Question 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?

We agree with the consultation document's assessment that, based on recent stress episodes, the main vulnerabilities that have the potential to generate systemic risk are: (i) liquidity mismatches; (ii) excessive leverage; (iii) increasing interconnectedness across intermediaries.

Arguably, inadequate preparedness for margin and/or collateral calls and related potential liquidity risk could be regarded as a standalone vulnerability, rather than inextricably linking it to 'excessive leverage'. Liquidity risk in this regard can arise even when leverage use may not be deemed 'excessive'. For example, a pension fund using interest rate derivatives or a commodity trader buying futures on input materials may be considered as engaging in hedging, not excessive leverage taking. Yet, these entities can still be subject to liquidity risk from margin calls. This is also in line with work by the dedicated workstream on margin preparedness by the FSB.

Concentration risk presents another relevant source of vulnerability. Highly concentrated portfolios within non-banks may amplify abrupt downturns in specific sectors or areas. At the same time, financial market segments that are dominated by a few market participants could be vulnerable to the unexpected inability of these market participants to carry out their critical functions, which is a relevant issue for all market participants, including NBFIs.

Lastly, it is important to recognize the possibility of other, yet unidentified, sources of systemic risk emerging from the NBFI sector, particularly as the sector continues to evolve. Therefore, the regulatory framework must remain as flexible and adaptable as possible, allowing for the development of additional policies – such as level 2 measures – to address new sources of systemic risk as they arise.

Question 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.

Interconnections between credit institutions and NBFIs can take various forms, such as: credit institutions (i) providing credit to NBFIs; (ii) acting as counterparties in derivative and repo transactions; (iii) directly or indirectly owning NBFIs; or (iv) having common asset exposures with NBFIs.

Banks, amongst others, serve as prime brokers for leveraged NBFIs either through loans or derivatives. They are also exposed to NBFIs through derivatives for their own hedging purposes, mainly in relation to interest rate risk. Here, banks often have opposing hedging needs compared to NBFIs. For instance, pension funds are exposed to the risk of decreasing interest rates which leads to an increase in the present value of their future pension liabilities. Banks, on the other hand, tend to have a positive duration gap which may expose them to the risk of increasing interest rates. Banks also provide credit lines to NBFIs, exposing them to liquidity risk in case of large (simultaneous) drawdowns. Acting as clearing members for NBFIs, banks face counterparty and step-in liquidity risks. Additionally, credit institutions may rely on NBFIs for funding through repos, bonds, equity or in short-term funding markets, making them vulnerable to funding strains resulting from liquidity stress in NBFIs (e.g. MMFs). Moreover, credit institutions might hold securities issued by NBFIs or invest in funds. Also, credit institutions and NBFIs may have common asset exposures, creating the potential for portfolio losses due to fire sales.

Banking regulation and supervision already recognizes such risks. This year, the BCBS published a consultative document for Guidelines on Counterparty Credit Risk (CCR) management. The guidelines provide sound practices for supervisors in the areas of CCR due diligence; mitigation strategy; monitoring and governance- with a focus on NBFI counterparties. The guidelines add to the existing CCR framework in the CRR3, as well as the risk-mitigation techniques for OTC derivative contracts specified in EMIR. Current regulation therefore addresses banks derivative and SFT exposures to NBFI counterparties.

Question 3. 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? Please explain 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.

For investment funds, it is usually the collective actions of funds that may pose systemic risk by generating spillover effects across other segments of the financial system and the broader economy. The March 2020 'dash for cash' and the stress in UK Gilts markets in 2022 exemplify instances where the combined actions of multiple funds had systemic risk implications, necessitating central bank intervention. While these events have not yet led to a complete breakdown of critical functions, they demonstrated the possibility of such outcomes, especially without central banks intervening. Overall, when investment funds fail or face distress, it can disrupt credit flow to governments and the wider economy. Similarly, market stress affecting MMFs could hinder funding for the banking sector.

The actions of life insurers and pension funds can also generate wider spillover effects due to their large and concentrated market footprint, notably in long-term fixed-income products and some investment funds. During the March 2020 market turmoil, they acted procyclically by selling long-term debt securities and investment fund shares,[1] leading to major outflows from money market funds (MMFs) as they needed liquidity for margin calls.[2] The 2022 LDI episode only further illustrates how the interconnectedness of pension funds and investment funds can result in knock-on effects that have systemic implications.

Other NBFI entities essential for the stability and functioning of financial markets include market infrastructures, notably CCPs, and potentially CSDs, payment systems, and trading platforms. For CCPs, ESMA concluded in its 2021 assessment that three clearing services offered by UK CCPs are of systemic relevance to the EU or one of its member states. ESMA's 2024 stress test indicated EU and Tier 2 CCPs to be resilient. In order to be less dependent on UK CCPs in cases of stress or failure, EU entities have to hold an Active Account at an EU CCP for the systemically relevant services from mid-2025 onwards. This will likely provide a backup in case of failure of these non-EU CCPs. We consider the default of a CCP in or outside the EU unlikely, given that the CCP rulebook offers almost inexhaustible tools for loss-allocation to its members. Moreover, the CCP Recovery & Resolution Regulation provides additional safeguards.

Finally, the importance of principal trading firms in global trading and market making has increased significantly.[3] Because of their larger share in global trading, their importance to the rest of the financial system has increased as well, as highlighted by previous stress episodes such as the flash crash in 2010. At the same time, the sector is highly concentrated, with a few institutions dominating different market segments. Failure of large principal trading firms may therefore have implications for market functioning and liquidity in those segments. Nevertheless, the exact systemic implications of principal trading firms are yet to be further assessed, which is challenging given the complexity of their business models and limited transparency. As such, the exact role of principal trading firms in the financial system and their systemic relevance remain a blind spot for regulatory authorities and policymakers.

[1] See e.g. ECB's May 2021 Financial Stability Review (Chart 5.2) and Fay and Ghiselli (2023).
[2] See Box 'Interconnectedness of derivatives markets and money market funds through insurance corporations and pension funds' in ECB's November 2020 Financial Stability Review and Ghio et al. (2023).
[3] New titans of Wall Street: How trading firms stole a march on big banks (ft.com)

Question 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.

First, collective asset sales by investment funds can give rise to systemic liquidity risk. During times of market stress, fund managers can face significant outflows. For open-ended funds subject to liquidity mismatch, these outflows may at least in part reflect a materialization of the first-mover advantage present among investors. In order to accommodate these outflows, fund managers may be forced to liquidate portfolio assets. Such forced asset sales may amplify stress and deteriorate liquidity in underlying markets. A clear example includes the COVID-19 market turmoil in March 2020, during which open-ended investment funds faced unprecedented outflows that exceeded levels seen during previous crises. The resulting forced asset sales have been shown to affect underlying asset markets.[4]

Second, margin and collateral requirements could also generate systemic liquidity risk. Centrally cleared transactions impose requirements on participants that can unexpectedly increase amid sudden dislocations in market prices. The liquidity shortfall generated by poor preparedness to these margin calls induces reactions (e.g. fire sales) which propagate the shock to the whole financial system (see also answer to Question 26). Again, the COVID-19 market turmoil in March 2020 provides a relevant example. During this period, insurance companies and pension funds located in the euro area faced a significant increase in variation margin requirements on their derivative portfolios. As variation margin typically needs to be paid in cash, insurance companies and pension funds massively redeemed MMF shares, which became subject to significant outflows.[5]

Materialization of systemic liquidity risk is more likely in case of concentrated exposures. In case liquidity risk materializes for (cohorts of) market participants, the impact on underlying markets may be larger in case they hold a larger share of the underlying assets. For instance, as illustrated by the Archegos episode, an investor could accumulate a significant exposure to a limited set of assets that would be difficult to unwind without impacting the market price of both the underlying securities and the derivatives based on those securities. Another example would be the UK Gilt crisis, in which GBP LDI funds (collectively) held concentrated exposures in the UK Gilt market. The sudden rise in UK interest rates led to significant liquidity needs for GBP LDI funds, which subsequently had a strong impact on the UK Gilt market.

[4] For the impact of liquidity mismatch in open-ended funds on the corporate bond market, see, e.g., Does mutual fund illiquidity introduce fragility into asset prices? Evidence from the corporate bond market - ScienceDirect.
[5] Interconnectedness of derivatives markets and money market funds through insurance corporations and pension funds (europa.eu)

Question 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.

In the Netherlands, we primarily observe high levels of (reported) leverage in hedge funds and LDI funds (both GBP- as well as euro-denominated LDI funds). In principle, these funds are regulated under the AIFMD. Anecdotally, we know that similar strategies are offered through segregated mandates (often offered by the same management companies that manage the respective AIFs) under a MiFID license, but due to a lack of data we are unable to accurately monitor the use of leverage in these mandates.

For hedge funds, the exact vulnerabilities are particularly difficult to assess, as leverage is predominantly acquired through a variety of derivatives. Assessing the quality of the netting and hedging arrangements within a fund is challenging given the current AIFMD reporting framework. The funds themselves are most vulnerable, followed by leverage providers (such as prime brokers) and entities that are invested in similar asset classes through the position liquidation channel. Until now, DNB has not yet activated Art. 25 AIFMD.

The strategies of LDI funds are relatively simple as these mainly aim to hedge against interest rate increases. When interest rates increase, leverage ratios of these funds mechanically increase while significant margin calls may arise at the same time. This may lead to forced asset sales in order to deleverage or obtain the cash required to meet margin calls. Forced asset sales may adversely impact the stability of the underlying asset markets, as was the case during the UK Gilt crisis with GBP-denominated LDI funds. Moreover, LDI funds may redeem MMF shares to generate the cash required, in which case stress may spill over to the MMF sector. To the extent leverage is obtained through the repo market (which is only the case for GBP-denominated LDI funds), repo counterparties could be affected as well. Note that the EUR LDI funds in The Netherlands are unlikely to pose significant risks to the financial system.[6] However, this conclusion is solely based on LDI strategies that are offered through Alternative Investment Funds. Because of data gaps, it is unclear whether and how this conclusion would change once LDI strategies offered through segregated mandates are taken into account as well.

At the EU level, apart from hedge funds and LDI funds, pockets of substantial leverage are observed in a subset of real estate funds as well as in a subset of UCITS funds that uses synthetic leverage and relies on the Value-at-Risk (VaR) approach to compute exposures. [7,8]

[6] Limited liquidity risks in Euro LDI funds (dnb.nl)
[7] ESMA, 2023, *EU Alternative Investment Funds*.
[8] EU Non-bank Financial Intermediation Risk Monitor 2024 (europa.eu)

Question 6. Do you observe any systemic risks and vulnerabilities emerging from crypto assets trading and intermediaries in the EU?

Financial stability risks in crypto asset markets appear limited at present. Crypto asset market cap is close to its peak reached in November 2021 but remains a small portion of global financial system assets. Linkages with core financial markets and institutions have continued to grow but remain limited in scale; crypto assets are not widely used in critical financial services (incl. payments) on which the real economy depends; and decentralized finance remains a niche market segment. However, if the crypto asset ecosystem were to grow further in size, or its integration with the financial system and the real economy were to increase, financial stability challenges could arise in the future.

One key channel through which crypto assets can potentially impact financial stability is their interlinkages with the traditional financial system. This year's surge in applications for crypto spot ETPs by traditional asset managers in the US contrasts with limited exposure to crypto assets of EU investment funds. It is warranted to continue monitoring (the development of) these linkages. Priority areas to focus on would be: (i) stablecoins' reserve assets and their use for payment and settlement, and (ii) bank and non-bank exposure to crypto-asset markets through direct holdings of crypto-assets and through their holdings of investment products such as ETPs.

Another channel that warrants attention is the concentration risk of crypto asset conglomerates. Currently, MiCAR imposes governance requirements for activities within the same entity but does not stipulate any prohibitions for any combinations of services within the same entity or group ("crypto asset conglomerates"). Given that risks can arise from the concentration of certain activities within one entity, it needs to be monitored whether MiCAR addresses these risks sufficiently or whether additional requirements will be needed.

Question 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.

The Capital Markets Union (CMU) is essential for a competitive and resilient Europe, yet progress is sluggish and European capital markets remain fragmented. Deeper and more integrated European capital markets will support economic growth and strengthen financial stability. The EU's financial system remains bank dominated, leading to concentration of systemic risk due to inherent maturity mismatches, high leverage, and interconnectedness. A well-developed CMU improves the resilience of the European economy by its potential to distribute shocks more evenly across the EU through diversification and increased private risk sharing. Furthermore, market-based financing can stimulate equity funding that is more suitable for SMEs or higher-risk innovative projects.[9]

Non-bank financial intermediaries play a pivotal role in funding EU businesses, which is essential for the advancement of deeper and more integrated European capital markets. Given the increasing presence and influence of investment funds within the financial system, it is important to take continued steps towards addressing their structural vulnerabilities. We therefore support ongoing efforts aimed at mitigating the risks associated with investment funds and advocate for the development of a comprehensive macroprudential framework within the European context.

At the same time, a macroprudential approach should be tailored and proportional to avoid undue increases in financing costs. The initial focus should be on repurposing existing tools by embedding the macroprudential perspective into current regulations. This also applies to regulatory initiatives already underway, such as the work on RTS's and Guidelines within the revised AIFMD/UCITS framework. These upcoming requirements should serve as the first layer of defence and can go a long way in enhancing the overall resilience of the investment fund sector in the face of shocks. It is important to monitor how this will affect liquidity mismatches in the coming years. To avoid wrong incentives and moral hazard, the primary responsibility for managing risks and addressing liquidity concerns should lie with the fund manager. A future macroprudential approach that permits interventions by macroprudential authorities should impose conditions on such actions (cf. Art. 25 AIFMD). For instance, such interventions should only be possible when fund managers do not take sufficient action, and authorities must step in to address significant unmitigated systemic risks. Authorities should consider systemic risk amplifiers, such as concentration, commonality of assets before applying tools to cohorts of funds. A macroprudential framework should be applied in a proportionate and risk-based manner considering the heterogeneity of the sector, while also ensuring its economic efficiency, cost effectiveness and profitability. In considering the use of instruments, attention should be given to the structure of an entity (the degree of alignment of the investment strategy, liquidity profile and redemption policy) and the type of investors investing in an entity/fund (retail, professional, mixed). Investors need to be informed on the conditions for the use of liquidity tools for the fund that they are investing in, so that they could take informed investment decisions, in line with their risk appetite and liquidity appetite.

[9] AFM and DNB joint position paper 'Next steps for the European Capital Markets Union'.

Question 8. What are pros and cons of giving the competent authority the power to increase liquidity buffer requirements on an individual or collective basis in the event of system-wide financial stability risks? Under which other situation do you believe MMF liquidity buffers should be increased on an individual or collective basis by the competent authority? Please explain.

To boost the resilience of EU private debt MMFs, legislative amendments should primarily focus on increasing overall liquidity requirements, as suggested by ESMA and ESRB recommendations. The market turbulence in March 2020 highlighted that many investors, including Dutch pension funds, viewed these types of funds more as *cash-like* than *investment-like*. Moving forward, reforms should focus on maintaining the liquidity function of MMFs during times of stress, so they can meet periods of increased redemption requests without destabilizing broader money markets. Enhanced liquidity requirements should also aim to bridge the regulatory gap between the EU, the US and potentially the UK.

We believe that adequate liquidity levels would negate the need for authorities to independently raise liquidity buffers in the event of system-wide financial stability risks. While granting authorities the ability to adjust buffer levels may allow for regulatory flexibility in a changing risk landscape and may positively impact MMFs' readiness to address sudden redemption pressures, there are challenges associated with this approach. Timing is crucial during periods of stress, and there is a risk that such interventions might come too late. Furthermore, variable requirements over time or across different funds might lead to regulatory arbitrage among jurisdictions and potential spillover effects within the EU. Therefore, priority should first and foremost be given to increasing overall liquidity requirements, thereby establishing a higher level of MMF resilience across the EU. In this light, we also consider it important to decouple the potential activation of certain liquidity management tools from regulatory liquidity thresholds.

However, we do believe that there could be a role for authorities in encouraging fund managers to utilize buffers, supporting shock absorption during acute stress periods. Authorities should also provide sector-level guidance (e.g., by fund type and currency) on rebuilding buffers after stress events, thereby enhancing buffer usability. Such guidance should be coordinated at the EU level.

Question 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.

If liquidity requirements are appropriately set, there would be no immediate need to grant authorities additional powers to increase liquidity buffers on an individual or collective basis during system-wide financial stability risks (see response to Question 8).

Question 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?

Reporting is essential for monitoring the MMF market and identifying systemic vulnerabilities. The sector is already subject to reporting obligations under the MMFR and benefits from the recent AIFMD/UCITS agreement. However, a necessary review of the MMFR should ensure reporting changes are topped up and adequately tailored to the unique nature of MMFs. In this context, it is also important to note that MMFs operate in a fragmented and opaque European market for short-term debt securities, characterized by limited information availability.

In line with the ESRB's recommendations for MMFs, changes to reporting should explore increasing the reporting frequency for MMFs from quarterly to monthly for certain key indicators and parameters. Additionally, it is crucial to assess whether more detailed information, such as investor data and portfolio composition, should be included beyond what is covered by the AIFM/UCITS Directive. In this context, it is essential that this assessment considers both proportionality and cost.

It is also important to evaluate the need for authorities to be able to request even higher-frequency data, such as daily fund flows, in crisis scenarios, as suggested by the ESRB.

Furthermore, we support enhancing and harmonizing data-sharing arrangements, particularly in times of stressed market conditions. Given the cross-border nature of MMFs, ESMA may play a central role in coordinating and harmonizing ad hoc data requests during market-wide stress events to ensure a consistent approach across jurisdictions.

Question 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 supervision and remediation actions for detecting liquidity risks?

Overall, we view the proposed enhancements to the stress testing framework favorably; however, their success will greatly depend on the details of their implementation, comprehensive data collection, effective cooperation among authorities and the availability of other risk management tools. Additionally, while stress testing may aid in the identification of liquidity risks, it alone will not be enough to manage these risks. Legislative changes, as suggested in the ESMA and ESRB recommendations, will be necessary to enhance the ex-ante resilience of the MMF sector and address such risks before they occur.

When evaluating and implementing these changes to the stress testing framework, we believe several important considerations must be taken into account:

- Liquidity demands from investors might result in multiple MMFs selling assets at the same time, which could trigger market-wide stress. Thus, obtaining more detailed insights into the investor base of MMFs is crucial to better understand the potential risk of simultaneous investor redemptions. In this context, consideration must be given to the aggregate holdings of the same investor across multiple MMFs, as well as concentration risk within a single MMF.
- Both the reporting burden for MMFs and supervisors' ability to assess stress test outcomes and conduct independent risk evaluations are important. Here, it is also relevant to further assess how a necessary review of the MMFR can complement recent changes to reporting provisions following the AIFMD/UCITS review. In this context, particular attention may be given to the possibility of MMFs reporting exposures at the ISIN-level on at least a quarterly basis. Synergies could be leveraged with existing data reported by institutions for the Eurosystem's Securities Holdings Statistics. ESMA's work based on the revised AIFMD and UCITS Directive is important in this regard.
- Efforts should be directed towards enhancing data sharing among EU NCAs, particularly given that risks frequently arise from cross-border market participants. For instance, to more effectively evaluate fire sale risks, it may be considered to integrate nationally covered MMF asset holdings, across central banks, with investor base data, which have European coverage for all central banks.

Question 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?

We recognize the potential benefits of introducing an EU-wide stress test for MMFs. The MMF sector is characterized by distinct challenges, including high portfolio overlap, a significant market footprint, and the low liquidity in the markets they invest in. An EU-wide stress test could help flag possible coordination failures within the sector and may incentivize MMFs to address these problems more effectively.

However, experiences with stress tests in other sectors—such as banking, insurance, pension funds, and CCPs—suggest that these exercises demand significant resources, though the final cost will be contingent on the chosen design and scenarios. Given the considerable expenses involved, it is essential to beforehand clearly define the objective and added value beyond the current stress testing guidelines for MMFs.

In the design of such a stress test, we believe that liquidity risk should indeed be the primary focus. Though, the emphasis should be on system-wide liquidity instead of the liquidity position of individual funds, as this can provide most additional information for macroprudential purposes.

Question 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.

MMF resilience is closely linked to short-term funding market conditions. As such, it is important to implement measures that strengthen liquidity resilience in MMFs. Appropriately set liquidity buffers, for instance, can provide a cushion during periods of market stress. Regulatory requirements mandating MMFs to invest in centrally tradable instruments with a certain level of liquidity may help mitigate liquidity risk under normal market conditions. However, just because an instrument is traded on a trading venue does not guarantee sufficient liquidity during times of market stress. The susceptibility of these markets to illiquidity in times of stress remains.

Therefore, such measures cannot be seen separately from the broader range of measures needed to improve the functioning and potentially the resilience of short-term funding markets, in line with the FSB's suggested reforms in this area. Overall, these markets require more work to address their structural fragilities.

Moreover, implementing such a measure can also come with unintended consequences, such as the risk of a further concentration in instruments. This requires a careful cost-and-benefit analysis, as the limited information provided makes it difficult to reach a substantiated decision.

Question 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?

AIFMD data contains information on the liquidity profile of a fund's assets and the redemption terms offered to investors. In principle, this allows authorities to quantify any liquidity mismatch. However, reported information on portfolio liquidity is static and may not be representative of portfolio liquidity during times of stress, i.e. when vulnerabilities resulting from liquidity mismatch tend to materialize. Also, this information is self-reported by fund managers and hard to validate by authorities. The use of LMTs is reported to authorities as soon as they are activated. This allows supervisors to monitor the general state of liquidity in the fund sector.

The recently completed review of the AIFMD and UCITS Directive provides a promising step forward in authorities' ability to monitor liquidity risks in open-ended investment funds by broadening the reporting scope. ESMA has been tasked with drafting regulatory technical standards specifying the details of the additional information to be reported. In particular, ESMA will determine whether full portfolio disclosure to supervisors on a periodic basis is warranted. Such granular line-by-line portfolio holdings of investment funds would allow authorities to independently assess portfolio liquidity themselves, thereby improving authorities' monitoring capacity. It is also important that the new reporting requirements contain information on the available LMTs and their activation. However, benefits should be carefully weighed against probabilities for use and costs.

Question 16(a). What is the supervisory practice and experience with monitoring and detecting unmitigated liquidity mismatches during the lifetime of OEFs?

Careful consideration has been given to the extent of liquidity mismatch in OEFs and availability of tools to manage it, and this focus continues as the market evolves. Liquidity risk of investment funds is a core topic for the AFM in the supervision of the investment fund sector. The AFM not only looks at liquidity management tools (LMTs) to address liquidity risk, but at the elements of liquidity management of the funds. This includes the availability and use of LMTs, but also the redemption policy and the composition of the investors.

Liquidity mismatches have also been monitored and analysed as part of thematic analyses that focused on specific cohorts of funds. In 2016, the AFM did its first analysis of liquidity mismatch in open-end real estate funds. The conclusion was that if a liquidity mismatch occurs, the available liquidity tools will most likely be sufficient to prevent large redemptions. In 2017 we followed up our analysis of Dutch real estate funds with a joint analysis with the Dutch Central Bank (DNB) on liquidity risk of Dutch investment funds that report a liquidity mismatch in their regulatory reporting (the final report is an internal report and not published). During this joint investigation into liquidity risk, substantial shortcomings in the reporting quality were found in some of the regulatory reporting examined. This conclusion and the expected follow-up by the sector was published in a sector letter (only in Dutch) in 2018.[10] DNB's Financial Stability Review in autumn 2023 focused again on liquidity mismatches in real estate funds, motivated by concerns about CRE valuations due to the rise in interest rates.[11] Here, DNB concluded that liquidity mismatch in real estate funds appears contained as redemption terms seem aligned with the liquidity of the investments.

Since 2020, the AFM has started to develop a more structural monitoring of liquidity based on reported AIFMD data via data dashboards. The development of these dashboards is an important aspect of the daily supervisory activities of the AFM. These dashboards not only use regulatory AIFMD data, but also fund related data from data vendors for funds that are not subject to regulatory reporting (e.g. UCITS). In these dashboards supervisors can look at general characteristics of funds, the level of liquidity mismatch of individual funds and fund type level, the reported stress test results, the presence of a liquidity buffer if the fund uses derivatives, and available LMTs.

Also, liquidity risks are taken into account during the periodic assessment of leverage-related financial stability risks under AIFMD Article 25. Specifically, for each Alternative Investment Fund, the risk to financial stability resulting from fire sales is assessed. This assessment of fire sales risks is among others based on the difference between the redemption terms offered to investors and the liquidity profile of a fund's portfolio.[12]

[10] https://www.afm.nl/~/profmedia/files/doelgroepen/aifm/sectorbrief-liquiditeitsonderzoek.pdf
[11] Financial Stability Report - Autumn 2023 (dnb.nl)
[12] esma34-32-701_guidelines_on_article_25_aifmd.pdf (europa.eu)

Question 17. What is the data that you find most relevant when monitoring liquidity risks of OEFs?

AIFMD regulatory data currently provides the most relevant information, including information on the redemption profile (e.g., open- vs closed-ended, redemption frequency, notice periods). In addition, AIFMD regulatory data includes information on the liquidity profile of a fund's assets and the redemption terms offered to investors. This allows for an assessment of a fund's liquidity mismatch.

AIFMD regulatory data is an important source for the data dashboards the AFM has developed to monitor risks at individual fund level and sector wide level. These dashboards complement regulatory AIFMD data with fund related data from data vendors for funds that are not subject to regulatory reporting (e.g. UCITS). General market data on for instance volatility and other stress indicators are also used to further contextualize the economic environment.

As mentioned before, access to granular line-by-line portfolio holdings (which may become available due to the recent AIFMD/UCITS review) would significantly enhance authorities' monitoring capacity. That being said, it is important to ensure proportionality when setting reporting requirements to avoid an unnecessarily high administrative burden.

On top of that, for certain cohorts of funds that are involved in derivative or repo transactions, SFTR and EMIR data could be very helpful databases to monitor liquidity risks resulting from margin and/or collateral calls. We support ongoing efforts to improve the quality of these databases, as data quality issues constrain the use of these data for policy analysis.

Question 18. What supervisory actions do you take when unmitigated liquidity mismatches are detected during the lifetime of an OEF?

Article 16 of the AIFMD requires AIFMs to have an appropriate liquidity risk management system and to ensure that the liquidity of the underlying assets is consistent with the liquidity offered in the redemption profile. This permits NCAs to have limited intervening powers in the fund's design during its registration process. According to Article 16, the AFM can, to a limited extent, engage with and request the fund manager to make changes to the liquidity risk management and redemption profile if it determines that these aspects do not comply with Article 16. With the revised AIFMD and UCITS, the AFM can extend the assessment to the LMTs chosen by the fund. The ESMA Guidelines can be helpful in setting minimum expectations for the type of LMTs and their calibration for certain funds. In the ongoing supervision of funds, we can regularly check if funds still comply with Article 16. This assessment can take place based on information received from AIFMD reporting, the activation of LMTs, or any other market signals.

The main responsibility for liquidity management and the chosen tools and/or design of the redemption profile under Article 16 rests with the fund manager. The article permits fund managers to address liquidity mismatches using available LMTs, rather than through the redemption profile. However, mitigating liquidity mismatches via the use of LMTs is not effective in all cases. LMTs should be applied to unforeseen circumstances, providing managers with tools to address liquidity levels that the fund is not calibrated for in normal times. Consequently, liquidity mismatch should be addressed ex ante, via the redemption policy or through the use of ex-ante LMTs. NCAs lack powers to set certain requirements, such as notice periods in the day-to-day supervision of funds. ELTIFs exemplify how the current framework allows funds with characteristics of closed-end funds in terms of the underlying investments to still be sold as open-ended, without an adequate notice period and limited intervention capacity for NCAs regarding the design of the fund. It is recommended that the ELTIF regime be evaluated considering further developments in the macroprudential framework, including the impact of microprudential regulation on mitigating risk and building resilience.

Moreover, looking ahead, the liquidity requirements in the revised AIFMD and UCITS will serve as the first layer of defense. It is important to consider how these will impact liquidity mismatches in the upcoming years. Additional measures may be necessary for authorities to reduce risks caused by unmitigated liquidity mismatches that could lead to systemic risk. Specifically, a macroprudential tool should be considered to address current and potential future liquidity risks. This tool should resemble the Article 25(3) AIFMD tool for leverage and must be applicable to both AIFs and UCITS, depending on the nature of the systemic risk posed by cohorts of either fund type. Consistent with the existing Art. 25 tool, an equivalent liquidity tool should be discretionary, based on a comprehensive risk monitoring framework, and subject to clear conditions. It should also be ex ante in nature, aimed at preventing the build-up of risk or activated in case of assessed threat to financial stability. It should allow for the ex-ante mitigation of significant and systemic liquidity risks, in accordance with tools selected by the fund manager and included in the prospectus. Investors need to be informed of the conditions for the use of such liquidity tools in the funds they invest in, enabling them to make informed decisions aligned with their risk and liquidity appetite.

The use of such a tool should follow a consistent assessment and be subject to certain conditions, similarly to those in Art. 25 AIFMD. Designed to mitigate financial stability risks, the assessment should consider systemic risk amplifiers such as market impact, concentration, investor base, and commonality of assets between funds (see response to Q3). This tool should not replace proper liquidity risk management by

fund managers, who bear primary responsibility. It is intended as a last-resort measure to contain systemic risks that go beyond the individual fund level. The design and use of the tool must also consider proportionality and costs and benefits from a wider economic perspective. We are not in favor of granting authorities a role in the (de)activation of LMTs at this stage, given that the primary responsibility for adequate liquidity risk management lies first and foremost with the fund manager. Instead, efforts should focus on enhancing baseline resilience beforehand, rather than providing authorities with an ex-post instrument already available at the level of the fund manager.

Question 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?

Currently, there is limited information on the availability of LMTs at the fund level for both UCITS funds and AIFs. When activated, LMTs are reported to the AFM immediately and included in the AIFMD reporting, however, the latter always has a lag of maximum 3 months. In 2022, the AFM gathered data on all available LMTs at the individual fund level. However, since available LMTs are not part of regular reporting requirements, this complicates the assessment of potential inconsistencies or insufficient calibration between selected LMTs by fund managers and the liquidity mismatch of the underlying fund, especially if available LMTs change over the fund's lifetime. This issue of data availability needs to be resolved first before authorities can address the issue of inconsistencies or inadequate calibration between LMTs and a fund's liquidity mismatch. The new revised reporting requirements following the new AIFMD and UCITS Directive are a first step towards addressing this matter. Nonetheless, it is primarily the fund manager's responsibility to address liquidity mismatches already at the onset of a fund by assessing the underlying liquidity of the assets with the proposed redemption profile including the available LMTs. Consistent application of EU Guidance and future possible powers to set stricter requirements on the redemption profile for certain funds should be a part of that.

Question 23: 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?

From a national perspective, AFM and DNB collect information on funds' liquidity stress tests as part of AIFMD reporting, in accordance with Article 16(1) of Directive 2011/61/EU. Funds are only obligated to report the results of these stress tests. As a result, AFM and DNB do not structurally receive underlying fund data used by fund managers or methodologies used. Since AIFMs report on at most a quarterly basis, this is the maximum frequency at which AFM and DNB receive information on liquidity stress test results. To gain better insight into liquidity stress testing practices within the Dutch asset management sector, the AFM and DNB reviewed the liquidity stress testing policies of several large asset managers and the results from various individual investment funds in the second half of 2023. Research by the AFM and DNB indicates that asset managers conduct their liquidity stress tests in different ways, which are broadly in line with the guidelines. It is important for fund managers to align their stress testing policies with ESMA's guidelines on liquidity stress testing, as these guidelines provide a useful framework. However, additional guidance on liquidity risks associated with derivative use, such as margin calls, could enhance the guidelines.

Question 24: How do you use information collected from stress tests at fund level for other supervisory purposes and for monitoring systemic risks?

The current information provided in the AIFMD reporting on liquidity stress test results is of limited use for other supervisory purposes or for monitoring systemic risks. This limitation arises mainly from the scant information on liquidity stress testing within AIFMD reporting. In the upcoming revised reporting requirements following the new AIFMD and UCITS Directive, it would be beneficial to explore a more uniform way of reporting the results of liquidity stress tests at the fund level.

Question 25: 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?

Given that funds managed by the same asset management company face shared reputational and operational risks, conducting stress tests at the asset management company level can help identify these vulnerabilities. However, asset management companies typically offer a wide variety of funds targeting different asset classes, using different investment strategies, with different investor bases, and managed by different fund managers. From a macroprudential viewpoint, the relevance of concentrating on the asset management company level is therefore not immediately obvious. As such, for macroprudential purposes, we believe the focus should be on identifying groups of funds with similar risks and strategies (across different asset management companies), as systemic risk typically arises from their collective behaviour.

Also, experience with stress tests in other sectors – banks, insurance companies, pension funds, and CCPs – has shown that these exercises are resource intensive. The eventual cost of conducting such a stress test will depend on the design and scenarios chosen. Given the high costs involved, the objective and added value of such a stress test at the asset management company level need to be clearly defined beforehand.

Question 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?

Recent market stress events, such as the March 2020 market turmoil, Archegos collapse, commodity market stress in 2022, and UK gilt crisis, have highlighted the potential effects of inadequate margin preparedness by some non-bank market participants. To address these issues, the forthcoming FSB policy recommendations on managing and mitigating the impact of spikes in margin and collateral calls in the NBFI sector should be swiftly implemented in the EU.

From a national perspective, we consider the preparedness of Dutch pension funds to meet margin calls to be adequate. Overall, we emphasize the (growing) importance of adequate levels of available liquidity, especially now that the exemption from the clearing obligation has ended and central clearing has become mandatory for pension funds. However, even though Dutch pension funds have enough liquidity sources to meet margin calls under different stress scenarios, they are crucially dependent on money markets continuing to function smoothly, so they can raise cash at short notice.[13]

Moreover, euro LDI funds managed from the Netherlands appear to have sufficient liquidity to meet margin calls in the event of a sudden rise in interest rates.[14] After comparing funds' liquidity buffers – consisting of cash and cash equivalents, MMF shares, and short-term government bonds – with funds' interest rate sensitivity (which is a primary determinant of the magnitude of margin calls), we conclude that margin preparedness of euro LDI funds appears adequate.

[13] Dutch pension funds can meet margin calls on derivatives, but depend on functioning money markets | De Nederlandsche Bank (dnb.nl)
[14] Limited liquidity risks in Euro LDI funds | De Nederlandsche Bank (dnb.nl)

Question 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.

For pension funds, DNB considers quarterly reporting templates with several sensitivity analyses with regards to different market shocks, including shocks to interest rates, foreign exchange rates as well as equity. The aim of these analyses is to ensure that pension funds have adequate levels of available liquidity to deal with sudden or large margin calls. Besides, DNB as a supervisor performs on-site inspections on a risk-based level, and DNB uses surveys with qualitative questions to assess the overall quality of the risk management system.

For insurers, the main metric that DNB uses is to compare the margin calls resulting from a 50bps interest rate shock to available cash, committed liquidity facilities and other liquid assets. Compared to pension funds, some Dutch insurers have sizable committed liquidity facilities relative to their MC DV01. These can cover an interest rate increase of up to 250bps. Furthermore, we have surveys with qualitative questions assessing the overall quality of the risk management system. This survey also includes questions on how often the liquidity buffer is monitored, how often the liquidity buffer is reported and how many exceedances of the liquidity buffer limit have taken place in the past year. The presence and quality of the insurer's liquidity risk management plan is also an indication of how serious insurers take their liquidity risk.

For Alternative Investment Funds, risk metrics indicating funds' sensitivities to market shocks, including DV01, which measures the sensitivity to interest rate shocks, are helpful indicators of exposures to margin calls. Moreover, SFTR and EMIR data enable authorities to observe granular derivative and repo positions, which allows for more accurate assessments of liquidity risks resulting from margin and collateral calls. We support ongoing efforts to improve the quality of these databases, as data quality issues constrain the use of these data for policy analysis.

Question 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.

On a quarterly basis look-through holdings data is already available, including derivatives positions, through regulatory reporting by pension funds. Moreover, EMIR data allows the monitoring of the derivative portfolios of Dutch pension funds on a more frequent basis. Finally, SFTR data enables authorities to observe the activities of pension funds in repo markets. In order to enhance our ability to monitor liquidity risks in the pension fund sector, we are working on merging pension fund supervisory data with EMIR and SFTR data. Consequently, it is key to resolve any outstanding data quality issues in EMIR/SFTR. For other sectors like Alternative Investment Funds and insurance companies, we have less detailed information as these entities report no or less detailed look-through information. Assessing liquidity risks stemming from exposures to other funds is therefore more challenging for these sectors.

Question 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?

The main benefit of an EU-wide liquidity stress test would be that it captures the entire universe of LDI strategies. If authorities conduct such stress tests at a national level, the impact of forced asset sales on underlying asset markets might be underestimated as the true market footprint of LDI strategies could be greater when considering the entire EU. Moreover, pension funds may use LDI strategies through LDI funds or segregated mandates, and potentially by using their own balance sheets. An EU-wide liquidity stress test at the pension fund level would capture all these various forms through which LDI strategies may be employed. Naturally, variations in the structures through which LDI strategies are used may have different implications for liquidity risks. For instance, the UK Gilt crisis has shown that the recapitalization process can be more challenging for pooled LDI funds as opposed to single client funds/mandates. As such, these stress tests would need to take into account the diversity of the different structures through which LDI strategies are employed. Overall, the comprehensiveness of an EU-wide stress test could lead to a more accurate assessment of the systemic risks resulting from LDI strategies. On the other hand, the EU pension fund industry and the use of LDI strategies is likely heavily concentrated in just a few jurisdictions.

Note that insurance companies that offer DC pensions can also employ LDI strategies, which may expose them to similar liquidity risks. Consideration could therefore be given to including insurance companies that offer pension products as well.

As such an EU-wide liquidity stress test would require data from various jurisdictions, EU authorities could play an important role in the coordination of such an exercise as well as the data collection process.

Question 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?

A wider range of issuers could enhance the liquidity of commercial paper markets and may provide a source of diversification to both issuers and investors alike. In principle, more diversification in funding sources may benefit financial stability. However, as these markets may become less liquid or face dry ups in times of stress, corporate issuers should not become overly reliant on these markets for short-term funding.

Question 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.

One concern is that a significant portion of euro-denominated commercial papers (CPs) are issued in the EUR-CP market outside the EU, which complicates monitoring by EU authorities, especially during times of stress, and places this market beyond their regulatory and supervisory jurisdiction.

Question 33. What could be done to improve the liquidity of secondary markets in commercial papers and certificates of deposits?

Commercial paper and certificate of deposit markets are buy-and-hold-to-maturity markets, hence there is hardly any secondary market trading in normal circumstances. Therefore, the potential for improving the liquidity of secondary markets appears limited. Regardless, some steps may be conducive to secondary market liquidity, including more standardization, improving data availability and the ability to trade CP and CDs instruments on a trading venue.

Question 35. Do you think there is a risk with the high concentration of this market in a few investors (MMF and banks)? Please elaborate.

Commercial paper and certificate of deposit markets are highly concentrated, both from an issuer and from an investor perspective. This can constitute a vulnerability for both in times of stress. The March 2020 market turmoil illustrated this well, as MMFs faced high outflows following investor redemptions, while issuers faced short-term funding dry ups.

Question 39. How would you assess the level of preparedness of commodity derivatives market participants in terms of meeting short-term liquidity needs or requests for collateral to meet margins? Please rank from 1 to 5 (lowest to highest) the level of preparedness for the following participants by sector: insurance companies, UCITS funds, AIFs, commercial undertakings, investment firms, pension funds.

Dutch insurers do not invest in commodity derivatives. For Dutch pension funds, the exposures to commodity derivatives are marginal. For AIFs, only a very small subset of the Dutch hedge fund population makes use of commodity futures. In short, there is very limited usage – if any – of said products amongst the participants listed.

Aside from the minimal use of commodity derivatives, liquidity risks for these funds are unlikely to be substantial since they only trade in very liquid instruments like futures. Based on EFET member discussions involving the AFM, it appears that commercial undertakings, particularly utility firms, and commodity trading firms (based outside the Netherlands) have funding lines with several different banks whilst having a concentration position at clearing banks in order to benefit from netting effects. It's worth noting that a significant portion of TTF trading is conducted by firms located in a third country, outside the EU.

Question 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.

It is generally fair to say spot markets are driving the derivatives (futures) market, since the underlying assets dictate the value of derived products. That said, unlike derivatives markets, spot markets are not leveraged. As a result, derivatives markets face far more elaborate regulation, especially post-2008, which would be too much for spot markets. Therefore, a more comprehensive set of trading rules and risk management for spot trading, based solely on driving futures trading, seems excessive. While, the spot energy market regulator is indicating that while spot markets are changing in nature, this in itself does not imply they need to be regulated as stringent as derivatives markets.

Question 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?

Both financial markets and energy markets are already subject to regulation, including frameworks such as MiFID and REMIT. Additionally, REMIT has been revised recently. Hence, it seems best to stay aligned with the regulation for financial markets designed in the wake of the GFC overall. To enhance energy market regulation and supervision and further align this with existing financial market regulation, there may be merit in exploring some of the proposals on energy suggested by Draghi in his report on competitiveness, particularly those concerning national gas markets. However, any further assessments must be approached with care. Certain proposals in the Draghi report that advocate for extending the mandate of EU supervisors—such as implementing price regulations—could potentially disrupt the price formation process and reduce market liquidity. This could negatively impact traders who want to hedge risks from holding physical positions, thereby increasing the chance that risks transmit from (spot) energy markets to financial markets.

Question 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?

First, implementing the FSB recommendations on minimum haircuts for securities financing transactions (SFTs) would help address the risks resulting from NBFI leverage obtained through repo financing.

Second, UCITS funds using Value at Risk (VaR) models should regularly report and disclose their leverage to enable authorities to better monitor potential risks to financial stability. Consideration could be given to a discretionary tool to impose leverage-related restrictions to UCITS funds that use the VaR approach and pose a risk to the stability of the financial system. Such a tool could resemble AIFMD Article 25 and should be subject to clear conditions. Alternatively, the scope of Article 25 could be broadened.

By using VaR, especially absolute VaR, UCITS funds might acquire leverage that is considered substantial according to AIFMD definitions. This could create a gap in the regulatory toolkit to limit leverage-related risks within the investment funds sector. As a starting point, all UCITS funds using VaR should be required to report and disclose regularly on their leverage, based on the commitment approach. This would enable authorities to better monitor leverage use and potential risks to financial stability posed by this fund cohort. In addition, the ability to impose additional constraints for such UCITS funds – should they pose risks to broader financial stability – would enhance the existing macroprudential toolkit and merits further exploration, notably regarding the investor types involved in these funds. This could be achieved through the use of the same power as exists now in the context of Article 25 of the AIFMD for those UCITS using the VaR approach, i.e. the ability to impose leverage or other restrictions on those funds. Moreover, from an investor protection point of view, it is worth questioning whether substantially levered UCITS are desirable, given the reputation of UCITS funds for retail investors.

Finally, ongoing FSB work may lead to additional recommendations, such as strengthening activity- and entity-based measures, stress testing requirements, and enhancing public and private disclosure. Policy tools could also target leverage providers such as prime-brokers, e.g. by imposing possible concentration limits towards their counterparties.

Question 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 main benefit of the 'yield buffer' under AIFMD Article 25(3) is its flexible applicability. By setting a resilience requirement to an interest rate shock for an entire cohort of funds, the measure is both broad and refined, as it targets funds with similar strategies that could give rise to financial stability risks due to collective behaviour in times of stress. Besides, by setting this resilience requirement, the 'yield buffer' offers a workaround to complex (data) issues with regards to the exact calibration of specific leverage limits at the fund level.

At first glance, the costs of the yield buffer appear limited. However, possible leakage to segregated mandates that are regulated under MiFID or other forms of regulatory arbitrage still needs to be assessed. Due to the lack of a reciprocity framework, fund managers offering LDI funds could in theory relocate to jurisdictions where the yield buffer does not apply. To the extent that multiple jurisdictions are involved and differences of opinion exist, it is essential to establish a reciprocity framework to ensure consistent application of leverage-related restrictions under AIFMD Article 25 within the EU. Additionally, it could be that interest rate hedges have become more capital intensive, due to which pension funds can potentially allocate less to asset classes that offer higher expected returns (such as equities or real estate). This may put a drag on overall returns on pension funds' investment portfolios.

Question 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.

In the Netherlands, we primarily observe high leverage in hedge funds and LDI funds (both GBP as well as euro-denominated LDI funds). These funds are regulated under the AIFMD and most of them are open-ended. See also the response to Question 5.

For hedge funds, the exact vulnerabilities are particularly difficult to assess, as leverage is predominantly acquired through a variety of derivatives. Assessing the quality of the netting and hedging arrangements within a fund is challenging given the current AIFMD reporting framework.

The strategies of LDI funds are relatively simple as these mainly aim to hedge against interest rate increases. When interest rates increase, leverage ratios of these funds mechanically increase while significant margin calls may arise at the same time. This may lead to forced asset sales in order to deleverage or obtain the cash required to meet margin calls. Forced asset sales may adversely impact the stability of the underlying asset markets, as was the case during the UK Gilt crisis with GBP-denominated LDI funds. Moreover, LDI funds may redeem MMF shares to generate the cash required, in which case stress may spill over to the MMF sector. To the extent leverage is obtained through the repo market (which is only the case for GBP-denominated LDI funds), repo counterparties could be affected as well. The introduction of the 'yield buffer' under AIFMD Article 25 should have alleviated the risks posed to financial stability by GBP-denominated LDI funds. Moreover, the risks posed to financial stability by euro LDI funds managed from the Netherlands seem contained, as these funds appear to have sufficient liquidity to meet margin calls in the event of a sudden rise in interest rates (see also the responses to Questions 5 and 26).[15]

At the EU level, apart from hedge funds and LDI fonds, pockets of substantial leverage are observed in a subset of real estate funds. AIFMD Article 25 has been activated twice in recent years. First, the Central Bank of Ireland applied a leverage limit to Irish real estate funds. Second, GBP-denominated LDI funds in Ireland and Luxembourg have become subject to a yield buffer, also imposed using AIFMD Article 25. Finally, leverage is present within a subset of UCITS funds that uses synthetic leverage and relies on the Value-at-Risk (VaR) approach to compute exposures.[16]

[15] Limited liquidity risks in Euro LDI funds | De Nederlandsche Bank (dnb.nl)
[16] See Box 5 in the ESRB NBFI Risk Monitor 2024 (EU Non-bank Financial Intermediation Risk Monitor 2024 (europa.eu))

Question 46. How can leverage through certain investment strategies (e.g. when funds invest in other funds based in third countries) be better detected?

The key to better detect leverage through certain investment strategies is to close data gaps for authorities. Options that may help achieve this include:

- Line-by-line portfolio holdings, including look-through information, both for UCITS as well as AIFs. Such look-through information would allow authorities to observe the indirect exposures that open-ended funds may obtain through positions in other funds. Further examination of costs and benefits and proportionality would be important.
- Holdings in other investment funds that employ leverage (either synthetically or financially) could be merged with EMIR and SFTR data using the underlying funds' identifiers. This way, authorities could be able to observe derivative and repo holdings by the underlying funds that open-ended funds may invest in. While this may not give a complete overview of the underlying funds' activities, it may help to better understand the implicit exposures that may arise from more complex investment strategies. Note that this would only work in case underlying funds are covered by EMIR and SFTR. Also, remaining data quality issues in EMIR/SFTR would need to be addressed.
- Cross-border data-sharing agreements. This is not only relevant within the EU, but also outside the EU given that exposures and interlinkages can be of global nature. For instance, EU funds may hold shares of non-European funds that employ global investment strategies, such as the yen carry trade. Data sharing agreements between authorities globally may enhance authorities' ability to detect the different layers of leverage present in such global exposures/interlinkages. This in turn allows for a better assessment of the corresponding risks to the financial system. Within the EU, a potential option could be to grant NCAs access to AIFMD regulatory data for the entire EU. Currently, NCAs only observe data for fund managers located in their own jurisdiction. Expanding the coverage for NCAs to the EU level may benefit NCAs' detection of leverage, for instance in case a fund invests in a leveraged Alternative Investment Fund whose manager is located in a different jurisdiction.

Question 47. Are you aware of any NBFI sector entities with particularly high leverage in the EU that could raise systemic risk concerns?

For private equity and private credit funds (which are typically closed-end), leverage is often not acquired on the balance sheets of these investment funds, but located somewhere else in the chain. These funds often do not use leverage on the fund-level, but the entire chain may involve various layers of leverage ranging from the portfolio companies and special purpose vehicles to the ultimate investors. Better information on the use of leverage outside the funds' balance sheets would therefore also help to improve detection of leverage.

Leverage is also used beyond collective investment funds, for example, in segregated mandates wherein an asset manager invests on behalf of one client only. Although the investment structure is different, the risks with respect to the use of leverage at portfolio or asset management level could be similar. While collective investment funds are subject to the AIFMD or UCITS Directive, segregated mandates fall under MiFID II. For the latter, macroprudential supervisors often have very little information on the leverage used, if any, limiting their ability to assess associated risks. It could therefore be helpful to expand reporting requirements for segregated mandates to ensure that macroprudential authorities can appropriately assess and mitigate leverage-related risks. Further examination of costs and benefits and proportionality would be important.

Apart from segregated mandates, family offices may also use significant levels of leverage, as was the case with Archegos. Family offices are typically lightly regulated compared with collective investment funds and face no or less stringent reporting requirements, hindering the monitoring of their leverage use by authorities.

Question 48. Do stakeholders have views on macroprudential tools to deal with leverage of NBFIs that are not currently included in EU legislation?

The forthcoming FSB recommendations on measuring and addressing risks from leverage in NBFI should be implemented swiftly in the European Union. Possible avenues to consider are (some of them are also mentioned in the response to Question 43):

- Private/public disclosures, including to providers of leverage.
- Enhanced activity-based measures: margin requirements, central clearing requirements, and minimum haircuts. These should be in line with the forthcoming FSB recommendations on non-bank leverage.
- Entity-based measures: concentration/position limits, leverage limits. Although further research is required, consideration could be given to creating provisions similar to AIFMD Article 25 for other entities such as leveraged UCITS funds or segregated mandates.

Question 49. [To 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?

Most entities in principle report on a quarterly basis or at an even lower frequency. This relatively low reporting frequency complicates the timely identification of leverage pockets. Nevertheless, the reported data from insurance companies and pension funds is rather granular with line-by-line portfolio holdings (for pension funds this also includes look-through information). This information, combined with more timely data sources such as EMIR/SFTR would in principle enable DNB to monitor the use of leverage through derivatives/repos by insurance companies and pension funds on a more continuous basis. As mentioned before, resolving remaining data quality issues in EMIR/SFTR is key to ensure accurate and effective monitoring/analysis.

In addition to insurance companies and pension funds, the use of leverage by other entities or legal forms is harder to detect, especially at higher frequencies. For instance, asset management activities take place via forms other than investment funds as well, for instance through family offices and segregated mandates. The use of segregated mandates is widespread in The Netherlands as well. For such alternative forms of asset management, significant data gaps exist which prevent authorities from assessing their use of leverage in the first place, let alone on a more frequent basis.

Question 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?

See also the response to Question 46.

The reconciliation of positions in leveraged products would require combining various data sources, such as regulatory reporting by pension funds and insurance companies, AIFMD regulatory data, UCITS data, as well as more activity-based databases such as EMIR and SFTR. As mentioned before, line-by-line holdings with look-through information, cross-border data sharing, and data on segregated mandates under MiFID would help significantly. Also, it is of crucial importance to ensure that each database contains an identifier that allows merging it with other sources of data (such as the Legal Entity Identifier).

For private funds, reconciling positions in leveraged products is more challenging given the inherently untransparent nature of their business models. For instance, funds may hold a controlling stake in a holding structure that owes the debt. In such a case, leverage does not end up on the fund's balance sheet but rather on the balance sheet of the underlying holding structure. The lack of information on the portfolio holdings (including look-through information) prevents authorities from assessing leverage-related risks in private funds.

Finally, to the extent that these various legal entities are domiciled in different jurisdictions, cross-border data-sharing agreements may be crucial to expand the scope of NCAs' monitoring exercises.

Question 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?

The AFM monitors 'daily positions' rather than intraday positions. Intraday trading, and its relation with volatility, is complex. The AFM observes that trading firms and market makers have different strategies, and that their intra-day trading cannot be seen as homogeneous. This reduces the risk of liquidity drying up. Additionally, financial infrastructure such as trading venues use mechanisms like circuit breakers to curb extreme volatility, further reducing the risk of liquidity shortages.

Instead, liquidity issues can arise from external events that create large shocks or unbalance supply and demand, such as the war in Ukraine, the Nordstream explosions, or China's economic recovery. This risk primarily affects the clearing bank, which employs real-time risk management techniques for on-venue trading.

A more fundamental question is what constitutes a 'dry up'? Liquidity is dynamic and tends to be less deep in times of stress. Still, there is always someone willing to buy or sell at some price, even if it is extremely high or low.

Question 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?

There are several examples of interconnectedness between banks and NBFIs, as well as among various NBFI sectors, that could create vulnerabilities within the financial system.

One prominent channel is through derivatives and repos, where NBFIs often rely on prime brokerage services offered by banks. Many of these derivative transactions are settled on a bilateral basis, which requires robust risk management from both parties, posing a potential risk. Furthermore, the relationships between banks and hedge funds are often concentrated, increasing the likelihood of default or disruptions spreading across financial institutions, potentially triggering chain reactions.

Another significant link comes from the short-term financing banks obtain from money markets, where MMFs are key buyers of short-term bank debt. If MMFs experience large redemptions, they may be forced to sell the debt securities issued by banks, potentially increasing banks' funding costs or even resulting in a funding shortfall.

Bank ownership of asset management firms is another area where risks may arise. Such affiliations can expose banks to reputational or step-in risks. For instance, if an affiliated investment fund faces substantial withdrawals, a bank might step in to provide liquidity or credit lines to protect its reputation.

Banks and NBFIs also share indirect exposures through common asset holdings. A shock in the NBFI sector could force some intermediaries to sell off these securities, driving down their value and negatively impacting banks holding similar assets, even though the initial shock did not directly affect them.

In terms of links between different NBFI sectors, MMFs also contribute to interconnectedness in this regard. NBFIs, such as insurance companies and pension funds, may hold significant amounts of MMF shares. However, there can be risk associated with reliance on MMF shares as a stable liquidity source during periods of market stress, when MMFs may experience large outflows, and in some cases, may even suspend redemptions. This underlines the importance of increasing the resilience of MMFs.

Lastly, increasing cross-holdings among investment funds is another factor that can amplify risk. When multiple funds hold stakes in each other, stress in one area can quickly spread. Additionally, these assets may turn out to be less liquid than expected in a crisis, further exacerbating the problem. Furthermore, the lack of detailed data on cross-border fund holdings can make it difficult to monitor and mitigate such risks effectively.

Question 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?

Conducting an EU-wide stress test (SWST) can offer significant advantages, especially given the intricate and complex links between banks and NBFIs. SWST can help quantify these channels through which shocks spread between NBFIs and banks. This exercise would also improve data transparency by publishing aggregated exposures and losses from the stress test. Performing these tests regularly would provide regulators with valuable insights into the adequacy of NBFI regulations and the necessity for a macroprudential approach.

However, designing such an exercise is likely to be costly and highly complex due to the inclusion of many diverse sectors in a single stress test. Developing a common SWST methodology at the EU level to model the relationships among the several sectors involved is still work in progress.

Moreover, the success of SWST in accurately identifying potential risks depends heavily on the granularity of data available. Data improvements should see to enhancing the availability of investor-level information for insurers, investment funds, and regulatory datasets relating to NBFI balance sheets, which are collected under frameworks such as the AIFMD, UCITS, MMFR, and Solvency II. Additionally, there is a need to upgrade the quality of EMIR disclosures concerning derivatives and SFTs. As such, current data access and/or data sharing agreements would need to be enhanced to perform a SWST.

At present, regulators may attempt to combine NBFI data with banking data by relying on commercial or national databases for investment funds and insurers, and on SHS-G and Anacredit. However, commercial databases often have coverage gaps and quality issues, which make them less suitable than regulatory data. Legal restrictions may also limit the use of confidential data.

Overall, despite the operational complexities in conducting a comprehensive EU-wide SWST, the benefits in terms of improved financial stability assessments and transparency would outweigh the associated costs.

Question 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.

A SWST at the EU level should involve diverse sectors: banks, investment funds (including MMFs), pension funds, CCPs and insurers, and would require granular data on all of them (see Question 53). To reflect the interconnected nature of the European financial system, the SWST would involve stress testing several entities across various member states simultaneously. Currently, the European framework does not allow for comprehensive sharing of data between relevant EU and national authorities and across jurisdictions without dedicated arrangements. Although initiatives are underway at the European level to make data sharing easier, data collected by the Eurosystem central banks falls under ECB governed regulation. As a result, this data is not included in these initiatives, despite the fact that central banks collect relevant information for NCAs.

We see a need for legal amendments and further coordination to enhance access to data and data sharing within and across jurisdictions. At present, the separation between banking supervisors and market authorities can create challenges for data sharing. At the EU level, legal amendments may also benefit the conduct of an EU SWST and strengthen macroprudential oversight of the NBFI sector. While some data are shared by NCAs and with the ECB and ESMA and EIOPA, restrictions limit the sharing of this data between NCAs or NCBs. For example, national central banks do not necessarily have access to granular supervisory data on banks located in other member states; certain MMFR data transmitted to ESMA are not always accessible to other NCAs or NCBs; securities holding statistics (SHS) are not available for national authorities of other member states. Generally, Eurosystem central banks should have access to relevant EU-wide databases under their monetary policy and financial stability mandates (e.g. AIFMD, MMFR, Solvency II and MiFID data reported). Similarly, central banks should share relevant statistical data on funds with regulatory authorities.

Overall, we support ongoing efforts at the EU level to streamline reporting requirements, reduce duplication, improve data standardization, and improve the sharing and use of data already reported. In this regard, key principles to guide reform include (i) establishing a financial stability gateway for data sharing, where any UCITS/AIFMD reporting should be shareable on financial stability grounds (ii) enhancing analytical capabilities, and (iii) improving data quality, coverage, and frequency.

Question 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?

When considering existing governance principles for designing a system-wide stress test, we see the greatest benefit in maintaining the role of the ESRB in developing scenarios that capture systemic risks. Ensuring that all institutions within the stress test face the same scenario is crucial for maintaining consistency and comparability across the exercise.

While EBA, EIOPA and ESMA are well-equipped to handle methodological choices for the institutions they supervise, there is a gap in determining the methodology for interlinkages between financial institutions. The ESRB, supported by the ECB, could play such a role due to its extensive experience with top-down system-wide stress tests and macroprudential stress testing.

Moreover, it is important to establish clear guidelines for how macroprudential authorities should utilize the outcomes of the stress test to ensure that follow-up procedures are consistent across the EU.

Question 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.

It is imperative to enhance the supervisory architecture of EU capital markets to reflect and support the growing role of NBFI, its cross-border dimension and relevance for financial stability. This needs to ensure that NBFI remains resilient in times of stress and does not amplify systemic risk or generate cross-border contagion. The current architecture of capital markets supervision in Europe does not sufficiently reflect the interconnectedness of these markets. For instance, critical NBFI entities are often concentrated in a few Member States while their activities, and hence the risks, are inherently cross-border in nature. Thereby, these entities can pose systemic risks or create adverse spillovers to other EU jurisdictions or the EU as a whole. Besides, as macroprudential policy for NBFI evolves without an adequate governance framework for coordination, the increasing use of macroprudential powers at the national level could lead to fragmentation, lack of a pan-European approach, regulatory arbitrage and an uneven playing field. Effective governance arrangements and policy coordination need to ensure a consistent approach to cross-border risks.

In principle, moving towards central supervision should be considered where markets are highly integrated across borders, where the rules are harmonized and where there is a residual risk of supervisory arbitrage.[17] Central supervision is well-placed to monitor and assess risks to financial stability from a pan-European perspective and ensure that these cross-border risks are effectively and efficiently addressed. In practice, this would mean shifting the supervision of critical cross-border market infrastructures such as CCPs to ESMA. Further down the road, this may also apply to (large or significant) trading venues, and asset managers that are particularly relevant for financial stability in multiple Member States or the EU as a whole. Less relevant venues and asset managers and those with largely national clients and exposures would remain under national supervision. A step-by-step approach could be followed in which capital markets supervision (in certain areas) is first coordinated at the European level and then centrally managed. At all times, moving towards central European supervision or enhancing coordination should be done in an efficiency-enhancing manner and not lead to multiple layers and duplication of efforts, additional costs or unclarity for supervised entities and authorities alike.

In other cases where central European supervision is not (yet) warranted, effective arrangements for policy coordination should be established to ensure that cross-border risks are addressed pre-emptively in a consistent way. In this regard, two elements should be prioritized to enhance the current framework from a macroprudential perspective:

- Reciprocation: As the use of macroprudential powers by national authorities is likely to increase, reciprocation is an important mechanism to ensure cross-border risks are effectively addressed and to prevent leakage. Existing regulations, such as Article 40 of MiFIR could provide a template for how further enhanced reciprocation might work within the EU in the context of macroprudential measures for NBFI. Under such a framework, ESMA – having consulted the ESRB – would be required to assess whether a national measure proposed by one member state should also be applied across the EU, for example for investment funds that operate in multiple member states or where the fund manager is located in another jurisdiction. Such a mechanism would enhance the effectiveness of these macroprudential powers while guarding against the potential for

[17] Please see AFM – DNB Position-paper with recommendations for a stronger CMU.

arbitrage and fragmentation across the EU. For example, if a national competent authority were to implement a leverage limit for a group of funds, the reciprocation mechanism would extend those limits to funds in that same cohort and with a similar risk profile in other jurisdictions, if deemed appropriate in relation to the nature and magnitude of these risks.

- Top-up powers: ESMA, being well placed to assess systemic risks from a pan-European and cross-border perspective, could be granted certain (top-up) powers in relation to specific macroprudential tools. For example, if ESMA (or the ESRB) assesses a group of investment funds to pose a systemic risk to an EU Member State or the EU as a whole, it should be given the power to request the implementation of specific macroprudential measures such as the leverage limit under Article 25(3) AIFMD or the new macroprudential tool for liquidity (see above), or to "top-up" existing national measures. Such an action should only be taken in close collaboration with the respective national competent authorities, and after having consulted the ESRB, while avoiding unclarity about responsible supervisors towards entities subject to supervision.

In general, it is important to ensure the involvement of macroprudential authorities – those responsible for macroprudential regulation and instruments – in governance and supervisory arrangements. These authorities may be market regulators, central banks or both, depending on the supervisory set-up in different jurisdictions. Any supervisory or coordination framework should involve the right authorities, also at the level of ESMA where in some cases, central banks are the NCA with macroprudential powers at the national level. The composition of the CCP Supervisory Committee at the level of ESMA could be informative in this regard, as the committee gathers the authorities primarily responsible for CCPs supervision, as well as the central banks of issue.

Finally, centralising data and reporting should be given serious consideration. ESMA is well placed to collect and analyze data in order to identify, assess and monitor EU-wide risks. The centralization of data systems and register at the European level may also have advantages related to efficiency and costs of IT. Needless to say, national competent authorities, where they retain (partial) responsibility for supervising national entities, should have direct and unrestricted access to the necessary data for supervisory purposes. Additionally, supervised institutions should not be obligated to provide the same data more than once

Question 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?

Under AIFMD Article 25(3), ESMA is already granted a facilitating and coordinating role to ensure that a consistent approach is taken by NCAs in relation to measures being proposed. Please see also the response to Q57 for options to enhance the overall role of EU bodies, in particular the suggestions in the area of reciprocation and top-up powers

Similarly, for MIFIR's product intervention powers, ESMA must evaluate whether a measure by a national authority should be extended to other EU authorities and provide an opinion. This approach is being expanded to CCPs through the creation of the Joint Monitoring Mechanism. The JMM at ESMA will unite relevant Union bodies overseeing Union CCPs, clearing members, and clients.

In addition to the role of the ESAs, ensuring that NCAs involved have access to the necessary data is an important objective.

Question 59. What are the benefits and costs of introducing an Enhanced Coordination Mechanism (ECM), as described above, for macroprudential measures adopted by NCAs?

On the benefit side, an Enhanced Coordination Mechanism (ECM) may facilitate consistent implementation of macroprudential measures across different EU member states. By promoting effective coordination and facilitating information sharing among NCAs and ESAs, an ECM enhances the ability to proactively and promptly identify systemic risks. Coordinated actions, such as the synchronized application of leverage limits or the suspension of redemptions, can boost resilience by reducing regulatory arbitrage opportunities and levelling the EU playing field.

With regards to the potential costs of an ECM, it needs to be ensured that such a system remains flexible to allow for the swift and tailored implementation of macroprudential measures by NCAs to address jurisdiction-specific (or broader) risks to financial stability. A more centralized coordination approach might restrict the flexibility of individual NCAs in tailoring macroprudential measures to address their specific national market conditions. Hence, we see value in the fact that the proposed ECM features comply-or-explain procedures. In this context, it is also important that it emphasizes distinctions between home-host obligations, allowing macroprudential measures to be tailored and proportional to the specific risks in question and the responsibilities of both home and host countries where an institution operates across borders.

In addition, the introduction of new layers of coordination and oversight could also cause delays in decision-making and the implementation of measures. While it is essential to establish robust governance arrangements with appropriate checks and balances, ensuring the process remains agile will be crucial in maximizing the framework's efficiency and effectiveness.

Question 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?

First, ESMA and the ESRB play an important role in the monitoring and assessment of risks to the financial system when funds from various jurisdictions are involved. NCAs often lack information on funds outside their own jurisdictions and hence are unable to comprehensively assess financial stability risks. As such, the coordinating role by ESMA and the ESRB is already of importance in the risk identification stage.

Second, in addition to an Enhanced Coordination Mechanism, a reciprocity framework or top-up powers for ESMA could be considered (see answer to Question 57).

Question 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?

Enhanced supervisory coordination can ensure consistent application of regulatory standards across the EU, creating a level playing field for asset managers and may improve the identification of EU-wide risks. If implemented well, greater coordination may lead to efficient resource utilization.

Enhancing supervisory coordination should be targeted towards asset managers engaged in cross-border activities that are relevant to financial stability in more than one Member State or the Union as a whole. Needless to say, new structures and mechanisms should remain efficient and flexible and not lead to a duplication of supervisory practices or slow-decision making processes. A variety of different models for strengthened supervisory coordination should therefore be explored with proper cost benefit analysis. These models could include supervisory colleges, Joint Supervisory Teams (JSTs), a structure akin to the CCP Supervisory Committee. Specific attention should also be given to certain prerequisites for the different models to work efficiently and effectively, e.g. in relation to governance, funding and access to supervisory data

Considering the scope of large asset managers, 'size' should not necessarily be the condition for asset managers to qualify for European supervisory agreements. First, it should be about those asset managers that have the potential to generate systemic risks and/or adverse cross-border spillovers to other Member States. Second, in the case of investment funds it is questionable whether asset managers are individually relevant from a systemic perspective, even if they are 'large'. Rather, we would prioritize improving supervisory coordination over cohorts of investment funds that employ similar investment strategies and whose collective behaviour has the potential to destabilize underlying markets. This is motivated by the observation that past stress episodes in which open-ended funds were involved, often resulted from collective selling behaviour by cohorts of funds rather than single asset management companies (e.g., the dash-for-cash during March 2020, as well as the UK gilt crisis). Also, large asset management companies typically offer a wide variety of products that are not necessarily related to each other, where products are differentiated by asset class, investment strategy, fund structure, et cetera. Importantly, a focus on cohorts of similar funds does not exclude but instead nests a situation in which one or more funds managed by the same asset management company can be of systemic relevance. ESMA (together with the ESRB) should continue to play its important role in risk identification by coordinating analytical work. For instance, the annual ESMA report on the EU Alternative Investment Fund sector[18] as well as the annual NBFI monitor produced by the ESRB[19] provide very important insights to NCAs. When NCAs would only have information on a (small) subset of a cohort of funds that collectively may pose a risk to financial stability, absence of the analyses by ESMA and the ESRB could prevent NCAs from timely detecting systemic risks. ESMA could also play an enhanced role in contributing to the uniform application of policy and supervisory guidance at the national level with a view to ensuring consistent rigor practiced by NCAs.

[18] ESMA50-524821-3095 EU Alternative Investment Funds 2023 (europa.eu)
[19] EU Non-bank Financial Intermediation Risk Monitor 2024 (europa.eu)

Question 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.

As mentioned in the consultation document, ESMA could be given specific coordination powers including the issuance of opinions, coordination of EU-wide stress tests, et cetera. In line with our response to Question 62, such coordination powers may also target cohorts of investment funds that undertake similar activities, rather than individual asset management companies.

It is crucial to ensure that EU bodies have the necessary basic prerequisites to coordinate the supervision of relevant asset management companies effectively. This includes access to comprehensive and timely data. Additionally, developing an operational platform to convene NCAs quickly would facilitate the exchange of information, coordination, and a unified response in times of crisis. The AFM experienced as positive ESMA's initiative to organise *ad hoc* bi-weekly ESMA meetings with the other NCAs aimed at monitoring the suspensions, availability, and activation of LMTs, including sharing information on cases with cross-border elements, during the COVID-19 crisis.

Question 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)?

The benefits and costs are similar to those presented in the answers above and are inherent to discussions featuring increased coordination. Coordinated direct interventions would reduce the risk of fragmented national responses and would facilitate swiftly imposing necessary measures, thereby trying to ensure uniform crisis management across all relevant member states. Such targeted actions may also help mitigate potential negative impacts on market stability and liquidity, preserving the overall health of the financial system during times of stress.

However, potential costs must also be considered. One key challenge is the risk of delays in response due to inefficient coordination mechanisms. Additionally, granting direct intervention powers would require significant resources to properly monitor and manage these responsibilities. At present, there seems to be a lack of capacity to do this effectively, which makes it difficult to envision how such a system could be implemented without substantial enhancements in resources and infrastructure.

For the design of possible intervention powers, the following examples of actions could be considered:

- A responsible NCA overseeing a large asset company could notify ESMA, the ESRB, and/or the other NCAs concerned, prompting an emergency meeting.
- If the event has cross-border implications, impacting multiple jurisdictions and NCAs, ESMA, in consultation with the ESRB could take on the role of coordinating follow-up actions to ensure effective information sharing and aligned responses among the competent authorities. This could be done efficiently within the framework of a (temporary) supervisory college.

Question 65. What are the pros and cons of extending the use of the Enhanced Coordination Mechanism (ECM) described under section 6.1 to other NBFI sectors?

Extending the application of an ECM to other NBFI sectors could help improve the consistent application of macroprudential tools, by aligning regulatory responses and ensuring a more cohesive approach to risks. However, the pool of "other NBFI sectors" is vast and diverse, with considerable variations in risks, structures, and business models across different sectors. Therefore, the relevance and advantages of further coordination through such a framework must be assessed on a sector-by-sector basis. This assessment should focus on if further coordination is necessary, and if so, to what degree and how this should be designed. Guiding criteria for such an assessment should be the potential EU-wide impact and cross-border nature of certain activities or sectors.

Question 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.

Granting ESAs greater intervention powers in response to systemic events presents both benefits and challenges, depending also on the type of power granted. Direct data collection from regulated entities may improve the ESAs' ability to monitor and manage systemic risks, but has the downside that it could lead to overlap, coordination issues and a higher administrative burden for regulated entities. Because of ongoing supervision and regular contacts with regulated entities, NCA's have built a strong information position and short communication lines regarding entities under their supervision. NCA's therefore are better equipped to define more targeted and proportionate data requests or integrate these (ad hoc) in regular reporting and interactions. Needless to say, especially in times of systemic events, NCAs and the respective ESAs should work together closely, including by exchanging data. The ESAs, for example, could solicit data from NCAs or request NCAs to collect certain information from regulated entities.

However, instead of creating an additional reporting channel by granting the ESAs the power to collect information directly from regulated entities, we strongly recommend centralizing supervisory data at the European level directly. This would provide a 'one stop shop' for both NCAs and ESAs, is more efficient and aligns well with the goals of the Capital Markets Union to create an integrated and efficient market. Centralizing supervisory data facilitates regulatory effectiveness, streamlines reporting processes, and reduces compliance costs for companies operating across EU Member States. It also enhances market transparency, fosters international cooperation and improves risk management capabilities, especially in times of crisis when the ESAs are well placed to obtain a system-wide view.

Regarding trading halts, it is foremost the responsibility of trading venues to ensure fair and orderly trading conditions. In this regard it is also their responsibility to determine whether a trading halt is necessary in light of the responsibility referred to. NCAs are to assess and challenge trading venues policies and procedures in this regard. Trading halts are instruments that require timely coordinated intervention. We do not see benefits in granting ESAs the powers to introduce EU-wide trade halts. In fact, this could disrupt the current risk management by venues and NCAs within European financial markets.

Question 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?

In our view, the current supervision of commodities markets, in particular energy markets, is already sufficiently integrated with the supervision of financial markets. Notably, the recently revised REMIT improves cooperation between supervisors at the national and EU level.

From the current regulatory framework it already follows that the financial market regulator (the competent NCA) is involved in cases where market conduct on spot markets impacts futures markets, and vice versa. In summary, an appropriate level cooperation exists among various regulatory bodies (NRAs, NCAs, ACER, ESMA) in such scenarios. Regarding wholesale energy products classified as financial instruments, the NCA's supervisory oversight—encompassing monitoring, supervision, and enforcement of market abuse—align with the coordination obligations under both MAR and REMIT. This also involves close cooperation with the spot market regulator (NRA). Additionally, in instances overlap in systems or contractual terms at trading venues facilitating both spot and futures trading, there is cooperation between both regulators in light of their respective mandates. Thus, moving towards a more integrated system of supervision does not offer considerable benefits.

Question 68. Are there elements of the FSB programme on NBFI that should be prioritised in the EU? Please provide examples.

In recent years, the FSB, working with the global standard setters, has made important progress by agreeing on a range of ambitious policies and recommendations that aim to make the NBFI sector, and thereby our financial system, more resilient. Unfortunately, however, the implementation of some of these policies has been slow and uneven across jurisdictions. Implementing these recommendations would result in an increase in resilience of the NBFI sector in the EU. It would also foster a level playing field across the NBFI sector, both within the EU and globally. The level playing field is needed to mitigate the risk of cross-border fragmentation, regulatory arbitrage and/or business reallocation, as well as cross-border spillovers stemming from globally interconnected entities and activities.

- The FSB *Thematic Review on Money Market Fund Reforms: Peer review report* found that progress in the EU lags behind key peers. Authorities in the United States recently raised the minimum liquidity requirements for all MMFs i.e. to 25% daily liquid assets and 50% weekly liquid assets, while in the United Kingdom, authorities have proposed similar requirements for all MMFs in a public consultation i.e. 15% daily liquid assets and 50% weekly liquid assets. This leaves private debt-focused MMFs domiciled in the EU less resilient to liquidity shocks in comparison. Moreover, for EU MMFs which invest in assets denominated in non-EU currencies, rules that diverge globally can create opportunities for regulatory arbitrage, while weaker resilience could also trigger spillovers to funding markets in jurisdictions outside the euro area. As outlined in ESRB recommendations on MMFs, there are a number of key MMF reform proposals that should be implemented in Europe.[20] These include, among others, increasing liquidity requirements for private debt MMFs and making liquidity buffers more usable.

- *Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds* have been published in December 2023 and should be implemented in the EU through the regulatory work on the Revised AIFMD and UCITS Directive. In addition to the measures envisaged by the Level 1 of the AIFMD and UCITS review, further measures may be necessary to ensure full compliance with the FSB recommendations, and in particular for OEFs investing in illiquid and less liquid assets. If this fails to generate a material increase in the use of ADTs as part of the day-to-day liquidity management of funds, as well as in stress,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), even on a partial basis.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.

- Recommendations aimed at enhancing *Liquidity Preparedness for Margin and Collateral Calls* are expected to be finalized by the end of the year (2024). The FSB's recommendations emphasize the importance of robust liquidity risk management and governance practices and promote the use of liquidity stress tests to identify sources of liquidity strains and to ensure proper calibration

[20] European Systemic Risk Board (2021) 'Recommendation of the European Systemic Risk Board on Reform of Money Market Funds'.

of diverse and reliable liquidity and collateral sources. Once finalised, it is important that these recommendations are implemented in the EU within the timeframe agreed with the FSB.

- With respect to leverage, a first step would be the adoption the *FSB's minimum haircut framework for SFTs* (originally published in November 2015, and last updated in September 2020) to manage leverage acquired via securities lending and repo transactions. Such a framework should be adopted in the EU in sector-wide regulation (SFTR), while addressing the level playing field issues pointed out by the 2019 EBA report, in particular when it regards the inclusion of non-bank-to-non-bank transactions. In addition, further reforms might be needed at the EU-level following the policy proposals that are expected to come out of the ongoing work of the FSB on non-bank leverage.