INTERNATIONAL MONETARY FUND

IMF Country Report No. 25/212

EURO AREA

July 2025

PUBLICATION OF FINANCIAL SECTOR ASSESSMENT PROGRAM DOCUMENTATION—TECHNICAL NOTE ON INVESTMENT FUNDS REGULATION, SUPERVISION AND SYSTEMIC RISK MONITORING

This paper on Investment Funds Regulation, Supervision and Systemic Risk Monitoring was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed on July 2, 2025.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: http://www.imf.org

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

EURO AREA

FINANCIAL SECTOR ASSESSMENT PROGRAM

July 2, 2025

TECHNICAL NOTE

INVESTMENT FUNDS REGULATION, SUPERVISION AND SYSTEMIC RISK MONITORING

Prepared By
Monetary and Capital Markets Department

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program in the euro area. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at http://www.imf.org/external/np/fsap/fssa.aspx

CONTENTS

TABLE

FIGURES

APPENDIX

Glossary

AIF	Alternative Investment Fund
AIFMD	Alternative Investment Funds Management Directive
AUM	Assets Under Management
BoS	Board of Supervisors
DQEF	Data Quality Engagement Framework
EA	Euro Area
EAD	Eligible Assets Directive
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pensions Authority
ELTIF	European Long Term Investments Fund
ESA	European Supervisory Authority
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
EuSEF	European Social Entrepreneurship Fund
EuVECA	European Venture Capital Fund
IOSCO	International Organization of Securities Commissions
LDI	Liability-driven Investment Funds
LMTs	Liquidity Management Tools
MMF	Money Market Funds
NAV	Net Asset Value
NCA	National Competent Authority
RTS	Regulatory and Technical Standards
TN	Technical Note
UCITS	Undertakings for Collective Investment in Transferable Securities

EXECUTIVE SUMMARY[1]

While gradually declining in market share, Europe[2] remains the second largest asset management market globally. The industry is mostly concentrated in a few member states (MS) with a significant amount of delegation of portfolio management services outside of the EU. The majority of funds are held by institutional investors, and the share of funds held by investors outside of the EU continues to grow.

The regulatory framework is complex, and despite recent reforms, remains relatively fragmented. Divergent interpretations of directives by MS, as well as parts of the framework remaining domestically regulated can create opportunities for regulatory arbitrage and affect the resilience and effectiveness of the regulatory framework. This note focuses on the regulatory framework for the two main types of investment funds in the EU, Undertakings for Collective Investment in Transferrable Securities (UCITS) and Alternative Investment Funds (AIFs), as well as Money Market Funds (MMF) as a subcategory of these.

Recent amendments to the UCITS and AIFs Directives introduce much needed liquidity risk management tools and reporting requirements. Most notably, these include the legal basis for a new reporting framework for UCITS, which currently only reports data further to domestic regimes (where they exist); and harmonized liquidity risk management requirements for UCITS and AIFs, including Liquidity Risk Management Tools (LMTs). To implement the reforms the European Securities and Markets Authority (ESMA) needs to develop Regulatory Technical Standards (RTS) and Guidelines which will still take some time, in particular the reporting standards will not be in place until end 2027.

Reform of the MMF Regulation should be a priority. The current framework should be better aligned with international policy developments and best practices and should be revisited. Recommendations by the European Systemic Risk Board (ESRB) and in-depth work carried out by ESMA on areas to be strengthened should form the basis of the reform.

Data gaps and fragmentation are preventing an adequate monitoring of systemic risks at the Euro Area (EA) level. Importantly, the lack of a harmonized reporting framework for UCITS has been a significant limitation for oversight and systemic risk monitoring, with authorities using commercial data for their analysis. Authorities have also noted data quality issues in the AIFM framework that need to be addressed for more adequate monitoring going forward. Also, a multitude of complex reporting frameworks and inadequate data sharing arrangements between

[1] This Technical Note has been prepared by Ms. Cristina Cuervo, Senior Financial Sector Expert from the Monetary and Capital Markets Department of the IMF. The on-site work supporting the findings and conclusions was conducted during November 2024. The information in this note is current as of March 13, 2025. The FSAP thanks the authorities for their constructive dialogue and insights.

[2] While the Technical Note focuses on the EA, the legislative framework is at the EU level and some figures and references may include non-EU countries, depending on the data source.

domestic and European authorities result in data not being used to its potential and leaves authorities with a partial view of the system and financial stability risks.

Authorities should swiftly move towards a single reporting framework which enables data accessibility between the authorities. Beyond ensuring that the new UCITS and updated AIFM reporting frameworks allow for sufficiently granular data for systemic risk monitoring, ESMA should continue to prioritize the work assigned to it by the amended directives on the integrated collection of supervisory data. In particular, to reduce duplications and inconsistencies across reporting frameworks and improve the standardization, efficient sharing and use of data. Potential amendments to the European Supervisory Authorities (ESAs) Regulations, should deliver swift progress on data sharing between the ESAs, the ESRB, National Competent Authorities (NCAs) and the ECB, and ESMA should become a central data hub for investment funds data in the EU.

ESMA has increased the availability and use of its supervisory convergence toolkit. Along with the sustained use of peer reviews, the incorporation of new tools like Common Supervisory Actions and Voluntary Supervisory Colleges for some asset management groups has enhanced the effectiveness of its supervisory convergence efforts. Going forward, a more structured and formal approach to the newly incorporated tools is recommended, to incorporate the compulsory participation of NCAs and clear expectations on their engagement in following up on the findings.

ESMA's resources should be enhanced to strengthen the use of its current powers and deliver key policy, supervisory convergence and risk monitoring responsibilities. Increased mandates to develop implementing regulation under the directives, multiple data and reporting initiatives, enhanced supervisory convergence and a growing range of risk analysis exercises are all needed to adequately supervise the investment management sector in the EA, but are putting a strain on ESMA's resources. Authorities should ensure that ESMA's IT and human capabilities are enhanced to support adequate oversight of the market.

Most of the above issues are being discussed at the European level as part of the Targeted European Commission Consultation regarding a macroprudential framework for Non-Bank Financial Intermediation (NBFI). Responses to the consultation highlight data fragmentation and resource issues as key obstacles to adequate systemic risk monitoring in the EU fund management sector, urgency to reform of the MMF regulation, as well as the need to further enhance liquidity and leverage frameworks for investment funds in Europe. The mission welcomes the macroprudential discussion regarding investment funds which has provided valuable input for this exercise and offers valuable suggestions for a potential framework. In particular, the mission recommends that authorities provide ESMA with the ability to top up measures defined further to Article 25 of the AIFMD and require cross-border reciprocation, as well as consider introducing a similar provision under the UCITS framework.

Table 1. Euro Area: Recommendations on Investment Funds Regulation, Supervision and Systemic Risk Monitoring

Recommendations	Timing [1]	Authorities
Single rulebook		
Mitigate regulatory arbitrage and improve resilience and effectiveness of the regulatory framework by using Regulations where possible.	MT	EC
Ensure new reporting framework under UCITS and AIFs requires sufficiently granular portfolio data and sufficient and comparable information on leverage across funds, to adequately monitor systemic risks.	ST	ESMA
Align the AIF requirements for independence of depositaries with those of the UCITS Directive.	MT	EC
Require the reporting of leverage under the commitment approach for all UCITS and AIFs.	ST	ESMA, EC
Reform the MMF Regulation in line with international policy developments.	I	EC
Supervision		
Strengthen the supervisory convergence framework to ensure a more structured approach to some tools, including compulsory NCA participation and engagement in the follow up process.	ST	EC, ESMA
Enhance the effectiveness of supervisory colleges, by ensuring formal coordination by ESMA, compulsory participation of all affected NCAs, and voluntary participation of third-country regulators where appropriate.	ST	EC, ESMA
Consider the introduction of consolidated supervision of cross-border fund management groups, to ensure better visibility of risks across jurisdictions.	MT	EC
Prioritize areas where supervision remains fragmented including delegation and third-party risks.	I	ESMA
Review whether supervisory frameworks across NCAs ensure compliance with the overarching requirement in AIFMD that the liquidity profile of the investments of the AIF is able to meet its underlying obligations.	MT	ESMA
Continue to use Breach of Law powers available for the most serious cases of non-compliance with Union legislation.	MT	ESMA
Strengthen resources to allow for more effective use of available convergence tools.	ST	EC
Systemic risk monitoring and macroprudential approach		
Revamp data sharing mechanisms to allow for the broadest possible access across institutions (ESAs, ESRB, NCAs, CBs, ECB).	ST	EC
Introduce a single reporting mechanism for fund-level data and centralize data collection at ESMA	MT	EC, ESMA
Introduce a more structured approach to fund stress testing across fund types, including a more regular frequency of exercises.	MT	ESMA
Continue developing system-wide stress tests, to identify vulnerabilities in asset management groups, interconnections with the financial system, risk of generating excessive price volatility and liquidity stress in the financial system.	MT	ESRB, ESAs, ECB

Table 1. Euro Area: Recommendations on Investment Funds Regulation, Supervision and Systemic Risk Monitoring (Concluded)

Strengthen resources to allow for an enhanced approach to stress testing and further risk analysis work under the new reporting frameworks.	ST	EC
Continue the use of risk monitoring ad-hoc exercises and stress simulations to minimize the impact of data gaps and fragmentation, as well as to monitor potential risks (including from funds investing in less liquid assets).	I	ESMA
Strengthen the role of ESMA regarding Article 25 of the AIFMD to enforce cross border reciprocation and to require NCAs to top-up measures defined by ESMA further to Article 25, and introduce a similar provision under UCITS framework.	ST	EC

[1] I Immediate (within 1 year); ST Short Term (within 1-2 years); MT Medium Term (within 3–5 years).

INTRODUCTION

1. This note reviews the functioning and effectiveness of the regulation, supervision and systemic risk monitoring of investment funds in the EA. It refers to the relevant International Organization of Securities Commissions (IOSCO) Principles and Standards.[3] IOSCO generally uses the term Collective Investment Scheme (CIS) to ensure a more globally comprehensive definition of investment funds. Both terms will be used interchangeably in this Technical Note (TN). Emphasis in the TN is placed on requirements with most direct relevance for financial stability, namely valuation, segregation and safekeeping of fund assets, leverage, liquidity risk management and redemption of fund units. The TN also reviews how supervision of compliance with the investment funds common regulatory framework happens in the euro area, and how the authorities analyze and monitor the systemic risk arising from fund management activities.

A. Market Overview

2. Despite a gradual decline in its market share in recent years, Europe still ranks as the second largest market for investment funds globally. Over the past decade, the US has kept its global dominant position in the investment funds market (46.8 per cent in 2013 and 49.6 per cent in 2023), while the market share of the Asia-Pacific region has been gradually rising (from 10.3 per cent in 2013 to 14.2 in 2022). Europe has seen a gradual decline in its market share, from 35 per cent in 2012 to 30 per cent by end 2023. In 2023, net assets of investment funds in the US stood at EUR 33.2 trillion, while European investment funds net assets amounted to EUR 20.1 trillion. The Asia-Pacific region followed with EUR 8.9 trillion[4]. Several EA countries are among the top ten domicile jurisdictions for investment funds, including Luxembourg, Ireland, Germany and France. In 2023, equity funds represented 32 per cent of fund assets, followed by bond funds (20 per cent), multi-asset funds (20 per cent) and other funds (19 per cent). MMFs comprised 9 per cent of the total. When compared with 2022, the share of equity funds edged up one per cent, resulting from the recovery in equity valuations. In terms of breakdown between UCITS and AIFs, the two main fund types in EU legislation, at end 2023, UCITS remains the largest, with a market share of 64 per cent.

3. There is a relative degree of cross-border activity, while funds and managers are concentrated in a few member states (MS). The vast majority of funds are held in the country in which they are domiciled. According to data by EFAMA, in 13 countries, more than 90 per cent of

[3] This note does not make a comprehensive assessment against the IOSCO principles but focusses on selected issues above and associated risks. The relevant IOSCO documents used are: Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation, August 2011, Principles of Suspensions of Redemptions in Collective Investment Schemes (CIS), January 2012, Policy Recommendations for Money Market Funds, October 2012, , Principles for the Valuation of CIS Assets, May 2013, Standards for the Custody of CIS Assets, November 2015, Recommendations for Liquidity Risk Management for CIS, February 2018, Recommendations for a Framework Assessing Leverage in Investment Funds, December 2019.

[4] Source: EFAMA, Factbook 2024.

the home-domiciled funds are held by local investors.[5] The two main cross-border fund domiciles in Europe are Luxembourg and Ireland.[6] There is a number of fund managers belonging to large groups with presence in several MS.[7]

- Regarding concentration of fund domiciles across the EU:
    - Luxembourg is the largest domicile for UCITS in the EU, followed by Ireland and France.
    - The MMF market is highly concentrated in three main domiciles: Ireland, Luxembourg, and France.
    - The largest domicile for AIFs is Luxembourg, followed by Germany, France and Ireland.
- As for managers, and further to ESMA's register, the majority are located in France, Spain and Luxembourg.[8] There is, however, a high degree of delegation of portfolio management activities by EU managers, including to third-countries outside of the EU, like the UK and the US.[9]

4. The majority of funds are held by institutional investors, and the share of funds held by investors outside of the EU continues to grow. Insurers and pension funds are the primary fund investors in the EU, holding approximately 32 per cent of total fund assets, followed by households. Over the past five years, net flows of funds outside the EU averaged EUR 276 billion, surpassing both the EUR 174 billion for cross-border funds sold in the EU and EUR 196 billion for domestic funds. As noted in the 2024 NBFI Risk Monitor by the European Systemic Risk Board (ESRB), EU MMFs are significantly held by investors outside of the EU, especially so for EU-domiciled MMFs denominated in USD and GBP (which have a 78 and 93 per cent share of foreign investors, respectively). They also provide more funding to non-EU issuers and borrowers than EU entities. Lastly, they can have a large footprint in short-term funding markets outside of EUR, and in particular in the sterling market.

B. Institutional Framework

5. The institutional framework for regulating and supervising investment funds in the euro area is characterized by a balance between EU-level rules and national supervision. In general terms, the European Commission (EC) and the Council and the European Parliament (EP) establish the regulatory framework, while the NCAs, supervise and enforce these rules. The European Securities and Markets Authority (ESMA) plays a key role in preparing draft technical standards to

---

[5] While many funds are registered with potential host NCAs under the passporting framework, they may not be marketed cross-border in practice. The extent of passporting UCITS is also not fully clear to individual NCAs, as they will only have full visibility of foreign funds passported in their jurisdiction, but not of outbound local funds. AIFMs report at the level of the manager for all managed funds, so NCAs have a better picture of fund/manager location.

[6] At end 2023, about 90% of funds domiciled in these countries were held abroad (Source: EFAMA, Factbook 2024).

[7] These may also be asset managers licensed under the Markets in Financial Instruments Directive (MiFID)

[8] Further to data by EFAMA Asset Management Report 2023, the majority of EU fund management activities are in France, Germany and The Netherlands, based on AUM managed out of those jurisdictions.

[9] There is currently no comprehensive data on the delegation of portfolio management across and outside the EU.

the EC and in providing technical advice to the EC for Commission delegated act for the implementation of the EU directives and regulations, and ensuring convergence of supervisory practices across the EA. The ESRB assesses potential risks related to financial stability for investment funds. The interaction among all authorities is explained in more detail in subsequent sections of this TN.

6. The EC has the central responsibility in the development of financial markets legislation, including for investment funds. It drafts proposals for legislative acts, such as regulations and directives that govern the investment fund sector. It is also responsible for the endorsement of draft technical standards and for the drawing up of Commission delegated acts for the implementation of directives and regulations. The EP and the Council co-legislate based on proposals by the EC, by amending and adopting proposed regulations and directives. They also endorse the draft implementing legislation described above. The EC is also in charge of monitoring that EU laws are duly implemented and enforced in the member states. The EC does this through a structured process involving legislative, administrative and judicial mechanisms:

- **Transposition deadline and notification:** Directives provide a deadline by which MS must transpose the provisions into their national legal frameworks. Once a MS transposes a directive, it must notify the EC, including details of the national measures adopted to give effect to the directive. The Commission tracks these and compiles a transposition database.

- **Monitoring of transposition and compliance:** The Commission systematically checks whether MS have transposed directives within their deadlines and whether this has been done correctly. This includes examining how MS interpret specific provisions and comparing them to the text and intent of the directive. Any found non-compliance is pursued by the EC via a dialogue with the MS, as explained below.

- **Dialogue and cooperation:** The EC engages in informal dialogue with a MS to seek clarification or early compliance without resorting to formal procedures. It also may publish implementation reports that assess the state of transposition and highlight best practices.

- **Infringement processes:** when informal measures fail to resolve issues, the EC can launch formal infringement procedures against MS. This is a multi-stage process, that starts with a Letter of Formal Notice and a Reasoned Opinion by the EC, followed by a Referral to the Court of Justice of the EU if the MS fails to comply and the potential imposition of financial penalties by this Court.

7. ESMA plays a key role in the drafting of implementing regulation, as well as in ensuring a common supervisory approach across NCAs. ESMA is entrusted with elaborating technical standards to be submitted to the EC for endorsement: these can be either regulatory technical standards that are endorsed by the EC by means of delegated acts or implementing technical standards to be endorsed by the EC via implementing acts. ESMA usually conducts open consultations before submitting the technical standards to the commission. As explained in the Supervision section below, ESMA also has a key mandate in ensuring the convergence of supervisory practices across the EA, which it carries out through an array of different supervisory convergence tools.

8. The two governing bodies of ESMA are the Board of Supervisors (BoS) and the management Board.

- The BoS guides the work of ESMA and has the decision-making responsibility on a broad range of matters, including the adoption of draft technical standards and guidelines, as well as opinions, reports, and advice to EU institutions. It is supported by a number of standing committees and working groups that are dealing with technical issues. In addition to the ESMA Chair, the BoS is composed of the heads of the NCAs in the EU and the European Economic Area (EEA) responsible for securities regulation and supervision with non-voting representatives from the EC, the ESRB, the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Free Trade Association Surveillance Authority (EFTA Surveillance Authority).

- The Management Board ensures that ESMA carries out its mission and performs the tasks assigned to it in accordance with its regulation. In particular, it focuses on the management aspects, such as the development and implementation of the multi-annual work program, as well as budget and staff resource matters. In addition to the Chair, the Management Board is composed of six members selected from the BoS by its members. The Executive Director, and a representative from the Commission attend as non-voting participants (except on budget matters where the Commission has a vote).

9. There are several teams across ESMA involved in investment fund regulation and supervisory convergence. The Investment Management policy unit sits within the Investor Protection and Sustainable Finance and Department and involves a group of approximately nine staff who work on policy and supervisory convergence matters, including as rapporteurs to the Investment Management Standing Committee (IMSC), which has key input and decision on policy positions and supervisory priorities. The Markets, Funds and Infrastructure team covers risks across sectors, and are in charge of risk analysis and publications, including stress testing exercises and other simulations. They are also the cooperation point with the ESRB, with team members in all relevant committees. The Convergence team, within the Conduct Supervision and Convergence Department, covers supervisory convergence work across all sectors, including fund management. Finally, the Data, Intelligence and Technology Department has a few staff working on data and reporting for investment funds, including ongoing work on integration of reporting frameworks under AIFMD and UCITS.

REGULATORY FRAMEWORK—THE SINGLE RULEBOOK

10. This section provides an overview of the key elements of the Single Rulebook for investment funds in the EA, including some key regulatory initiatives. Its subsection A describes the main types of investment funds recognized at the European level and their key pieces of legislation, as well as those for bespoke regimes. Subsections B, C and D, describe the treatment of liquidity, leverage and valuation at the EU level, for the main types of funds. Section F covers one of the bespoke regimes noted in subsection A in more detail, the framework for Money Market Funds.

A. Overview of the Regulatory Framework for Investment Funds

11. The EU legislative and regulatory framework differentiates between two main types of collective investment schemes. UCITS are the main type of EU funds that are marketable to retail investors. The second main type, AIFs, are CIS that are non-UCITS and which are generally marketed to professional investors in the EU. They can also be marketed to retail investors according to national legislation, should a Member State (MS) permit so and in that case, those funds can only be marketed domestically.

12. The single rulebook for UCITS and AIFs is composed of EU wide legislation and implementing regulations and guidelines. These comprise directives (or Level 1 legislation) which set out the broad framework that are complemented by Level 2 measures (implementing directives and regulations by the EC) and Level 3 measures, most importantly, guidelines by ESMA. Directives need to be transposed into national legislation by MS to enter into force, while regulations are directly applicable in all member states once they enter into force. Further to article 16 of Regulation 1095/2010 of the European Parliament and the Council establishing ESMA (ESMA Regulation), NCAs and market participants must make every effort to comply with ESMA's guidelines, including by incorporating them into their national legal and/or supervisory frameworks as appropriate. NCAs must also notify ESMA within two months of publication of the guidelines of their compliance or intention to comply with them.

13. The legislative approach for the two types of funds is different. Even though the AIFM regime mirrored many provisions from the UCITS Directive, the Alternative Investment Fund Managers Directive (AIFMD) follows a different regulatory approach. One of the main differences is that the AIFMD mainly regulates alternative investment fund managers and not the funds themselves. The UCITS framework was created for funds marketed in the retail market, while the AIFMD focuses primarily on regulating managers managing AIFs for professional investors. Another key difference is that the AIF framework regulates also activities by managers and funds based outside of the EU, while the UCITS Directive covers only funds managed by EU management companies. There are also several bespoke regimes that regulate different types of non-UCITS; these include, among others, the recently amended European Long-Term Investment Fund (ELTIF). The Appendix includes a summary of key elements of all these regulatory frameworks.

Box 1. Euro Area: The Reform of the ELTIF Framework

Since the launch of the ELTIF in 2015, there has been limited adoption of this new type of AIFR, with only a few EU member states Participating. A primary goal of the ELTIF was to provide an alternative source of funding for infrastructure and other long-term projects, reducing reliance on bank lending and capital raising through stock exchanges, ultimately fostering growth. The Commission has prioritized the promotion of ELTIF uptake as a key focus area within the capital markets union initiative. In November 2021, the EC proposed a revised ELTIF Regulation aimed at introducing more flexible investment rules and eliminating barriers to retail participation, while also facilitating investments that align with the EU's Green Deal. The updated regulation, referred to as "ELTIF 2.0", came into effect in January 2024 and was supplemented by Regulatory Technical Standards in October 2024. The increased flexibility introduced be the regime has been praised by the industry and an uptake in use of these vehicles can be expected.

The ELTIF Regulation establishes harmonized EU rules governing the authorization, investment policies, and operational conditions for ELTIFs. Key reforms include the following:

i. The ELTIF Regulation provides that an ELTIF may invest only in: (a) eligible investment assets; and (b) the UCITS eligible assets specified in the UCITS Directive. ELTIF 2.0 widens the range of eligible assets in which an ELTIF can invest. Eligible assets must now represent at least 55% of the ELTIF's net assets (amended from 70% in the first iteration of the ELTIF Regulation).

ii. The amended Regulation also increases the leverage limit to 50 per cent (increased from the previous limit of 30 per cent) of the fund's assets when marketed to retail investors. Borrowing of up to 100% is now permitted for ELTIFs targeting professional investors. With the introduction of ELTIF 2.0, the borrowing conditions have become more flexible, with NAV serving as the new reference point for determining cash borrowing limits, replacing the previous capital reference. There is also no longer a requirement that borrowing must be utilized specifically for investing in eligible investment assets.

iii. ELTIF were generally close-ended vehicles, and would not ordinarily be permitted to offer the redemption of their units or shares before the end of the life of the ELTIF. The new regime, however, specifies further, compared to the original ELTIF-regulation, how these funds may offer redemptions before the end of the life of the ELTIF, subject to certain conditions. These include being able to demonstrate that the ELTIF has in place an appropriate redemption policy and LMTs that are compatible with the long-term investment strategy of the ELTIF, not granting redemptions before the end of a minimum holding period, and the overall amount of redemptions limited to a percentage of the ELTIF's investments which qualify as eligible assets under the UCITS regime.

B. Liquidity Risk in the Single Rulebook

14. **The UCITS rulebook contains a number of provisions aimed at managing the portfolio risks of funds, including liquidity risks.** These aim at ensuring that UCITS investors are able to redeem their investments on request and include limiting the types of assets UCITS are entitled to invest in,[10] imposing concentration and control limits on assets issued by or deposits made with the same body, as well as limits on counterparty risk and issuer concentration regarding derivatives. The rulebook also contains rules on risk management by management companies, including the obligation to establish and maintain an adequate and documented risk management policy which identifies the risk profile of the UCITS it manages, including via the use of stress tests.

[10] The UCITS Directive makes reference to several types of assets that are available for investment by UCITS, and the definitions and criteria for these assets are further developed and interpreted by the Commission Directive 2007/16/EC, commonly referred to as the Eligible Assets Directive.

15. The regulation for AIFMs contains more detailed liquidity management requirements. AIFMs shall employ appropriate risk management systems and adopt procedures which enable them to monitor the liquidity risk of the fund and to ensure that the liquidity profile of the investments of the fund complies with its underlying obligations. Managers must also ensure that for each AIF they manage, the investment strategy, the liquidity profile and the redemption policy are consistent. Delegated Regulations further detail the requirements that the liquidity management systems and procedures must include, and require managers to implement, maintain and monitor adequate limits for the liquidity or illiquidity of the AIF consistent with its underlying obligations and redemption policy, and determine course of action should those limits be exceeded.

16. Further to the recent amendments to the UCITS and AIFM Directives, liquidity risk management provisions have been strengthened. Importantly, managers of UCITS and open-ended AIFs now must select at least two liquidity risk management tools (LMTs) from a harmonized list which includes redemption gates and fees, extension of notice periods, swing pricing, dual pricing and anti-dilution levies, as well as redemptions in kind (only to meet redemptions requested by professional investors and further to certain conditions).

17. The amended Directives also include a stronger framework for the suspension of redemption of units. It specifically allows both UCITS and AIFs to not only temporarily suspend subscriptions and redemptions of units but also to activate side pockets in exceptional circumstances and taking into consideration the interest of unitholders. NCAs may also require AIFs and UCITS to suspend redemptions and subscriptions of units, based on financial stability risks. The amended articles 84 and 50, respectively, of the UCITS and AIF Directives also include a requirement for the communication of the use of this power to the NCA of the host Member State[11] and a process for the host NCA to request the NCA of the home member state to activate the suspension of redemptions (this is stipulated at the level of the fund for UCITS and at the level of the manager for AIFs). The process provides that where there is a disagreement between the host and home NCAs, ESMA must issue an opinion on the exercise of such powers and communicate it to both NCAs. Should the home member state intend to not act in accordance with ESMA's opinion, they shall inform ESMA and the host member state of this and explain their reasons for non-compliance. In certain circumstances and if there are financial stability risks in play, ESMA may publish the fact that the home member state authorities do not comply with its opinion.

18. ESMA is in the process of developing Regulatory Technical Standards (RTS) and Guidelines regarding the use of LMTs. The RTS will provide further detail in relation to the characteristics of the LMTs while the Guidelines are aimed at providing general principles regarding the calibration, design and choice of tools, as well as governance and disclosure, with specific reference to each of the tools set out by the amending Directive. For developing this work, ESMA has taken into consideration the IOSCO Guidance on Anti-dilution tools published in December

[11] The NCA of the country where the UCITS is passported.

2023 and its ongoing work on LMTs. Both the RTS and the Guidelines have already been published for consultation and ESMA expects to publish the final texts before April 2025.

19. The specificity of stress testing requirements in the single rulebook varies for different types of funds. All of the requirements are imposed on the managers of the different funds; there is no requirement for NCAs in neither the AIFM or UCITS Directives to carry out stress tests as part of their supervision or monitoring work, although some of them do.

- The requirement for AIFs is contained in the Level 2 Regulation, which provides some guidance on how they should be carried out and leaves the frequency of the tests at the discretion of managers. Results of stress tests are part of the data that is included in the reporting requirements for managers to NCAs.
- Article 40.2 of Level 2 UCITS Directive stipulates that managers shall conduct periodic stress tests and scenario analysis. The UCITS review also includes stress testing results as part of the data that managers will need to report to NCAs on a periodic basis.
- The requirements in MMFR are more specific: stress tests have to be conducted at a frequency considered an appropriate and reasonable interval in light of the market conditions and considering any envisaged changes in the portfolio of the MMF, and at least bi-annually. When the management company finds vulnerabilities for any of its MMFs, it has to report to the NCA of its member state. Additionally, management companies need to send results to the relevant NCA (annually or quarterly, depending on size of the MMF), which then share the results with ESMA[12].

20. In July 2020, and following a recommendation from the ESRB[13], ESMA issued Guidelines on liquidity stress-testing in AIFs and UCITS. These are meant to promote convergence in the way NCAs supervise funds liquidity stress testing in the EU. They provide guidance in relation to the design of the stress testing models, understanding of different risks and governance of the framework. It notes that stress tests should be carried out at least annually, although it recommends a quarterly or more frequent use depending on fund characteristics, and provides criteria for the determination of appropriate frequency.

21. The UCITSD provides a list of assets available for investment by UCITS while the Eligible Assets Directive (EAD) includes further guidance on determining which assets fall into the UCITS definitions. The EAD, published in 2007, aimed to help market participants and NCAs to develop a common understanding of broad concepts included in the UCITS Directive like "transferrable securities" and "money market instruments". Since its adoption, however, the number, type and variety of financial instruments traded on financial markets has increased considerably, leading to uncertainty in whether certain categories of financial instruments are eligible investments.

---

[12] ESMA started receiving reports from NCAs under Article 37 MMFR regarding stress tests in June 2021.

[13] See Recommendation ESRB/2017/6 for details.

22. The EC has formally requested that ESMA provides technical advice on the EAD review. ESMA has, in turn, published a Call for Evidence in May 2024, to gather insights from stakeholders on the manner and extent to which UCITS may have gained direct and indirect exposures to certain asset classes that may give rise to divergent interpretations and/or risk for retail investors. ESMA has reviewed numerous responses from a broad range of stakeholders to the call for evidence, and is in the process of identifying a way forward via its IMSC to submit a response to the Commission.

C. Leverage in the Single Rulebook

23. The framework for leverage is very different between UCITS and AIFs.

- **UCITS Directive sets limits on the leverage that UCITS funds are allowed to engage in**. The Directive limits a UCITS fund's global exposure from derivative instruments to 100 percent of the total net value of the UCITS portfolio. The global exposure has to be calculated using either the commitment approach or the Value-at-Risk (VaR) method.[14] Financial leverage, meaning leverage obtained through outright borrowings, is limited to 10% of net asset value (NAV) and can be carried out only on a temporary basis.

- The AIFMD requires managers to set leverage limits in respect of each AIF they manage but does not set maximum limits on leverage. The Directive defines leverage as "any method by which the AIFM increases the exposure of an AIF whether through borrowing of cash or securities, or leverage embedded in derivative positions or by any other means." The Directive requires AIFMs to set leverage limits in respect of each AIF they manage, but does not set maximum limits on leverage. Leverage must be calculated using two methods: the gross method and the commitment method. The overall leverage of an AIF is expressed as a ratio between the exposure of the AIF and its NAV.

24. Regarding AIFs, NCAs must undertake an assessment of leverage related risks to financial stability based on regular data reported by managers. Further to Article 24 AIFMD, and its developing regulation and measures, AIF managers have regular reporting obligations to their home NCAs, who in turn submit data reports to ESMA. Article 25 charges NCAs with assessing the risks that the use of leverage by AIFs can entail, and provides an avenue for imposing limits on the use of leverage. The use of this tool is discussed in more detail in the Section on Systemic Risk Monitoring below.

25. Regulatory requirements pertaining to leverage risk management also apply for both UCITS Management Companies and AIFMs. For UCITS, management companies are required to employ a risk-management process which enables them to monitor and measure at any time the risk of the positions and their contribution to the overall risk profile of the portfolio of a UCITS.

[14] The VaR approach is an advanced risk measurement methodology that is recommended for UCITS that engage in complex investment strategies for a non-negligible part of their portfolios (e.g., non-directional strategies). UCITS using the relative VaR approach are subject to a limit so that the VaR of their portfolio should not be higher than two times the VaR of a reference unleveraged benchmark. Funds using the absolute VaR approach should have a one-month VaR, computed at the 99th level, lower or equal to 20% of their NAV.

General requirements applicable regarding risk management also apply to leverage risks in the case of both UCITS Management Companies and AIFMs.

26. The recent amendments to AIFMD have also introduced a framework for loan originating AIFs, including limits on leverage. For AIFs that engage in loan origination, managers must ensure that the leverage of a loan originating AIF does not exceed 175 per cent if the fund is open-ended or 300 per cent if it's closed-ended. The leverage should be expressed as the ratio between the exposure of the AIF (calculated further to the commitment approach) and its NAV. Please see Box 2 for more details on this framework.

Box 2. Euro Area: Loan Originating Funds

Directive 2024/927 amending UCITS and AIFM Directives has introduced a framework for AIFMs that manage AIFs engaging in loan originating activities. The Preamble to the Directive recognizes that diverging national regulatory approaches regarding these funds can give rise to regulatory arbitrage and varying levels of investor protection. Also, given the fast-growing private credit market, micro and macro-prudential risks that can be posed by these funds need to be addressed. The new rules introduced aim at harmonizing this sector in the EU via the regulatory framework for managers, while do not prevent member states from introducing domestic product frameworks that define certain categories of funds with more restrictive rules.

The framework introduces key risk management, leverage and risk retention requirements for AIFs engaging in loan originating:

- AIFMs that manage AIFs engaging in loan origination must have effective policies, procedures and processes for assessing credit risk and administering and monitoring their credit portfolio. Those should be proportionate to the extent of the loan origination and must be reviewed regularly.
- To contain the risk of interconnectedness with other financial market participants, AIFMs of loan originating AIFs should be required to diversify their risk and subject their exposure to certain limits when the borrower is a financial institution.
- As a general rule, loan originating AIFs must be closed-ended, however, the Directive permits the use of an open-ended structure provided that certain requirements are fulfilled, including a liquidity risk management system that minimizes liquidity mismatches, ensures fair treatment of investors and is subject to approval of and supervision by the relevant home NCA. ESMA is tasked with developing RTS to establish the relevant criteria further to which NCAs should determine whether loan-originating AIFs can use an open-ended structure.
- Loan originating AIFs must be subject to a leverage limit that varies depending on whether they are of an open or closed-ended type. Managers must ensure that the leverage of a loan originating AIF does not exceed 175 per cent of its NAV[1] if the fund is open-ended or 300 per cent if it's closed-ended.
- AIFs must retain 5 per cent of the notional value of each loan that the AIF has originated and subsequently transferred to third-parties. This has to be retained until maturity, or for at least eight years if the maturity of the loan is longer (or if it's made to consumers, irrespective of maturity). The framework also prohibits "originate to distribute" strategies, essentially preventing funds from originating loans with the sole purpose of selling them to third-parties.
- Member states will be able to prohibit AIFs to originate loans to consumers or service such credits.

1/The threshold expresses the ratio between the exposure of that AIF and its net asset value, and will be calculated according to the commitment method

D. Reporting

27. **Data availability, quality and frequency at the EU level varies for the different types of investment funds**. Reporting requirements and detailed implementation of these were developed with different levels of granularity for AIFs, MMFs and UCITS.

28. **For AIFs, key reporting obligations are set in the AIFMD, further developed by Level 2 and Level 3 measures**. Article 3 of the AIFMD sets out minimum reporting requirements for registered managers of AIFs, while Article 24 of the AIFMD further requires reporting of key items for authorized managers of AIFs managed or marketed in the EU. This includes risk profile of the funds, main categories of assets in which they invest and information on liquidity of the assets and arrangements for managing this. Implementing Regulations further detail the reporting frequency—which ranges between annually and quarterly depending on types of AIFs and Assets Under Management (AUM)—and provides harmonized reporting templates. ESMA has also published detailed Guidelines regarding the above reporting framework, which aim to clarify how it should be applied to different managers and AIFs they manage/market. Data is collected by NCAs for the AIFMs in their jurisdiction and submitted to ESMA.

29. **A similar framework was not included in the UCITS package, until its most recent review**. Currently, and until the review of the UCITS and AIFM Directives is implemented, there is no harmonized reporting framework for UCITS funds, and some MS have established their own national-level reporting regimes or data requests to monitor and assess the risks of these funds. These can vary quite significantly in content, data granularity and formats.

30. **There is, however, a harmonized reporting framework for funds that qualify as MMFs.** Article 37 of the MMFR sets out the information that managers need to report quarterly, for MMFs over 100 million Euros and annually for the rest.[15] The information includes data on assets held in the portfolio of the fund, portfolio indicators, results of stress tests, type and characteristics of the MMF and information on its liabilities, including investor information and subscription and redemption activity. Details on the format of reporting, including the reporting template, were developed via Level 2 measures. Data is collected by NCAs for the MMFs in their jurisdiction and submitted to ESMA. ESMA maintains a database of all MMFs established, managed or marketed in the EU to which the European Central Bank (ECB) has access, for statistical purposes only.

31. **One of the key reforms by Directive (EU) 2024/927 amending the UCITS and AIFM Directives has been the introduction of a harmonized reporting regime for UCITS**. This new regime borrows heavily from the reporting framework described above under the AIFMD, and has added further requirements, including information on delegation arrangements, which was not a part of the existing framework, as well as the total leverage employed by funds. In exceptional circumstances, and where required in order to ensure the stability and integrity of the financial system or to promote long-term growth, ESMA, after consulting with the ESRB may also request the

[15] In practice, the majority of MMFs report on a quarterly basis, with only a very small minority reporting annually.

NCAs to impose additional reporting requirements. The Directive mandates ESMA with drafting RTS and ITS on the details, standardization and reporting frequency and timing. These are to be submitted to the EC by 16 April 2027. Therefore, specific requirements on the particular data to be reported, including standard reporting templates will not be final until then.

E. Depositaries

32. Depositaries carry out an important oversight role within the EU fund management framework. The UCITS and AIFM Directives require appointment of a depositary for safekeeping and segregation of the fund assets, and they are also entrusted with the key functions of cashflow monitoring and oversight. The Directives require the appointment of a single depositary for each UCITS and AIF. As a general rule, in order to ensure that the depositary can properly exercise its safekeeping and oversight duties, a depositary is required to have its registered office or a branch in the same country where the fund is domiciled. Under both the UCITS Directive and AIFMD, the fund manager and the depositary must enter into a detailed written agreement that regulates the flow of information necessary for them to perform their respective roles.

33. The IOSCO Standards require that the assets of an investment fund be entrusted to a third-party custodian that is functionally independent. AIFMs and UCITS management companies are prohibited from acting as a depositary, and there are restrictions on common management of the UCITS management company/AIFM and the depositary. The depositary is also required to functionally and hierarchically separate the performance of its depositary tasks from its other potentially conflicting tasks and ensure that the potential conflicts of interest are properly identified, managed, monitored and disclosed to the investors of the funds.

34. While functional independence between the depositary and fund manager is required, the fund managers and depositaries can still be part of the same group. In case of such group links, there are certain safeguards specifically for UCITS including justification if sought by investors/ regulator, conflict of interest policies (including disclosure), and independence of certain board members. More specifically, where the management company and depositary belong to the same group, at least one third of the members (or, if lower, two members) of the body in charge of the supervisory functions in both the manager and the depositary are required to be independent. In case of AIFs, while there are certain conflict of interest provisions, the other detailed safeguards, especially requirement of independent directors, are absent.

F. Delegation in the Single Rulebook

35. Delegation is permitted under both UCITS and AIFM Directives, subject to certain conditions. The arrangements must be disclosed to the competent authority and must not prevent the effectiveness of supervision. The fund manager must be in a position to monitor the activities of the delegate on an ongoing basis. Where the delegation involves portfolio/investment management, the mandate can generally be given to entities authorized or registered for the purpose of asset management and that are subject to prudential supervision by their home authorities[16]. Under both Directives, delegation of portfolio/investment management to a non-EU/EEA entity is subject to cooperation arrangements being in place between the home and host supervisory authorities.

36. The regulatory requirements around delegation center on ensuring that the fund manager delegating its functions does not become a "letter-box" entity. IOSCO Principles require that the use of delegates should not, in any way, be permitted to diminish the effectiveness of the primary regulation and supervision of a fund and the manager should not be allowed to delegate its functions to the extent that it becomes a letter box. The broad principle relating to delegation is the same in the UCITS Directive and the AIFMD; however, the AIFMD and its implementing rules set out a more detailed framework against which to assess the extent of the delegation. This includes a description of circumstances that would lead to the entity being considered a letter-box, such as where it no longer retains the necessary expertise and resources to supervise the delegated tasks effectively, or it delegates the performance of investment management functions to an extent that substantially exceeds those performed by the AIFM itself.

37. Delegation arrangements are central to the provision of fund management services in the EU. A significant portion of management companies domiciled in the EU delegate their portfolio management services to firms in other jurisdictions, with significant delegation to jurisdictions outside of the EU, namely the UK and the US. The EU regulatory requirements on delegation were recently reviewed, as part of the amendments to AIFMD and UCITSD. Delegation has come under increased scrutiny at the European Level post Brexit since a significant amount of delegation of portfolio management by fund managers domiciled in Europe, will now sit outside the EU. As a part of the recent AIFMD/UCITS review, the regulatory requirements around delegation were strengthened, including on transparency as well as aligning delegation requirements for UCITS with the AIFMD requirements. See also the Supervision section below for ESMA's work on outsourcing via supervisory convergence.

G. Money Market Funds

38. The MMFR introduced rules for the operation of MMFs, to make them more resilient and limit contagion channels. The Regulation established rules on the use of the MMF denomination, banned the support by sponsoring entities and required the establishment of sound policies and procedures to know the investor base. Particularly relevant are also the rules on the composition of the portfolio of funds, including permissible categories of assets, diversification, concentration and minimum liquidity requirements.

39. The MMFR establishes mark-to-market as the preferred method of valuation and requires daily calculation and publication of the NAV. To allow for the specificities of public debt

[16] The AIFMD permits use of unregulated or unsupervised entities for delegation of portfolio management activities, only subject to prior approval of the relevant NCA.

Constant NAV[17] (CNAV) and Low Volatility NAV funds (LVNAV)[18], the Regulation permits that these use amortized cost for certain assets and under certain conditions. In particular, LVNAV MMFs are allowed to keep their NAV as calculated making such use of the amortized cost method, but only within a collar range of 20bps as compared to the NAV using entirely the mark-to-mark/mark-to-model valuation method. When their NAV breaches this collar, these MMFs need to use mark-to-market/mark-to-model valuation for the purpose of calculating the next redemption/subscription price of the MMF NAV.

40. Liquidity requirements vary for the different types of MMFs. In particular, CNAV and LVNAV MMFs are required to hold at least 10 per cent of their assets in daily maturing assets and 30 per cent in weekly maturing assets. Their portfolio must also have a Weighted Average Maturity (WAM) of no more than 60 days and a Weighted Average Liquidity (WAL) of no more than 120 days. Standard (VNAV) MMF's portfolio must have a WAM of no more than 6 months and a WAL of no more than 12. Additionally, 7.5 per cent of their assets have to be daily maturing assets and 15 per cent weekly maturing assets.

41. The MMFR also establishes requirements regarding the use of certain LMTs for CNAV and LVNAV funds. MMFs are required to implement robust liquidity management frameworks to enhance their resilience during periods of market stress. In particular, it mandates that CNAV and LVNAV may decide to activate liquidity gates, fees or suspend redemptions, when weekly liquid assets fall below 30 per cent of total assets, and when net daily redemptions on a single day exceed 10 per cent of total assets. Should the above-mentioned regulatory thresholds be breached, the manager must immediately inform its board, which should undertake a documented assessment of to determine the course of action and decide whether to apply one or more of the measures.

42. MMFs must conduct regular stress tests to assess their resilience to adverse market conditions and potential liquidity shortfalls. These tests must evaluate the impact of various stress scenarios on the fund's liquidity, credit risk, and overall stability. MMFs are required to simulate extreme but plausible stress situations, including significant redemption requests and market disruptions, to identify vulnerabilities and ensure they can meet investor demands. The results of these stress tests must be documented, reviewed by the fund's management, and reported to the relevant NCA. The MMFR requires these tests to be carried out at an appropriate frequency and at least bi-annually, but they must also perform additional stress tests whenever there are significant changes in their portfolios or market conditions that might impact their liquidity and risk profile. Further to Article 28 of the MMFR, ESMA produces updated guidelines on the use of stress tests on an annual basis. These guidelines include high level principles on how to conduct stress tests, as well as common reference parameters of the stress tests scenarios to be included in the exercise, the results of which are reported by managers of MMFs to their NCAs, who then

[17] Public debt CNAV MMFs aim to preserve the capital invested while ensuring a high degree of liquidity. The majority have a NAV per unit set, for example at EUR 1, when they distribute income to investors.

[18] A type of MMF in the EU that invests in lower volatility assets and is allowed to use amortized accounting for certain assets, provided they keep their NAV, as calculated using amortized costs for those assets, within a collar of 20 bps as compared to the NAV using entirely the mark-to-market model valuation method.

transmit it to ESMA. These parameters are updated annually taking into account the latest market developments.

43. The MMFR was put to the test during the market stress during the COVID-19 pandemic. The extent of stress on MMFs in Europe varied across jurisdictions, influenced by the differing structures of MMF markets, including the predominant types of MMFs, investor profiles, and the nature of underlying investments. In response to the unfolding crisis, major central banks, such as the ECB and the US Federal Reserve, implemented a range of measures to alleviate adverse effects. These included outright purchases of commercial paper in both primary and secondary markets, providing lending facilities for banks to acquire assets from MMFs (Federal Reserve), and extending the eligibility of collateral for refinancing operations to include unsecured bank bonds (ECB). These interventions were instrumental in bolstering liquidity and restoring confidence in short-term debt markets, which subsequently contributed to a slowdown in the rate of redemptions from MMFs. Despite experiencing substantial outflows from some MMF types (LVNAV and VNAV) during March 2020, no EU MMFs were compelled to activate redemption fees, gates, or to suspend redemptions, although a few LVNAVs breached their weekly liquidity requirements.

44. The international regulatory community, in response to MMF stress during 2020, revisited international policy proposals for MMFs. In particular, the Financial Stability Board (FSB) published a report on policy proposals to enhance MMF resilience in October 2021, which provided advice on several measures aimed at enhancing the resilience of MMFs, including on improving liquidity risk management, ensuring better usability of liquidity holdings during stress, enhancing stress testing frameworks and introducing more advanced reporting requirements to strengthen oversight. The FSB in 2024, published a thematic review focusing on MMF reforms in key jurisdictions, including the EU, and noted that while the MMFR had created a safer and more harmonized framework for MMF funds, certain shortcomings had been identified that warranted further assessment of the suitability of the regime going forward.

45. ESMA and the ESRB have reviewed the MMFR, recommending several key reforms. The ESRB's Recommendation[19], issued in 2021, called for the decoupling of regulatory thresholds from the use of LMTs, the removal of amortized cost accounting for LVNAVs and for new liquidity requirements for VNAV and LVNAV MMFs, composed of daily maturing assets, weekly maturing assets, and public debt assets. In line with the ESRB Recommendation, ESMA published an Opinion in 2022, after consultation with stakeholders, and provided detailed recommendations on similar key areas, with specific suggestions on how to amend the regulatory text:

[19] See Recommendation ESRB/2021/9 for details.

- **Decoupling regulatory thresholds from the use of suspensions, gates, and redemption fees for CNAV and LVNAV funds**: MMFR may have created an additional risk of first-mover advantage, by tying breaches of liquidity buffers to the use of redemptions fees and gates.[20]

- **Removal of amortized cost accounting for LVNAVs**: LVNAV funds should no longer be able use amortized cost accounting.[21]

- **Mandating LMTs**: Requiring MMFs to implement at least one LMT to effectively manage redemption requests and protect the interests of remaining investors during periods of financial stress.

- **Enhancing liquidity buffers**: Revisiting liquidity requirements for MMFs to ensure they have sufficient liquid assets to meet withdrawal demands. Also, introducing wording in the regulation to note that in stressed market conditions, MMFs can temporarily release a portion of their liquidity ratios.

- **Improving reporting and stress testing frameworks**: Enhancing the frequency and detail of reporting requirements for MMFs (including to introduce daily reporting in crisis conditions on a certain number of key indicators and reducing the frequency of regular reporting to a monthly basis for the larger funds) and providing a clearer framework for the reporting to ESMA and NCAs of stress testing reports on MMFs revealing vulnerabilities.

46. In 2023, the EC published a report discussing potential reform of the MMFR while deciding not to revisit the regulation. The report evaluates the effectiveness of the MMF Regulation, highlighting its role in enhancing market stability and liquidity during periods of financial stress, particularly during the COVID-19 pandemic. The report noted that regulation had generally achieved its objectives, and that the MMFR safeguards passed the test of liquidity stress experienced in March 2020. It identified, however, some areas for improvement: decoupling the activation of liquidity risk management tools from the liquidity buffers for CNAV funds, evaluating the need to increase liquidity buffers and enhancing supervision, stress testing and reporting. Overall, while the report called for ongoing reviews and potential future reforms to further strengthen the resilience and transparency of the MMF, it proposed no immediate reforms.

H. Findings and Recommendations

47. Despite increased harmonization over the years, the regulatory framework for funds remains fragmented. Firstly, there are certain specific areas where regulation is left to MS, including those parts of the framework that were partly left to domestic regulation (e.g., valuation

[20] For redemption fees and gates to be considered, the MMF has to breach the 30 per cent weekly liquid asset threshold and record daily outflows higher than 10 per cent. As liquidity approaches the regulatory threshold of 30 per cent, investors may have an incentive to pre-emptively run to avoid being subject to redemption fees and gates.

[21] The Opinion by ESMA notes that while the possibility of using amortized cost accounting should be eliminated for LVNAVs, that does not imply eliminating the LVNAV figure, which should continue to exist. Using amortized accounting is a current option, and some managers instead use mark-to-market valuation for their LVNAVs.

methodologies for both UCITS and AIFs). There is also some divergence in the way that jurisdictions have interpreted and implemented other aspects of minimum harmonization directives, which has led to different applications of the common principles in practice (e.g., practices around risk management and delegation of portfolio services) and where a more prominent role for ESMA in supervisory convergence would be helpful. Finally, there are certain sectors that are by design caught only partially, like AIFs, for which the main regulatory framework for the product remains domestic.[22]

48. To improve the consistency of the framework, the co-legislators should continue to move away from minimum harmonization. The increased use of regulations in recent years is a welcome step and should continue to be the trend whenever possible. To reduce the risk of regulatory arbitrage and impact on market resilience, authorities should study the possibility of moving as much of the framework as possible into regulations. If needed for compliance with the EU legislative framework and MS company laws, the overarching principles could be kept at the level of the directive while more prescriptive requirements are introduced via regulation.

49. In this sense, the recent amendments to the UCITS and AIFM Directives, particularly regarding liquidity risk management and reporting, are welcome. The availability of LMTs in legislation was uneven across Europe, with some MS lacking the legislative provisions for their use. The introduction of the new requirements will ensure a more harmonized approach to liquidity risk management, and notably also, a more harmonized regime across UCITS and AIFs. This will also address ESMA's and ESRB's recommendation to strengthen the liquidity risk management regime for MMFs, which will now be required to introduce at least one tool.

50. While liquidity management requirements are being significantly strengthened with the recent amendments to UCITS and AIFs Directives, it remains to be seen whether further legislative reforms may be required. Further to the 2021 FSB recommendations, funds that allocate a significant proportion of their portfolio to assets that are illiquid, even in normal market conditions, should create and redeem shares at lower frequency and/or require long notice or settlement periods. However, unmitigated liquidity mismatches may remain in diverse investment funds across the EA e.g., in AIFs investing in real estate or other inherently illiquid, long-term assets.[23] The authorities will need to assess whether implementation of the FSB recommendations through the recent amendments and the RTS (currently being developed) would suffice, or further legislative amendments will be required to harmonize approaches across the NCAs. In this regard, ESMA could first review through supervisory convergence whether supervisory frameworks across NCAs are able to consistently ensure compliance with the new requirements in AIFMD: that the liquidity profile of the investments of the AIF is able to meet its underlying obligations, including by ensuring that funds investing in less liquid assets have less frequent redemption terms. The

[22] Being the AIFMD a manager directive, product (AIF) rules are left to national discretion. This means that AIFs may be subject to many different national requirements, e.g., on authorization, investment restrictions, etc. set by individual NCAs.

[23] As flagged by the report issued by the ESRB in September 2023 "Issues note on policy options to address risks in corporate debt and real estate investment funds from a financial stability perspective".

authorities could also consider developing holistic indicators to measure unmitigated liquidity mismatches,[24] as assessing liquidity risk across diverse investment funds remains challenging.

51. The adequacy of the reporting regime introduced by the Directive amending UCITS and AIFMD hinges on the specificity of Level 2 measures yet to be developed. In particular, data granularity for portfolio composition of funds, measures of leverage and frequency of reports will be key. Given the systemic risk monitoring implications of data availability and quality, details on this recommendation are contained in Section Systemic Risk Monitoring below.

52. Given the importance of the oversight role of depositaries in the EU, the independence requirements for these entities should be strengthened. In particular, the regime should be equivalent for UCITS and AIFs, therefore ensuring that the safeguards provided by the UCITS Directive in the case of group links are included in the AIFM regime. We also encourage ESMA to incorporate depositary independence in the case of group links specifically into its supervisory convergence work for both UCITS and AIFs (once requirements have been aligned). This would provide additional analysis of the evidence and relevance of any oversight functions being hampered by conflicts of interest to determine if future consideration should be given to whether a stricter approach at the legislative level is needed (i.e., by prohibiting managers from using depositaries from the same group).

53. A harmonized approach to the measurement and reporting of leverage across funds should be adopted. While under the new reporting framework both UCITS and AIFs will need to report their levels of leverage, some disparity in available methodologies for its calculation may still prevent an adequate comparability of information regarding levels of exposure for different fund types. Requiring all UCITS funds using the VaR approach to report and disclose regularly on their leverage, based on the commitment approach—calculated using the same methodology for AIFs and UCITS—would allow comparable information on leverage usage across fund types and a better understanding of potential risks. This would also be in line with the IOSCO Recommendations for a Framework Assessing Leverage in Investment Funds, enabling the assessment of leverage across all fund types to determine the existence of funds that require further analysis due to their significant leverage under its recommended two-step approach.

54. Reform of the MMFR should be an urgent priority to better align with international policy developments. Given the global nature of the MMF industry, major differences in regulatory frameworks could trigger regulatory-driven cross-border flows. Considering recent reforms undertaken in the US, and those upcoming in the UK, the EU would remain an outlier within key MMF jurisdictions with a regulatory framework not fully in line with international recommendations. This could create regulatory arbitrage and greater potential uncertainty in periods of stress. To that effect, we support the recommendations and opinion from ESRB and ESMA to address identified vulnerabilities in the EU MMF space. Key priorities should be removing the option to use amortized accounting for LVNAV funds, decoupling liquidity thresholds from the use of LMTs, strengthening

[24] See potential indicators developed by the EC, in its 2024 European Financial Stability and Integration Review,.

liquidity buffers and allowing their partial release in periods of stress, and increasing the frequency of reporting, both in normal times (at least monthly) and periods of crisis (daily).

SUPERVISION

A. Institutional Arrangements

55. The primary responsibility for supervision of investment funds in the EA relies on NCAs, while ESMA has a supervisory convergence mandate. Supervision of investment funds and related service providers (fund managers and depositaries) is structured through a multi-layered framework that involves NCAs and ESMA. The NCAs have a key licensing and registration responsibility, as well as direct supervision of supervised entities. ESMA aims to foster effective supervision by NCAs and ensures a convergent application of EU rules by making use of its supervisory convergence powers.

56. NCAs are responsible for the authorization and registration of investment funds and fund managers within their respective jurisdictions, as well as supervision and enforcement of the applicable regulatory framework. This includes assessing the qualifications of fund managers,[25] ensuring compliance with regulatory requirements and granting the necessary approvals for operating. NCAs also conduct ongoing supervision of authorized entities to ensure compliance with the relevant EU directives and national regulations, including monitoring financial stability, risk management practices and compliance with investor protection standards. NCAs can investigate breaches of regulatory requirements and impose sanctions or corrective measures.

B. ESMA's Role in Supervisory Convergence

57. ESMA has a mandate to foster effective supervision by NCAs and ensure a convergent application of EU rules. Further to Article 29 of ESMA Regulation, it is mandated to play an active role in building a common supervisory culture and consistent supervisory practices, as well as in ensuring uniform procedures and consistent approaches throughout the Union. Article 29 further includes a minimum set of activities that ESMA is expected to carry out to implement this mandate:

- Providing opinions to competent authorities;
- Promoting an effective bilateral and multilateral exchange of information between NCAs;
- Contributing to developing high-quality and uniform supervisory standards, including for reporting and accounting;

[25] The licensing and supervision of other service providers depends on their regulatory status e.g., depositaries are typically subject to CRD and MiFID requirements in terms of their banking/investment firms' activities and to AIFMD/UCITS in terms of their fund management related activities. The competencies for licensing and supervision of depositaries and their branches are therefore in some MS shared between different competent authorities.

- Reviewing the application of the relevant regulatory and implementing technical standards adopted by the Commission, and of the guidelines and recommendations issued by ESMA and proposing amendments where appropriate; and

- Establishing sectoral and cross-sectoral training programs, facilitating personnel exchanges and encouraging NCAs to intensify the use of secondment schemes and other tools.

58. Beyond the tools established in ESMA's founding regulation, a broader supervisory convergence kit has been developed over time. Sectoral legislation sets out specific supervisory convergence tools (e.g., ESMA's Opinion to the Commission as requested under Article 5(3) of the Short Selling Regulation), but Article 29 of ESMA Regulation also provides ESMA with the ability to develop new practical instruments and convergence tools to promote common supervisory approaches and practices. Accordingly, the toolkit has been evolving over time, based on the experience gained and the risks and requirements at hand. The level of depth in published outcomes of supervisory convergence tools has also evolved over time, progressively including more detail on the findings and background of exercises.

59. ESMA's current framework for supervisory convergence is outcome focused and organized around five primary objectives. The framework contains over 30 tools, and these are categorized under each of the objectives the tools can help achieve: (i) identify risks and prioritize (including tools such as a risk heatmap and Union Strategic Supervisory Priorities), (ii) develop effective and consistent supervisory practices (examples of tools include Opinions, Guidelines, Q&As and No Action Letters, among others), (iii) undertake supervisory work (e.g., Common Supervisory Actions, Supervisory Colleges or Joint Groups), (iv) assess implementation and remediate (including peer reviews, mediation and breach of Union Law), and (v) increase common knowledge (e.g., ESMA groups, thematic studies or technical assistance). Identification of the outcome to be achieved is a key element in the choice of tool or tools, that can be combined (in parallel or sequence). See Box 3 for further detail on the most relevant supervisory convergence tools in the framework.

60. The actual selection and implementation of each tool varies significantly depending on the nature of the tool and the process associated with it. As mentioned, some tools may be initiated by mandate of sectoral legislation, while others can be deployed at ESMA's initiative, and they each have specific procedures for their deployment. Generally speaking, choosing a tool starts with ESMA staff and ESMA groups (these can be standing committees, or working groups) understanding the risks at stake using information and data available, and choosing a tool that best suits the risk at stake and the outcome targeted. Depending on the tool, it can either be deployed directly by ESMA staff/group and then submitted for approval to the relevant governing body (typically the BoS) or first be proposed for prioritization to the BoS and then deployed by the ESMA group, subsequently re-submitting the final recommendation for approval.

61. Since 2020, ESMA has a structured risk-based approach to the identification of issues that may require attention via supervisory convergence. Annually, ESMA conducts a risk prioritization exercise to focus its work in the following year on those supervisory risks of potential highest impact to investor protection, financial stability and orderly markets across the EU, that derive from divergence in implementation, interpretation or application of EU law, and/or from market dynamics. Supervisory risks are identified through a variety of inputs, including from NCA heads of supervision in the relevant sectors, ESMA's sectoral teams, data and risk analyses available to ESMA, and external stakeholders. Further to the collection of input, the heatmap is discussed by the Senior Supervisors Forum (SSF), presented for steer to the Management Board and approved by the Board of Supervisors in the third quarter of every year.

Box 3. Euro Area: Selected Supervisory Convergence Tools

ESMA-led Q&As. A relatively quick and simple convergence tool which is used to provide answers to technical questions that are usually targeted and very specific, with the aim to provide a shared understanding of the practical application of implementation of the single rulebook to supervisors and market participants. The relevant ESMA group involving NCAs (e.g., the Investment Management Standing Committee, IMSC) may decide, based on specific risks or misunderstandings identified, to develop specific Q&As and submit them for publication directly to the BoS.

Common Supervisory Actions (CSAs) are more extensive convergence tools that require NCAs concurrently performing supervisory work on a given risk or topic, under a common supervisory methodology and parameters, subsequently comparing results and discussing follow up work needed. Based on the supervisory convergence risks prioritized through the risk prioritization exercise mentioned above, the IMSC would identify if a particular risk would be best addressed through a CSA, submit a proposal to the BoS, agree on a common methodology and questionnaire, run the CSA and submit the final report to the BoS for approval.

Voluntary Supervisory Colleges (VSCs). ESMA created this tool in 2019 to bridge supervisory gaps for large broker dealers operating through different entities across the EU following Brexit. Building on this experience, ESMA decided to expand the tool to those firms with a widespread presence across the EU in the investment management sector. It has since 2021 created several VSCs that meet twice a year and present recent and planned supervisory work, their risk assessment of firms and findings and supervisory observations. The supervised entities are also invited for a part of the meeting to present and discuss specific topics. This tool helps consolidating and promoting supervisory dialogue, coordination and work among NCAs. ESMA is a member of the colleges, acts as rapporteur and proposes areas of common interest based on the risk priorities identified for convergence, the Union-wide supervisory priorities and other areas that emerge as relevant through NCA presentations. Its main role is to promote coordination and cooperation across NCAs.

Peer reviews. These can be discretionary (on topics approved by the BoS upon proposal by the Management Board) or required by sectoral EU legislation. They are designed to test whether supervision of rules or market developments is being carried out in line with expectations and/or to take action to address a situation where this appears not to be the case. They are resource-intensive exercises carried out further to the Peer Review Methodology published by ESMA and can target all or a group of member states and include on-site visits to NCAs and review of supervisory files as part of the process. It is carried out by an ad hoc Peer Review Committee composed by ESMA staff and NCA experts. It also requires the publication of a formal assessment of the level of convergence reached in terms of supervisory practices and enforcement, where NCAs are formally graded on different areas. The entire peer review process usually spans a year and it subsequently includes a formal follow up on shortcomings found, after two years of conclusion of the exercise.

Breach of Union Law. A remediation tool, which empowers ESMA to investigate and remedy alleged breaches of Union law. The Enforcement Unit reviews alleged breaches of EU acts under ESMA's remit contained in complaints from the public as well as from referrals from the relevant policy departments, to

Box 3. Euro Area: Selected Supervisory Convergence Tools (Concluded)

determine admissibility (based on whether it relates to a particular NCA and one of the Union acts, as well as reliability of the relevant complaint). After engaging with the concerned NCA to understand the allegations and any actions taken in response, staff advises the ESMA Chair on whether to initiate an investigation or not. In recent years, ESMA has opened a formal investigation in relation to fund management activities once, in 2017; the affected NCA decided to change the relevant practice early in the proceeding and the investigation was closed. ESMA has initiated the assessment phase in relation to investment management on several occasions but no clear indications of breach of law were revealed, so the procedures did not continue. The complaints received and any procedures initiated are regularly published by ESMA in its Annual Report.

62. **The risk prioritization exercise ranks risks across six key sectors, including Investment Management**. This tool is developed by the Supervisory Convergence team taking into account input from and discussions with several areas in ESMA including the different policy teams, enforcement, and risk analysis. For each sector, the exercise prioritizes a maximum of ten supervisory risks, which are ranked across levels of priority. For those risks that are prioritized, it also identifies areas of focus to further channel its attention on specific areas. The result of the exercise is used in several ways to prioritize convergence and supervisory initiatives, namely:

- **For sectoral supervisory convergence work**. The risk prioritization exercise result is shared with standing committees, to prioritize and shape convergence work in the next year. An annual call between the chair of the SSF and the chair of each Standing Committee also takes place in this context. Standing committees and working groups may further identify specific areas of focus under the overall risks identified in the exercise.

- **Cross-sectoral convergence work**. The exercise is used to identify the EU Strategic Supervisory Priorities and other transversal convergence projects (e.g., it informs the bi-annual peer review plan).

- **National supervision**: it is shared with NCAs through ESMA's collaboration platform and NCAs take into account common risks and supervisory priorities and integrate them, as needed, into their supervisory frameworks.

63. **There is a cross-sectoral supervisory convergence team that works in collaboration with experts from the different areas on the deployment of the specific tools**. A team of seven ESMA staff covers supervisory convergence work across all sectors under ESMA's remit, which translates into approximately one FTE for investment management matters. This team works with the staff of the Investment Management Unit to carry out convergence exercises. Depending on the topic and tool, between one and two ESMA staff are involved in each project. There is also regular collaboration with the risk team for these exercises.

64. **Recent examples of supervisory convergence tools used in the investment management space include CSAs, Peer Reviews and VSCs.** Some of the most significant examples are summarized below:

- Particularly relevant was the **CSA on liquidity risk management for UCITS** carried out in 2020, which found an acceptable level of compliance with applicable rules and only a small number of entities deviating from compliance. Overall, cases where NCAs found significant liquidity risks that could jeopardize the capacity of UCITS to meet redemption requests or honor liabilities were reported to be low. Key shortcomings, which affected a limited number of firms throughout the sample, referred to an overreliance on the application of presumption of liquidity with regards to listed securities and wrongful application to other instruments in the portfolio, delegation of both portfolio management and liquidity risk management against UCITS rules and a lack of quality in liquidity risk management mechanisms and methodology. All 30 EU and EEA NCAs fully participated in this exercise which involved data collection from UCITS managers representing 95 per cent of AUM per MS, and interviewing of managers representing 50 per cent of AUM per MS. The findings of this CSA have provided background for the amendment of LRM frameworks under the UCITS and AIFM Directives, as well as to the ongoing discussion regarding the potential review of the EAD.

- To better understand practices regarding valuation of funds' assets, an area where requirements are not harmonized at the EU level,[26] ESMA launched a **CSA on valuation** in 2022. The purpose was to analyze NCAs' supervisory approaches regarding asset valuation rules under the UCITS and AIFM Directives.[27] The exercise focused on managers of UCITS and open-ended AIFs investing in less-liquid assets (unlisted equities, unrated bonds, corporate debt, real estate, high yield bonds, emerging markets, listed equities that are not actively traded, bank loans), as this is the category of assets more impacted by valuation issues especially during stressed market conditions. Overall, there was a satisfactory level of compliance with key provisions, with a few NCAs identifying a number of shortcomings and vulnerabilities. Generally, ESMA's report highlighted the importance of ongoing supervision continuing to focus on potential liquidity mismatches and inaccurate valuations, with a particular attention to funds invested in less liquid assets offering frequent redemptions. Most NCAs reported following up bilaterally with entities that showed shortcomings during the exercise, and a few also intended to initiate enforcement actions for those that were not rectified. Additionally, several NCAs noted that findings from the exercise would inform circulars to the industry on best practices and expectations.

- A series of tools were deployed to try to ensure a level playing field among the MS in the context of the UK's withdrawal from the EU. This exercise was carried out across all relevant sectors, including for investment management and it involved the publication of an **Opinion, followed by a peer review**, to check the extent to which NCAs adhered to relevant legal requirements and ESMA opinions regarding the authorization of Brexit-related relocations of

[26] While the AIFMD and UCITS frameworks include provisions on the implementation of the valuation function and required policies and procedures, as well as on the disclosure to investors, the rules applicable to the valuation of assets are not harmonized at the level of the EU and are subject to national variation.

[27] Following the Russian invasion of Ukraine, ESMA invited NCAs to use this CSA to also investigate issues with respect to the fair valuation of Russian/Ukrainian and Belarusian assets. In May 2022, ESMA published a public statement to promote convergence in relation to the valuation of Russian, Belarusian, and Ukrainian assets, including where the use of LMTs, specifically side pockets, might be warranted.

firms/business activities. In particular, the peer review concluded that none of the four NCAs assessed met supervisory expectations in relation to delegation arrangements in the scope of the relocation of firms in the EU. Indeed, none of these NCAs performed a comprehensive review of delegation arrangements, including the objective reasons for delegation and compliance with due diligence requirements. The peer review was published in December 2022 and the follow up with NCAs is expected in due course. Beyond this exercise, ESMA has identified third-party outsourcing as a priority and is currently developing cross-cutting principles on all the relevant sectors under its remit, including for ESMA's areas of direct supervision.[28] The principles will be addressed to NCAs, approved by the BoS and are expected to be made public in 2025.

- There are currently **three VSCs for complex cross-border investment management groups**, the first two were created in end 2021 and the most recent in 2024. These colleges are coordinated by ESMA and involve all home NCAs of the relevant firms, joining on a voluntary basis. They are established on the basis of a Cooperation Arrangement setting out the terms of reference for collaboration by the relevant NCAs. The colleges meet twice a year, on a supervisory call and a full day meeting where NCAs present recent and planned supervisory work, their risk assessment of the firm and findings/supervisory observations. The supervised entities are invited to part of the meeting to present and discuss on specific topics that are agreed by the college in the interim call. VSCs on investment management firms are relatively recent and have mostly served as forums for information exchange; no joint supervisory action had been undertaken under them as of the time of the FSAP mission.

65. ESMA publishes the results of the tools deployed and follows up on the recommendations with NCAs. Follow-up depends on the tool, taking into account the specificity of recommendations and expected actions; for example, the high-level nature of recommendations of CSAs allows for less specific tracking than those of peer reviews and follow up is usually in the form of discussions with NCAs. Convergence reports, including recommendations, are published on ESMA's website. Peer reviews are published in their entirety, including NCAs assessments and any follow up report. ESMA also carries out a formal tracking of compliance with Guidelines it issues, and keeps a public record of NCAs' compliance on the ESMA website.

66. The feedback from industry and NCAs suggests these are time consuming, but valuable exercises. Industry mostly values the increased use of VSCs and CSAs. Alongside these, the risk prioritization exercise is also a valued tool by NCAs. Particularly, CSAs provide the industry with valuable guidance on supervisory expectations, while from the point of view of NCAs, they allow for a better understanding of how they are expected to converge in their supervisory approach. Some industry members noted that questionnaires were sometimes further tailored by NCAs, resulting in divergent responses across the same entity to different NCAs. VSCs have the benefit of providing a group overview to NCAs and a better understanding of business models that may not be revealed

[28] ESMA currently has powers to directly supervise Credit Rating Agencies, Trade Repositories and Securitization Repositories, certain Data Reporting Service Providers and benchmark administrators and Tier 2, third-country CCPs.

by their individual supervision and are valued opportunities for industry to address common issues and provide information to all relevant NCAs under the same forum.

67. Except for peer reviews and breach of Union law procedures, most convergence tools are voluntary. Peer reviews and breach of Union law are highly structured processes and the participation of NCAs is compulsory. Other convergence tools developed by ESMA remain voluntary, although it is worth noting that all NCAs have to date participated in all CSAs and VSCs when requested.

Figure 1. Euro Area: Statistics on the Use of Supervisory Convergence Tools by ESMA

Tool	Year introduced	Total used	For fund management
Guidelines	2012	97	23
Peer reviews[1]	2011	41	6
Supervisory briefings	2011	40	9
USSPs	2021	4	2
VSCs[2]	2020	13	7
Q&As[3]	2022	68	6
Opinions	2011	259	12
CSAs	2019	9	3

[1] The numbers include both peer reviews and follow ups and consider the ongoing peer reviews being undertaken by ESMA.
[2] The numbers refer to the full year VSC meetings.
[3] The Q&As tool was introduced in 2007 but figures are only available since 2022.

C. Findings and Recommendations

68. Authorities should further strengthen the supervisory convergence framework. Over the years, ESMA has stepped up its convergence efforts, including through the addition of valuable tools for the harmonization of supervisory practices and working towards a common supervisory culture across the EU. In particular, CSAs can prove to be very effective in addressing divergent practices on specific areas that may be of concern across a large group of NCAs. Likewise, supervisory colleges are a much-needed tool for larger groups with services across several MS. The risk-based and outcome-focused approach has allowed for a better use of resources, but many of the most impactful tools rely on NCA's providing input, technical expertise and staff to participate in the work on a voluntary basis. Access to supervisory information happens only in very limited and more resource intensive cases (e.g., peer reviews). Enforcement of findings is also a challenge, with follow up by NCAs on findings from supervisory convergence work uneven. Accordingly, the authorities should adopt a more structured approach for newly created tools, in terms of expectations for NCAs participation, sharing of supervisory information, cooperation where applicable, and engagement in the follow up process. ESMA should continue its efforts to publish comprehensive reports as these provide very valuable information to industry and NCAs and can serve as moral suasion towards common supervisory approaches.

69. The VSC framework should also be strengthened. As the work of these colleges evolves, a strengthened and more structured approach is needed. The current set up covered the initial stages, the goal of which was to build up sufficient understanding on the structure of the group across NCAs. Going forward, a more coordinated approach towards supervision should be developed. This should include coordinated supervisory actions, including onsite visits as needed. The framework should ensure formal coordination by ESMA and compulsory participation of all affected NCAs, and consider the desirability of requiring consolidated supervision at the group level to ensure better visibility of risks. To the extent that activities are delegated in a significant manner to the UK or the US (or there are significant group ties with those jurisdictions), participation of the relevant competent authorities of those jurisdictions is crucial.

70. Key areas where supervision has proven to remain fragmented, hindering the identification and monitoring of risks, should be a priority. In particular, work undertaken in relation to third-party risks and delegation at ESMA is very relevant and should continue to be given prominence. Ongoing work on preparatory tools to encourage common principles for risk-based supervision across NCAs and ESMA would help strengthen common supervisory culture and could be potentially followed by a more intrusive exercise on risk based supervisory practices across NCAs.

71. ESMA should introduce a more structured process to monitor follow up by NCAs and allow for better measuring of the impact of its convergence work. Beyond the publication of follow up reports for peer reviews, there should be a more structured approach to following up on findings from CSAs and other tools, including mandating participation by NCAs in the follow up process and setting up expectations for engagement and deliverables. Likewise, internal tracking of the tools used, resources they entailed and outcomes, is needed to better measure cost-efficiency as well as impact going forward.

72. ESMA should continue to use its formal powers for the most serious cases. While less intrusive tools seem to be having a persuasive effect on most NCAs and have proven effective in addressing instances of divergence in supervisory approaches, Breach of Union Law actions can have a deterrent effect and should be deployed when needed. ESMA should continue to pursue its formal processes for serious cases of breach of law or where other tools don’t reach the desired outcome for particular NCAs.

73. To be able to carry out adequately intrusive supervisory convergence work, ESMA’s resources need to be strengthened. The most effective tools for promoting supervisory convergence are very resource-intensive, involving staff and resources over a long period of time. To be able to build on the use of the helpful extended toolkit developed, ESMA needs to be given adequate resources.

SYSTEMIC RISK MONITORING & MACROPRUDENTIAL APPROACH

74. **This section reviews the approach to systemic risk monitoring of investment funds at the EU level**. It describes the institutional framework for systemic risk monitoring and how this is undertaken by the different authorities, data sharing arrangements, and the current approach to stress testing of investment funds at the EU level. It also reviews the current consultation process initiated by the EC on the potential development of a macroprudential framework for Non-Bank Financial Intermediation (NBFI) in the EU and how this could be shaped for investment funds.

A. Systemic Risk Monitoring Activities

75. **Monitoring systemic risks arising from investment fund activities at the European level is a shared responsibility among ESMA and the ESRB in collaboration with NCAs**. The ESRB is the body responsible for macroprudential oversight at the EU level and therefore contributes to the prevention and monitoring of systemic risks, including for investment funds. Likewise, ESMA has financial stability among its objectives and its founding regulation entrusts it with specific initiatives towards the identification and measurement of systemic risk and avenues of collaboration with the ESRB and the other ESAs for the purposes of maintaining financial stability in the EU.

76. **The ESRB's work on systemic risk regarding investment funds is mostly carried out by the Non-Bank Financial Intermediation Expert Group (NBEG), which is co-chaired by ESMA**. This group prepares, in close collaboration with ESMA, the ESRB's annual Non-Bank Financial Intermediation Risk Monitor, which extensively covers the investment funds sector. The ESRB also has a number of other working groups (Analysis Working Group, Advisory Technical Committee) that carry out work that can involve investment fund issues. The ESRB carries out its work in collaboration with the ESAs, which actively contribute to the above-mentioned working groups and are voting members of the General Board of the ESRB.

77. **At ESMA, systemic risk monitoring of the investment fund sector is mostly channeled through the Risk Standing Committee**. As stipulated in Article 32 of the ESMA Regulation, ESMA shall undertake economic analysis of the markets in the area of its competence, including monitoring and assessing market developments, assessing and measuring systemic risk and other impediments to financial stability, and informing the relevant EU Institutions about relevant micro prudential trends, potential risks and vulnerabilities. In order to fulfil its mission, the BoS established the Risk Standing Committee, as a permanent internal committee. It is made up of representatives from each member of the BoS and includes, as observers, representatives of the following authorities: the EC, ESRB, EBA and EIOPA.

78. **The role of the Risk Standing Committee is to cooperate with NCAs on all risk monitoring and analysis activities and approve relevant outputs before publication.** It has two separate working groups through which it carries out its mandate: (i) the Financial Stability and Risk

Monitoring Working Group, in charge of risk monitoring activities, analysis and indicators generally for financial stability and orderly markets, and (ii) the Investor Trends and Research Working Group, with a focus on consumers; innovation; and environmental, social and governance issues.

79. To contribute to the monitoring of the markets under its purview, ESMA regularly produces several publications. Twice a year, it produces the Trends, Risks and Vulnerabilities report—Risk Monitor highlighting market developments, identifying market trends and comparing them over time and across markets. It includes key data on the markets under ESMA's remit, as well as structural indicators on securities, markets, market participants and infrastructures for the EEA, EU and by Member State. It shows regulatory data maintained by ESMA, based on information submitted by NCAs or market participants as well as commercial data. ESMA also takes part in the production of the ESA Joint Committee's Report on Risks and Vulnerabilities in the EU Financial System which focuses mainly on cross-sectoral risks. In addition to this, ESMA also regularly publishes Market Reports on specific sectors—including the AIFM and MMF reports published on an annual basis.

80. The monitoring of the AIF and MMF sectors is based on AIFMD and MMFR data collected by NCAs and shared with ESMA. As noted, ESMA uses this data to produce the regular AIF and MMFR market reports, which discuss fund activity and risks on a regular basis. In addition, the results of the NCA's quarterly assessment of the risks posed by leveraged AIFs discussed earlier in this TN, are reported to ESMA annually. The 2023 results, together with ESMA's own assessment, were published in the Article Assessing Risks Posed by Leveraged AIFs in the EU, meant to complement ESMA's monitoring framework on AIFs.[29].

81. In the absence of a harmonized UCITS reporting framework, ESMA currently assesses UCITS related risks using commercial data. This analysis is reflected in the semi-annual Trends, Risks and Vulnerabilities reports and in the stress simulation framework discussed below. As mentioned in the Regulatory Framework Section, there is currently no reporting framework for UCITS funds at the EU level, which makes commercial data the most comparable source of information for risk analysis at the EU level. The newly amended framework will introduce reporting requirements for UCITS that will eventually enable risk analysis using supervisory data.

B. Data Sharing Framework and Cooperation

82. Home and host NCAs are required to share information as needed to carry out their supervisory work. NCAs have the obligation, under articles 50 and 101, respectively of the AIFM and UCITS Directives, to cooperate with each other, and with ESMA and the ESRB,[30] whenever

[29] The Article concluded that the implementation of the ESMA Guidelines for Article 25 AIFMD is improving the monitoring of the EU AIF sector. It also noted that, at the national level, NCAs generally managed to overcome existing AIFMD data gaps by using additional data sources and other information from fund managers.

[30] For UCITS, the obligation was extended to cooperation with ESMA and the ESRB under the most recent review.

necessary for the purpose of carrying out their duties under the directives or exercising their powers under the directives or under national law.

83. The legal underpinning for data sharing across EU authorities is specifically determined in each piece of legislation. There is no overarching framework for the automatic sharing of information across ESAS, ESRB and ECB. Rather, each regulatory framework sets the basis under which authorities can exchange information**:**

- **UCITS and AIFMD:** The amended Directives require that the information gathered by NCAs, further to the new reporting framework in respect of UCITS and AIFMs they supervise, be made available to other relevant NCAs, ESMA, EBA, EIOPA and the ESRB, whenever necessary for the purpose of carrying out their duties.

- **MMFR:** Article 37 of the MMFR requires NCAs to submit all reported data to ESMA. The article provides the ECB access to the data, for statistical purposes only. There is no specific provision to share data with the ESRB (although MMFs being either UCITS or AIFs, the sharing arrangements for reporting framework in above would apply).

84. ESMA has established specific IT channels for the transmission of data from NCAs. It has one reporting system with two interfaces available for NCAs (depending on the level of reporting/data upload needed) for both AIFMD and MMFR data and uses Databricks (a big data solution) to review, aggregate and analyse the data. This framework has proven to cover existing reporting and data analytics sufficiently but is likely to require upscaling when the reporting scope further expands with the newly introduced reporting framework.

85. To improve the quality of data reported by AIF and MMF managers, ESMA, in cooperation with the NCAs, has developed a Data Quality Engagement Framework (DQEF). ESMA has been receiving data under the AIFMD and MMFR for several years and has been progressively addressing quality issues in more depth. The DQEF was launched in 2019 for AIFMD data and extended to MMFR data in 2020.[31] The initiative aims to detect any quality shortcomings in the data reported and identify ways to correct them. The DQEF sets out the procedures agreed by NCAs and ESMA to verify and follow up on the data quality issues pertaining to the information reported. It includes a series of tests that are run directly by ESMA on the data along the four dimensions of data quality (accuracy, timeliness, completeness and consistency). The tests focus on the completeness of the reporting population, the timeliness of information and on selected reporting fields such as the NAV and the AUM, leverage, the investors profile and the identifiers reported, risk measures and liquidity and portfolio indicators. ESMA reports results back to NCAs which in turn follow up with the relevant reporting entities. The results of these exercises are annually published in an aim to further engage the industry in data improvement.

86. Fund managers within the Eurosystem are required to report data to their respective central banks, to satisfy statistical reporting obligations to the ECB. The specific information to

[31] This is an ESMA-wide initiative that affects several other reporting frameworks beyond investment funds.

be reported is set by each Central Bank, but in many MS there is a significant level of granularity in the reported data, including line-by-line portfolio composition of each individual fund. This data is aggregated at the central bank level and reported to the ECB. There is no common framework for the sharing of this data with NCAs and most do not have access to this data from their respective central banks[32]. There is also no legal basis for the sharing of the ECB data with ESMA. See Figure 2 for an illustration of the reporting environment for investment funds.

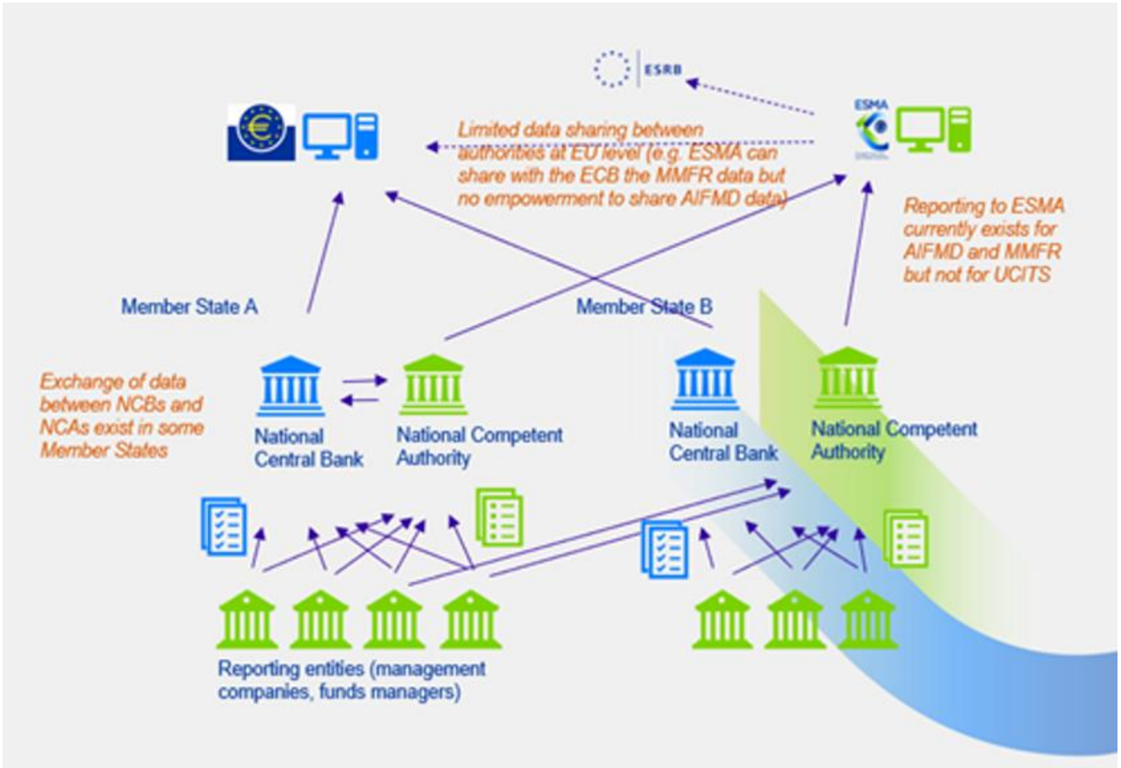
87. A 2019 'fitness check' exercise by the EC revealed an overly complex reporting framework. Developed over the years through multiple legislative initiatives in a progressively expanding framework for different types of funds and different purposes, the existing reporting framework contains a multiplicity of layers of reporting that result in duplications of data, data gaps, as well as divergent definitions, standards and frequencies of reporting. Also, in many areas, national supervisory reporting requirements preceded those at EU level, and in a number of cases they continue to exist in parallel to the new EU-level reporting requirements, adding to the complexity of the framework. While the exercise is cross-sectoral and covers reporting across the financial sector, the complexity and data gaps of the investment funds framework are noted repeatedly in the report.

88. As part of the review of AIFMD and UCITSD, ESMA has received a mandate to study the development of an integrated collection of supervisory data. This work, which is expected to be carried out in close cooperation with the ECB and the other ESAs, should focus on: (a) reducing areas of duplication and inconsistencies between the reporting frameworks in the asset-management sector and other sectors of the financial industry; and (b) improving data standardization and efficient sharing and use of data already reported within any existing EU reporting framework by any competent authority, at the national or EU level. This has to be reported by ESMA to the EC by 16 April 2026. ESMA has set up a dedicated task force that has already started work on several workstreams, including consultation of the authorities involved.

89. There is also a broader initiative in progress, regarding reporting alignment across financial sectors in the EU. A legislative proposal to amend the Regulations for each of the ESAs and the ESRB in relation to data sharing was initiated by the EC in 2023, and is currently in the trialogue phase with the Council and the EP. The purpose of the initiative is to ensure access to data sharing broadly across ESAs, the ESRB and the ECB with the aim to bridge the gaps in data sharing that currently stem from the different sectoral legal frameworks. It is unclear whether the initiative will be limited to providing the legal basis for broader data sharing, or if it will have a broader reach in terms of moving towards a single reporting framework across sectors (as currently suggested in the Parliament's proposal).

[32] There are limited exceptions to this, in cases where the central bank is also the regulator for investment funds and others where authorities have entered into bilateral cooperation agreements for the exchange of this information.

Figure 2: Euro Area: The Complexity of the Reporting Environment



Box 4. Euro Area: ESMA's Data Strategy

ESMA issued its first data strategy in 2017, to enhance data governance, standardization, and reporting frameworks within the EU. As a key component of this strategy, ESMA established a Data Standing Committee that convenes national authorities to address cross-cutting issues related to data reporting across various regulatory regimes. This includes transaction and position reporting, order record-keeping, and instrument data under the Markets in Financial Instruments Regulation (MiFIR), as well as trade reporting under the European Market Infrastructure Regulation (EMIR) and the Securities Financing Transactions Regulation (SFTR), and fund reporting under the AIFMD and MMFR. The committee's primary goal is to promote supervisory convergence and improve the quality of the data reported.

The second Data Strategy was recently published, aligned with ESMA's strategic priorities, covering the term 2023-2028. It outlines the motivations behind the report and establishes ESMA's data vision and objectives, focusing on enhancing its role as a data hub through improved data accessibility, interoperability, and standardization. It aims to provide useful, machine-readable information to markets, support data-driven supervision, foster collaboration on data standards, and promote efficient data policies while reducing reporting burdens. ESMA has already commenced scaling up its data capabilities and implementing initial deliverables, with plans to adapt the strategy as new legislative or technological developments arise.

C. Stress Testing

90. ESMA has a general mandate under its founding regulation, to initiate and coordinate EU-wide stress tests to assess the resilience of financial market participants to adverse developments. This is set out in Article 32 of ESMA Regulation, which further specifies that this work needs to be done in cooperation with the ESRB. The MMF Regulation also mandates ESMA to design annually, in cooperation with the ESRB, a stress tests scenario to be used by MMF managers. The ESRB provides ESMA with the adverse scenario for the MMF stress-testing guidelines.[33] As discussed earlier, there is a detailed stress testing framework requirement for MMFs, and this includes regular reporting to ESMA of managers' stress tests results by NCAs. ESMA is also informed of reports and action plans for MMFs where vulnerabilities have been found further to the stress tests, after they've been submitted to the relevant NCA. In 2023, ESMA published a report on the first MMF stress tests results further to the methodology and parameters included in the ESMA Guidelines. The findings indicate that both liquidity and credit risks may negatively affect MMFs, particularly raising concerns about the ability of LVNAV funds to preserve their stable value. Furthermore, although the analysis was calibrated to reflect the severity of the March 2020 stress episode, the different redemption and macroeconomic scenarios showed the capacity of MMFs to fulfill redemption requests.

91. ESMA has also developed a stress simulation framework for investment funds. This was published in a 2019 report, which provides an overview of the different building blocks of a stress simulation framework, along with a menu of options to be selected by stress testers, including discussion of the calibration of redemption shocks, methods to assess the resilience of funds to shocks, etc. The framework was used to assess liquidity risks for UCITS bond funds, a case study that is showcased in the report. The results showed that, overall, most funds were able to cope with the proposed shocks, but pockets of vulnerabilities were identified, particularly for high yield funds, with up to 40 per cent of them experiencing a liquidity shortfall. Going forward, ESMA intends to carry out stress testing exercises on a more systematic basis. The timing, detail and scope of these, however, will depend on availability of resources and adequate data. Existing data quality and availability issues noted, as well as limited resources have prevented ESMA from carrying out these exercises on a regular basis.

92. The ESRB, in collaboration with participating authorities, has developed a liquidity stress test covering the entire EU financial system. This exercise is the first of its kind and has been led by the ESRB. The stress test exercise is based on a two-leg desktop stress test approach quantifying the impact of an aggregate liquidity shock in the EU. The two legs consist of a bottom-up approach and the ESRB's balance sheet tool (top-down approach), which is further complemented by the ECB's Interconnected System-wide stress test Analytics (ISA) model. The exercise covers banks, investment funds, and insurance corporations within the EU. The exercise

[33] The ESRB publishes all the scenarios used for such regulatory stress tests – see the "Stress testing" page on the ESRB's website. The adverse scenario for the latest, 2024 ESMA's MMF stress testing guidelines, published in January 2025, can be found here.

involves thirteen authorities including ESMA, EIOPA and the ECB/SSM, with the ESRB designing the adverse scenario and aggregating results from NCAs and ESAs.[34] The exercise has shed light on sectoral liquidity shortfalls and equity impacts from adverse financial conditions and has exposed data gaps and data sharing constraints across authorities. The exercise will be helpful to inform policy actions to strengthen the systemic risk monitoring framework. There have also been several ad-hoc stress testing initiatives at the EU level:

- In 2020, the ESRB with input from the ESAs, the ECB and the Bank of England, carried out scenario analysis work to estimate the impact of large-scale corporate bond downgrades at system level. The authorities shared data to estimate the impact of downgrades on banks, insurance corporations, funds and financial markets.

- In 2022, the ESRB carried out a project to assess the exposures of EU bond funds to interest rate risk.

- In 2023, the ESRB carried out analytical work to stress liability-driven investment (LDI) funds using a range of entity (AIFMD) and activity-based data (EMIR and SFTR). In 2024, ESMA carried out further work on the resilience of GBP LDI funds to interest rate shocks.

D. Leverage risk monitoring framework under Article 25 AIFMD

93. The AIFMD introduced a monitoring framework, and provides competent authorities with the power to impose limits, on the leverage of AIFs for financial stability reasons. Article 25 of the AIFMD charges NCAs with assessing the risks that arise from the use of leverage by an AIFM for the AIFs it manages. Where deemed necessary in order to ensure the stability and integrity of the financial system, the home NCA for the AIFM—having notified ESMA, the ESRB and competent NCA for the relevant AIF/AIFs—can impose limits on the level of leverage that the AFM can employ with respect to the AIFs that it manages. Besides leverage limits, the NCA can also impose other restrictions on the management of the AIF with respect to the AIFs under its management, including imposing liquidity related measures.[35]

94. Further to Article 25 of the AIFMD, ESMA plays a limited formal convergence role in relation to the use of this power by NCAs. Article 25 tasks ESMA with issuing advice to the NCA of the home member state of the AIFM after receiving the notification mentioned in the previous paragraph, about the measure that is proposed or taken. The advice may address whether the conditions for taking action appear to be met, whether the measures are appropriate and the duration of these. The relevant NCA must report to ESMA should it intend to deviate from its advice.

95. Article 25 empowers ESMA to advise NCAs on remedial measures, including leverage limits. ESMA may issue this advice further to its independent analysis of AIFMD data reported by NCAs, and after taking into account advice by the ESRB, having determined that the leverage

[34] The funds in the sample are mostly UCITS and private sector data was used.

[35] See paragraph 97 below for an example of this regarding measures imposed by the Central Bank of Ireland.

employed by an AIFM or a group of AIFMs poses a substantial risk to the stability of the financial system. Should this procedure be followed, ESMA must immediately inform the NCAs concerned, the ESRB and the EC. Similarly to the case explained above, should the NCA decide not to follow ESMA's advice, it must report so. This power has not yet been used.

96. In 2021, ESMA published Guidelines on the use of Article 25, to ensure common, uniform and consistent application thereof. The Guidelines suggest a two-step approach, with the first step being the identification of those AIFs that are more likely to pose risks to the financial system, and step two, the evaluation of potential leverage-related systemic risks of the AIFs identified. Authorities are encouraged to go beyond AIFMD reporting data and use the best available data for the risk indicators to be considered, including national supervisory data and third-party data when appropriate. The Guidelines also note that this assessment should be done on a quarterly basis. They further provide guidance in relation to the calibration of the limits and consideration of other measures that could be appropriate.

97. ESMA has issued advice further to NCAs action under Article 25 on three occasions.

- The first time this process was used it was in November 2022, in relation to the initiative by the Central Bank of Ireland to impose a leverage limit on AIFMs established in Ireland managing commercial real estate AIFs domiciled in Ireland. Further to the Central Bank of Ireland's risk analysis of AIFs investing in real estate, it established that a cohort of funds had elevated levels of leverage (on average higher than equivalent real estate funds in Europe), some were also exposed to liquidity mismatches and had a large market footprint on the commercial real estate market. Accordingly, the Central Bank of Ireland decided to introduce a 60 per cent leverage limit on those funds, along with guidelines on minimum liquidity timeframes that should typically extend to 12 months of notice. ESMA, having carried out its own assessment of risks, issued advice supporting the measure proposed, timing for implementation and indefinite duration.

- Two Advice reports were issued simultaneously in April 2024, to provide feedback on the measures consulted by the Luxembourg supervisor and the Central Bank of Ireland to be applicable to managers of LDI funds, further to the gilt market crisis in late 2022. ESMA supported the measures put forward by the two NCAs, which had been coordinated bilaterally, as well as the timing and duration thereof. While Article 25 does not provide ESMA with explicit coordination powers when measures need to be considered by more than one NCA, it was involved informally throughout the coordination process.

98. The role of ESMA further to article 25 is restricted to issuing advice on potential measures. As explained above, NCAs can deviate from this advice, and simply notify ESMA of their intention to do so. Article 25 also does not provide ESMA with any explicit coordination powers when measures need to be considered by more than one NCA. In the LDI case explained above, however, ESMA was in contact with both NCAs and involved throughout the process.

E. EC Consultation on a Macroprudential Framework for Non-Bank Financial Intermediation

99. In May 2024, the EC launched a targeted consultation on assessing the adequacy of macroprudential policies for NBFI. The objective of the consultation, as stated by the Commission, is to seek stakeholders' views on the adequacy of the macroprudential framework for NBFI with the intent not to revisit recent legislative agreements. It announces its intention to focus on (a) evaluating the effectiveness of existing macroprudential tools and supervisory arrangements, (b) considering the repurposing or reviewing of existing microprudential and reporting tools, and (c) assessing, if necessary, the possibility to introduce new macroprudential tools, as well as tools to improve EU-wide coordination.

100. The consultation concentrates on unmitigated liquidity mismatches, excessive leverage and interconnectedness, as key vulnerabilities for NBFIs, and for investment funds in particular. It reviews existing elements of the EU regulatory framework for investment funds that aim to address risks arising from those vulnerabilities (e.g., regulatory limits on leverage, liquidity risk management requirements, concentration limits, stress testing requirements, etc. including revisions introduced by recent regulatory initiatives) as well as the ESRB and ESMA's role in systemic risk monitoring and macroprudential issues. It asks stakeholders to address questions on several areas: (i) MMFs, specifically on NCAs' supervisory powers regarding liquidity buffers, reporting and stress testing; (ii) enhancing the supervisory framework on liquidity risks; (iii) other potential tools beyond the ones currently available, to contain systemic risks generated by pockets of excessive leverage in open-ended funds; (iv) introduction of system-wide stress tests for various NBFI sectors (including funds) and (v) EU-supervisory coordination, including discussion of a potential enhanced coordination mechanism for adoption of macroprudential measures and giving ESMA specific coordination powers regarding supervision of large asset management companies.

101. ESMA submitted its response to the EC Consultation proposing several areas of focus. Key points from ESMA's response are suggesting enhancements to the liquidity and leverage regulatory and supervisory framework for funds (including considering more prescriptiveness in relation to notice periods for ELTIFs and similar rules to apply to funds investing in less liquid assets), the need for a stronger and integrated reporting framework to assist risk monitoring and analytical work, clearer powers (including for reciprocation) regarding the use of Article 25 of AIFMD, and support for further work on system-wide stress testing.

102. The ESRB, the Eurosystem and other stakeholders have submitted responses to the Consultation. The ESRB calls on the Commission to close known gaps in the regulatory framework and to facilitate data sharing across authorities during the first half of the legislative term. Specifically, the ESRB requests the Commission to address vulnerabilities in MMFs and to progress the work on addressing vulnerabilities in investment funds, including considering further enhancements to liquidity risk management frameworks, similar reporting and safeguards for excessively leveraged UCITS and a potential reciprocity mechanism regarding Article 25 of the AIFMD. The Eurosystem points to similar recommendations in its response, encouraging further revisions to the liquidity risk management framework including introducing liquidity bucketing and a bigger role for authorities regarding the use of LMTs and a similar proposal on leverage for UCITS to the one described by the ESRB. More generally, the ESRB's response stresses the need to take a system-wide approach and enhance transparency in asset management activities more generally and better incorporate a macroprudential perspective in associated regulation.

103. Several NCAs have recently published their own reports or statements related to the discussion on macroprudential frameworks for investment funds. A common theme across many of these publications is the recognition of the value of many existing microprudential tools as ex-ante tools that play a significant role in the contention of systemic risk. They also propose ways to improve some of these tools (e.g., LMTs, reporting) to ensure effectiveness for systemic risk management. The reports recognize the asset management cross-border implications within the EU for financial stability and the need to enhance coordination across NCAs, particularly where large cross-border asset managers are involved. Finally, introduction of system-wide stress tests and certain reforms to the MMF Regulation are also contemplated by some NCAs.

F. Findings and Recommendations

104. The current framework provides both ESMA and the ESRB with a structure to monitor and manage systemic risk in the investment funds sector, but is uneven across fund types. Different legal and regulatory provisions provide both ESMA and the ESRB with mandates to act on systemic risk monitoring, both jointly, separately or in cooperation with NCAs. The effectiveness of monitoring, however, is uneven across different types of funds, as it is very much linked to the quality and availability of data across AIFs, UCITS and MMFs. The capacity of authorities to act and the processes to do so, also vary for different types of funds, as the regulatory frameworks for these are different (e.g., the stress testing framework, see below).

105. The recent UCITS and AIFMD review will potentially mitigate some imbalances, but will take time to implement. The new reporting framework for UCITS and AIFs aims to provide consistency and improve the quality of data reported to authorities and is a very welcome step. It will also enhance liquidity risk management frameworks, including by providing NCAs with the power to suspend redemption rights of open-ended funds based on financial stability risks. Newly reporting data on delegation of activities of asset managers is also a key addition to the framework that will provide a better view of the extent of delegation across borders in the EU. These reforms, however, still need to be operationalized via Regulatory Technical Standards (including definition of reporting templates), for which ESMA has been given a deadline of end 2027. Therefore, implementation of these reforms, will still take several years and authorities will need to continue exploring ways to monitor systemic risk as effectively as they can under the current framework.

106. The Authorities should continue working to ensure that implementing regulations provide the level of granularity required for adequate systemic risk monitoring. ESMA has several initiatives ongoing to improve the quality of supervisory data, including work on the implementation of the new reporting framework for UCITS and AIFs. The development of reporting templates needs to be carried out considering the range of fund types and strategies that can be covered by the AIFMD and UCITS frameworks. Authorities must ensure that the new reporting framework ensures adequate monitoring of systemic risks and that data deficiencies already identified by ESMA and their ESRB in their risk analysis exercises are addressed. Ensuring that the updated framework requires managers to report monthly portfolio data on a granular enough manner and sufficient and comparable information on levels of leverage for both UCITS and AIFs is critical.

107. Data on EU investment funds should be collected at a centralized level. While the work above will greatly improve the harmonization of reporting frameworks, data remains fragmented at the national and EU level (across NCAs, Central Banks and different sectoral EU authorities) and comprehensive data sharing arrangements are lacking. This is very relevant not only for larger asset management groups (where data reported by one manager in one MS could be relevant to several other NCAs where the group provides services), but also more generally across the industry, given the home-host authority cooperation required as part of the passporting framework. ESMA currently receives data directly from NCAs further to the AIFMD and MMFR frameworks and has developed expertise in the handling of these data. The authorities should centralize the collection of fund-level data via ESMA, which should act as data hub allowing access to NCAs and domestic and EU authorities as needed. Work to develop a more integrated reporting framework should ensure redundances are avoided and data already gathered by EU authorities, NCAs and National Central Banks is used and shared to the broadest extent possible. This would also facilitate the strengthening of the stress testing framework, including system-wide, as discussed below. Any centralized reporting system should be designed having in mind what would be the most adequate features for safety of the information.

108. While the EU framework provides a basis for ESMA to perform stress tests under its systemic risk monitoring function, in collaboration with the ESRB, it has significant limitations. The key limitation is, as stated above, the lack of quality data to carry out solid stress testing exercises for AIFs and UCITS. The level of detail on the role of ESMA in stress testing, also varies significantly across fund types, with the MMFR providing a more prescriptive framework regarding ESMA's role, when compared to the UCITS and AIFM frameworks. There are numerous regulatory provisions on stress testing across the single rulebook, with different implications for ESMA and the ESRB, which also make for a complex and fragmented framework. In general, EU authorities have been able to use available tools and mandates to carry out a number of stress simulation exercises and to provide guidance to NCAs and industry to the extent of their capacity, but the framework falls short of providing a comprehensive and systematic approach to stress testing across the investment fund sector.

109. There should be a more structured approach to the stress testing of EU funds and system wide liquidity. ESMA, in collaboration where needed with the ESRB, should work towards having a systematic approach to stress testing across UCITS, AIFs and MMFs, including strengthening exercises and setting up a regular frequency in light of future reporting frameworks. The ESRB, in collaboration with the ESAs, should also continue work towards the development of system-wide stress tests that would provide better insight into the interconnectedness and systemic implications of funds within the broader financial system, with the aim of making these a regular exercise. In particular, system-wide stress tests may be helpful to better understand the vulnerabilities of each asset management group and its interconnections (and correlated strategies) with the financial system, and capacity to generate excessive price volatility and liquidity stress in the system.

110. The human and IT capabilities of authorities need to be reconsidered to allow for a scaled-up stress testing framework. While ESMA has a strong understanding of systemic risk in the fund sector and has been able to carry out ad-hoc stress simulation exercises, it may not be able to carry these out on a more regular basis, and with a broader scope, without a significant strain on its resources. Both human and IT resources would need to be strengthened to allow for a stronger stress testing framework that would permit regular exercises across all types of funds.

111. We encourage ESMA to continue minimizing the impact of data gaps and fragmentation via its convergence and risk analysis efforts. While work continues on the development of data reporting framework to allow for a more systematic stress testing framework, ESMA is encouraged to continue its efforts to bridge data gaps (particularly for UCITS) through the use of ad-hoc exercises (e.g., topical exercises on liquidity or leverage risks for particular types of funds) and stress simulations. Also, analysis of AIFMD data should continue to ensure monitoring of potential unmitigated liquidity mismatches in AIFs investing in real estate or other inherently illiquid assets (including ELTIFs), with results feeding into the supervisory convergence and policy as needed.

112. The Commission's consultation on a macroprudential framework for NBFI is an important opportunity to address data fragmentation. Without adequate data, the development of a sound systemic risk monitoring framework is an impossible task. Strengthening the data should be an urgent priority, to inform better-founded discussion on where vulnerabilities lie not only in investment funds, but also in their interconnections with banks and the rest of the financial system.

113. The role of ESMA in relation to the use of Article 25 of the AIFMD should be strengthened. The current framework does not provide adequate arbitration authority for ESMA, or the tools to ensure cross-border reciprocation of measures where potentially needed. While recent experiences of the use of Article 25 have been positive, instances of more complicated scenarios or involving larger numbers of NCAs could be much more challenging. Given that funds in one MS could be managed by a management company supervised in another MS, coordination of measures across NCAs should be a key part of the framework. To ensure that risks arising at the EU level are adequately managed, as well as to ensure a level playing field, ESMA, in consultation with the ESRB, should at least have the power to (i) require NCAs to assess whether a measure taken by one NCA for funds managed out of one jurisdiction, should also be applied to similar funds in another jurisdiction and (ii) require NCAs to top up the measures defined by them further to Article 25.

114. A similar tool should be introduced for UCITS. Authorities should consider introducing a tool to impose additional measures for UCITS funds that might reach levels of leverage that are substantial, in a similar fashion to Article 25 of AIFMD. This could be a helpful tool to contain any excessive leverage in UCITS that may be revealed once the new reporting framework for this type of funds is implemented. [36] Such a tool should be developed having in mind the recommendation in the paragraph above, ensuring the additional powers for ESMA to top up measures and enforce reciprocation.

115. Additionally, as part of the EU discussion on macroprudential frameworks, authorities should prioritize the following areas discussed earlier:

- Reviewing the MMF Regulation, to ensure that key vulnerabilities of these vehicles for financial stability perspective are minimized, as discussed in the Section on the Regulatory Framework above.
- Enhancing VSC arrangements, by strengthening the coordination role of ESMA in relation to supervisory colleges for cross-border asset managers, expanding their supervisory coordination activities, making participation compulsory and extending membership to relevant non-EU regulatory authorities as needed (See Supervision section for more details).
- Ensuring sufficient resources are allocated to EU authorities to enable a more comprehensive approach to systemic risk monitoring.

116. Going forward, authorities should also consider some of the proposals provided by stakeholders in the responses to the EC consultation. In particular, some responses provide valuable suggestions on how to enhance the liquidity risk management frameworks that authorities should consider once amendments to the UCITS and AIFM Directives have been implemented. As noted above, increased monitoring by ESMA regarding funds investing in less liquid assets and an assessment of the recently introduced amendments to AIFMD and UCITS once the RTS, ITS and Guidelines have been implemented and in use, will provide a better understanding of what risks remain and any needed enhancements to the framework.

[36] This has been recommended by the Eurosystem and the ESRB in their responses to the EC Consultation as noted above. Also, the Eurosystem response to the EC Targeted Consultation equally proposes that UCITS using the VaR approach would be required to report their leverage under the commitment approach, in line with a recommendation of this TN.

Appendix I. The Regulatory Framework for Investment Funds in the EU

Single Rulebook for UCITS

1. There have been six key revisions of Level 1 legislation for UCITS:

- The first UCITS Directive (UCITS I), adopted in 1985, is a "product" directive that created the first EU open-ended collective investment structure invested in transferable securities. The UCITS Directive launched a single EU common framework with common minimum organizational and operational requirements for UCITS to operate and providing the ability for a UCITS to be sold to the public across the EU.

- UCITS I was revised in 2001 through (a) the 'Management' Directive No 2001/107/EC which introduced a single EU status for UCITS management companies to operate throughout the EU and a simplified prospectus to provide information in a simplified format to UCITS investors, and (b) the 'Product' Directive No 2001/108/EC allowing UCITS to invest in a wider range of financial instruments including derivatives.

- The UCITS III package was adopted in 2002 and came into effect in 2003. The package included two directives to give management companies a passport to operate throughout the EU and to allow funds to invest in a wider range of financial instruments.

- In 2009 Directive No 2009/65/EC, also known as UCITS IV Directive was adopted, and became applicable on July 1, 2011. It introduced the requirement for a Key Investor Information Document (KIID), replacing the simplified prospectus, and common frameworks for mergers and master-feeder structures.

- The UCITS V Directive No 2014/91/EU amended the 2009 version by introducing additional definitions of the tasks and liabilities of UCITS' depositaries, strengthening the rules on remuneration and creating a common framework for sanctions.

- Most recently, Directive (EU) 2024/927, amended both the UCITS and AIFM Directives, introducing a number of reforms to liquidity risk management and reporting.

2. UCITS Level 1 legislation is complemented by a number of Level 2 measures, including:

- Commission Directive 207/16/EC implementing Council Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) as regards the clarification of certain definitions (Eligible Assets Directive);

- Commission Directive 2010/43/EU implementing Directive 2009/65/EC as regards organizational requirements, conflicts of interest, conduct of business, risk management and content of the agreement between a depositary and a management company;

- Commission Implementing Regulation (EU) 2016/1212 laying down technical standards for the submission of information to ESMA;
- Commission Delegated Regulation (EU) 2016/438 on depositaries' obligations;
- Commission Regulation (EU) No 583/2010 on the content of the KIID;
- Commission Regulation (EU) No 584/2010 on standard notification to a host member state competent authority and UCITS attestation, use of electronic communication between competent authorities, and procedures for on-the-spot investigations and exchange of information between competent authorities;
- Commission Directive 2010/42/EU relates to certain provisions concerning fund mergers and master-feeder structures.
- Commission Delegated Regulation (EU) 2018/1619 of 12 July 2018 amending Delegated Regulation (EU) 2016/438 as regards safe-keeping duties of depositaries

3. The framework is further detailed by Level 3 measures. Some of the most relevant guidelines by ESMA include: (a) Guidelines on sound remunerations and policies, (b) Guidelines on ETFs and other UCITS issues, (c) Guidelines on risk measurement and the calculation of global exposure for certain types of structured UCITS, (d) Guidelines—Selection and presentation of performance scenarios in the KIID for structured UCITS, (e) Guideline on the methodology for the calculation of the synthetic risk and reward indicator in the KIID, (f) Guideline on the methodology for the calculation of the ongoing charges figure in KIID and (g) Guidelines—Risk Management principles for UCITS.

4. UCITS are also regulated by supplementary frameworks. Most notable example is the Sustainable Finance Disclosure Framework (SFDR), which aims at increasing transparency on sustainability risks and impacts of their financial products, and also applies to AIFMs.

Single Rulebook for AIFs

5. The AIFMD (2011/61/EU) regulates activities related to the AIFs industry, a category that encompasses significant heterogeneity of fund subtypes. It includes notably hedge funds, private equity funds and real estate funds, but also bond and equity funds that do not qualify as UCITS. It regulates: (i) EU fund managers that manage AIFs, (ii) fund managers (wherever they are domiciled) that manage AIFs established in the EU, and (iii) fund managers (wherever they are domiciled) that market the units of an AIF in the EU. The Directive includes a dual regime, whereby larger managers are subject to the full regulatory framework, whereby smaller managers are subject to a lighter framework that notably includes registration (not full licensing) and the same reporting requirements than for larger managers.[1]

6. The AIFMD has been supplemented by several Level 2 Regulations. Notably:

- Commission Delegated Regulation (EU) No. 231/2013 on exemptions, general operating conditions, depositaries, leverage, transparency and supervision.
- Commission Delegated Regulation (EU) No. 694/2014 determining types of AIF managers.
- Commission Implementing Regulation (EU) No. 447/2013 on opt-in AIFMs.
- Commission Implementing Regulation (EU) No. 448/2013 on the procedure or establishing the member state of reference for non-EU fund managers.

7. ESMA has further issued a number of Guidelines to NCAs. These include Guidelines on key concepts of AIFMD, on reporting obligations, on sound remuneration policies under AIFMD and on its Article 25.

Bespoke Regulatory Frameworks

8. There are also several bespoke regimes that regulate different types of AIFs in the EU. These regimes are in the form of Regulations and their provisions are directly applicable across member states, eliminating the need for national implementation measures.

- **The European Venture Capital Fund (EuVECA)** Regulation offers a voluntary EU-wide marketing passport to qualifying fund managers, free from certain costs and requirements of the AIFMD, such as appointing a depositary. In order to qualify as EuVECA, funds are only allowed to invest in certain types of assets, such as equity instruments issued by, or loans granted to qualifying portfolio undertakings that employ up to 499 people or are SMEs listed on SME growth markets.
- **The European Social Entrepreneurship Fund (EuSEF)** is a label to help identify funds that focus on European social businesses, making it easier for them to attract investment. In order to qualify for the label, EuSEF funds must adhere to specific investment policies, only investing in certain types of assets and following rules regarding portfolio composition, investment techniques, and own funds. EuSEF funds also do not require the appointment of a depositary.
- **The European Long-term Investment Funds (ELTIF) Regulation** is an EU regulatory framework for AIFs that enable investors to support companies and projects requiring long-term

[1] Article 3 of the AIFMD defines the "smaller" managers, as (a) those managing AIFs portfolios using leverage with AUM below EUR 100 million or (b) those managing portfolios of unleveraged AIFs whose AUM are below EUR 500 million. Further to ESMA's 2023 AIF Market Report, the AIFM sector is highly concentrated. In 2022, AIFs with a NAV larger than EUR 1bn accounted for less than 4% of all AIFs but for 51% of the NAV. Smaller AIFs (NAV lower than EUR 500mn) account for 93% of all AIFs but only 32% of the NAV.

capital. An ELTIF must be managed by an authorized EU AIFM. ELTIFs have specific requirements for their investment policy, with at least 55 per cent of their capital required to be invested in eligible investments. ELTIFs sold to retail investors are also subject to specific diversification thresholds and concentration limits. Unlike the EuVECA and EuSEF, ELTIFs must appoint a depositary.

Money Market Funds Regulation

9. Enacted in 2017, the MMFR aims to enhance the resilience of MMFs. Regulation (EU) 2017/1131 on MMFs, introduced a harmonized definition of MMF and applies to all those funds managed and/or marketed from the EU, in addition to the relevant AIFM and UCITS rules that apply based on their registration as either AIFs or UCITS.