# TARGETED CONSULTATION ON THE ADEQUACY OF MACROPRUDENTIAL POLICIES FOR NON-BANK FINANCIAL INTERMEDIATION (NBFI)

# SUMMARY REPORT

*DISCLAIMER*

*This document should be regarded solely as a summary of the contributions to the public consultation on the adequacy of macroprudential policies for Non-Bank Financial Intermediation (NBFI). It cannot in any circumstances be regarded as the official position of the Commission or its services. Responses to the consultation activities cannot be considered as representative sample of the views of the EU population.*

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## Glossary

| Acronym | Full name |
|---|---|
| AIF | Alternative Investment Fund |
| AIFM | Alternative Investment Fund Manager |
| AIFMD | Alternative Investment Fund Managers Directive |
| CACM Regulation | Capacity Allocation and Congestion Management Regulation |
| CCP | Central Clearing Counterparty |
| CD | Certificate of Deposits |
| CP | Commercial Paper |
| CMU | Capital markets union |
| CRR | Capital Requirements Regulation |
| CRE | Commercial Real Estate |
| CTAs | Commodity Trading Advisors |
| EBA | European Banking Authority |
| ECB | European Central Bank |
| ECM | Enhanced Coordination Mechanism |
| ESAs | European Supervisory Authorities |
| EIOPA | European Insurance and Occupational Pensions Authority |
| EMIR | European Market Infrastructure Regulation |
| ESFS | European System of Financial Supervision |
| ESMA | European Securities and Markets Authority |
| ESRB | European Systemic Risk Board |

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| FICOD | Financial Conglomerates Directive |
| FSB | Financial Stability Board |
| IOSCO | International Organization of Securities Commissions |
| LDI | Liability Driven Investment |
| LMT | Liquidity Management Tool |
| LRMP | Liquidity Risk Management Plans |
| MAR | Market Abuse Regulation |
| MCIs | Multifunction crypto intermediaries |
| MCM | Market Correction Mechanism |
| MiCAR | Markets in Crypto Assets Regulation |
| MiFIR | Markets in Financial Instruments Regulation |
| MMF | Money Market Fund |
| MMFR | Money Market Fund Regulation |
| MMI | Money Market Instrument |
| NAV | Net Asset Value |
| NBFI | Non-Bank Financial Intermediation |
| NBFIs | Non-Bank Financial Intermediaries |
| NCA | National Competent Authority |
| NMM | National Macroprudential Measure |
| OEF | Open-Ended Funds |
| ORSA | Own Risk and Solvency Assessment |
| RTS | Regulatory Technical Standard |

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|---|---|
| SFTR | Securities Financing Transactions Regulation |
| SMEs | Small and Medium Enterprises |
| UCITS | Undertakings for Collective Investment in Transferable Securities |
| UCITSD | Undertakings for Collective Investment in Transferable Securities Directive |

# 1 Context and objectives of the targeted consultation

Non-Bank Financial Intermediation (NBFI) comprises very diverse financial sectors including regulated entities such as asset management companies and investment funds, non-bank investment firms, pension funds, insurance companies, and unregulated entities, like family offices and supply chain finance companies. Non-Bank Financial Intermediaries (NBFIs) are a key source of funding for the EU economy and a source of diversification for the financial system, making it safer, less concentrated and more efficient.

Stress events in recent years shed lights over emerging systemic risks, such as unmitigated liquidity mismatches for some OEFs and the build-up of excessive leverage. Interconnectedness risk also raised concerns over the limited understanding of the links among NBFIs and between NBFIs and banks have increased the attention over the soundness and integrity of those sectors.[1] Macroprudential policies for NBFI featured among the priorities of the international work programme of the Financial Stability Board (FSB), as supported by G7 (2023) and G20 (2024). Moreover, it is also in the priorities of the mission letter of Commissioner Albuquerque and so of the European Commission.

As a result, on 22 May 2024, the Commission launched a targeted consultation seeking feedback and evidence on the adequacy of macroprudential policies for NBFI until 22 November 2024. The consultation focused on: 1) evaluating the effectiveness of the existing macroprudential tools and supervisory arrangements in achieving their purpose; 2) considering repurposing or reviewing existing microprudential and reporting tools (e.g., their activation/trigger and design); and 3) assessing the possibility to introduce new macroprudential tools, as well as tools to improve EU-wide coordination, where needed.

This report provides a summary of the responses to the targeted consultation organised in five main sections: 1) key vulnerabilities and risks; 2) unmitigated liquidity mismatches and liquidity risks; 3) excessive build-up of leverage; 4) monitoring interconnectedness; and 5) supervisory coordination and consistency at the EU level.

# 2 Who replied to the targeted consultation?

The targeted consultation received a substantial number of responses, with a total of **86 submissions** from stakeholders operating in different fields and headquartered in 15 out of 27 EU countries or in 2 non-EU countries (UK and US).

[1] For a more detailed discussion about these risks see, for instance, Report from the Commission to the European Parliament and the Council on the macroprudential review for credit institutions, the systemic risks relating to Non-Bank Financial Intermediaries (NBFIs) and their interconnectedness with credit institutions, under Article 513 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012, COM(2024)21, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX%3A52024DC0021.

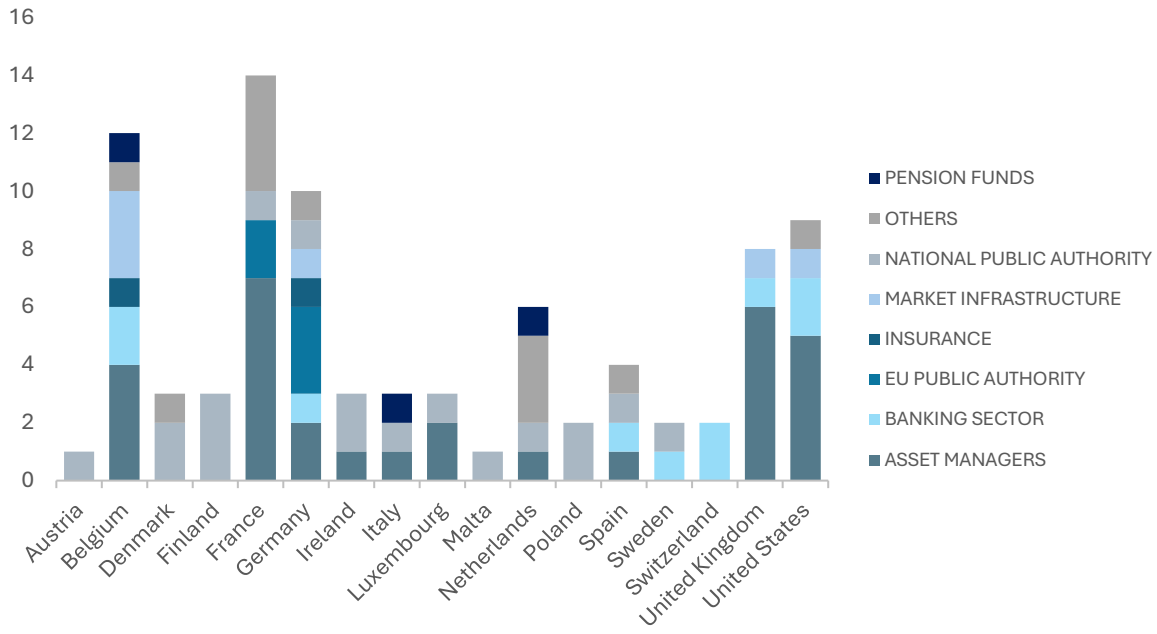


*Figure 1. Distribution of respondents by country of origin*[2]

Respondents were asked to provide information on their country of origin and field of activity, selecting from predefined categories, including:

- Accounting
- Auditing
- Banking
- Credit rating agencies
- Insurance
- Pension provision
- Investment management (e.g. hedge funds, private equity funds, venture capital funds, money market funds, securities)
- Market infrastructure operation (e.g. Central Counterparties [CCPs], CSDs, stock exchanges)
- Social entrepreneurship
- Other sectors.

In this feedback statement, stakeholders are grouped into the following categories to facilitate the analysis: asset managers, EU public authorities, insurance, market infrastructure, national public authorities,[3] others (mainly NGOs, think tanks and corporate treasuries), pension funds and the banking sector (comprising credit institutions and other private entities representing banking stakeholders).

[2] The country of origin is the country where the respondent is headquartered.
[3] Where possible, the text will refer to 'National Competent Authorities (NCAs)'.

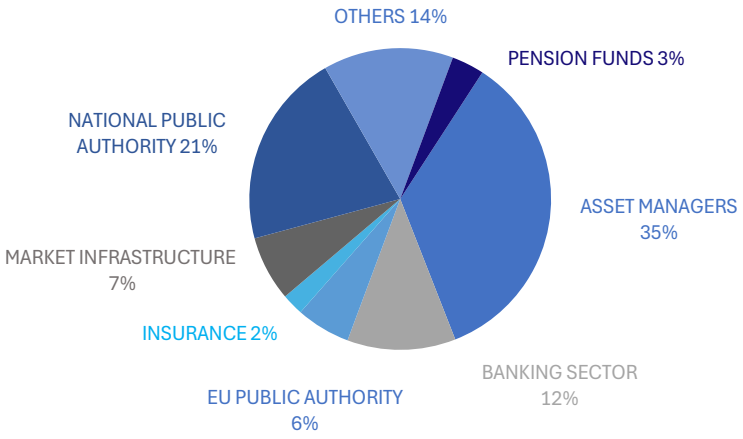


*Figure 2. Distribution of respondents by category (%)*

In addition to completing the survey, nearly half of the respondents submitted supplementary documents, including detailed responses, findings, reports, and charts, to further substantiate their feedback. These additional materials provided deeper insights into the perspectives and analyses of the stakeholders and have been taken into consideration in the assessment of the present feedback statement. Some of this additional feedback is included.

# 3 Main findings

## 3.1 Key vulnerabilities and risks stemming from NBFI

This section summarises the responses to the consultation paper on emerging systemic risks and vulnerabilities and the transmission channels of such risks. These include unmitigated liquidity mismatches and liquidity risks, the build-up of excessive leverage, interconnectedness risks and emerging risks from crypto assets and how macroprudential policies can support capital markets development.

On the systemic risks already identified by the Commission and other international organisations in previous reports,[4] i.e. build-up of excessive leverage, unmitigated liquidity mismatches, and interconnectedness, both national and EU public authorities agreed in their responses that those risks are indeed key sources of potential systemic risk in NBFIs and highlighted the importance of considering the collective actions of NBFIs (what the consultation paper referred to as 'holistic approach'), rather than monitoring institutions individually for systemic risk detection and monitoring. Both public authorities and industry stakeholders pointed out the need for the risk assessment to take into account the heterogeneity of NBFIs, considering the large variety of activities and entities, and type and intensity of risks. For example, some respondents from the asset management and banking sectors stressed that macroprudential tools, as used in the banking sector, are not suitable for asset management.

[4] See, for instance, Report from the Commission to the European Parliament and the Council on the macroprudential review for credit institutions, the systemic risks relating to Non-Bank Financial Intermediaries (NBFIs) and their interconnectedness with credit institutions, under Article 513 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012, COM(2024)21, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX%3A52024DC0021.

### 3.1.1 Emerging systemic risks and vulnerabilities and transmission channels (Q. 1, 2, 3, 4)

*In this first section, the consultation paper asked stakeholders to identify systemic risks and vulnerabilities stemming from NBFI activities, particularly regarding its interconnectedness with capital markets and credit institutions, and to provide insights into significant risks posed by NBFI, emphasising key transmission channels and real-world examples of such risks.*

On **emerging system risks and vulnerabilities (Q.1, 2)**, several industry respondents (mainly asset managers and banking sector) agreed that the focus should shift from EU regulated to unregulated entities, since systemic risk is more likely to arise from the latter category. While regulated NBFIs, particularly UCITS and AIFs, are considered well-supervised, the regulatory gaps within unregulated entities, as well as their interconnectedness with systemic institutions (such as banks), could lead to management failures. Second, several asset managers argued that non-EU entities operating in the EU under equivalence or reciprocity rules could pose more significant risks due to differences in regulatory standards. Within the banking sector, two respondents were concerned about the growing role of private credit and its potential to amplify financial risks. Few more responses pointed at the risks stemming from herding behaviour, margining, and excessive leverage in certain market segments where market participants may be engaging in speculative leveraged trades. Finally, the sector also raised concerns on the increasing role of crypto markets and large technology firms in financial services, suggesting these entities are not adequately covered by the existing regulatory framework. Several national public authorities agreed with the systemic risks identified in the consultation paper (liquidity mismatches, excessive leverage, and interconnectedness) but stressed additional concerns such as cybersecurity risks, climate-related risks, and geopolitical risks. Also, according to one NCA, cross-border interconnectedness and data availability were also considered key. Another NCA emphasized that passive investment strategies and algorithmic trading may create systemic vulnerabilities during market stress. Among EU public authorities, respondents largely agreed that hidden vulnerabilities exist within the NBFI sector, as leverage is difficult to observe in complex strategies. ESMA mentioned family offices, that, for example, remain outside regulatory reporting requirements, while the Eurosystem and the ESRB shared concerns on market concentration (e.g. ESRB highlighted some non-bank institutions handle 50% of payment services for major credit institutions, making their failure a potential source of operational disruption). ESRB added that non-financial risks are increasingly relevant, including risks stemming from groups engaged in mixed activities, such as conglomerates with both financial and commercial operations. These, according to the ESRB, create new transmission channels for financial stress.

With regard to the **extent to which an NBFI failure could significantly disrupt the delivery of critical functions to the real economy or the financial system (Q.3)**, 52% of all respondents provided a closed-ended response, among which nearly 27% of those respondents (including both industry and public authorities) indicated that the failure of an NBFI could affect in some way critical functions of the economy (i.e. from a significant to a very high extent). On the contrary, approximately half of this sample (mostly from the asset management sector), believed the impact to be low or very low. Indeed, for asset managers regulated NBFIs do not pose risks to financial stability, as they do not perform critical functions. Several asset managers suggested these firms do not “fail” in the same way as banks, since clients' assets are segregated from the firm’s balance sheet, and fund insolvencies do not disrupt financial markets. Some asset managers also suggested that NBFIs provide essential liquidity during market stress, which reduces rather than increases systemic risks. Few banking sector respondents noted that the failure of NBFIs could significantly disrupt key market functions, particularly in highly

interconnected areas such as market-making, clearing, and margin lending. Some industry stakeholders (asset managers, market infrastructure, NGOs) also flagged market-making as an economic function of critical importance: market making in certain asset classes is now dominated by non-bank liquidity providers (e.g. non-banks in ESMA list of market makers and primary dealers). Most of these firms are regulated as IFR Class 2 Investment Firms (given their performance of the MiFID activity 'dealing on own account') and do not meet the consolidated asset threshold to be subject to CRR requirements, so a stakeholder from the banking sector argued that the level of granularity within existing regulation insufficiently addresses differences in risk profiles. In addition, some banking industry respondents highlighted that banks have increased the provision of prime brokerage services to hedge funds, thus increasing related credit, liquidity and interconnected risks: two respondents suggested these entities may pose systemic risks if their withdrawal from markets leads to liquidity crises. According to the Eurosystem, since investment funds play a critical role in market-based financing, their failure could disrupt market functioning, as they provide 25% of external credit to euro area non-financial corporations. The ECB and EBA warned that banks are highly dependent on NBFIs for funding, particularly through MMFs and short-term repo markets, making them vulnerable to liquidity squeezes if NBFIs face distress. Together with EIOPA, the Eurosystem emphasized the importance of insurance companies and pension funds in sovereign and corporate bond markets, where their withdrawal could cause liquidity shortages and price volatility. EIOPA further stressed that insurers are crucial providers of financial protection, warning that failures in non-life insurance segments, such as catastrophe and trade finance coverage, could have systemic consequences due to limited substitutes. Moreover, the ESRB identified trade credit and natural catastrophe insurance as critical functions, cautioning that failures in these lines could force businesses to bear unexpected losses or rely on government interventions, with natural catastrophe failures widening the climate protection gap.

When requested to provide **concrete examples of most significant risks for credit institutions stemming from their exposures to NBFIs (Q.4)**, stakeholders broadly recalled the Archegos Capital Management collapse (2021) as a cautionary example of how opacity and leverage in derivatives markets can result in severe bank losses (Industry, EU and public authorities, NGOs). Several respondents across categories frequently cited the 2022 UK gilt market sell-off, driven by pension fund losses, as an example of correlated exposures amplifying market stress. An NCA highlighted reputational risks, particularly for large banking groups with asset management subsidiaries, citing the H2O Asset Management and Natixis case (2019) as an example of how fund difficulties can escalate parent banks' funding costs. Also, one stakeholder from the banking sector highlighted 2022 UK crisis as an example where leveraged NBFI strategies led to market instability, forced selling dynamics and the failure of large, or cohorts, of non-bank market makers. Based on data, the Eurosystem warned about real estate funds (the sector represents €1.5 trillion in assets), which raise both leverage and liquidity risks, with the latter particularly due to liquidity mismatches in open-ended structures. The top quartile of real estate funds is significantly leveraged, making them more vulnerable to market downturns. The Eurosystem and an NCA shed lights on vulnerabilities from common asset holdings and foreign exchange swaps, which could trigger losses during market disruptions, particularly during USD shortages. Meanwhile, EBA observed that NBFIs held over a quarter of total bank-issued debt in the euro area as of December 2023, underscoring significant interdependencies. Eurosystem also flagged the reliance on short-term funding from MMFs and NBFIs, which represented 14% of total bank liabilities by end-2022. Finally, ESRB and an NCA highlighted risks from off-balance-sheet exposures and clearing services. ESRB detailed indeed how credit lines drawn by NBFIs during stress periods could strain bank liquidity, while the NCA pointed to potential losses from providing central clearing services if clients default.

### 3.1.2 Excessive Leverage (Q. 5)

Stakeholders were asked where they see build-up of excessive leverage in NBFI sectors and which NBFIs could be most vulnerable.

On potential **excessive leverage within NBFIs**, asset managers largely argued that leverage within regulated funds is already well-governed and does not pose systemic risks. They emphasized that leverage is primarily used for risk management rather than increasing exposure and caution against the use of misleading regulatory terminology such as "hidden leverage" or "excessive leverage." Existing frameworks, including AIFMD, UCITS, and national regulations, impose strict limits and enhanced reporting obligations. Some asset managers noted that concerns about leverage were more relevant in unregulated NBFIs, particularly family offices like Archegos. While a few respondents acknowledged potential pockets of excessive leverage, particularly in certain commercial real estate (CRE) markets, they did not recognize it as a structural issue. A large asset manager highlighted the importance of assessing leverage within a system-wide context rather than at the individual fund level. Pension funds emphasized that leverage is largely restricted under the IORP II Directive, which prohibits borrowing except for temporary liquidity needs. Country-level regulations further reinforce these restrictions, with some jurisdictions, such as Italy, imposing outright bans on borrowing and short selling, thereby minimizing systemic risk. The banking sector expressed no particular concerns about leverage in hedge funds, noting that these funds are inherently leveraged. Indeed, banks mitigate their exposure through collateralization, working with well-rated funds, and maintaining robust counterparty risk controls. Excessive leverage, they argued, becomes problematic when risks are not properly managed or remain opaque to creditors (e.g. Archegos example). Banks highlighted that existing regulatory safeguard under AIFMD, MMFR, and UCITSD already address leverage risks through stress tests, disclosure obligations and leverage limits. Private equity funds pose challenges due to limited transparency, and enhanced reporting requirements could improve risk assessment. Some respondents stressed that investment funds facing margin calls may experience liquidity stress, warranting supervisory attention. Rather than imposing new regulatory layers, banks suggested improving the usability of existing European Market Infrastructure Regulation (EMIR) and Securities Financing Transactions Regulation (SFTR) reporting data to enhance oversight. Other stakeholders, including NGOs and think tanks, brought attention to the increasing use of NAV loans in private equity funds, which add further leverage on top of already highly leveraged portfolio companies. The quadrupling of NAV loans to USD 16.4 billion in 2023 raised concerns over cross-collateralization risks. Family offices and sovereign wealth funds, which remain outside traditional regulatory frameworks such as AIFMD and UCITS, engage in leveraged trading strategies without adequate oversight (e.g. Archegos). Some respondents proposed extending AIFMD disclosure requirements to family offices exceeding specific leverage thresholds. Private credit funds, which rely heavily on borrowed capital, may also pose risks if investors struggle to absorb losses during downturns. Similarly, leverage in loan-originating AIFs requires closer supervision, particularly given banks' increasing role in financing these funds. Finally, one NGO supported the idea that the push to revive securitization as part of the Capital Markets Union (CMU) could contribute to increase leverage and risks. Public authorities, particularly at the national level, expressed more concerns, emphasizing the role of hedge funds in leverage build-up, in particular those engaged in derivative-based strategies such as commodity trading advisors (CTAs) and relative value arbitrage. They flagged some hedge funds reporting leverage levels exceeding 20 times their NAV, amplifying financial instability and increasing the risk of forced deleveraging during market downturns. In the pension fund sector, the UK's 2022 liability-driven investment (LDI) fund crisis serves as a case study of how leverage can turn localised stress into broader systemic risk. Authorities also highlighted that leverage could take various forms, including financial leverage via borrowings and synthetic leverage via derivatives. Some considered that

the reporting requirements for hedge funds and other financial intermediaries is not sufficient for accurate risk assessments. Authorities and NCAs also expressed concerns towards hedge funds and certain AIFs, real estate funds particularly those exhibiting high leverage, more vulnerable to market and valuation corrections. A national public authority proposed EU-wide leverage limits for AIFs to mitigate systemic vulnerabilities. With the sector representing €1.5 trillion in assets, Eurosystem stressed its significant influence on commercial real estate markets. EBA mentioned banks as key leverage providers to NBFIs, providing 22% of all short-term loans to such entities, creating potential feedback loops between the banking sector and non-bank financial markets. While the insurance sector generally avoids financial leverage, EIOPA pointed to growing concerns over synthetic leverage stemming from derivatives use and LDI-like strategies, which could introduce liquidity strains during stress events. As per policy responses proposed by responding authorities, given the fragmented regulatory treatment of leverage across EU jurisdictions, a harmonized approach has been mentioned as necessary to ensure consistency in addressing systemic risks. While excessive leverage is not yet widespread in some jurisdictions, respondents warned that it could escalate quickly, necessitating improved data collection and risk oversight.

### 3.1.3 Emerging risks from crypto assets (Q. 6)

*The consultation also sought stakeholder feedback on the risks and vulnerabilities emerging from crypto assets activities and intermediaries*.

With regard to **risks and vulnerabilities arising from crypto assets activities and markets**, many asset managers emphasized that, despite high volatility and increasing retail participation, they currently remain too small to pose systemic risks. However, one respondent recognized the need for sound regulatory frameworks to address emerging vulnerabilities, particularly in custody, valuation, and accounting. Another stakeholder highlighted the role of the EU's Markets in Crypto Assets Regulation (MiCAR) in creating a harmonized framework that mitigates risks while fostering innovation. A large asset manager stressed the importance of monitoring the integration of crypto assets into traditional finance to anticipate any evolving threats to financial stability. Other stakeholders, including NGOs and think tanks, expressed concerns that MiCAR does not sufficiently separate key financial functions such as market-making, proprietary trading, and agency brokerage, increasing the risk of conflicts of interest (collapse of FTX is cited as an example of these structural weaknesses). One of them highlighted that MiCAR does not regulate crypto lending, thus leveraged crypto trading could lead to market-destabilizing spillovers. As crypto markets become more interconnected with traditional finance, new channels for contagion may emerge, including liquidity crises, counterparty failures, and leverage accumulation. An NGO further emphasized that the lack of prudential requirements for NBFIs involved in crypto activities exacerbates financial stability risks. Additionally, fraud, cyber threats, and the concentration of crypto-related activities in a few dominant firms were recognised as systemic vulnerabilities that require regulatory attention. Respondents from the banking sector generally asserted that crypto asset trading is not material to their activities, as they primarily engage in market-making rather than proprietary trading. They however pointed to strict capital requirements under CRR III, which impose high-risk weights and exposure limits, ensuring that their involvement in crypto assets remains contained. They cautioned that crypto trading by NBFIs poses higher risks, as these entities lack similar capital requirements and regulatory oversight, potentially shifting systemic vulnerabilities outside the banking sector. Crypto markets' extreme price volatility and the risk of rapid asset devaluation raised concerns, particularly in the context of margin calls and liquidity stress. While MiCAR represents a positive step in addressing these risks, overall, the banking sector argued that regulatory gaps persist, especially in maintaining a level playing field between banks and NBFIs. Several

national public authorities largely agreed that, at present, crypto assets do not pose systemic risks due to their limited size and weak integration with mainstream finance, calling however for improved data collection to better track crypto-asset exposures. One public authority emphasized that the largely unregulated nature of crypto markets exposes them to risks such as market manipulation, fraud, and inadequate investor protection. One authority also warned that increased institutional exposure to crypto assets, particularly stablecoins, could lead to spillover effects that threaten financial stability. Similarly to the above-mentioned industry opinion, one public authority thinks that MiCAR does not fully address risks linked to the underlying distributed ledger technologies. EU public authorities (ESMA, ESRB) also acknowledged that crypto assets remain a small part of the financial system but warned that their rapid expansion and growing interconnections with traditional finance could introduce systemic risks over time. Leverage in crypto markets was raised as a concern by the ESRB, with some centralized and decentralized exchanges offering high leverage (up to 100x), amplifying risks like those seen in highly leveraged financial products. It also highlighted liquidity risks stemming from stablecoins and crypto lending platforms, which engage in maturity and liquidity transformation, making them vulnerable to investor runs. The increasing adoption of crypto-related financial products, coupled with traditional financial institutions offering crypto services, strengthens the interconnectedness between the two sectors according to the ESRB. Moreover, EBA and ESRB agreed that regulatory arbitrage remains a challenge, as crypto firms can relocate to less regulated jurisdictions while still serving EU clients, requiring strong oversight and enforcement mechanisms.

### 3.1.4 Macroprudential policies and NBFIs' ability to provide funding to companies (Q. 7)

*Stakeholders were invited to respond to the role that NBFIs have in providing greater access to finance for companies and how macroprudential policies can help to enhance NBFI's ability to provide funding opportunities through capital markets*.

On how **macroprudential policies can enhance NBFI's ability to provide funding opportunities**, some asset managers argued that they already comply with extensive prudential regulations and that additional macroprudential tools targeting them would be counterproductive, some others emphasized that macroprudential policies should ensure a level playing field and avoid imposing excessive constraints that could hinder the competitiveness of EU NBFIs. Many respondents stressed that those policies should focus on system-wide risks rather than imposing bank-like capital and liquidity requirements on investment funds, which could distort markets and reduce risk-taking. Some asset managers advocated for measures that promote a more developed securitisation market to enhance capital markets funding, particularly for SMEs and real estate projects. A few respondents highlighted the need to differentiate between various types of NBFIs when designing macroprudential policies, given their different risk profiles and funding structures. Moreover, some asset manager suggested that macroprudential authorities should focus on improving transparency and data collection in the less-regulated parts of the financial sector. Within the banking sector, some stakeholders agreed that consistent regulatory approach should apply to all market participants providing similar types of funding to prevent regulatory arbitrage. Two respondents suggested macroprudential policies should avoid imposing undue burdens that could stifle innovation or limit investment funds' ability to finance companies. Securitization was recognized as an important funding tool for NBFIs to provide capital to SMEs and the real economy, but one argued that EU regulations have made it too costly, suggesting regulatory reforms should revive the securitization market to enhance funding sources. The decline of securitization in the Netherlands was seen as an example that illustrates the impact of regulatory changes on market dynamics, with CRR III, Solvency II, and the 2019 Securitization Regulation leading

to reduced issuance and investor demand. Moreover, one noted private credit markets have grown significantly, particularly in the US. Since they are likely to play an increasing role in capital markets, it supported regulatory measures that push for transparency and do not impose more burden. An entity in the insurance sector argued that the bank-centric funding structure remains an issue, as European businesses still rely too heavily on bank funding, making capital market access a key policy objective under the CMU. Among the barriers to insurers' investment in corporate funding mentioned, the stakeholder highlighted capital requirements (e.g., under Solvency II) that limit insurers' ability to invest in listed equities, or the legal uncertainties (e.g., insolvency laws) that reduce insurers' willingness to invest across the EU. Moreover, the actor shared few proposals, like improving prudential rules to remove unnecessary barriers (e.g., adjust Solvency II capital requirements for equity investments), expanding national and EU-level SME investment funds to facilitate insurance industry participation, or strengthening cross-border investment frameworks by harmonizing insolvency laws and enhancing investor protection mechanisms. One other respondent from the industry said that macroprudential rules should recognize the structural differences between banks and non-banks, avoiding the imposition of countercyclical capital buffers on investment funds. According to the same actor, activity-based rather than entity-based regulation is preferable to ensure stability without stifling market financing. To reduce instability and ensure efficient market financing, some respondents advocated for: 1) Leverage limits for hedge funds and other highly leveraged entities; 2) Redemption suspensions for investment funds during crises. 3) Circuit breakers on exchanges to prevent extreme volatility; 4) Stronger short-selling restrictions to limit market manipulation. An NGO stated CMU should prioritize green financing by defining "green securitisation" and ensuring that macroprudential measures align with climate transition goals. Another NGO supported measures such as rating agency development, cross-border investment facilitation, and enhanced private equity frameworks could improve financing conditions for smaller businesses. Furthermore, a consulting firm added that strengthening the Financial Conglomerates Directive (FICOD) by aligning definitions with Basel standards could ensure consistent oversight across banking, insurance, and asset management sectors. Some national public authorities emphasised that macroprudential policies should focus on financial stability rather than industrial policy, ensuring that regulation enhances resilience without interfering with market allocation of capital. Some other stressed that macroprudential frameworks should be proportional and avoid unnecessary administrative burdens, focusing on targeted regulatory improvements rather than overhauls. Some respondents also stressed that macroprudential measures should be risk-based and designed to strengthen resilience without significantly increasing funding costs for businesses. ESMA and Eurosystem supported the idea that macroprudential policy should balance financial stability with NBFI growth, ensuring that risks are addressed while allowing NBFIs to provide stable funding for companies. According to ESMA, the diversity of NBFIs requires a tailored macroprudential approach, distinguishing between regulated entities (investment funds, pension funds, insurers), market infrastructures, and unregulated players (family offices, high-net-worth individuals). Overall, EU authorities agreed that applying banking-sector tools mechanistically may not be effective. Key policy tools proposed include: 1) leverage limits for highly leveraged NBFIs, such as hedge funds and real estate funds, to prevent excessive risk accumulation (Eurosystem); 2) harmonized liquidity management tools for investment funds, ensuring they can meet redemption requests without destabilizing markets (ESRB); margin rules for derivatives and repo markets, preventing the buildup of uncollateralized exposures (ESRB); 3) supervisory intervention powers, allowing authorities to suspend fund redemptions or impose additional risk management requirements when needed (ESRB); 4) improved data collection and monitoring, ensuring authorities have a clear view of risks in the NBFI sector (e.g. enhanced reporting requirements under AIFMD and UCITS) (ESMA). Moreover, international coordination was pointed out as necessary, as systemic risks in NBFIs often transcend national

borders. According to ESRB and ESMA, aligning with global standards, such as those from the FSB and IOSCO, ensures consistency in regulation.

## 3.2 Unmitigated liquidity mismatches and liquidity risks

### 3.2.1 MMFs reforms (Q.8 to 15)

#### 3.2.1.1 Reporting and data sharing (Q. 10)

*Stakeholders were asked to respond to whether reporting requirements under the MMFR could be aligned, simplified and improved to identify stability risks in view of recent changes to UCITS and AIFMD reporting and the possibility to ensure more efficient data sharing.*

Regarding **MMFR reporting requirements,** several industry respondents (asset management and banking sector) were supportive of efforts to streamline reporting and avoid duplication. However, several industry respondents (asset management and banking sector) suggested that alignment would be difficult and not desirable as the reporting regimes for UCIT funds or AIFs have different requirements due to the differences between the respective fund types. In terms of improvements, some industry respondents (asset management and banking sector) suggested that clarity on the methodologies used for certain elements of the reporting requirements for MMFs would be useful. One asset manager supported some alignment of reporting standards, suggesting standardising data formats, definitions, and reporting frequencies can reduce administrative burden and suggested implementing a standardised digital reporting platform utilising APIs to reduce manual errors. One asset manager supported increased frequency of reporting for MMFs as information disclosed on a quarterly basis is unlikely to be of significant use to supervisors given the short-term nature of MMF portfolios whereas a framework for daily reporting can provide supervisors with valuable information if focused on the most relevant data points. Some asset managers mentioned that reporting should be targeted as opposed to exhaustive. Some asset managers mentioned that data sharing is important and recommended alignment on reporting templates between EU jurisdictions. One asset manager suggested establishing a 'feedback loop' for industry and authorities to pursue continuous improvement. One asset manager cautioned that authorities should avoid expanding MMF reporting requirements specifically to monitor risks in other NBFI segments or credit institutions. Some asset managers mentioned the need to distinguish between normal and crisis-period reporting, which can be more frequent depending on requests from supervisors, suggesting this was useful and others adding that these should remain simple to produce and be aligned between jurisdictions. Some asset managers opposed changes to MMFR reporting due to the possibility of increased reporting burden and citing uncertainties around the outcome proving to be more effective. Several national public authorities supported enhanced data sharing to provide data to the relevant NCAs (if different from the NCA collecting the data), ESMA and the ESRB and proposed creating a single data hub, for AIFMD, UCITSD and MMFR data with access granted to NCAs, ECB, central banks and ESRB to use within the limit of their regulatory powers. Some national public authorities supported increased reporting frequency for MMFs, in line with the proposal of ESMA/ESRB (see below). Several national public authorities also supported crisis time reporting on a high frequency (e.g. daily) covering limited key data necessary to monitor MMFs, with some suggesting ESMA could harmonise requests and coordinate to ensure a consistent approach across jurisdictions. On alignment, one national public authority suggested exempting MMFs from reporting under the AIFMD report and the forthcoming UCITS report to avoid double reporting and 'red tape' as the comprehensiveness and specificities of the MMF report makes the AIFMD/UCITS report superfluous. One national public authority suggested MMFs should follow the same reporting obligations and reporting structure as UCITS and AIFs, to make it

comparable, but possibly with additional requirements that corresponds with the data needed to produce the MMF stress tests. One national public authority raised the issue of MMFs using the amortised cost methodology as a risk in the context of financial stability risks suggesting removal of this methodology. The ESMA response proposed that the frequency of reporting should be raised in normal times from quarterly to monthly, for MMFs whose assets under management exceed EUR 100,000,000, and from annually to quarterly, for MMFs whose assets under management do not exceed EUR 100,000,000. For stressed times, the ESMA response suggested more frequent reporting (daily) would be expected on a certain number of key indicators and that it would be useful to develop ex-ante a common EU reporting format for managers of MMFs with specification of the exact indicators to be reported in these circumstances decided through a delegated act. The ESRB response proposed increasing the frequency of regular reporting and providing more information on the investor base of MMFs, and suggests that ESMA coordinates and, where necessary, harmonises ad hoc data requests made by the NCAs to MMFs in times of stress and outlines the core elements required for such reporting. The ESRB response also proposes that NCAs share data stemming from regular reporting and from crisis-specific reporting with EU bodies with a financial stability mandate.

#### 3.2.1.2 Liquidity buffers requirements: extension of ESMA/ESRB powers (Q. 8, 9)

*Stakeholders were asked to give views on pros and cons of giving competent authorities the power to increase liquidity buffer requirements on an individual or collective basis in the event of system-wide financial stability risks and how ESMA and the ESRB could ensure coordination and the proper use of this power.*

Industry respondents (asset management and banking sector) were strongly opposed to providing competent authorities with **the power to increase liquidity buffers.** They outlined several cons, for example: an increase in liquidity buffer requirements during a market crisis, decided by a competent authority, if publicly disclosed, may trigger uniform behaviours such as “dash for cash” phenomenon and foster a “first mover advantage” effect; this power could circumvent the investment policy of the MMF as disclosed in the fund documentation; contradicts that the primary responsibility for liquidity risk management remains with the manager, as stated in the revised UCITS Directive and AIFMD; and, the possibility to impose liquidity buffers inconsistently across the EU or global MMF industry would result in diverging liquidity profiles as imposed by supervisory forces rather than economic rationale and could affect competitiveness. One industry respondent (asset management) suggested that targeted increases to the DLA (daily liquid assets) and WLA (weekly liquid assets) buffers that MMFs hold on an ongoing basis would further underpin resilience across the sector, as long as they are calibrated appropriately. Some industry respondents supported removing the linkage between breaches of minimum WLA requirements and the need for fund boards to consider imposing liquidity fees or gates. One asset manager suggested there would be merit to provide the flexibility to adapt the daily and weekly liquidity buffers to current market circumstances in the interest of the investors but that this option should be made available to the management of the fund which is best placed to decide whether or not to make use of such flexibility at a given point in time except in very exceptional market circumstances when the regulator could take action with appropriate safeguards. National public authorities were mostly against this proposal, highlighting cons such as first mover advantage and increased pro-cyclicality and mostly suggested that increasing ex ante liquidity requirements was more useful to increase resilience. One national public authority did suggest that top-up tools could then be considered. Another national public authority suggested that there could be a role for authorities in encouraging fund managers to utilize buffers, supporting shock absorption during acute

stress periods and that authorities should also provide sector-level guidance (e.g., by fund type and currency) on rebuilding buffers after stress events, thereby enhancing buffer usability with such guidance coordinated at EU level. The Eurosystem response noted that empowering authorities could provide benefits but suggested to enhance the resilience of EU private debt MMFs and that legislative changes should prioritise higher overall liquidity requirements on MMFs and ensure that the buffers are usable in times of market stress. The Eurosystem response noted that if liquidity requirements were set at adequate levels in line with the ESRB recommendations, it might not be necessary to grant authorities additional powers to increase liquidity buffers on an individual or collective basis in the event of system-wide financial stability risks. The Eurosystem also noted that if a flexible tool for MMF liquidity buffer requirements were considered regardless, it would seem appropriate that ESMA receives additional powers to increase liquidity buffers across the EU, in coordination with national competent authorities (NCAs). In addition, such a tool should only be used pre-emptively and not in response to a stress event. The ESRB suggested higher liquidity requirements for variable net asset value (VNAV) MMFs and low volatility net asset value (LVNAV) MMFs to reduce the liquidity transformation and improve asset-liability matching. The ESRB also noted that, given the global nature of the EU MMF industry, major differences in national or individual regulatory set-ups could lead to arbitrage and regulatory-driven (cross-border) flows meaning therefore, that these requirements should be established within the MMFR to ensure consistency and convergence, rather than being left to discretionary implementation and changes.

Regarding **the role of ESMA/ESRB to coordinate the power to increase liquidity buffers**, there was limited additional feedback from industry given most respondents did not support the introduction of the power in general and thus did not support roles for ESMA or the ESRB in this context. Some national public authorities also reiterated their opposition to the power in general and thus any role for ESMA/ESRB. Some national public authorities suggested ESMA could play a coordinating role in encouraging fund managers to use liquidity buffers in times of stress and to rebuild buffers following a stress. One national public authority also suggested ESMA and ESRB have a crucial role in relation to enhancing data sharing and cooperation across NCAs when analysing potential risks in the MMF market and to facilitate discussions regarding a suitable policy response to a potential build-up of risks in cohorts of MMFs. The ESRB suggested authorities should be empowered to set a specific timeframe during which MMFs under their jurisdiction may hold fewer liquid assets than typically mandated and that ESMA's coordination during this period would help prevent market distortions and promote consistency. The ESRB also suggested that ESMA should coordinate and, where necessary, harmonise ad hoc data requests made by the NCAs to MMFs in times of stress resulting from market-wide developments.

#### 3.2.1.3 Stress testing framework and liquidity risk in MMFs (Q. 11,12)

*Respondents were asked to provide feedback on potential enhancements to the current common stress testing framework for MMFs improve the ability to identify and mitigate liquidity risks effectively. Respondents were also asked to provide views on a potential EU-wide stress test of MMFs.*

Regarding proposed **enhancements to the stress testing framework for MMFs**, many industry respondents (asset management and banking sector) were generally supportive of the current framework as being sufficient. Some industry respondents suggested that the investor base and concentration should be taken into account when conducting stress tests. One asset manager suggested stress testing should focus on material risks and leverage the expertise of NCAs while another asset manager expressed concerns that enhanced supervision and remediation actions might not add significant value and could overlook the nuanced understanding of NCAs. One industry

respondent (banking sector) suggested stress testing could be conducted at the EU level with ESMA playing a coordinating role, while another noted stress testing may not capture risks related to contagion or feedback loops. Several national public authorities also expressed support for the current framework as being robust and sufficient. One national public authority suggested stress testing could be conducted at the EU level with ESMA playing a coordinating role. One national public authority expressed a concern that stress testing might not capture all potential risks, particularly those related to contagion or feedback loops. EU public authorities supported enhancements to the stress testing framework (ESMA, ESRB, Eurosystem). ESMA and ESRB supports proposal for stress testing conducted at EU level with ESMA playing a coordinating role. ESMA noted that, in the current framework, the report sent to NCAs containing the corrective measures that the manager of an MMF will take when results of stress tests reveal vulnerabilities of a specific MMF is also sent to ESMA, but no such report was ever submitted to NCAs. ESMA suggest that the MMFR could be adjusted to specify that ESMA would, together with NCAs, receive directly from the manager of the MMF the report mentioned in Article 28(5) of the MMF Regulation, so that ESMA can play its coordination role with NCAs in a more effective way, given in particular real-time information is of a significant value in such crisis situations as in March 2020. The conditions under which such a report shall be issued by the manager of the MMF could also be specified. The ESRB suggested introducing dynamic adverse scenarios incorporating a wide range of market shocks, such as sudden changes in interest rates, credit risk and market volatility, would enable to capture diverse liquidity challenges across different economic and financial conditions. The ESRB also notes that an EU-wide stress testing regime for MMFs should offer the possibility to conduct reverse stress tests.

Regarding **the costs and benefits of an EU-wide stress test of MMFs**, industry responses were mixed with some asset managers acknowledging the potential benefits in fostering consistent stress testing across Member States, improving liquidity risk identification, and harmonizing supervisory scenarios. However, some other industry respondents (asset management and banking sectors) suggested that existing EU MMF regulations are already sufficient for addressing embedded risks, and additional stress testing requirements may not provide substantial value. Some industry respondents (from the asset management and banking sectors) outlined concerns on administrative burdens and cautioned to avoid approach that does not account for specific risks of different MMF types. One industry respondent (from the banking sector) highlighted the need to first standardize supervisory data-sharing at the EU level before adding new layers of stress testing. Some industry respondents (asset managers) also stressed that such a framework should be strictly for risk management purposes and not lead to additional regulatory constraints or systematic remedial actions. One asset manager also suggested liquidity risk should not be the sole focus, which instead should be on broader systemic interactions. Some national public authorities highlighted the benefit of improved comparability and systemic risk identification across jurisdictions, while some also suggested that the proposed stress test should primarily focus on liquidity risks but should also include secondary risks such as credit risk and market risk. One other response suggested cross-border exposures and systemic interactions between MMFs and banks should be considered. Some national public authorities stressed the need to ensure benefits outweigh costs from an EU-wide stress test with one response suggesting a pilot phase before any regular exercise is introduced. The Eurosystem response suggested that a stand-alone EU-wide stress test for MMFs could provide significant benefits, as MMFs play a critical role in money markets, financial stability, and monetary policy transmission. The Eurosystem noted that the unique characteristics of MMFs must be considered, including their high portfolio overlap, substantial market footprint, and exposure to illiquid instruments. The Eurosystem response suggested that liquidity risk should be a primary focus, but leverage-related risks should also be analysed, given that investors may sell MMF shares to meet margin calls during periods of market volatility. The Eurosystem highlighted

that the design and scope of the stress test should be clearly defined, ensuring that it adds value beyond existing regulatory stress-testing requirements, and that given resource requirements, costs must be carefully weighted against benefits. The Eurosystem suggested that a system-wide approach is preferable, prioritising macroprudential benefits over individual fund-level stress testing and encouraged the use of common reporting templates to integrate MMF stress test data into broader financial stability assessments.

#### 3.2.1.4 Market structure and stability: EU ban on RDM mandatory trading venue participation (Q. 13, 14)

*Stakeholders were asked to provide views on the EU ban on a reverse distribution mechanism (RDM) by MMFs and how the RDM has impacted in practice the stability and integrity of MMFs.*

Some industry respondents (from the asset management and banking sectors) were opposed to the ban on **the reverse distribution mechanism**, suggesting the RDM had been an effective operational tool for passing negative yields to investors and that the ban led to costly operational adjustments and created divergence between other jurisdictions reducing competitiveness. A few industry participants (asset managers) also supported the ban citing concerns about investor transparency and arguing that RDM artificially maintains a constant NAV, circumventing the market valuation principle. Regarding how the use of the RDM has impacted MMFs in practice, some industry respondents suggested it had no negative impact on stability or integrity and was a technical mechanism to handle negative yields, while others suggested the absence of RDM did not pose any major issues, as alternative approaches such as accumulating share classes have been implemented. Some national public authorities also expressed cautious support to remove the ban with strict conditions, whereas a few supported maintaining the ban, some public authorities specifically stated they were neutral on the issue. Some national public authorities noted they did not observe a negative impact from the use of the RDM before the ban, while some other national public authorities noted they had limited experience with the issue. The ESMA response suggested the EU ban on the reverse distribution mechanism should be explicitly included in the MMF Regulation, ensuring legal clarity and certainty and noted the upcoming review of the MMF Regulation presents an opportunity to formally codify the ban, reinforcing regulatory consistency across jurisdictions.

#### 3.2.1.5 Market structure and stability: mandatory trading venue participation (Q. 15)

*Stakeholders were asked to give views on whether regulatory requirements for MMFs take into account whether the instrument they are investing in is admitted to trading on a trading venue with some critical level of trading activity.*

Most respondents were opposed to this proposal, industry respondents (from asset management and the banking sectors) suggested this could disrupt market functioning without improving liquidity conditions. Several industry respondents noted that short-term funding markets for MMFs are primarily over-the-counter (OTC) and stressed that transparency does not necessarily equate to liquidity. One asset manager proposed that improving the standardization of money market instruments would be a more effective way to enhance liquidity than mandating trading venue participation. Some industry respondents (from asset management and the banking sectors) highlighted that the ability to trade across multiple channels should remain a choice for MMFs to ensure flexibility in managing liquidity and that bilateral transactions allow for greater collateral flexibility and better liquidity management.

Some national public authorities noted that trading venue admission does not guarantee liquidity, as many financial instruments admitted to trading are still highly illiquid. One national public authority also expressed concerns regarding unintended consequences, such as market concentration risks, which could impact liquidity. Some national public authorities also noted many financial instruments admitted to trading venues can remain illiquid and one national public authority response noted that short-term instruments used by MMFs often have limited secondary market trading but are still liquid due to their structural features. One national public authority suggested admission to a trading venue should be considered as one factor in assessing liquidity but should not be the sole criterion.

### 3.2.2 Liquidity tools for OEFs (Q. 16 to 25)

This section covers three areas that were part of the consultation paper: 1) tools to detect and monitor unmitigated liquidity mismatches; 2) tools and powers of supervisors to deal with unmitigated liquidity mismatches; and 3) liquidity stress testing.

#### 3.2.2.1 Tools to assess and monitor unmitigated liquidity mismatches (Q. 16,17, 20, 21)

*The consultation paper asked how NCAs monitor the liquidity profile of OEFs on an ongoing basis, the tools and data necessary to detect and monitor liquidity risks, and the challenges asset managers face when trying to measure and address liquidity risks in stress situation.*

**On data needed for monitoring the liquidity profile of OEFs,** most industry stakeholders (mainly asset managers) suggested that the current reporting framework being implemented (under the revised UCITSD and AIFMD 2) is robust and comprehensive and does not require changes in relation to the data made available for the monitoring of liquidity risks. Asset managers look at a broad range of data measures, including (among other) marketable volumes, measures to assess investor behaviour, liquidity stress testing and so on. One large asset manager indicated that it first makes an assessment of asset liquidity with several measures (to determine time to liquidate assets in normal and stressed conditions), then it looks at redemption scenarios and other liabilities measures, to combine them to determine the redemption coverage ratio (RCR)[5]. One respondent also warned about the use of bucketing approaches for classification of fund asset liquidity profile, as it could lead to a static approach to risk monitoring and herd behaviours in reaction to market events for funds falling in the same liquidity bucket. Most of public authorities agreed that monitoring liquidity risks for OEFs requires timely and granular data about the asset and liability side of investment funds and on a set of metrics[6] that can be frequently updated. The data that were mentioned as most relevant are:

- Reports on net redemptions or outflows, including information on dealing frequency and volume, as well as percentage for activation;
- Portfolio data, such as instrument type, maturity, credit quality, sector, issuer details, and portfolio liquidity at 1 day, 1 week, 2 weeks and so on;
- Information on the selection and use of Liquidity Management Tools (LMTs) (e.g. notice periods, swing pricing, redemption limits and suspensions) and details of redemption terms (e.g. notice period);
- Data on the use of repos and derivatives including margin/collateral requirements;

[5] The Redemption Coverage Ratio (RCR) measures the extent to which portfolio positions can be converted to cash to cover redemptions over a range of time horizons.

[6] One public authority also refers to the need for greater alignment with the FSB´s Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Fund, revised in December 2023.

- Information on the funds' investor base (e.g. domicile of the investor);
- Results from internal stress tests and scenario analyses.

One NCA suggested monthly reporting on redemption activity and client structure. One more NCA also suggested that the use of amortised cost valuation method (including those using collars) should be forbidden, because of the distortion they create by not taking into account interest rate risk, especially for private debt funds.

Various EU and national public authorities emphasised that NCAs should, where appropriate, effectively and systematically use their powers in line with ESMA Liquidity Stress Testing (LST) guidelines, requesting liquidity stress test results in the course of their supervisory activity (with the appropriate frequency). ESMA (supported by other national and EU public authorities) also proposed to develop, together with NCAs, a harmonised analytical framework for regular liquidity risk assessment for OEFs, which would allow for more harmonised supervisory actions on the basis of existing or new supervisory tools. Many NCAs and EU authorities pointed out that more effective data sharing arrangements (for existing reporting) between authorities are key to provide relevant information in a timely manner and to reducing the reporting burden on financial institutions.

**On NCAs' experience with monitoring and detecting liquidity mismatches during the lifetime of OEFs,** overall, national public authorities indicated that they check the proper structure of an OEF liquidity profile at the authorisation (including redemption terms, minimum percentage of liquid assets, etc). For one NCA this assessment should also include the assessment of the selected LMTs, such as redemption gates or notice periods, and how they are calibrated in normal and stressed conditions. Among the shared experiences, some public authorities said that the ongoing supervision of liquidity mismatches in their countries usually takes place via thematic reviews of cohorts of funds, with one of them mentioning using a dashboard of indicators that flag inconsistencies and trigger a more in-depth review of the adequacy of liquidity management tools and aspects of the liquidity management framework of the fund (e.g. redemption policy and investor base). During the lifetime of the OEFs, liquidity profiles are reviewed based on periodic supervisory reports and ad hoc analysis. Another NCA suggested that they focus on two areas when supervising UCITS: 1) those that invests in less liquid asset classes compared to their declared liquidity profile and 2) UCITS that declared a slow asset liquidation compared to the fund's liabilities and do not have LMTs in place. One more NCA pointed out that it has introduced quarterly liquidity stress tests for all UCITS and retail AIFs and pays close attention to RCRs and the liquidity shortfall measures. The same national public authority also indicated that it follows the daily fund inflows and outflows as a preliminary measure of unusual activities. Finally, one NCA pointed out that, while the reporting quality is set to improve with changes to AIFMD, AIFMD reporting on a quarterly basis provides a fairly static picture of liquidity, which may not be representative of portfolio liquidity during stress events. Another NCA suggested that the frequency of reporting should be increased in times of crisis, especially for information on large redemptions, as well as portfolio actions and LMT used to deal with large redemption requests.

The consultation paper also asked about the **challenges asset managers face when trying to measure and address liquidity risks in stress situations**. They list the following challenges: (i) Access to real time market data in crisis times, especially when there are valuation gaps between prices modelled and prices actually traded and when markets have low transaction volumes (e.g. fixed income markets are highly fragmented and their price discovery mechanism is considered opaque by many asset managers, leading many to ask for a consolidated tape) (ii) Modelling investors' behaviours and liquidity demand in stress conditions, facing lack of information from fund distributors about clients in omnibus accounts (mainly type, size and concentration of holdings) complicated by the multiple distribution channels (institutional and retail clients would act very differently); and (iii) Ability

to calibrate swing factors. An insurance stakeholder mentioned that because fund distributors may not always be keen to share information related to their end clients with fund managers, even in anonymized form, the European Commission should consider actions to ensure that fund distributors share for free their client typology data – even in anonymised format – with the asset managers of the funds they distribute.

#### 3.2.2.2 Tools and ex ante powers of supervisory authorities to address unmitigated liquidity mismatches (Q. 18, 19)

*The consultation paper asks about the tools and powers available to address unmitigated liquidity mismatches, mainly focusing on the role of NCAs in this process. Stakeholders were also invited to provide their views on how NCAs could ensure that fund managers make adjustments to LMTs if they are unwilling to act and how coordination could be enhanced at the EU level.*

On **unmitigated liquidity mismatch and the role of NCAs**, a baseline assumption for the national public authorities is that the responsibility to deal with liquidity management issues should first be with the asset manager, who know best the idiosyncratic characteristics of the fund and has a fiduciary duty to investors. The asset manager should be responsible to (pre-emptively) activate (on a fund-by-fund basis) the available LMTs to address the liquidity mismatch (and justify their decision to NCAs).[7] This implies for several respondents that only in the absence of appropriate activation (and selection) of LMTs (or even converting the fund in a closed-ended investment vehicle), the NCA should consider intervention. Few NCAs suggested that two main supervisory actions are available to them (after collecting the relevant information from the fund managers): 1) direct dialogue with the fund manager based on internal monitoring risk models and suggesting mitigation measures deemed necessary (one pointed out that this is an explicit power in their jurisdiction derived from the implementation of Article 16 of AIFMD); and 2) suspension of redemptions and subscriptions (empowerment provided in EU law in extreme cases, used by one NCA as a threat to impose remedial actions. One NCA would launch a probe into the relevant management company's liquidity risk management framework and liquidity stress testing practices, to ensure adherence with relevant regulations and guidelines. However, one NCA reported having experienced difficulties in enforcing risk mitigation actions, highlighting the need for more explicit intervention powers in such situations. As a result, some NCAs may have a limited range of powers to impose other actions than a suspension of redemption. Overall, most national public authorities agree that NCAs supervisory actions cannot replace funds' own risk management practices and that NCAs cannot be asked to act first, as direct NCA intervention would generate moral hazard and stigma effects that could trigger investor panic. Few public authorities suggested that the European Commission should consider legislative amendments to place a default requirement on OEFs to have anti-dilution LMTs at all times, even on a partial basis, especially for funds that are less liquid, i.e. based on the liquidity bucketing approach. While one public authority advocated for the mandatory selection of at least one quantitative LMT, to ensure that managers can reduce redemption pressures if deemed to be in the best interest of the investors without having to suspend the fund, another one mentioned anti-dilution LMT, to protect existing investors against significant material dilution. ESMA mentioned the need for the EU to implement ex-ante liquidity measures to enhance OEF's resilience by applying liquidity bucketing approaches and cash buffers based on OEF liquidity profile following the implementation of the FSB's 2023 recommendations to enhance the liquidity management of OEFs.

[7] To be noted that there are ex ante LMTs (like notice periods) that are not necessarily activate in stress times and ex post LMTs (like redemption gates) that are activated by a stress event.

With regard to suggestion on how **coordination of supervisory practices could be enhanced at the EU level**, most industry stakeholders see no need to strengthen further the existing supervisory powers of the competent authorities in relation to liquidity risks, provided that authorities receive the necessary and timely information from entities and there is sufficient data exchange between competent authorities, ESMA, ECB and ESRB to limit duplicative reporting. Supervisors should also have a limited role in the selection and activation of LMTs and should not impose uniform LMT activation across cohorts of funds due to the complexity of identifying such groups with strong similarities as that could exacerbate procyclical market effects. A large asset manager did not rule out that a supervisor could intervene to address material shortcomings in a company's liquidity risk management framework. Some EU authorities (ESRB and the Eurosystem) argue that while tools and measures in current regulation may be useful in crisis management, there are limited ex-ante tools to strengthen resilience against liquidity shocks in the investment fund sector. Therefore, there could be a possibility to introduce a tool to address the build-up of liquidity risk that could be conceived as the tool to address the build-up of leverage for AIFs in Article 25 of AIFMD. Some NCAs and market authorities, however, see no merit of having a tool based on Article 25 of AIFMD for liquidity, as it would be hard to design in practical terms since NCAs cannot assess liquidity on a day-to-day basis and efficiently replace the asset manager to determine which relevant liquidity tool to activate in crisis times. There could also be potential threshold effects and first mover advantage risks that could emerge from the NCA decision to activate such tool.

#### 3.2.2.3 Liquidity stress testing (Q. 22, 23, 24,25)

*The consultation paper asked NCAs to explain how they use stress test results for liquidity risk monitoring and how effective the current process and data collection is. Then, NCAs were asked about the feasibility (costs and benefits) of a stress test requirement at the asset management company level. Finally, asset managers were asked about challenges in calibrating worst-case and stress-case scenarios in relation to redemptions and margin calls.*

**On the use of fund level liquidity stress test results by NCAs,** whether results come from UCITS or AIFMs, NCAs make quite a different use of these results. Several NCAs report making use of stress testing results for micro and macro level supervision. This may imply use for systemic risks monitoring, but also to challenge the fund on their liquidity risk management and to conduct on-site inspections. Some NCAs stressed that, due to the very different nature and assumption made by each asset manager (which decides the parameters of the stressed scenario), they cannot systematically compare results across AIFs (also using similar strategies) for systemic or macro-supervision and pledged for the use of uniform parameters and scenarios for liquidity stress tests at the fund level. For MMFs, according to one NCA, the use of a standardised set of parameters and scenarios across the Union has increased the usability of the data and comparability across fund types, managers and countries. The Eurosystem pointed out that the use of standardised parameters and scenarios at a fund and system level is essential to ensure that stress testing data can be used as an effective supervisory tool. While the details of the parameters and results of fund-level stress tests are available, the lack of standardisation for stress testing for AIFs can make it difficult to effectively use this data. Notwithstanding the liquidity stress testing guidelines published by ESMA, no standardisation exists for AIFs, making it difficult to use data to monitor stress tests. Currently no such reporting requirement is applicable to UCITS, but one NCA noted that it collects similar data from UCITS (every 6 months) and it does so based on a number of standardised questions. The same NCA argued that standardised questions could be potentially sent to all fund managers running those stress tests. A national public authorities highlighted that NCAs do not structurally receive underlying fund data or methodologies

used by fund managers, because they are not obliged to share this information unless requested to, with some NCAs request underlying data regularly and other a case-by-case basis. Finally, another NCA sought proportionality in the frequency of reporting of stress test results, mainly based on size (e.g. for small funds to be an annual exercise rather than quarterly).

**On the pros and cons of adopting stress test requirements at asset management company level,** several asset managers found the exercise unnecessary and too costly. In particular, investment funds are set up as separate legal structures (not consolidated at group level), with segregated assets and managed according to their single investment strategies, with different risk profile and investor base, so they need to be looked at in isolation and aggregated results may not be relevant. The asset management company itself is not exposed at aggregate level to fund level risks, even though it remains exposed to operational risks (such as cyber security risks). The Eurosystem acknowledges that if there can be some benefits in fund level stress testing for broader supervisory perspectives to identify common reputational and operational vulnerabilities, the key focus of stress testing for macroprudential purposes should be to identify cohorts of funds and herding behaviours. Focus on funds of funds and cross holdings could be useful, but greater priority should be given on conducting system wide stress tests. Some NCAs concur that, keeping proportionality principles in mind, stress testing at asset management company level could be useful, but the scope and purpose of this exercise needs to be well-defined. They could use reverse stress test to identify the situations or points of non-viability to extract useful information about vulnerabilities in a firm's business model and strategy. This would also allow easier aggregation of holdings across all the managed funds to provide a comprehensive assessment of liquidity risk and also benefit own investors by better understanding portfolios' resilience and identify common risk warranting common action.

**On the calibration of worst-case and stress-case scenarios in relation to redemptions and margin calls**, asset managers mentioned four points in particular: 1) the need to improve data to better estimate client/asset owner behaviour and redemption patterns; 2) the lack of predictability of intraday margin calls is a challenge calling for standardisation and increased transparency of CCPs margin models; 3) the idiosyncratic nature of crises means that stress scenarios must rely on various aspects beyond historical redemptions, such as client segmentation and concentration and the potential for correlated redemptions and cross-sector interconnections: and 4) understanding what eligible assets for margin are and how they react to stress periods is a key component of calibrating stress scenarios. Against this background, **several asset managers called for an expansion of assets that are deemed acceptable for collateral purposes** as it would support liquidity management and margin resilience.

### 3.2.3 Other NBFIs and markets (Q. 26 to 42)

#### 3.2.3.1 Margin call risk and preparedness (Q. 26, 27)

*The consultation paper also seeks views on margin preparedness of NBFIs, having been a recurring issue for NBFIs in all recent stress episodes mentioned in the consultation paper, asking stakeholders to provide also relevant risks metrics and tools to monitor it.*

**On NBFI margin preparedness**, several industry stakeholders advocated that greater transparency in CCP margin models is needed to help market participants anticipate margin calls more effectively. Indeed, a lack of transparency in margin methodologies makes it difficult for market participants to anticipate liquidity needs, advocating for clearer disclosures and stress simulation tools and more predictable intraday margin calls as standardized margin framework could reduce liquidity stress. Some market infrastructure operators, however, called for more proportionate transparency measures.

Indeed, while transparency provisions on margin models are necessary, one respondent stressed excessive transparency could lead to speculation and destabilizing effects during market stress. Moreover, two market infrastructure operators acknowledged the importance of margin simulators in helping market participants prepare for margin calls, but they should remain flexible, avoiding rigid legislative obligations. The same stakeholders considered recent EMIR changes a positive step that could allow non-bank market participants to post non-cash collateral, such as uncollateralized bank guarantees, to reduce liquidity pressures. One market infrastructure respondent also expressed concerns regarding clearing member transparency noting that clearing members do not always provide full transparency to their clients regarding margining dynamics, suggesting that better client-clearing member transparency would improve liquidity preparedness. Stakeholders from the banking industry also called for regulatory reforms to enhance repo market resilience but stressed that stringent capital and liquidity requirements restrict banks' ability to intermediate in repo markets, limiting NBFI liquidity options during stress**.** They encouraged sponsored access to clearing as a way to strengthen liquidity access for NBFIs. Among pension funds, one stakeholder noted that following a significant increase in supervision and monitoring post-UK LDI crisis, collateral management is now performed daily and only cash (shifting out from bonds) is required for cleared positions. Supervisors have strengthened their engagement with pension funds, including conducting stress tests. Sone national public authorities noted that preparedness varies across NBFI sectors, with pension funds and insurers generally better equipped to handle margin calls than asset managers and hedge funds. One authority emphasized that unexpected spikes in margin calls can create systemic risks, particularly for non-bank clearing members who lack access to central bank liquidity. Moreover, few other NCAs noted that margin requirements should be adjusted, ensuring that margin calls do not amplify market stress. Finally, several NCAs highlight that stress testing and scenario analysis should be used to assess liquidity risks and potential margin call vulnerabilities. According to the ESRB and the Eurosystem**,** episodes of market turmoil suggest the lack of NBFI preparedness to meet margin calls, requiring improved risk mitigation. The two EU authorities noticed NBFIs should diversify liquidity sources to meet margin calls, using stress testing and scenario planning to improve governance and risk calibration. The ESRB believes that the role of CCPs in margin stress needs closer scrutiny, as abrupt margin calls during times of high market volatility can propagate systemic risks (e.g. clearing members passing on initial margin increases to clients should not amplify liquidity stress), and anti-procyclicality measures should be extended to non-centrally cleared transactions, which remain vulnerable to sudden liquidity squeezes. Also, the ESRB stressed Commission should assess whether additional legislative changes are required to fully implement forthcoming BCBS, CPMI, IOSCO, and FSB recommendations on margin preparedness, particularly for derivatives and securities markets. Finally, EIOPA mentioned insurance companies, which are exposed to margin calls through their use of derivatives (particularly interest rate swaps cleared via CCP) arguing that the rise in interest rates has led to significant variation margin calls, but insurers have managed without signs of liquidity stress or market spillovers.

Responses also discussed preparedness with regard to **collateral eligibility**, and many asset managers suggest expanding the scope of eligible collateral for variation margin calls to reduce procyclical cash demands. Proposals include allowing sovereign bonds, shares of MMFs, ETFs, and other high-quality assets. Most respondents from the banking sector advocated also for an expanded range of eligible collateral beyond cash, including high-quality liquid assets such as MMFs, government bonds, and public guarantees to mitigate liquidity pressures during stress periods. Several asset managers pledged for tokenization of assets as a means to improve collateral mobility and mitigate liquidity risks in stress scenarios. One respondent from the banking sector also supported this idea and stressed the need for enhancing automation and standardization of collateral workflows to mitigate liquidity stress and improve market efficiency.

**On risk metrics and tools**, some industry respondents emphasised that a one-size-fits-all approach is not appropriate for monitoring liquidity and margin preparedness across diverse types of NBFIs, as the sector is highly heterogeneous. Behind that, asset managers stressed that appropriate tools are clear governance and operational processes around collateral and margin management, including regular engagement with clearing members. As such they highlighted the importance of stress testing, redemption coverage ratios, liquidity gap reports and margining gaps under different market conditions (assessing differences in eligible collateral across institutions) to monitor liquidity risks. For example, the Central Bank of Ireland's approach (regular stress testing of collateral portfolios against market movements) was considered a good practice by two respondents from the banking sector. As a key metric to monitor margin and liquidity preparedness, one market infrastructure operator proposed an equivalent to the Liquidity Coverage Ratio (LCR) for systemically important NBFIs, as well as a long-term leverage monitoring tool similar to banks' Leverage Ratio (LR). From the banking sector, one respondent proposed the volume of unencumbered high-quality assets available for margining. One respondent belonging to the insurance sector, mentioned: 1) the EIOPA's EU-wide liquidity stress tests assess insurers' resilience to liquidity shocks; and 2) the IAIS Holistic Framework, which incorporates five global liquidity metrics as ancillary indicators for macroprudential analysis. Solvency II metrics for insurers were also mentioned by and NGO as good practice. Among national public authorities, many agreed with the industry that preparedness varies across NBFI sectors, with pension funds and insurers generally better equipped to handle margin calls than asset managers and hedge funds and one emphasized that unexpected spikes in margin calls can create systemic risks, particularly for non-bank clearing members who lack access to central bank liquidity. Other two NCAs emphasized that sector-specific indicators should be developed, as liquidity risks differ between pension funds, insurers, and investment funds. Other NCAs recommended enhancing reporting on collateral buffers and exposure to synthetic leverage to better track liquidity risks in investment funds and pension funds. Liquidity stress testing is a key tool for assessing margin preparedness according to the ESRB, which supported the inclusion of margin call analysis in system-wide liquidity stress tests. ESRB proposed that ESMA further enhances its investment fund stress testing guidelines to include the impact of margin calls on fund liquidity.

#### 3.2.3.2 Liquidity and leverage risk reporting by pension funds (Q. 28, 29)

*The consultation paper asked respondents to provide feedback on how to improve supervision of liquidity risks for pension funds, as well as how to ensure more effective look-through capability of their exposures to monitor leverage risks. The paper also enquired on how to run more consistently an EU-wide liquidity stress test and the role of EU authorities (considering the existing powers to initiate a sectoral stress test in the EIOPA regulation).*

On how to improve **supervision of liquidity risks for pension funds**, most asset managers agreed that existing supervisory tools (i.e. current reporting frameworks) already provide sufficient oversight, especially under IORP II and national regulations. In particular, most respondents from the insurance and pension fund industry pointed out that a comprehensive set of data is already available to authorities. A stakeholder from the insurance sector suggested that explicit reporting requirements for pension funds using derivatives or LDI funds would be justified once a material threshold is reached. One asset manager supported the expansion of pension funds' existing Own Risk Assessment (ORA), rather than the introduction of new obligations. The same respondent proposed **introducing risk indicators**, such as projected liquidity scenarios, **to enhance look-through capabilities** and improve supervision without increasing the compliance burden. One large asset manager also mentioned additional reporting of the available cash or cash like assets to cover margin calls from CCPs and the

level of yield move that might cause funds to need to sell repo or government bonds. One respondent from the banking sector proposed coordinating liquidity stress testing requirements at the EU level to avoid duplicative reporting obligations for pension funds operating in multiple countries. Pension funds respondents admitted they cannot hold enough cash to meet large variation margin calls (they depend on repo markets, liquidity facilities, and asset transformation), arguing that repo markets may fail in periods of severe stress. They leveraged measures like liquidity facilities for pension funds, which are already active in UK, US and Canada. One respondent from the banking sector noted that the CBI and CSSF already have in place a data template for monitoring the resilience of sterling-denominated LDI pooled funds, suggesting this could be adapted for use by IORPs using derivatives and repo in several areas. One national public authority emphasised that the new Solvency 2 requirements for insurance companies on margin calls and liquidity stress tests are sufficient and that **look-through holdings data is already available**, including derivatives positions, through regulatory reporting by pension funds. Another one argued that EMIR data already allow the monitoring of the derivative portfolios of pension funds in its own country on a more frequent basis. Another response from a national authority mentioned the importance to preserve proportionality principles and national options available when devising new reporting requirements for financial stability purposes, in particular when domestic insurers with traditional insurance activities do not face a significant liquidity risk and have no derivatives exposures or LDI type strategies as in the UK. Nevertheless, several authorities acknowledged that there is a need for further development of reporting at EU level, to improve data quality (making use of LEI and ISIN identifiers, EMIR and SFTR data) and data sharing (access to the CSDB database) so to help NCAs. Two authorities proposed some entities shall be subject to enhanced scrutiny such as reporting of private equity funds as participations. Moreover, a national public authority suggested, as one respondent from the industry, that CSSF and CBI national data collection and templates applying to LDI pooled fund managers could in theory be adapted for reporting by IORPs, thus building on an existing form of regulatory reporting. EU authorities (ESRB, EIOPA) are of the view that more comprehensive regular reporting is needed such that authorities can act when risks are building up which will also reduce ad hoc data requests during times of market stress. IORPs using derivatives make up the majority of the IORP market in terms of assets, but the current reporting framework entails little information about actual notional amounts. In a survey conducted by EIOPA among NCAs, 40% of NCAs indicated that they do not collect derivative data from IORPs, or they collect only the market value of derivatives in the IORPs' balance sheet. Where NCAs collect relevant derivative data, like type of derivatives and notional amounts, this is often only true for direct derivative holdings and not indirect derivative holdings through investment funds. This makes it difficult for NCAs to assess the liquidity risks that IORPs are facing, as required by the IORP II Directive. To improve the supervision of liquidity risks stemming from indirect derivative exposures, EIOPA said **NCAs could**, as a first option, **collect data on indirect derivative holdings directly from their IORPs**, which are expected to already dispose of these **look-through data**. As a second option, derivative data that is already reported by investment funds to their competent authorities or to derivative trade repositories, as required by EMIR, could possibly be used. Notwithstanding the different level of granularity of the Solvency II reporting, according to EIOPA similar consideration should be extended to insurers offering pensions products.

**On costs and benefits of a regular EU-wide liquidity stress test for IORPs**, most banks, asset managers and ICPFs stated that EIOPA already conducts liquidity stress tests every two years, questioning the need for revamping regulatory stress testing rules. According to most of the pension sector respondents, stress testing should not be the only tool for liquidity risk management, but emphasis should be made on scenario planning and risk management by pension providers. Additionally, pension funds emphasized that liquidity risks were often country-specific and better addressed by NCAs through scenario planning and targeted risk management strategies. Some asset

managers said that if liquidity stress tests were introduced, they should be risk-specific rather than broad-based, focusing on solvency, coverage ratios, and liability management rather than generic liquidity risk. A large asset manager doubted about potential benefits of additional stress testing and was sceptical about what new insights they would provide beyond existing assessments. Public national authorities recognized potential value added of an EU-wide stress tests for IORPs but highlighted the need for flexibility, stressing that pension funds structures vary significantly across Member States, requiring flexible stress test methodologies. Some authorities indicated that EU-wide stress tests would improve risk assessments and preparedness, but costs and resource burdens must be carefully managed. Also, one regulator emphasized that national supervisors should have opt-out options if stress tests are deemed unnecessary in their jurisdiction. A few authorities suggest that EIOPA should lead the coordination of liquidity stress testing, aligning it with existing solvency assessments. Among EU authorities, EIOPA listed benefits of a potential EU-wide liquidity stress tests for IORPs: e.g. 1) early warning of vulnerabilities, 2) better understanding of liquidity risk in the pension sector, 3) assessment of pension funds' ability to manage adverse liquidity events, 4) increased transparency on the impact of market shocks on retirement savings. However, the regulator clarified that introduction of new EU legislation for IORP liquidity stress testing is not needed, as existing stress testing requirements already provide necessary insights. According to ESRB, rapid changes in interest rates pose a significant liquidity risk for pension funds, as seen in the UK gilt crisis. ESRB believes that IORPs with derivative exposures must be particularly monitored, as they may face large margin calls that require rapid liquidation of assets, calling for a harmonized EU-wide approach for consistency across member states (i.e. IORP II is a minimum harmonization framework). The ESRB suggested complementing bottom-up tests with top-down, and system-wide analyses for broader market insights. Nonetheless, both authorities agreed that new EU legislation was unnecessary, as existing frameworks were sufficient for identifying risks.

#### 3.2.3.3 Short- term market instruments (Q. 30 to 38)

*The consultation paper asked stakeholders about the potential creation of a new framework or label for commercial papers (CPs) and/or certificates of deposits (CDs), as well as the soundness of existing definitions of money market instruments. Then, it gathered feedback on the structure of these markets today and areas where this market structure can be further improved.*

This section of the consultation investigated the opinions of stakeholders with regard to a **potential new framework or label in EU legislation** and several respondents, including industry, public authorities and NGOs, generally agreed (with few exceptions among asset managers and from the banking sector) that this could enhance transparency and standardization in the money market, as well as efficiency and investor confidence. Overall, the industry supported an evidence-based assessment prior to any market change, highlighting the importance of involving issuers in the process to avoid that regulatory burdens could deter them and lead to further market concentration. On the **scope of eligible instruments for the framework or label**, one asset manager and one respondent from the banking sector discussing said that it should be aligned with Article 3 of the Eligible Assets Directive (with remarks on the need for flexibility to accommodate the bespoke nature of CP/CD markets), while another asset manager stated that the same article does not fully capture the diversity and evolving nature of current money market instruments. For this reason, additional criteria (e.g. credit ratings, residual maturity) could be helpful in the creation of labels that would reflect the heterogeneity of the market. According to the same stakeholder, a criterion should be introduced also for issuer eligibility (e.g. financial soundness, transparency requirements). **On potential costs of a new or revamped framework or label,** some respondents from the asset management and banking sectors cautioned about excessive transparency requirements, which may ultimately affect issuers' sensitivity regarding

funding costs (e.g. more transparency around pricing levels is thought to lead to misinterpretation of an issuer's financial health, potentially driving issuers to less transparent markets) and exclude smaller domestic markets/unrated issuers who benefit from local regimes. **On potential benefit**, the industry suggested leveraging existing initiatives like the Short-Term European Paper (STEP) label to achieve the desired standardization and transparency, that proved to provide transparency and standardization. One NGO stressed that any new framework should avoid increasing systemic leverage, particularly by excluding securitizations and instruments with embedded derivatives. Two national public authorities agreed that, if a framework or label is created, it should be within the scope of eligible assets in Article 3. A national public authority argued that standardisation could reduce costs of issuance and allow smaller entities to consider issuing CP/CDs, cautioning about the creation of a brand-new framework or label, suggesting building on existing labels and initiatives, such as the above-mentioned STEP label and the French Negotiable European Commercial Paper (NEU CP) market, which represents the only market in the EU subject to a legal framework for standardised content and presentation of information on issuers and programme description. The Eurosystem also explained that this label enables a reliable comparison among the various CP programmes used by EU issuers, promotes common documentation practices and is recognized for collateral eligibility. However, the Eurosystem also argued that its voluntary nature that limits its impact, as many issuers prefer direct bank financing to avoid additional disclosure requirements.

**With regard to the adequacy of the maturity threshold set in the Eligible Asset Directive 2007/16**, there was overall agreement (both from the industry and from the regulatory authorities) that the current threshold of up to 397 provides a balance between risk and is adequately calibrated for short-term funding markets. One of the asset managers added that the threshold also aligns with regulatory guidelines set by international authorities. Nonetheless, two NGOs argued for an extension of the threshold, to better reflect existing market practices in some jurisdictions, or even for a stricter limit of less than one year. One national public authority provided data on the maturity distribution of Money Market Instruments (MMIs) issuances, revealing that among financial issuers, three out of four MMIs issuances have a maturity ranging from 200 to 365 days. This maturity bracket is also used to some extent for issuance by non-financial counterparts (17.9% of total issuance). The Eurosystem strongly supported the above-mentioned views, suggesting that expanding Article 3 scope could cover legally distinct instruments (short-term securities, maturing within a year, and longer-term securities like bonds), thus complicating value comparisons.[8]

**On concentration risk and secondary markets' liquidity in CP/CD markets,** the consultation questioned stakeholders whether the diversity of funding sources could be beneficial or detrimental to financial stability, and if so, what are the solutions that could enhance secondary markets liquidity and reduce reliance on banks. Several asset managers and other industry respondents generally acknowledged that a diverse issuer base could contribute to financial stability by enhancing market depth, increasing liquidity, and promoting economic growth. They emphasized that distributing risk more broadly could provide greater stability in times of market stress. Some asset managers shared complaints over the increased concentration due to the introduction of the MMF Regulation, which has reduced the number of issuers in short-term funding markets, due to the high credit quality requirements imposed. Furthermore, two asset managers warned that aligning rules between diverse

[8] Despite this, the Eurosystem response added: "There is market demand for instruments with maturities in excess of 397 days that are legally different from bonds. For instance, in the EU, aside from NEU CP programmes, issuers may opt for NEU MTN (medium term notes) programmes. NEU MTN have the same features (technically and legally) as the NEU CP, except for the maturities, which exceed one year (without restrictions). The NEU MTN outstanding volume is currently at around €40 billion."

types of MMFs (e.g., VNAV and LVNAV) could lead to even greater concentration and harm market diversity. In contrast, one respondent within the banking sector argued that the investor base is already sufficiently diverse, with participation from central banks, pension funds, and corporate treasuries, thus mitigating concentration risks. An asset manager highlighted that further diversification could be beneficial but the presence of sophisticated market participants, MMFs and banks, already helps distribute risks effectively. Expanding access to smaller issuers was widely seen as beneficial for financial stability from the no profit sector, as it would enhance liquidity, diversify risk, and reduce reliance on bank financing. The discussion on liquidity focused on how to improve market conditions for short-term instruments, like CP/CD. One asset manager and one respondent from the banking sector proposed leveraging digital platforms to align CPs with bonds in terms of disclosure and accessibility. One large asset management company suggested enhancing dealer banks' ability to intermediate by recognizing highly rated CPs as high-quality liquid assets and expanding central bank collateral eligibility. Similarly, one respondent from the banking sector emphasized the need for regulatory adjustments to support liquidity, proposing measures like providing capital and liquidity relief to encourage dealer banks to hold inventory, particularly during periods of market stress. They also suggested developing a dedicated repo market for CPs to increase liquidity options. National public authorities also overall agreed that the diversification of the issuer base, including smaller issuers, could enhance financial stability by promoting diversification of funding sources. However, they pointed out that smaller issuers might face higher costs than larger issuers due to the increased regulatory burdens and the preferences of investors, such as MMFs, for high-credit-quality issuers. Two national public authorities acknowledged the inherent challenges in improving liquidity, given the buy-and-hold nature of CPs and CDs, asserting that clearer legal frameworks and more standardized processes could help increase market efficiency and liquidity. One NCA advocated for market participants to take into account the tendency of STFM to become illiquid in times of stress and adopt a prudent approach, correct ALM management and acknowledge the market concentration to MMFs. Among EU authorities, the Eurosystem recognized too the danger of high concentration, recalling its intervention in 2020 when purchasing corporate CP to support short-term issuance and ease MMF tensions. Eurosystem also supported the idea that a more diversified short-term funding base would benefit issuers significantly. On the issuer side, Eurosystem emphasised that smaller ones must adopt strong corporate governance and disclosure practices to overcome information asymmetries and attract investment. Moreover, it noted that CPs are primarily buy-to-hold instruments, recommending enhancing legal clarity, market microstructure and the use of digitalization to benefit efficiency and liquidity. Overall, although reducing reliance on banks is desirable, Eurosystem believes it is unlikely that banks will be completely replaced as market makers in the short term. The involvement of banks remains essential to maintaining market liquidity, particularly during periods of stress.

Respondents were asked to share their views on the **reasons why euro-denominated commercial papers are in large part issued in the 'EUR-CP' market outside the EU and what are the associated risks**. Corporate issuers highlighted the importance of familiarity and established relationships with brokers as crucial factors for the continued reliance on the EUR-CP market even after Brexit. In their view, CP markets in the EU need to address fragmentation (through harmonising regulation and streamlining documentation and processes around issuance) and grow in scale to become more attractive to some of the issuances now taking place outside the EU. Indeed, a large asset manager emphasized that the EUR-CP market's global reach and established legal framework reduce risks, advising against major changes to a system that is working well. Even if few noted potential risks, such as lack of transparency, standardisation and market fragmentation, which could lead to liquidity challenges during market stress, the category overall rejected the opinion that there could be systemic risks arising from this market structure. Respondents from the banking sector also saw minimal risks in

issuing CPs outside the EU, even though they acknowledged that the EUR-CP market lacks regulatory oversight and transparency, especially in times of financial stress. They also highlighted the market's reliance on English law, while acknowledging that its international nature may complicate monitoring and regulatory control. One respondent from pension system expressed concern about the inability of EU authorities to effectively monitor euro-denominated CPs issued outside the EU. Other industry respondents commented on risks related to market inefficiencies and the perception that EU markets are national rather than EU-wide, mentioning historical preferences and cost inefficiencies as barriers to shifting away from the EUR-CP market. The risks associated with regulatory fragmentation and the potential lack of attractiveness of EU-based CP markets were also common topics, suggesting a need for harmonization and technological innovation to mitigate these issues. Two national public authorities suggested that the EU should enhance transparency and regulatory oversight to attract more issuers to EU-based markets and possibly relocating issuance within the EU to improve supervision. Along these lines, the Eurosystem identified significant risks associated with the EUR-CP market's dominance, including its opacity and the lack of a regulatory framework. These factors indeed complicate market monitoring, especially during stress periods.

On the **possibility to trade on a regulated venue increase secondary market volumes in a systemic event**, most asset managers agreed that it does not necessarily guarantee liquidity during stress periods, arguing that liquidity depends more on risk appetite, market participants' willingness to trade, investor base diversification and dealer intermediation, rather than the venue itself. Two respondents representing corporates saw more trading on regulated trading venues as a way to increase transparency and provide a safety valve in case of systemic events but cautioned against a trading obligation because of the potential costs of limiting access to more flexible OTC issuance, which should remain available to corporates. Two asset managers highlighted that dealer intermediation remains critical for money markets, and shifting transactions to regulated venues does not address the core issue of constrained balance sheet capacity. Some industry respondents (mostly asset managers) proposed the introduction of a standing repo facility for CP/CD with the Eurosystem, similar to existing facilities in the U.S. An asset manager noted that all-to-all trading structures might improve market resilience but would not solve liquidity shortages alone. Banking sector respondents pointed out that central bank purchase programs remain crucial for improving liquidity during truly systemic events, while in stress situations, bilateral OTC trading might be more effective, as sellers could face price pressures on regulated venues. National public authorities overall doubted on the real efficacy of the measure, with one authority advising high caution, while another one suggesting such activities to be contractual, i.e. voluntary, better supporting utility aggregation. Eurosystem mentioned historical instances of significant bond market stress, such as the global financial crisis, which showed that market-making commitments failed to ensure continuous pricing, even for typically liquid bonds like covered bonds and government securities in Europe. Even though it recognizes the challenges, Eurosystem recognized that mandating CP/CD trading on regulated venues could modernize market infrastructure, enhance price discovery, and improve transparency for regulators, supporting market monitoring and collateral valuation.

Finally, stakeholders were tasked to think about potential **benefits and costs of introducing an obligation for money market instruments to trade on regulated trading venues (Q.38)**. Most asset managers expressed strong scepticism toward this measure. Many highlighted the drawbacks, such as increased costs, reduced flexibility, and potential liquidity fragmentation. One respondent emphasised that such obligations would impair liquidity due to the unique CP/CD market characteristics, which differ substantially from equity markets. Similarly, two large asset managers stressed that dealer intermediation is crucial for the commercial papers and that mandatory trading on venues could lead to dealer exits, negatively impacting liquidity. Other industry stakeholders agreed that the wholesale

nature of these short-term instruments market necessitates flexibility, which would be curtailed by such obligation. Furthermore, the same respondents were concerned about costs and operational complexities (e.g. compliance, operational fees, ISIN generation) outweighing any transparency gain. One asset manager suggested instead expanding all-to-all markets and electronic trading platforms, alongside standardisation, would be more effective than imposing trading obligations. Most of the respondents from the banking sector opposed mandatory trading on venues, citing confidentiality needs for large transactions and the flexibility of OTC mechanisms, because it is likely to negative affect participants diversity and increase costs, potentially driving issuers to alternative funding sources. Moreover, two banking sector respondents proposed, instead, that digitalisation and a shorter settlement time could be better options to address market inefficiencies. National public authorities provided diverse responses. Some of them supported an obligation to trade on trading venues for enhanced transparency and market monitoring purposes. They also recognised issues like market fragmentation, uneven competition with non-EU jurisdictions, potential risk of reducing dealer participation. A national public authority highlighted the differences between fixed-income instruments and equities, noting that many instruments are held to maturity, making mandatory listing or admission to trade less relevant. The Eurosystem supported the idea that trading on a regulated platform could enhance transparency and information availability in the secondary market. However, it also noted that such commitments may not prevent market disruptions during times of stress. Additionally, Eurosystem doubted on the extent to which regulated venues would support liquidity under normal conditions.

#### 3.2.3.4 Commodities' markets stability and risk transmission (Q. 39, Q40, Q41)

*The consultation asked stakeholders feedback on the role of commodity markets, especially during stress scenarios, by collecting feedback on the level of preparedness of commodity derivatives traders and on how to contain risk of contagion from spot to derivative markets. See also responses to the question on integrated supervision under section 3.5.3.*

On the **level of preparedness of commodity derivative traders (Q.39)**, industry stakeholders (asset managers, market infrastructure operators and NGOs) noted that commodity derivatives market participants, including commercial undertakings, investment firms, and pension funds, are generally well-prepared for **short-term liquidity needs**, citing various reports supporting this thesis (FSB, ESMA, and EBA). Asset managers suggested UCITS Funds are well-prepared due to strong risk management rules in place. A large asset manager added that AIFs show mixed levels of preparedness, depending on their leverage and structure, with some potentially facing liquidity issues in tough market conditions. A respondent from the insurance sector argued that insurance companies are considered well-prepared under Solvency II rules, whereas one stakeholder from the pension funds sector mentioned the Italian case, where IORPs have negligible exposure to commodity derivatives due to strict regulation in place. National public authorities agreed on commodity derivatives' adequate preparedness, stressing that non-financial counterparties face higher liquidity stress. The ESRB shared a comprehensive analysis of the status of commodities markets, emphasizing the critical role of **liquidity preparedness to margin calls during periods of market stress**. It recalled the 2022 energy crisis, which highlighted the potential for funding and market liquidity feedback loops to amplify risks, especially in highly concentrated markets. In the EU natural gas futures market, price spikes and volatility led to several destabilising effects: (1) liquidity pressures on both financial and non-financial participants, compelling them to either expand credit lines or reduce positions; (2) a squeeze on short positions, as market participants hedging presold energy output faced escalating margin calls without adequate short-term funding, forcing some to exit the market; (3) non-financial firms, particularly energy companies,

experiencing severe liquidity constraints as they were required to secure substantial cash reserves for margin calls. As explained in the response, this posed risks of higher energy costs for consumers.

Regarding **containing contagion risk from spot to future markets** (**Q.40, 41**), asset managers stated that existing regulations are enough and strictly opposed new requirements that could burden market participants. One industry stakeholder from the commodities sector argued that extending bank-like prudential requirements to commodity market participants would be disproportionate and harmful, potentially reducing market liquidity. One respondent from the banking sector also showed reluctance toward stricter regulation and mentioned the Market Abuse Regulation (MAR), REMIT II, and other sector-specific regulations already providing risk mitigation mechanisms for spot energy market participants, reducing the need for additional trading rules. Moreover, respondents expressed concerns about regulatory overlap between MiFID II, MAR, REMIT, and EMIR, which already impose significant compliance requirements. While some acknowledged risks of contagion between energy and financial markets, they trust current risk management practices to handle these, stating that risks are primarily driven by supply and demand rather than financial speculation. Some highlighted past measures, such as gas storage obligations or MCM (Market Correction Mechanism), having distorted market signals and increased volatility in financial markets. Regarding potential improvements, there was a call to better align spot and futures market rules to minimize chances for arbitrage. According to the same respondent, a key vulnerability is faced by banks in providing credit and liquidity to those markets' participants due to capital and leverage requirements. Among national public authorities, some argued that spot market participants should not necessarily be subject to stricter trading rules. Also, one NCA noted that trading rules for electricity and gas spot markets have recently been updated, and further regulation is under review. Among EU regulators, ESMA advocated for an enhanced coordination between financial regulators and energy regulators (ACER). EBA and the ESRB advocated for targeted sector-specific stress tests, with occasional cross-sectoral exercises coordinated among ESAs, the ECB, and the ESRB.

#### 3.2.3.5 Emerging liquidity risks and market functioning issues in other markets (Q. 42)

*The consultation paper asked about risks and market functioning issues that can affect liquidity in other markets than those discussed in the previous sections.*

Some industry respondents (asset management and banking sector) highlighted potential liquidity stresses in fixed-income markets, corporate bond markets and repo markets, which could lead to pressures in other areas of the financial system through interconnections. One asset manager pointed to increasing concentration risk in certain asset classes, warning that a liquidity shock in one sector could spill over to other markets. Some asset managers argue that there is no significant evidence of emerging liquidity risks and caution against regulatory overreach. Banking sector respondents highlighted that liquidity risks can spread across markets due to market interconnectedness, highlighting interconnectedness between the repo market and bond markets. One banking sector respondent noted that if liquidity in the commercial paper market dries up, issuers may shift to bank financing or private placements, potentially straining bank balance sheets and reducing liquidity in bond markets while another noted that a liquidity crisis in the corporate bond market can lead to redemption pressures on Money Market Funds (MMFs), which may in turn affect broader market stability. One banking sector respondent suggested that non-regulated NBFIs as national competent authorities have limited visibility into their liquidity profiles, potentially leading to spillover effects during periods of market stress. One banking sector respondent also noted that hedge funds and relative value (RV) funds contribute to market liquidity but do not have an obligation to provide

continuous two-way quotations, unlike primary dealers, and in times of heightened volatility, they tend to exit the market, exacerbating liquidity risks. One NGO highlighted potential risks arising from the agricultural derivates market noting that large changes in prices on derivatives markets can cause liquidity risks for both physical and derivatives traders. This NGO suggested there is growing concentration in the agribusiness sector, which should be reduced with competition policy measures, to ensure that no large agribusiness can (silently) abuse its market power to unduly influence both spot and derivatives markets and resulting liquidity stress in finance firms. Some national public authorities outlined that they do not currently observe significant emerging liquidity risks but remain vigilant. One national public authority noted that liquidity mismatches in NBFIs can amplify market shocks and create spillover effects and highlighted concerns over synthetic leverage, particularly in derivatives markets, which could trigger margin calls and forced asset sales. One national public authority suggested that greater transparency in repo and derivative markets is necessary to mitigate liquidity risks. One national public authority noted that rising interest rates and tighter monetary policy may reduce market liquidity and increase refinancing risks for market participants. The ESRB noted that significant liquidity risks are emerging in key financial markets, as seen in recent government bond cash and repo market dysfunctions across the EU, the UK, and the US, with similar patterns observed such as extreme asset price/yield fluctuations, widening bid-ask spreads, shrinking trade sizes and sudden deteriorations in liquidity condition. The ESRB suggested that NBFIs have played a major role in these liquidity disruptions, particularly due to insufficient risk mitigation in bilateral clearing mechanisms, inadequate liquidity preparedness in response to margin calls and procyclical selling behaviours that amplify price swings. EIOPA noted that insurers' growing use of alternative assets poses additional financial stability risks, as many insurers may have shifted toward illiquid, highly leveraged assets in response to low-interest rate environments. EIOPA highlighted that these assets include private equity, structured products, and complex investment vehicles, which are difficult to liquidate in stress scenarios and noted that insurers using derivatives and LDI-like strategies may face liquidity strains from margin calls, particularly as interest rate swaps are now mandatorily cleared through CCPs.

## 3.3 Addressing excessive build-up of leverage

### 3.3.1 Systemic risk and leverage in investment funds (Q. 43, 44, 45)

*The consultation asked stakeholders to give views on where there are pockets of excessive leverage in the open-ended funds sector which are not sufficiently addressed and on tools not currently available in the EU to contain systemic risks arising from potential pockets of excessive leverage for OEFs. Stakeholders were also asked to give views on the benefits and costs of yield-buffers for liability-driven investment funds as applied by authorities in Ireland and Luxembourg to address leverage.*

**Regarding potential pockets of excessive leverage in the open-ended fund sector** that are not sufficiently addressed, asset managers did not identify any such pockets indicated that the current framework for OEFs, through restrictions on leverage for UCITS and the Article 25 AIFMD for AIFs, allows authorities to identify such pockets. Some asset managers disagreed with the focus on excessive leverage as an indicator of risk, suggesting this should just be a starting point to identify funds that can pose a risk. Some national public authorities referenced UCITS utilising the Value-at-Risk (VaR) approach as a potential source of risk. Some other national public authorities were not aware of pockets of excessive leverage and considered the current OEFs toolkit sufficient, even if they caveat their responses by the need for more cooperation and data sharing, suggesting that further work would be needed to better cover leverage-related risks in supervisory reporting and data sharing on foreign

funds investing in illiquid assets. One national public authority mentioned LDI funds as being leveraged but suggested risks are contained and also mentioned hedge funds noting exact vulnerabilities are particularly difficult to assess, as leverage is predominantly acquired through a variety of derivatives. European public authorities, including ESMA, the Eurosystem and the ESRB, raised the issue of potential systemic risks stemming from leverage by UCITS using the VaR approach, noting the issue needs further analysis. ESMA and the Eurosystem noted that while AIFs under AIFMD can be subject to leverage limits under Article 25, there is no such a harmonized tool for UCITS implementing sophisticated investment strategies and using the VaR approach for calculating their global exposure. The Eurosystem outlined that that UCITS pursuing hedge fund-like strategies amount to roughly €150 billion according to ECB statistics (around 30% of the total EU HF sector in terms of AUM), while the "alternative" UCITS segment (including hedge fund-like strategies) could total some €300 billion in assets according to ESRB estimates. The ESRB suggested that UCITs funds using the VaR approach should be required to regularly report on and disclose their leverage under the recently introduced reporting regime, for example, based on the commitment approach. The ESRB suggested that implementing direct leverage restrictions for all UCITS would be an effective way to prevent the build-up of excessive leverage or alternatively that these funds could be subject to a similar framework as for AIFs, including powers for authorities to impose leverage limits or other restrictions. The Eurosystem also suggested the ability to impose additional constraints on such UCITS funds – should they pose risks to broader financial stability – would enhance the existing macroprudential toolkit and that this could be achieved through the use of the same power as exists now in the context of the AIFMD (Article 25) for those UCITS using the VaR approach.

Regarding **additional tools to address leverage**, industry respondents (asset managers and banking sector) were mostly against additional tools suggesting that existing limits in UCITS and Article 25 AIFMD are sufficient for investment funds. One asset manager suggested that with respect to leverage, the focus should be on issues that would impact critical counterparties providing leverage or core markets and suggested a system-wide stress test based on a relevant scenario would be a useful tool to identify the type of links that could arise from leverage. Some asset managers raised the issue of data sharing in this context, suggesting this could help to identify and contain systemic risks by allowing macroprudential supervisors to form a complete overview of the financial system. Margin requirements were raised as a potential policy area in this context, with the suggestion that improving margin and collateral processes in derivatives markets, such as increased transparency around initial margin requirements and predictability in intraday margin calls, would strengthen resilience. One asset manager suggested a number of potential tools; enhancing regulatory stress testing focused on leverage-related risks; applying margin requirements more dynamically; facilitating the use by banks of their liquidity buffers during periods of stress; and, expanding acceptable collaterals to include, for example, public-debt constant net asset value (PDCNAV) MMF shares and certain qualifying ETFs. national public authorities considered the current toolkit sufficient with others agreeing with the caveat if it is applied consistently. Some public authorities raised the issue of cooperation and data sharing as beneficial in this context while one suggested further work is needed to better cover leverage-related risks in supervisory reporting. An NCA suggested implementing the FSB recommendations on minimum haircuts for SFTs, to help address the risks resulting from NBFI leverage obtained through repo financing. One national public authority proposed systemic risk generated by potential pockets of excessive leverage in OEFs could be addressed by the measures listed in the FSB 2023 Recommendation on OEF resilience. One national public authority suggested backing mechanism is needed for investment funds which could force their management companies to prevent a fund from losing liquidity, being suspended and triggering a market panic. One national public authority proposed a VaR-like metric to address links between leverage and liquidity, incorporating restrictions based on

the expected maximum margin call a fund could face under a highly adverse scenario, expressed as a percentage of highly liquid assets. The Eurosystem supported minimum haircuts for securities financing transactions and also suggested that UCITS funds using VaR should report and disclose regularly on their leverage, based on the commitment approach and argued for a discretionary tool to impose tighter leverage restrictions for these funds. The Eurosystem also suggested strengthening activity- and entity-based measures, stress testing, and public and private disclosures. The ESRB suggested regulators should consider measures such as introducing margin requirements for bilaterally cleared transactions in government bonds and repos and addressing impediments preventing NBFIs from centrally clearing trades, such as the limited uptake of CCP access models. Furthermore, in the context of mitigating transmission of liquidity stress induced by margin/collateral calls, the ESRB suggested liquidity stress tests would be helpful to assess the size of the potential cash needs and can be used not only by OEFs, but also other entities using synthetic leverage. The ESRB made a number of suggestions on UCITS/AIFMD, suggesting inconsistencies between the UCITS Directive and AIFMD in leverage definitions and metrics should be resolved to improve overall leverage assessment and that UCITS should regularly report and disclose their leverage using the commitment approach, harmonised between the UCITS Directive and AIFMD. The ESRB also proposed direct leverage restrictions for all UCITS, which would prevent the build-up excessive leverage, with VaR measures used only as a complementary measure and suggested that transparency around leverage use and lending activities in private equity and private debt funds should be increased.

Regarding the **benefits and costs of yield buffers** for certain open-ended funds, some industry respondents (asset management and banking sector) were positive on the measures, given they were tailored to the specific business model and LDI fund type while making clear that such measures would not be suitable for general use in the funds sector. Some asset managers provided neutral responses given lack of experience or lack of relevance of LDI funds for their businesses. One asset manager noted that benefits include consistency and ease of understanding for stakeholders regarding the requirements while a negate is the limited flexibility to evaluate funds on an individual basis. One large asset manager provided more detailed comments on key variables to consider for yields buffer implementation, such as initial margin, haircuts and other potential draws on collateral with robust calculations and noted that the yield buffer calibration will never provide complete protection against scenarios in which assets have to be sold to replenish collateral buffers. Several national public authorities were positive on the use of yield buffers as a tailored tool to address leverage risks, albeit one national public voiced some concerns, noting that leakage could occur with the lack of a reciprocity framework and also noted there could be possible leakage to segregated mandates that are regulated under MiFID or other forms of regulatory arbitrage. One national public authority expressed reservations on the use of yield buffers, highlighting they should be set on a case-by-case basis considering the interest rate environment, performance targets and investment horizons of respective funds. ESMA and the ESRB shared positive feedback, specifically in relation to their operational aspects and the composition of eligible assets. Among the stakeholders, ESMA suggested a prudent approach to the inclusion of assets which are not cash or eligible collateral, with such assets only accounting for a limited part of the total buffer. This prudent approach should especially apply to MMF shares included in the yield buffer. EU authorities also suggested it might be useful to explore the extent to which this measure could be calibrated to address leverage-related risks arising from (fluctuations in) other economic factors as such an approach may prove relevant for funds pursuing investment strategies beyond LDI. Properly, a liquidity buffer is believed to enhance fund shock absorption capacity and allow them, at least initially, to manage margin or collateral calls without resorting to asset sales. In its response, the Eurosystem cited minimum haircuts for securities financing transactions as supporting the measure's implementation.

### 3.3.2 High leverage in NBFI sector: liquidity and volatility risk and EU legislation gaps (Q. 47, 48, 51)

*The consultation asked stakeholders to give views on any NBFI sector entities with particularly high leverage in the EU that could raise systemic risk concerns and also asked whether stakeholders have views on macroprudential tools to deal with leverage of NBFIs that are not currently included in EU legislation. Stakeholders were also asked to provide views on the role concentrated intraday positions have in triggering high volatility and heightening risks of liquidity dry-up.*

Regarding **NBFI sector entities with high leverage**, industry respondents (asset management and banking sector) urged regulators to focus on harmonising leverage definitions globally and to prioritise oversight of unregulated entities rather than adding new burdens on regulated sectors like UCITS and AIFs. Some industry stakeholders (asset management and banking sector) advocated for conducting system-wide stress tests to identify leverage risks in less-regulated NBFI sectors, such as hedge funds and structured finance vehicles. Some national public authorities highlighted the need for better data collection and sharing regarding leveraged exposures outside traditional fund structures and for unregulated or lightly regulated entities (e.g., family offices, segregated mandates. Some national public authorities suggested limited evidence of excessive leverage in their jurisdictions but highlight data gaps limit comprehensive assessments, while some other national public authorities cite hedge funds, real estate funds, or private equity structures as having pockets of significant leverage, though not at systemic levels. EU public authorities (EBA, ESRB) expressed concerns about high leverage in the NBFI sector particularly within crypto-asset markets. Crypto exchanges and trading platforms provide highly leveraged trading tools, amplifying risks of cascading failures during price declines. Additionally, lending and borrowing activities in DeFi markets rely on overcollateralization and automatic liquidation systems, which can exacerbate risks. Both EBA and ESRB highlighted the lack of adequate disclosure and governance over crypto intermediaries, complicating risk assessment. While the EBA focused heavily on the risks of leverage in crypto-assets and MCIs, the ESRB highlighted broader concerns related to UCITS funds, hedge funds, and commercial real estate. Hedge funds, according to ESRB, frequently employ leveraged strategies, particularly within EU government bond and repo markets. In their responses, zero haircuts in bilaterally cleared repos were recognised as a risk multiplier, and brusque shifts in leveraged positions may heighten market instability during stress periods. Furthermore, EU regulators noted sophisticated UCITS using the VaR approach can reach leverage levels comparable to AIFs without direct restriction. Concerns were raised on heterogeneity in safeguards across fund types. Both regulators stressed the lack of comprehensive data and standardised leverage measures across sectors and that there is a need for a better understanding of leverage across complex intermediation chains and potential amplification channels, possibly through broader application of a look through reporting.

Regarding **macroprudential tools not yet included in EU legislation**, most industry respondents (asset management and banking) suggested current framework is sufficient, while few also stressed the importance of focusing on unregulated or less-regulated NBFI entities, advocating for tailored enhancements rather than applying bank-like tools indiscriminately to asset managers. The banking sector emphasized that additional tools targeting banks' leverage exposures to NBFIs are unnecessary, but improved coordination and data sharing among regulators are highlighted as priorities. One stakeholder from the banking sector suggested an activity-based approach to macroprudential regulation, targeting specific NBFI activities involving maturity or liquidity transformation that may pose systemic risks. Several national public authorities highlighted gaps in the current macroprudential toolkit, particularly for addressing leverage risks in UCITS funds that use the VaR approach. The same

authorities suggested adapting Article 25 of AIFMD to expand its applicability to other fund types or developing new macroprudential tools for NBFIs. Some national public authorities also call for greater harmonization of leverage definitions and metrics across NBFIs. Both EBA and ESRB emphasized addressing leverage in less-regulated areas, such as crypto-asset lending and borrowing, decentralized finance (DeFi), and private finance. They also proposed activity-based measures and entity-based approaches, including enhanced reporting and leverage limits where needed.

On the role of **concentrated intraday positions in triggering high volatility and heightening risks of liquidity dry-ups**, the asset manager who responded to the question suggested the introduction of consistent and predictable guidance on intraday margin calls that would help funds anticipate liquidity needs and avoid pro-cyclical selling. Moreover, it proposed more transparency in margin requirements to provide market participants with better visibility into potential liquidity demands. One stakeholder from the banking sector recognized the role of CCPs in managing concentrated intraday positions but highlighted the liquidity pressures caused by unscheduled intraday margin calls, especially during market stress. Recommendations from the same respondent included shifting to scheduled intraday margin calls for greater predictability, allowing CCPs to accept non-cash collateral, and enhancing collateral management practices to reduce liquidity pressures. Other respondents (Market infrastructure, NGOs, think-thank) pointed at significant data gaps in EU supervisors' assessments of market concentration in commodity derivatives as non-EU liquidity is often excluded from evaluations, distorting the view of market competitiveness. Additionally, one respondent noted prudential requirements on commodity firms could reduce their ability to provide liquidity, exacerbating volatility risks. Recommendations included: 1) addressing data gaps by incorporating non-EU liquidity in market analyses; 2) standardizing CCP margin models and avoiding new prudential requirements on commodity firms to preserve market liquidity. Among national public authorities, one reported no evidence that concentrated intraday positions directly trigger volatility or exacerbate liquidity dry ups. However, the rise of high-frequency trading (HFT) in commodity markets, such as European wheat, was mentioned by an NCA to alter market microstructure, reducing order book depth without significantly increasing volatility. The same respondent mentioned using alerts to detect sudden price variations and breaches of position limits, but no alarming trends have been observed. Two national public authorities commented that commodity markets, particularly natural gas and energy, exhibit high concentration levels, which can heighten volatility and liquidity risks during stress events. Transparency, monitoring, and scenario-specific regulatory interventions were emphasized as key responses to these risks. In these responses, one of the national energy markets inspectorates highlighted that intermittent electricity production has increased the importance of intraday markets. The introduction of intraday auctions in 2024 is expected to improve market liquidity, though its full impact remains to be assessed. Public authorities' policy recommendations included: 10 enhancing monitoring tools; 2) expanding the use of circuit breakers; 3) mandating detailed disclosures on market concentration in high-risk sectors such as natural gas and energy; and 4) monitoring the effects of new intraday auction systems introduced in electricity markets to evaluate their impact on liquidity. ESMA emphasised the importance of conducting a holistic review of the EU commodity derivatives markets, particularly focusing on the interplay between energy spot and financial markets, to address systemic risks effectively and suggested strengthening supervision of commodity markets to mitigate risks related to market concentration and volatility.

### 3.3.3 Leverage detection and monitoring (Q. 46, 49, 50)

*Public authorities were asked to share if they are currently able to detect financial and synthetic leverage in NBFIs, especially when funds invest in other funds based in third countries. All stakeholders were also asked how NCAs can better reconcile positions in leverage products taken via*

*various legal vehicles to the ultimate beneficiary.*

**On data gaps and ability to detect leverage risks**, asset managers argued that existing reporting frameworks (EMIR, AIFMD, and SFTR) already provide transparency into leveraged positions. They recommended optimizing the use of these data sets rather than imposing additional reporting obligations. Similarly, banks stressed that regulators already have tools, particularly under EMIR, to track exposures, counterparty risks, and concentration risks in derivatives markets. Instead of introducing new requirements, they called for improved data-sharing mechanisms between jurisdictions to provide a more comprehensive view of leveraged positions. Other stakeholders broadly supported international cooperation to enhance oversight. Suggestions included leveraging IOSCO's Multilateral Memorandum of Understanding and adopting a successful tool like the Hedge Fund Monitor in the United States.[9] Additionally, improved sharing of aggregated data between regulators was seen as crucial for understanding interconnections between NBFIs, banks, and leveraged products. Among national public authorities, two respondents recommended harmonizing leverage definitions across sectors while ensuring a balanced approach to additional data collection and implementation constraints. Overall, they shared they face significant challenges in accessing clean, complete, and timely data for monitoring leveraged positions due to delays in reporting. Key issues raised include inconsistent use of identifiers (e.g., LEIs) and cross-border data-sharing constraints, complicating effective oversight. To address these gaps, respondents advocated for strengthening reporting frameworks, mandating standardized identifiers and improving cross-border data sharing. Synthetic leverage and derivative exposures were also raised as particularly challenging to monitor due to existing data limitations, emphasizing the need for look-through data to identify the ultimate beneficiaries across complex intermediation chains, encompassing indirect holdings through investment funds and special purpose vehicles (SPVs). For instance, one public authority particularly underscored the need to address the lack of a look-through approach in private equity fund regulation, which hinders the assessment of leverage along the private equity financing chain. Two national public authorities recognised that reporting frameworks such as Solvency II and IORP II have specific regulation regarding derivatives, but identified them as insufficiently granular, because they are filed on a quarterly or annual basis and do not allow effective oversight. To enhance leverage detection, national public authorities proposed increasing reporting frequency and incorporating additional data points, such as margin requirements, collateral arrangements, and leverage ratios. According to them, although EMIR and SFTR data could be valuable tools, their effectiveness depends on quality improvements. Another authority highlighted the limitations in cross-border liquidity data sharing and resource-intensive data validation processes (EMIR and SFTR), which restrict leverage assessments, particularly in fund-of-funds structures. One authority suggested that AIFs could be required to disclose material off-balance sheet leverage in their regulatory reporting and financial statements, including supplementary information. At the EU level, EIOPA emphasised the need to address **data gaps in leveraged funds, loans, and mortgages in the insurance and pension sectors**, where key attributes such as loan-to-value ratios are often missing. To strengthen supervision, EIOPA advocated for expanding look-through possibilities within the existing regulatory framework for investment funds. A structured taxonomy for

[9] Few industry stakeholders suggested the experience of the Office of Financial Research in the US, which launched an interactive data visualisation tool (Hedge Fund Monitor) that collects aggregated data on hedge fund activities from several sources more accessible. Data are classified in 6 categories (size, leverage, counterparties, liquidity, complexity and risk management) covering potential vulnerabilities identified for this type of NBFIs. They also pointed out that data stems from existing sources (e.g. SEC filings, CFTC reports or FRB survey) and (ii) the monitor does not reveal entity-level confidential information.

identifying leveraged funds, such as LDI funds, was seen as a valuable tool for improving the supervision of investment strategies. Additionally, EIOPA argued that synthetic leverage should be treated equivalently to traditional leverage to ensure a more comprehensive risk assessment. EIOPA also proposed to enable access to shared data hubs among supervisors, which would enhance look-through capabilities by integrating data from multiple reporting systems across the financial sector. This approach would allow for a deeper analysis of underlying assets without imposing an excessive burden on reporting entities. Finally, EBA stressed that the introduction of IFR/IFD regulatory frameworks has improved prudential oversight, but these measures can partially address leverage detection for all NBFIs.

**On reconciling build-up of excessive leverage with ultimate beneficiaries in complex legal structures**, one NCA suggested to enforce to the maximum extent possible **LEI-reporting in financial supervisory reporting schemes** (also supported by a stakeholder from the asset management industry) and to grant national financial supervisory authorities' standing access to Euro Groups Register (EGR; European Statistical System) and Register of Institutions and Affiliates (RIAD; European System of Central Banks) microdata (containing reconciled information on ultimate beneficiaries). Access to ECB/ESCB Centralized Securities Database to all NCAs was also mentioned by another NCA. The same authority indicated that it should be made clear that each fund (or each sub-fund in the case of umbrella funds has to report under EMIR and SFTR individually, with its own unique LEI and ISIN code. Late, incomplete or wrong reports should lead to automatic fines. Proper identification of the fund was noted by this respondent as a prerequisite for combining the databases and re-constructing leverage figures. Other suggestions included: 1) data sharing among authorities of AIFMD reports, EMIR, SFTR; 2) portfolio data for funds domiciled abroad for the home NCA of the management company; 3) greater transparency in portfolio holdings and liabilities within private funds.

## 3.4 Monitoring interconnectedness

### 3.4.1 Banks and NBFIs interconnectedness (Q. 52)

*The consultation paper asked stakeholders to provide examples of links between NBFI sectors and between NBFIs and banks that could pose risks to the financial system.*

As of December 2023, EBA estimates the asset exposure of banks towards NBFIs at 9.2% of total assets (EUR 2.5 trillion), while the liability exposure of banks towards NBFI funding at 10.3% of total assets (EUR 2.8 trillion). This is also reflected in off-balance sheet exposures, with undrawn loan commitments, financial guarantees and other commitments extended to NBFIs amounted to 6.4% of all EU/EEA banks off-balance-sheet items, while those received from NBFIs amounted to 9% of all EU/EEA banks off-balance-sheet items. Data confirms that NBFIs are net lenders to banks. On this basis, an industry respondent suggested that interconnectedness should be considered an intrinsic and necessary feature of the modern financial system. However, **interconnectedness depends on several factors**, including the incentives created by regulatory intervention. Many industry stakeholders pointed out the importance of effective supervision and data sharing to monitoring emerging risks from interconnectedness, while some national and EU public authorities suggested that greater transparency and data collection on NBFI-bank interactions is needed to monitor emerging risks effectively.

Several stakeholders (including asset managers, EU and national public authorities, NGOs) highlighted the **risk transmission that exists between banks and NBFIs**. In particular, the Archegos case raised questions about poorly monitored leveraged positions and the risks stemming from prime brokerages services (like lending margins or through securities financing transactions or other derivatives, e.g. total

return swaps) to hedge funds and less regulated entities (like family offices). One stakeholder from the banking industry suggested that banks regularly monitor such exposures to manage concentration risks, in application of the EBA guidelines on shadow banking exposures, but it is also important to the role of securities regulators to monitor aggregated concentrations and that additional prudential restrictions would further reduce intermediation capability making stress situations even worse. An NGO suggested that limits on bank exposures to NBFIs should be mandatory. A national public authority also emphasised that these linkages may also raise **step-in risks** for banks because of their significant ownership links mainly with asset management and insurance companies.

Many stakeholders (including, among others, pension funds, public authorities and NGOs) also emphasised the build-up of risk from the **interlinkages between financial institutions via short-term funding markets**. In particular, some NBFIs, such as pension funds, rely on repo markets and other short-term funding markets to meet margin calls and such markets have shown inability to offer (secondary) market liquidity in past stress events. Moreover, short-term bank funding largely relies on money markets, which in turn largely rely on MMFs for liquidity through commercial papers and certificates of deposits (Eurosystem). This increases rollover risk for banks and liquidity risk for those using such markets for cash management purposes. Finally, large sections of these markets remain bilaterally cleared, raising counterparty and concentration risks (Eurosystem).

Most public authorities and NGOs pointed at risks stemming from **common asset exposures and portfolio overlaps** between banks, investment funds and other NBFIs. With large common asset exposures, forced sales during crises can reduce value of securities and lead to fire sales. Moreover, portfolio overlaps also occur for insurance and pension funds via large holding of investment funds units. An NGO also suggested that expansion by NBFIs (e.g. private credit funds and insurance companies) in **private credit markets** could expand the common asset exposures and so the possibility to amplify risks stemming from such activities, also considering the limited data currently available. Increasing use of synthetic securitisation of bank loans, with securitised instruments allocated across NBFIs (e.g. hedge funds, private credit funds) can also increase complexity of interconnection with and among NBFIs according to an NGO.

### 3.4.2 EU-wide System-Wide Stress Test for banks and NBFIs (Q. 53,54,55)

*The consultation paper looked for stakeholders' feedback on the benefits and costs of an EU-wide system-wide stress test for banks and NBFIs. Moreover, it looked into the role that current reporting and data sharing arrangements could play for this exercise and what can be learned from similar exercises done in the EU and beyond (especially in relation to the governance of the stress testing effort).*

Generally, this exercise was seen by stakeholders as either a bottom-up exercise, like the Bank of England's System-Wide Exploratory Scenario (SWES), or as a top-down exercise, like the fit-for-55 stress test. The two types of stress tests could both be designed to measure/model second-round effects but are different in nature and can produce different outcomes.

On the **benefits of an EU-wide system-wide stress test**, all stakeholders see value in such exercise if properly designed, mainly in better understanding interconnectedness, portfolio overlaps and effectiveness of hedging strategies. Some NGOs and (EU and national) public authorities argued that such exercise would also provide better visibility over systemic risk that is 'hidden' across banking and non-banking sectors. According to the same respondents, it would thus provide a meaningful tool to identify second-round effects and contagion risks (and allow market participants to hedge against these risks, so providing value back to the industry) and ensure a more effective macroprudential

oversight, as well as a better calibration of existing regulatory tools. It would also complement existing sectoral stress tests conducted by the ESAs (which do not measure second-round effects and contagion risks), helping them to assess cross-sectoral interconnectedness and feedback loops and to monitor liquidity risks through a better understanding of the reaction function of key markets and entities in those markets[10]. Finally, it would help to identify risks that cut across all sectors, such as cyber and climate change risks. On **costs**, instead, all stakeholders pointed at the resource-intense nature of a system-wide stress test, the risks of overlapping with existing stress testing activities and add more reporting burdens. EU authorities (Eurosystem, ESRB) have also flagged the importance of earmarking enough resources for this exercise. Moreover, there are overall concerns on feasibility and data challenges, with methodologies taking time to be operationalised, 'hidden' links not easy to identify and data quality varying a lot across sectors. There is also complexity in the adverse scenario design, which needs to be sector specific.

Most industry stakeholders indicated the Bank of England's SWES as a **good example of system-wide stress test**. They emphasised, in particular, the need for a similar exercise: 1) to be a collaborative effort with the industry (e.g. in designing adverse scenarios); 2) to focus on systemic dynamics rather than on pinpointing individual firms and lead to additional prudential requirements; 3) to consider a frequency that is proportionate to the amount of effort required (not annual); 4) to avoid duplications with existing stress testing (and other reporting: e.g. Solvency II data) and to lever as much as possible on existing stress test reporting and other reporting data before considering additional reporting; 5) to focus on assessment of second-round effects (actual market reactions) and less on static stress scenario assumptions; 6) to be targeted in assessing linkages through the role underlying core markets (e.g. repo). Few industry stakeholders suggested to focus on specific markets to begin with (such as sovereign debt, repo and derivatives markets). Some national public authorities (including the Eurosystem and the ESRB) indicated the possibility to work with a top-down (desktop) approach, expanding data sharing arrangements and relying as much as possible on existing experiences (which are, however, considered at early stages), such as the sectoral stress test run by ESAs, the ECB's Interconnectedness System-Wide Stress Test Analytics (ISA) model used in the Fit-for-55 climate scenario analysis to assess contagion effects, the ESRB's system-wide liquidity stress test, ESMA's CCP stress test and the EBA banking stress test (where it captures the interactions between banks and the wider financial system).

The consultation then asked stakeholders about the type of data and data sharing arrangements, as well as the type of governance necessary to smoothly run an EU-wide system-wide stress test. On **data sharing arrangements**, most stakeholders across all categories were supportive of improving existing data sharing arrangements. One NCA and EU authorities pointed out that the current legal framework restricts the possibility to share data between NBFI supervisors and bank supervisors (an industry stakeholder described a similar situation as a 'regulatory silo' to be overcome). Current restrictions limit real-time access to certain datasets, such as MMFR, Solvency II, and AIFMD data (Eurosystem). Some other NCAs (and some industry stakeholders) emphasised the importance of creating a single European data hub to facilitate data sharing and improve oversight but cautioned that data sharing must be based on a strong legal framework to ensure confidentiality and avoid misuse. Some industry stakeholders and NGOs suggested that less duplication of reporting and more unified collection (also

[10] ESMA also suggests that the data sharing arrangements made to develop the system-wide stress test could be beneficial to the Joint Monitoring Mechanism created under EMIR to monitor and analyse the clearing ecosystem (and quoted the European Court of Auditors recommendation to develop a comprehensive model for the analysis of interconnectedness). This also implies that the exercise should avoid overlaps with the JMM.

with more harmonised templates) would increase efficiency and create conditions for easier data sharing. An insurance company argued that no more data sharing arrangements are needed between insurance and banking supervisors. On **type of data needed to run an EU-wide system-wide stress test**, many stakeholders referred to the need to avoid duplicative reporting requests, so that existing reporting is used at its full extent before adding new reporting requests. Two industry stakeholders suggested that ESMA's CCP stress test includes valuable information that could be used in an EU-wide system-wide stress test. This data could include the analysis of client concentrations and liquidity impacts, to evaluate the impact of concentrated positions on market stability and to measures banks and NBFIs ability to meet liquidity demands (e.g. repo markets), and the credit stress test to assess NBFIs' ability to absorb mark-to-market losses and to handle large counterparty failures. One NGO suggested to amend the Financial Conglomerates Directive to require banks and NBFIs to report all exposures and interconnections. The same respondent emphasised that a 'look through' data analysis is critical to identify ultimate risk holders and transmission channels.

On the **lessons to be learned from similar recent experiences**, like the SWES or the fit-for-55 stress test, some industry stakeholders mentioned the bottom-up collaborative environment of the SWES, coupled with focus on market and sector-wide responses rather than isolated firm behaviours, being conducive to value for both supervisors and entities participating to the exercise. One NCA also supported that stress tests should move beyond theoretical exercises and involve real engagement with market participants. This would allow, according to an industry stakeholder, to not pre-define participant behaviour, but rather allow responses to emerge organically from the data. On **governance**, more specifically, some NCAs and EU authorities suggested that the ESRB should coordinate the EU-wide stress test, with input from ECB (SSM) and the ESAs. NCAs from one Member State called for a phased-in approach in order to refine the governance and the methodological framework of this new task. More time, according to one industry stakeholder, would also allow to include findings of ongoing work at FSB and IOSCO level. An NGO, however, suggested that the ESRB is currently 'too bank-centric'. A more balanced governance framework, incorporating both banking and non-banking regulators, is needed. A consulting firm added that the Joint Committee of the ESAs (EBA, EIOPA, ESMA) was established for cross-sectoral cooperation, but it needs stronger enforcement powers.

There was support among NGOs and market infrastructures on the need for **forward-looking scenarios to be properly developed** and integrated into system-wide stress testing by financial authorities and firms. Reliance solely on historical data is insufficient for effective macro-prudential oversight, given the rapid pace of change in areas such as **financial innovation, cyber security, AI adoption, geopolitical shocks, and climate-related risks**. Respondents believe the role of EU bodies, including the ESRB, ESAs, and their Joint Committee, should be strengthened to serve as a central coordinating mechanism for developing comprehensive forward-looking scenarios.

### 3.4.3 Risk management and monitoring (Q. 56)

*The consultation paper asked industry stakeholders about the level of sophistication of their risk management strategies and internal stress testing to monitor and address risks stemming from the level of interconnectedness with other NBFIs and banks (e.g. portfolio overlaps) at entity and group level.*

Most asset managers and respondents from the banking sector (some owning asset management companies) replied that a traditional **stress testing at group level** would not be meaningful because each fund operates differently (e.g. investment strategy, performance objectives, recommended investment horizon, client structures) and would require different adverse scenarios, making the

exercise very hard to implement. However, some asset managers do monitor correlations and exposure overlaps across their funds to assess market footprint. Also, it was suggested by one large asset manager that extending the stress test exercise to a group of portfolios investing in similar asset classes may provide helpful information. This was also suggested as a voluntary option by the manager once risks become visible through UCITS/AIFMD reporting. Moreover, another entity in the asset manager sector pointed that stress testing should also focus on investor redemption behaviours. Some respondents from the banking sector argued that banks already run stress tests at group and portfolio levels, which include credit and liquidity risk assessments involving NBFI exposures (including those part of the liquidity coverage ratio tests). Finally, some pension funds indicated that they have been subject of a stress test by the Dutch supervisor on interconnectedness and preparedness for margin calls.

## 3.5 Supervisory coordination and consistency at the EU level

### 3.5.1 Enhanced Coordination Mechanism, coordination of national macroprudential measures and role of the ESAs (Q. 58, 59, 60, 61, 65)

*The consultation paper asked stakeholders to provide views on how to ensure more coordinated and effective macroprudential supervision of NBFIs and markets and how the role of EU bodies could be enhanced. Stakeholders were also asked for specific views on how currently available coordination mechanisms for the implementation of macroprudential measures for OEFs by NCAs or ESAs could be improved and how ESMA and the ESRB could ensure relevant measures are adopted in other EU member states or for how coordination and reciprocation could work in general. Stakeholders were also asked for views on benefits and costs of extending an ECM to other NBFI sectors.*

In general, most industry (asset management and banking sector) and other respondents supported greater **coordination in the EU in the assessment and adoption of macroprudential measures** highlighting the need for improved data collection and sharing between national and EU authorities. Some industry respondents supported the role of NCAs in the current framework given their targeted expertise and experience with supervision and expressed some concern on the risk of centralised coordination overshadowing the mandates and expertise of NCAs. Other stakeholders highlighted the role of national competent authorities as still being key in data collection and supervision. All EU public authorities, including the Eurosystem, expressed support for greater coordination and agreed with the need for improved data collection and data sharing, including the possibility to create a centralised data hub at the EU level.

Regarding feedback on **how existing coordination can be improved with reciprocation or an enhanced coordination mechanism**, several industry respondents (asset management and banking sector) suggested that the currently regulatory framework is sufficient when it comes to coordination regarding measures on leverage, citing examples of recent coordination by NCAs such as the introduction of leverage limits for property funds in Ireland under Article 25 of the AIFMD. Some respondents from the asset management sector also cited the new liquidity management tools introduced with the UCITSD and AIFMD reviews, suggesting additional macroprudential measures may not be needed. Several industry respondents (asset management and banking sector) returned to the theme of data sharing and information sharing, suggesting this is where greater coordination is needed between NCAs and EU authorities. Several industry respondents (asset management and banking sector) highlighted ESMA could play a role through being a **data hub**. Other respondents also

referenced the importance of effective data sharing. National public authorities also broadly supported greater coordination and highlighted the need for improved data collection and sharing, with some national public authorities advocating for a centralised data hub at the European level. One national public authority suggested creating a unified data reporting system. Various other respondents suggested greater use of supervisory colleges and greater role for the ESAs, even with some additional 'top-up' powers (see following paragraphs). In this respect, one national public authority suggested that gradually moving towards a more centralised supervision should be considered for markets that are highly integrated across borders. As rules are harmonized, there is only residual risk of supervisory arbitrage. This would mean shifting **supervision of critical cross-border market infrastructures**, such as CCPs, to ESMA and potentially in the future applying this principle to trading venues or asset managers throughout the EU. Some national public authorities supported greater coordination, but proposed decision-making should largely remain at the national level. Some public authorities suggested using existing cooperation structures as opposed to entirely new structures, between NCAs, ESMA and the ESRB and avoiding duplication to ensure resource efficiency, while another NCA cited the risk of overregulation. One national public authority suggested the creation of a more integrated supervisory approach among the ESAs through the joint committee, which would ensure coordination and consistency across the different sectors.

Stakeholders were also asked about **benefits and costs of an enhanced coordination mechanism**. Several industry respondents (asset management and banking sector) generally outlined potential costs, suggesting that the current framework is sufficient and supporting the role of NCAs in the current framework. They emphasised the importance of maintaining flexibility and the ability of NCAs to act swiftly and appropriately to local conditions and benefiting from expertise of local NCAs. Several national public authorities noted the potential benefits of an ECM to enhance coordination, while cautioning against an intervention that would increase bureaucracy and costs. Two national public authorities argued against reducing national discretion and supported macroprudential measures tailored to specific local conditions. A national public authority also suggested that the ECM could reduce the reactivity of NCAs during crises and that a thorough assessment would be needed before considering action. The Eurosystem response suggested that enhanced coordination and further supervisory powers to ESMA would help to ensure consistent treatment of risk, promote a level playing field across the EU and reduce the potential for regulatory fragmentation or arbitrage. The ESMA response notes that a lack of coordination could undermine the efficiency of measures taken in a jurisdiction to curtail a systemic risk leading to supervisory or regulatory arbitrage, as managers can relocate to a different EU jurisdiction to avoid applying the measure. The ESRB response notes that the cross-border nature of the investment fund sector requires a framework that facilitates coordination and cooperation among EU member states and suggests a formal reciprocation mechanism could be beneficial in achieving this goal.

Regarding **the role of ESMA and the ESRB in ensuring national macroprudential measures (NMMs) are adopted in other relevant EU countries as needed**, industry respondents (asset management and banking sector) and other respondents again stressed the need for more effective data sharing as a primary intervention tool. A few respondents from the asset management sector opposed macroprudential measures suggesting that such measures are not necessary for the asset management sector, which in their view does not significantly rely on leverage. One NGO proposed a structural change, advocating for legal changes that would empower ESMA to lead a college of supervisors for the same fund, with the ESRB as vice-chair, suggesting that ESMA and the ESRB should have the authority to request necessary data from non-bank financial institutions for national macroprudential measures. Some national public authorities highlighted the role of ESMA in facilitating coordination as being important but in the context of existing structures as opposed to introducing new

ones. Some national public authorities advocated for consistent application of macroprudential measures across jurisdictions, to prevent funds from relocating for regulatory arbitrage purposes. Some EU and national public authorities suggested **granting ESMA 'top-up' powers and tasks to ensure reciprocity of national measures across jurisdictions** in consultation with the ESRB. The ESRB recommended that the European Commission develops a methodology to ensure policies have a broad geographical reach, particularly when systemic risks spread cross-border, and also suggested that ESMA and other ESAs should be granted more direct powers to manage these risks and ensure that macroprudential measures are applied uniformly across the EU. ESMA suggested that the Commission may consider the opportunity to give ESMA, in collaboration with NCAs and after consulting with the ESRB, the formal power to request the implementation of stricter macroprudential requirements by one or multiple NCAs to address risks at EU-level. In relation to cross-border activities, ESMA's role could include: 1) facilitating more cooperation and joint supervisory work amongst NCAs through mandatory supervisory colleges and coordinated supervisory teams; 2) carrying out more central work on selected tasks such as common data or risk analytics; 3) centralising certain supervisory data collection and processing; and, 4) fostering harmonised enforcement outcomes through enhanced cooperation and convergence.

Regarding **alternative methods of coordination**, one national public authority suggested that a concrete tool for promoting coordination of macroprudential measures for specific NBFI sectors facing systemic threats could be the analysis, policy assessment and peer review that both the ESRB and ECB are using for the banking, RRE and CRE sectors, noting that the tool could be coordinated by the relevant ESA or the joint committee and the ESRB. The first step for policy action could be a comply-or-explain mechanism, and afterwards if needed, top-up powers. One national public authority suggested that a combination of action by ESMA, the NCAs and the use of supervisory colleges would be the most desirable supervisory coordination mechanism, with a truly clear and transparent mechanism steered by ESMA. One national public authority suggested information sharing has been enhanced and no further regulatory action is warranted, while another cautioned against new structures and suggested a framework for reciprocation similar to article 25. The ESRB suggested a reciprocation framework similar to that used for some measures under the CRD/CRR for the banking sector. In this framework, the Commission would initiate the development of such a reciprocity framework by consulting on potential improvements to the coordination model for AIFMD Article 25 where data will be a key enabler.

Regarding **expanding an ECM to other NBFI sectors**, industry responses were relatively limited with one respondent suggesting this was not necessary for the insurance sector due to the existing coordination and the new macroprudential framework introduced with the Solvency II Review, while one other respondent suggested it was not necessary for the energy market albeit better coordination of information would be welcome. Some national public authorities outlined benefits such as the consistent and homogenous application of macroprudential tools and also highlighted enhanced data sharing as being useful in this context. Some national public authorities also outlined costs including increased resources required for additional coordination while one national public authority suggested there were more challenges than benefits as it could slow down crisis responses due to bureaucratic layers and potentially confused accountability, as national and EU-level authorities might overlap in their roles. Some public authorities suggested any additional measures should be considered on a case-by-case basis following assessment. One EU authority (ESRB) suggested developing a methodology to guide the approach for policy cooperation concerning NBFIs for each sector.

### 3.5.2 Supervisory powers of EU bodies and supervisory colleges (Q. 62, 63, 64, 66)

*The consultation paper asked stakeholders to provide feedback on the supervisory powers of EU bodies, with questions on the benefits and costs of improving supervisory coordination over large asset management companies, the role of ESMA in this context and what powers would be necessary for EU bodies to properly supervise large asset management companies. Stakeholders were also asked to provide feedback on the benefits and costs of having targeted coordinated direct intervention powers to manage a crisis of large asset management companies and of gradually giving ESAs greater intervention powers to be triggered by systemic events.*

Industry respondents (asset management and banking sectors) voiced concerns about giving greater **supervisory powers for EU bodies with respect to asset management companies** with some against ESMA having a greater role. Some industry respondents (asset management and banking sector) were against using size as a proxy of risk for asset management companies suggesting the focus should be on products and activities. Asset managers also pushed back on potentially receiving a systemic risk designation. Some asset managers were open to being considered cross-border groups if this enabled a reduction of regulatory burden but still suggested the home NCA would lead on supervision. One other respondent (NGO) advocated for ESMA to lead supervisory colleges for asset management, with the ESRB as a vice-chair, with ESMA as lead supervisor having the power to impose appropriate macroprudential measures based on advice from the ESRB. National public authorities expressed mixed views with some suggesting suggested it would be more effective to focus on funds or cohorts of funds that collectively can pose systemic risks. Some national public authorities expressed support for the concept but acknowledged challenges on identifying 'large' asset management companies with one suggesting ESMA and NCAs could work on a definition. One national public authority suggested national supervision may be suitable for some systemic actors with cross border activities, while for others moving supervisory competences to EU level could be effective. Two NCAs were against an increased role for ESMA or greater centralisation and cautioned against regulatory burden. Some national public authorities suggested supervisory colleges involving NCAs and ESMA could be useful to monitor large cross-border asset manager, with one suggesting that a "lead NCA" for each group should be nominated and that to provide benefits to industry, the consolidated approach would need to be grounded in some regulatory requirements for example through acknowledging intragroup service provision arrangements. Another national public authority suggested ESMA could potentially have a role as the only supervisor of large cross-border asset management companies but included the caveat that as responsibility remains currently with NCAs, ESMA should not be in a position to request supervisory actions from NCAs. Some national public authorities supported ESMA having a stronger role with respect to coordination. However, several expressed caution on reducing the role of NCAs and increasing centralisation. One national public authority supported the role of ESMA as the sole supervisor of large cross-border asset management groups in principle but suggested that as long as NCAs have full responsibility for supervision, ESMA should not be in a position to take, or request from NCAs, supervisory actions. An authority suggested that for large cross-border NBFI entities, including asset managers, their systemic importance should be assessed based on criteria that focus on their market footprint and the externalities arising from their combined market strategies, having due regard to the risks they pose (EBA). One EU authority (ESMA) returned to a previous suggestion that regarding large groups with cross-border activities, ESMA could: facilitate more cooperation and joint supervisory work amongst NCAs through mandatory supervisory colleges and coordinated supervisory teams; carry out more central work on selected tasks such as common data or risk analytics; centralise certain supervisory data collection and processing; and, foster harmonised enforcement outcomes through enhanced cooperation and convergence.

Regarding the **benefits and costs of coordinated intervention powers,** Industry participants (asset management and banking sector) were strongly against intervention powers in general and against giving powers to ESAs in this context. Some industry respondents suggested a better approach could be coordination powers for the ESAs. One respondent from the asset management sector acknowledged that need for more efficient framework and better coordination for interventions in crisis periods, but suggested this should not be limited to large asset managers. Regarding the role of ESAs, one asset management respondent expressed a cautious stance on the expansion of direct intervention powers by the ESAs particularly in times of crisis and emphasise the importance of procedural safeguards and checks to ensure that any use of product intervention powers is appropriate and strictly necessary. Some national public authorities highlighted the potential benefits of a faster coordinated approach to recognise risks and to take action, while also noting the additional regulatory burden that this could entail. One national public authority suggested that centralised intervention powers may not be effective due to risks of regulatory overlap, delays, and reduced accountability, and instead suggested reinforcing coordinated guidance and information-sharing between EU bodies and national authorities. One national public authority suggested that in terms of design, if necessary, a responsible NCA overseeing a large asset company could notify ESMA, the ESRB, and/or the other NCAs concerned, prompting an emergency meeting and that follow could be coordinated by ESMA in consultation with the ESRB within the framework of a temporary supervisory college. Regarding a greater role for the ESAs, several national public authorities did not support additional powers. One national public authority expressed support, suggesting that unless there is a better coordination mechanism that ensures this level of regulatory agility, greater intervention powers for ESAs appear warranted. Regarding data, one national public authority suggested it would be more practical to empower ESAs to request certain data in crisis situation or also in ordinary business, but to maintain a role for NCAs as operational channel for the data, while another national public authority advocated that instead of creating an additional reporting channel by granting the ESAs the power to collect information directly from regulated entities, instead supervisory data should be centralised at the European level directly to provide a 'one stop shop' for both NCAs and ESAs.

### 3.5.3 Integrated supervision for commodities markets (Q. 67)

*The consultation paper asked stakeholders to provide feedback the benefits and costs of a more integrated system of supervision for commodities markets where the financial markets supervisor bears responsibility for both the financial and physical infrastructure of the commodity futures exchange, including the system of rules and contractual terms of the exchange that regulate both futures and (cash/physical) forward contracts.*

Several industry respondents suggested that an **integrated supervisory system for commodities markets**, where the financial markets supervisor oversees both the financial and physical infrastructure of the commodity futures exchange, is unnecessary and could be counterproductive. Some industry respondents noted there is no clear risk or market failure that would be addressed by merging supervision under a single authority, and a unified supervisory framework could impose unnecessary regulatory burdens. Some industry respondents suggested that consolidating supervisory regimes could lead to a "one-size-fits-all" approach, which does not accommodate the nuances of physical markets, potentially disrupting market efficiency. Some other industry respondents and other respondents suggested instead to enhance coordination between existing agencies and to leverage transactions data which is already collected better. One other respondent highlighted potential benefits of a more coordinated supervisory system covering all aspects of derivatives trading which could enhance understanding of market dynamics and improve oversight by addressing the interconnectedness of financial and physical market but also noted a fully integrated system would

involve interactions with third countries and could introduce complexities and would need to be managed carefully. Some public authorities also supported the current system as ensuring adequate supervision through existing regulatory frameworks and cooperation mechanisms between financial and energy market regulators. Some public authorities acknowledged potential benefits and costs, with some suggesting enhanced cooperation between financial and energy regulators, rather than full integration, would be a more efficient approach with one noting that a more formalised sharing of transaction data between financial and non-financial regulators could help address supervisory gaps without creating unnecessary complexity.

### 3.5.4 International coordination (Q. 68)

*The consultation paper asked stakeholders to give views on whether there are elements of the FSB work programme that could be prioritised in the EU.*

There were mixed views from stakeholders in this area, public authorities broadly supported **the work plan of the FSB** while some industry respondents were positive on global coordination in general to enable cooperation between jurisdictions. Asset managers broadly supported the current EU framework as being well-designed and expressed nuanced views on whether additional elements on the FSB work plan, or additional work in general by policymakers should be pursued. Some asset managers were strongly against the FSB NBFI work plan, suggesting it is counterproductive and could undermine confidence. Two asset managers reiterated the need to focus on unregulated NBFI with greater coordination and data sharing between authorities. Some asset managers were not explicitly pro/anti- the FSB NBFI work but suggested additional areas of work. These include: 1) efforts to improve the supply and transmission of liquidity through the financial system, including during times of stress; 2) additional work within the FSB to review how authorities could more efficiently share and use the extensive data that industry participants currently report; 3) work on how large, unexpected margin and collateral calls can be met; 4) completing the data pilot project to enhance authorities' and the FSB's ability to monitor vulnerabilities associated with open-ended fund liquidity mismatch; 5) work on the functioning and resilience of repo markets; and, 6) work address vulnerabilities identified in short-term funding markets at the EU level. Two asset managers were positive on global coordination broadly, with one suggesting this can avoid a regulatory race to the bottom and better deal with risks from unregulated NBFI, while another suggested to expand scope of macroprudential supervision through securities markets to encompass all relevant stakeholders and to designate ESMA as a central data hub. Banking sector respondents suggested work could be done to develop a common definition for NBFI for all stakeholders to use, starting from the FSB narrow definition. Several respondents mentioned the FSB leverage work, suggesting it needs to be proportionate and suggesting potential recommendations must be aligned with the EU regulatory framework to ensure effectiveness within the European context. Some respondents supported a consistent approach between financial centres and convergence, suggesting this would aid EU competitiveness and assist EU authorities in their efforts to share and receive data and information and to develop responses to financial stability vulnerabilities and risks collaboratively. One respondent suggesting EU framework is sufficient and did not have specific FSB priorities to recommend, however they did suggest the EU focus on enhancing market surveillance by securities regulators, supporting banking supervisors in facilitating existing CRR/CRD obligations and facilitating the ability to effectively share data between ESMA, NCAs and the central banks, via a single regulatory reporting hub. One respondent raised the issue of monitoring approach in other jurisdictions generally, citing specifically the Bank of England's Contingent NBFI Repo Facility, noting that this could be challenging in an EU context but could be effective to preserve financial stability. One respondent suggested greater transparency in CCP margining practices, a key part of the FSB NBFI work programme, should continue to be a priority and also supported the FSB's work on NBFI

liquidity preparedness for margin and collateral. One respondent also suggested monitoring the recent introduction of rules in the US on increased reporting and clearing of both cash Treasury and repo markets as these may provide useful information to the EU when determining the usefulness of repo clearing in this market, and to identify potential issues. One other respondent suggested increased transparency in the margining practices of CCPs, an essential aspect of the FSB's NBFI work agenda, should remain a top priority. One NGO supported the FSB Recommendations for MMFs, and recommendations following the March 2020, April 2023 and August 2024 stresses and also suggested research on the dynamics between institutional shareholders and their investee companies and the market-based pricing of energy and food commodities through derivatives markets to understand how climate change might affect the derivatives markets. This NGO also suggested the social usefulness of NBFIs should be taken into account by financial authorities. National public authorities broadly support the FSB work plan for NBFI and offer some views on areas of prioritisation. Several national public authorities support work on margin calls, some mention data-related issues as a priority and several mention work on leverage as a priority also mostly in context of the FSB consultation on leverage. One national public authority suggests reforms to MMFs in the context of previous FSB recommendations, mainly to remove amortised cost accounting for LVNAV and PDCNAV MMFs, decouple LMT activation from thresholds and increase daily and weekly liquid asset minimums. One other national public authority also mentions MMFs, supporting FSB recommendations on increasing liquidity requirements for private debt MMFs and making liquidity buffers more usable. Some national public authorities also support the FSB recommendations for OEFs. One national public authority, in the context of OEFs using LMTs, suggests in addition to AIFMD/UCITSD reviews, further measures may be necessary, possibly through further legislative amendments, which would place a default requirement on OEFs with exposures to less liquid assets that ADTs should be used at all times, especially swing pricing or anti-dilution levies (ADLs). This national public authority also suggests relevant EU authorities should work on implementing the FSB's proposal on classifying funds, depending on asset liquidity, and require longer notice periods to enable closer alignment between the redemption terms offered and the liquidity of liabilities of funds investing in less liquid assets, and lastly, also supports the adoption of the FSB minimum haircut framework for SFTs.

EU public authorities support the FSB work programme and support previous recommendations (ESMA, ESRB, Eurosystem). EU public authorities support FSB/IOSCO recommendations to address liquidity mismatches in open-ended investment funds combined with the IOSCO guidance on anti-dilution liquidity management tools the FSB's recommendations relating to the classification of OEFs depending on asset liquidity (the so-called 'bucketing' approach) (ESMA, ESRB, Eurosystem). EU public authorities also support the FSB recommendations related to MMF reforms (ESMA, ESRB, Eurosystem). The ESRB also suggest that draft recommendations by the FSB, designed to manage and mitigate the impact of spikes in margin and collateral calls in NBFIs, need to be implemented in the EU. The ESRB notes that recent changes to EU legislation mean that implementing some of these recommendations - once finalised - would not require further changes to EU law (EIOPA powers under solvency II on liquidity risk management) but regarding collateral management practices, they suggest it is important that the European Commission would review whether the entity-based regulations would need to be amended to explicitly state that also NBFIs should regularly review and test their operational capacity to transform highly liquid assets into cash under normal and stressed conditions within relevant timeframes. Regarding the FSB's Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds, the Eurosystem suggests that in addition to the measures envisaged in the AIFMD and UCITS review, further measures may be needed to ensure full compliance with the FSB's recommendations, especially for OEFs that invest in illiquid and less assets. The Eurosystem notes that the Commission and other regulatory authorities in the EU should

encourage more consistent use of anti-dilution LMTs (or ADTs) through regulatory guidance and if this fails to generate a material increase in the use of ADTs as part of the day-to-day liquidity management of funds, including during times of stress, further legislative amendments may be required. The Eurosystem also suggests that relevant EU authorities should work on implementing the FSB's proposal on classifying funds based on asset liquidity and should also require longer notice periods to enable closer alignment between the redemption terms offered and the liquidity of the liabilities of those funds that invest in less liquid assets.

# 4 Additional (selected) findings

The EBA mentioned that the significant growth in NBFI activity over the last decade is in part due to banks optimising their business models in response to factors such as regulatory developments (e.g. CRR3/CRD6), rather than banks withdrawing from lending and risky activities and being replaced by NBFIs. These providers of **private credit** could have become alternatives for banks in lending in areas such as consumer credit, SMEs, and infrastructure projects, covering more niche markets (with higher risk profile), but with activities and lending standards may not always be commensurate with those applied by more regulated financial institutions but that may also largely overlap with those of the banking sector making boundaries between NBFIs and traditional banking services hardly recognisable and lacking congruence (same activity, same risk, same regulation principle). The potentially reduced capacity of less-regulated lenders to absorb credit losses and/or their unwillingness or inability to remain in the market during economic downturns could pose risks of a credit crunch for borrowers with limited access to other sources of financing. **Investment firms are covered by the new Investment Firms Directive (IFR/IFD)**, with the largest ones being classified as credit institutions subject to same prudential rules and supervision (CRD, CRR). Class 2 firms (medium-sized and non-systemic investment firms that pose significant risks to their clients, markets, or themselves) will be subject to a new set of prudential rules and supervision under the IFR and the IFD, which are more proportionate and risk-sensitive than the CRR and the CRD. Class 3 firms are the smallest and least risky investment firms that provide simple services, such as investment advice or portfolio management would benefit from a simplified and lighter prudential regime under the IFR and the IFD. Recent episodes of market turmoil have nonetheless revealed that important channels of propagation and contagion (e.g. redemptions or asset fire sales) remain, requiring ongoing vigilance and information sharing between global regulatory and supervisory bodies. **Thereby, given the cross-border nature of the investment firm sector, their incentives to move to different jurisdictions to use more favourable regulations (i.e. regulatory arbitrage) should also be monitored.** The main holders of investment shares are foreign residents, households, and insurance companies, creating further shock transmission and amplification channels through the financial system and the real economy.

The **ERSB** suggested that asset management activity may also create risks and vulnerabilities that are independent of the types of entities involved in it. Addressing such risk and vulnerabilities may require **complementing entity-based regulation (EBR) with activity-based regulation (ABR).** In the medium term, the ESRB identified area for EU legislative improvement, by establishing ABR that would enable authorities to set (i) borrower-based measures (BBMs, e.g. restrictions on LTV ratios) and (ii) exposure concentration limits on highly indebted firms. This should be developed in distinct phases.

A large asset manager mentioned post-GFC constraints on bank-based intermediation spurred the growth of **algorithm-driven Principal Trading Firms** (PTFs) and **all-to-all trading platforms** as increasingly important methods of trading bonds in recent years.

On power spot market, one stakeholder proposed the **implementation of an additional methodology in the revised CACM Regulation**, which addresses the financial risks and introduces minimum requirements for power spot clearing and settlement under Articles 68 and 77 CACM Regulation.

Particularly, on **climate change risks for financial stability**, an NGO raised several concerns. First, weather events such as droughts, floods, and heat waves can reduce the availability of physical commodities, increasing price volatility in agricultural derivatives markets, creating liquidity challenges for traders (e.g. Cocoa price surges in 2024 due to plant diseases and climate-related events in key producing regions or coffee price spikes in 2024 due to droughts in Brazil and typhoons in Vietnam). Second, they highlighted derivatives market liquidity risk stemming from high speculative trading by non-hedging financial firms in agricultural derivatives markets can exacerbate price fluctuations and margin call pressures, leading to liquidity strains for both physical traders and financial entities. Third, they also warn against market concentration of major agribusiness firms, that could create systemic risks in both commodity and financial markets, necessitating stronger competition policies. The NGO suggested supervisors should be given the ability to intervene when speculative activity exceeds reasonable hedging needs, as seen in the milling wheat derivatives market (citing FR AMF report on grain derivatives markets).

One respondent belonging to the banking sector highlighted the emergence of new players, such as large technology firms ('**Big Techs**') into financial services (including payment, savings, and credits), should be considered from a systemic risks' perspective (cybersecurity, contagion, concentration risks within multi activity groups). Moreover, the lack of level playing field between 'Big Techs' and more traditional institutions could also have implications on financial stability. Additionally, existing regulatory framework does not consider aggregated risks arising from new types of mixed activity group (lack of holistic understanding of the risks they generate through the combination of financial and non-financial activities).

A respondent from the asset management sector gave information on **tools used within private equity funds to manage liquidity**. First, **subscription credit lines (SCLs)** are intended to ensure that the fund has immediate access to capital or liquidity (e.g. to cover the day-to-day operating costs) without the need to make intermittent commitment calls. SCLs are intended as a source of liquidity and portfolio management tool that simplifies the operations of both the fund manager and its investors, rather than a source of leverage or instrument to boost IRR. Second, **NAV facilities** are an alternative way of (re-)financing where traditional bank facilities are hard to obtain or costly. Third, **Collateralised Fund Obligations (CFOs)** are a form of securitisation involving the acquisition of a pool of private equity fund interests by a special purpose vehicle (SPV).

Finally, a respondent from the asset management sector suggested **competitiveness** should be added to **ESMA's mandate**.

# 5 Conclusions

The targeted public consultation provided extensive feedback in several areas across NBFI sectors. It was published on the Consultations page of the EU Economy and Finance website[11] and promoted via social media channels, such as X and LinkedIn. The consultation was also announced via a News Alert in the Press Corner of the European Commission website. Alongside the public consultation, the

[11] Targeted consultation assessing the adequacy of macroprudential policies for non-bank financial intermediation (NBFI) - European Commission

Commission also engaged in stakeholder outreach via a dedicated stakeholder workshop on the day of the launch of the consultation, engagement with Member States through the dedicated Commission's expert groups, through bilateral outreach, and in various working groups run by the European Systemic Risk Board (ESRB) and the European Securities and Markets Authority (ESMA).

Having received all the inputs from market participants, public authorities and civil society, the Commission will take stock of the feedback and inform any future initiatives that the College of Commissioners may decide to adopt. Contributions received from respondents who did not opt for full anonymity were published on the Commission's Have Your Say page.

# 6 ANNEX

## Distribution of responses by Question and Stakeholder Category

| QUESTIONS | ASSET MANAGERS | BANKING SECTOR | EU PUBLIC AUTHORITY | INSURANCE | MKT INFRA. | NATIONAL PUBLIC AUTHORITY | OTHERS | PENSION FUNDS | TOTAL | RESPONSE RATE (% of tot )[12] |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Are there other sources of systemic risks or vulnerabilities stemming from NBFIs' activities and their interconnectedness, including activity through capital markets, that have not been identified in this paper? | 26 | 5 | 4 | 2 | | 13 | 6 | 2 | 58 | ***67%*** |
| 2. What are the most significant risks for credit institutions stemming from their exposures to NBFIs that you are currently observing? Please provide concrete examples | 21 | 5 | 3 | | | 12 | 7 | 1 | 49 | ***57%*** |
| 3a. To what extent could the failure of an NBFI affect the provision of critical functions to the real economy or the financial system that cannot easily be replaced? | 21 | 3 | 5 | | | 9 | 6 | 3 | 47 | ***55%*** |
| 3b. Please explain your answer to question 3, in particular to which NBFI sector, part of the financial system and critical function you refer to, and if and how you believe such knock-on effect could be mitigated | 21 | 4 | 5 | 1 | | 12 | 6 | 3 | 52 | ***60%*** |
| 4. Where in the NBFI sectors could systemic liquidity risk most likely materialise and how? Which specific transmission channels of liquidity risk would be most relevant for NBFI? Please provide concrete examples | 26 | 4 | 5 | 1 | | 12 | 6 | 3 | 57 | ***66%*** |
| 5. Where in the NBFI sectors do you see build-up of excessive leverage, and why? Which NBFIs could be most vulnerable? Please provide concrete examples | 24 | 4 | 5 | | | 13 | 6 | 3 | 55 | ***64%*** |
| 6. Do you observe any systemic risks and vulnerabilities emerging from crypto assets trading and intermediaries in the EU? | 9 | 4 | 3 | 1 | | 10 | 5 | | 32 | ***37%*** |
| 7. Considering the role NBFIs have in providing greater access to finance for companies and in the context of the capital markets union project, how can macroprudential policies support NBFIs' ability to provide such funding opportunities to companies, in particular through capital markets? Please provide concrete examples | 25 | 5 | 3 | 1 | | 13 | 7 | | 54 | ***63%*** |
| 8.1 Please explain what the pros are? | 13 | 4 | 3 | | | 10 | 4 | 2 | 36 | ***42%*** |
| 8.2 Please explain what the cons are? | 12 | 1 | 1 | | | 9 | 2 | 2 | 27 | ***31%*** |
| 9. How can ESMA and ESRB ensure coordination and the proper use of this power and what could be their individual roles? Please provide specific examples or scenarios to support your view | 15 | 4 | 2 | | | 8 | 4 | | 33 | ***38%*** |
| 10. In view of the new UCITS supervisory reporting obligations and improvements to AIFMD reporting, how could reporting requirements under the MMFR be aligned, simplified and improved to identify stability risks (such as liquidity risks) and to ensure more efficient data sharing? | 16 | 3 | 2 | | 2 | 12 | 1 | | 36 | ***42%*** |
| 11. Do you believe that the proposed enhancements to the stress testing framework listed above are sufficient to identify and mitigate liquidity risks effectively? If not, what specific elements would you suggest including in the strengthened | 17 | 3 | 3 | | | 8 | 1 | 2 | 34 | ***40%*** |

[12] The response rate was calculated based on the total sample of respondents (N=86), except for questions directed at specific stakeholder groups. In those cases, the rate was determined using only the total number of stakeholders within the relevant categories. Additionally, it should be noted that 6 out of the 86 respondents provided input solely through Annexes, without addressing specific questions. As a result, their contributions are not reflected in the table above but have been considered in the drafting of the feedback statement.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| supervision and remediation actions for detecting liquidity risks? | | | | | | | | | | |
| 12. What are the costs and benefits of introducing an EU-wide stress test on MMFs? Should this stress test focus mainly on liquidity risks? | 17 | 4 | 3 | | | 10 | 4 | 2 | 40 | ***47%*** |
| 13. What are your views on the EU ban on a reverse distribution mechanism by MMFs? | 16 | 4 | 1 | | | 7 | 1 | 2 | 31 | ***36%*** |
| 14. Can you provide insights and data on how the reverse distribution mechanism has impacted in practice the stability and integrity of MMFs? | 13 | 1 | 1 | | | 7 | 1 | | 23 | ***27%*** |
| 15. Should regulatory requirements for MMFs take into account whether the instrument they are investing in is admitted to trading on a trading venue (regulated markets, multilateral trading facilities or organised trading facilities) with some critical level of trading activity? Please explain your answer | 16 | 4 | | | | 8 | 1 | 1 | 30 | ***35%*** |
| 16. How can NCAs better monitor the liquidity profile of OEFs, including redemption frequency and LMTs, in order to detect unmitigated liquidity mismatches during the lifetime of OEFs? | 27 | 3 | 1 | | | 14 | 4 | | 49 | ***57%*** |
| 17. Only for NCAs and EU bodies: What is the supervisory practice and your experience with monitoring and detecting unmitigated liquidity mismatches during the lifetime of OEFs? What is the data that you find most relevant when monitoring liquidity risks of OEFs? | 16 | 3 | 2 | | | 12 | 3 | | 36 | ***42%*** |
| 18. Only for NCAs and EU bodies: What supervisory actions do you take when unmitigated liquidity mismatches are detected during the lifetime of an OEF? | | | 1 | | | 10 | | | 11 | ***13%*** |
| 19. On the basis of the reporting and stress testing information being collected by competent authorities throughout the life of a fund, how can supervisory powers of competent authorities be enhanced to deal with potential inconsistencies or insufficient calibration between the LMTs selected by the manager for a fund or a cohort of funds and their assets and liabilities liquidity profile? How can NCAs ensure that fund managers make adjustments to LMTs if they are unwilling to act? How could coordination be enhanced at the EU level? | 21 | 3 | 2 | | | 13 | 3 | | 42 | ***49%*** |
| 20. Only for asset managers: What measures do you find particularly effective to measure and monitor liquidity risk in stressed market conditions? | 20 | 2 | | | | | | | 22 | ***26%*** |
| 21. Only for asset managers: What difficulties have you encountered in measuring and monitoring liquidity risks and their evolution? Are there enough tools available under the EU regulations to address liquidity mismatches? | 23 | 3 | 1 | | | | 2 | | 29 | ***34%*** |
| 22. Only for asset managers: What are the challenges in calibrating worst-case and stress-case scenarios related to redemptions and margin calls? | 19 | 2 | | | | | | | 21 | ***24%*** |
| 23. Only for NCAs and EU bodies: When monitoring or using results of liquidity stress tests, are you able to timely collect underlying fund data used by managers and the methodology used for the simulation? Are there other aspects that you find very relevant when monitoring the stress tests run by managers? | | | 1 | | | 11 | | | 12 | ***14%*** |
| 24. Only for NCAs and EU bodies: How do you use information collected from stress tests at fund level for other supervisory purposes and for monitoring systemic risks? | | | 1 | | | 9 | | | 10 | ***12%*** |
| 25. Only for NCAs and EU bodies: What are the main benefits and costs of introducing a stress test requirement at the asset management company level and how could this be organised? | 3 | | 2 | | | 9 | 1 | | 15 | ***17%*** |

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| 26. What are your views on the preparedness of NBFIs operating in the EU in meeting margin calls, and on the ways to improve preparedness, taking into account existing or recently agreed EU measures aimed at addressing this issue? Please specify the NBFI sector(s) you refer to in your answer: | 16 | 5 | 3 | 2 | 3 | 11 | 4 | 1 | 45 | ***52%*** |
| 27. What are relevant risk metrics or tools that can be used to effectively monitor liquidity and margin preparedness across all NBFI entity types? Please provide examples specifying the sector you refer to | 12 | 3 | 2 | 2 | | 11 | 3 | 1 | 34 | ***40%*** |
| 28. How can current reporting by pension funds be improved to improve the supervision of liquidity risks (e.g. stemming from exposure to LDI funds, other funds or derivatives), while minimising the reporting burden? What can be done to ensure effective look-through capability and the ability to measure the impact of unexpected margin calls? Please provide examples also for other NBFI sectors. | 3 | 1 | 2 | 1 | | 9 | 1 | 3 | 20 | ***23%*** |
| 29. What would be the benefits and costs of a regular EU-wide liquidity stress test for pension funds and with what frequency? What should be the role of EU authorities in the preparation and execution of such liquidity stress tests? | 5 | 2 | 2 | 1 | | 10 | 1 | 3 | 24 | ***28%*** |
| 30. What would be the benefits and costs of creating a framework or a label in EU legislation for certain money market instruments (such as commercial papers) to increase transparency and standardisation? Should the scope of eligible instruments to such framework/label be aligned with Article 3 of Directive 2007/16/EC? If not, please suggest what criteria would you consider for identification of eligible instruments: | 12 | 3 | 1 | | | 8 | 5 | | 29 | ***34%*** |
| 31. Would the presence of a wider range of issuers (notably smaller issuers) to fund themselves on this market, and therefore diversify their funding sources, be beneficial or detrimental to financial stability? | 13 | 2 | 1 | | | 9 | 4 | 1 | 30 | ***35%*** |
| 32. What are your views on why euro-denominated commercial papers are in large part issued in the 'EUR-CP' commercial paper market outside the EU? What risks do you identify? Please provide quantitative and qualitative evidence, if possible | 9 | 3 | 1 | | | 8 | 3 | | 24 | ***28%*** |
| 33. What could be done to improve the liquidity of secondary markets in commercial papers and certificates of deposits? | 11 | 3 | 1 | | | 8 | 3 | | 26 | ***30%*** |
| 34. Considering market practice today, is the maturity threshold for 'money market instruments' (up to 397 days) in the Eligible Asset Directive 2007/16 sufficiently calibrated for these short-term funding markets? | 11 | 2 | 1 | | | 6 | 4 | 1 | 25 | ***29%*** |
| 35. Do you think there is a risk with the high concentration of this market in a few investors (MMF and banks)? Please elaborate | 12 | 3 | 1 | | | 9 | 5 | 1 | 31 | ***36%*** |
| 36. How could secondary markets in these money market instruments attract liquidity and a more diverse investor base, while relying less on banks buying back papers they have helped to place? | 11 | 3 | 1 | | | 9 | 2 | | 26 | ***30%*** |
| 37. What are the benefits and costs of introducing an obligation to trade on trading venues (regulated markets, multilateral trading facilities and organised trading facilities) for such instruments? | 12 | 2 | 1 | | | 8 | 4 | 1 | 28 | ***33%*** |
| 38. Can the possibility to trade on a regulated venue increase the chances of secondary market activities in a systemic event, for instance by acting as a safety valve for funds that need to trade these assets before maturity (especially when facing strong redemption pressures, like for MMFs)? | 10 | 3 | 1 | | | 8 | 2 | 1 | 25 | ***29%*** |
| 39. How would you assess the level of preparedness of commodity derivatives market participants for each of the following sectors in terms of meeting short-term liquidity needs or requests for collateral to meet margins? Insurance | 4 | | | 1 | 2 | 5 | 2 | | 14 | ***16%*** |

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| 39. How would you assess the level of preparedness of commodity derivatives market participants for each of the following sectors in terms of meeting short-term liquidity needs or requests for collateral to meet margins?: UCITS funds | 3 | | | | 2 | 5 | 1 | | 11 | ***13%*** |
| 39. How would you assess the level of preparedness of commodity derivatives market participants for each of the following sectors in terms of meeting short-term liquidity needs or requests for collateral to meet margins?: AIFs | 3 | | | | 2 | 4 | 1 | | 10 | ***12%*** |
| 39. How would you assess the level of preparedness of commodity derivatives market participants for each of the following sectors in terms of meeting short-term liquidity needs or requests for collateral to meet margins?: Commercial undertakings | 4 | | | | 2 | 4 | 3 | | 13 | ***15%*** |
| 39. How would you assess the level of preparedness of commodity derivatives market participants for each of the following sectors in terms of meeting short-term liquidity needs or requests for collateral to meet margins?: Investment firms | 4 | | | | 2 | 4 | 2 | | 12 | ***14%*** |
| 39. How would you assess the level of preparedness of commodity derivatives market participants for each of the following sectors in terms of meeting short-term liquidity needs or requests for collateral to meet margins?: Pension funds | 3 | | | | 2 | 4 | 1 | 1 | 11 | ***13%*** |
| 39b. Please explain your answers to question 39 | 4 | | 2 | 1 | 4 | 6 | | 1 | 18 | ***21%*** |
| 40. In light of the potential risk of contagion from spot markets or off-exchange energy trading to futures markets, do you think that spot market participants should also meet a more comprehensive set of trading rules for market participation and risk management? Please elaborate on your response: | 1 | 1 | 2 | | 5 | 9 | 2 | | 20 | ***23%*** |
| 41. How can it be ensured that the functioning of underlying spot energy markets and off-exchange energy trading activity does not lead to the transmission of risks to financial markets? | 1 | 1 | 2 | | 4 | 10 | 2 | | 20 | ***23%*** |
| 42. To what extent do you see emerging liquidity risks or market functioning issues that can affect liquidity in other markets? | 7 | 1 | 2 | | | 7 | 1 | | 18 | ***21%*** |
| Please explain your answer to question 42, providing concrete examples | 4 | 2 | 2 | | | 4 | 1 | | 13 | ***15%*** |
| 43. What are other tools than those currently available under EU legislation which could be used to contain systemic risks generated by potential pockets of excessive leverage in OEFs? | 21 | 4 | 2 | | | 14 | 3 | | 44 | ***51%*** |
| 44. What are, in your view, the benefits and costs of using yield buffers(*) for Liability-Driven funds, such as it was done in Ireland and Luxembourg, to address leverage? * The yield buffer is defined as the level of increase in yields that a fund can withstand before its net asset value (NAV) turns negative. See The Central Bank's macroprudential policy framework for Irish-authorised GBP-denominated LDI funds, p.3. | 9 | 2 | 2 | 1 | | 8 | | | 22 | ***26%*** |
| 45. While on average EU OEFs are not highly leveraged, are there, to your knowledge, pockets of excessive leverage in the OEF sector that are not sufficiently addressed? Please elaborate with concrete examples: | 20 | 2 | 3 | | | 11 | 2 | | 38 | ***44%*** |
| 46. How can leverage through certain investment strategies (e.g. when funds invest in other funds based in third countries) be better detected? | 13 | 2 | 2 | | | 9 | 4 | | 30 | ***35%*** |

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| 47. Are you aware of any NBFI sector entities with particularly high leverage in the EU that could raise systemic risk concerns? | 15 | 3 | 1 | | | 9 | 1 | | 29 | ***34%*** |
| 48. Do stakeholders have views on macroprudential tools to deal with leverage of NBFIs that are not currently included in EU legislation? | 13 | 4 | 1 | | | 10 | 5 | | 33 | ***38%*** |
| 49. Only for NCAs and EU bodies: Are you able to timely identify (financial and synthetic) leverage pockets of other NBFIs (such as pension funds, insurance companies and so on), especially when they are taken via third parties or complex derivative transactions? Please elaborate on how this timely detection of leverage could be obtained | | | 1 | | | 9 | | | 10 | ***43%*** |
| 50. How can it be ensured that competent authorities can effectively reconcile positions in leveraged products (such as derivatives) taken via various legal entities (e.g. other funds or funds of funds) to the ultimate beneficiary? | 8 | 4 | | | | 6 | 1 | | 19 | ***22%*** |
| 51. What role do concentrated intraday positions have in triggering high volatility and heightening risks of liquidity dry-ups? Please justify your response and suggest how the regulatory framework and the functioning of these markets could be further improved? | 1 | 1 | 1 | | 4 | 8 | 2 | | 17 | ***20%*** |
| 52. Do you have concrete examples of links between banks and NBFIs, or between different NBFI sectors that could pose a risk to the financial system? | 22 | 5 | 3 | | | 13 | 3 | 3 | 49 | ***57%*** |
| 53. What are the benefits and costs of a regular EU system-wide stress test across NBFI and banking sectors? Are current reporting and data sharing arrangements sufficient to perform this task? Would it be possible to combine available NBFI data with banking data? If so, how? | 20 | 7 | 4 | 2 | | 14 | 3 | 2 | 52 | ***60%*** |
| 54. Is there a need for arrangements between NBFI supervisors and bank supervisors to ensure timely and comprehensive sharing of data for the conduct of an EU-wide financial system stress tests? Please elaborate: | 15 | 6 | 4 | 1 | | 10 | 3 | 1 | 40 | ***47%*** |
| 55. What governance principles already laid out in existing system-wide exercises in the EU, such as the one-off Fit-for-55 climate risk scenario analysis or the CCP stress tests conducted by ESMA, could be adopted in such system-wide stress test scenario? Please elaborate: | 7 | 5 | 1 | 1 | 1 | 7 | 2 | | 24 | ***28%*** |
| 56. Only for NBFIs and banks: In your risk management practices, do you run stress tests at group level, and do you monitor the level of interconnectedness with (other) NBFIs (within and beyond your own sector; e.g. portfolio overlaps)? | 14 | 3 | | | | | 2 | 1 | 20 | ***39%*** |
| 57. How can we ensure a more coordinated and effective macroprudential supervision of NBFIs and markets? How could the role of EU bodies (including ESAs, ESRB, ESAs Joint Committee) be enhanced, if at all? Please explain: | 24 | 4 | 3 | 1 | | 12 | 4 | | 48 | ***56%*** |
| 58. How could the currently available coordination mechanisms for the implementation of macroprudential measures for OEFs by NCAs or ESAs (such as leverage restrictions or powers to suspend redemption on financial stability grounds) be improved? | 21 | 3 | 2 | | | 10 | 3 | | 39 | ***45%*** |
| 59. What are the benefits and costs of introducing an Enhanced Coordination Mechanism (ECM), as described above, for macroprudential measures adopted by NCAs? | 17 | 3 | 1 | | | 9 | 2 | | 32 | ***37%*** |
| 60. How can ESMA and the ESRB ensure that appropriate National Macroprudential Measures (NMMs) are also adopted in other relevant EU countries for the same (or similar) fund, if needed? | 12 | 1 | 2 | | | 10 | 2 | | 27 | ***31%*** |

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| 61. Are there other ways of seeking coordination on macroprudential measures and possibly of reciprocation? What could this system look like? Please provide concrete examples/scenarios, and explain if it could apply to all NBFI sectors or only for a specific one: | 13 | 1 | 2 | | | 11 | 1 | | 28 | ***33%*** |
| 62. What are the benefits and costs of improving supervisory coordination over large (to be defined) asset management companies to address systemic risk and coordination issues among national supervisors? What could be ESMA's role in ensuring coordination and guidance, including with daily supervision at fund level? | 19 | 3 | 2 | | | 11 | 4 | | 39 | ***45%*** |
| 63. What powers would be necessary for EU bodies to properly supervise large asset management companies in terms of flexibility and ability to react fast? Please provide concrete examples and justifications. | 18 | 2 | | | | 8 | 3 | | 31 | ***36%*** |
| 64. What are the benefits and costs of having targeted coordinated direct intervention powers to manage a crisis of large asset management companies? What could such intervention powers look like (e.g. similar to those in Article 24 of EMIR)? | 16 | 1 | | | | 10 | 1 | | 28 | ***33%*** |
| 65.1 Please explain what the pros are? | 5 | | 1 | 1 | | 6 | | | 13 | ***15%*** |
| 65.2 Please explain what the cons are? | 3 | | 1 | | | 7 | 2 | | 13 | ***15%*** |
| 66. What are the benefits and costs of gradually giving ESAs greater intervention powers to be triggered by systemic events, such as the possibility to introduce EU-wide trade halts or direct power to collect data from regulated entities? Please justify your answer and provide examples of powers that could be given to the ESAs during a systemic crisis: | 10 | 2 | 3 | 2 | 5 | 9 | 5 | 3 | 39 | ***45%*** |
| 67. What are the benefits and costs of a more integrated system of supervision for commodities markets where the financial markets supervisor bears responsibility for both the financial and physical infrastructure of the commodity futures exchange, including the system of rules and contractual terms of the exchange that regulate both futures and (cash/physical) forward contracts? | 3 | 1 | | | 5 | 8 | 2 | | 19 | ***22%*** |
| 68. Are there elements of the FSB programme on NBFI that should be prioritised in the EU? Please provide examples | 10 | 5 | 3 | | | 10 | 6 | | 34 | ***40%*** |