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Final Report

Technical advice to the European Commission on the review of the UCITS Eligible Assets Directive

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1 Executive Summary

Reasons for publication

In June 2023, ESMA received a mandate from the European Commission to provide technical advice on the review of the UCITS EAD.

The mandate covers a broad range of policy issues, asking ESMA to provide analyses and policy proposals on how to amend the UCITS EAD and, if appropriate, also the UCITS Directive in the medium to long-term.

The mandate invites ESMA to conduct a data gathering exercise collecting insights on the manner and extent to which UCITS have gained direct and indirect exposures to certain asset classes that may give rise to divergent interpretations and/or risk for retail investors (e.g. structured/leveraged loans, catastrophe bonds, emission allowances, commodities, crypto-assets, unlisted equities).

ESMA carried out a comprehensive NCA survey and data collection exercise to gather insights and data on the issues covered in the mandate.

On 7 May 2024, ESMA also launched a Call for Evidence, seeking input on a broad range of policy issues and to collect data from stakeholders. The consultation period closed on 7 August 2024 and ESMA received 63 responses.

ESMA's technical advice provides policy proposals on a variety of issues. Notably, ESMA sees merit in applying a look-through approach to determine the UCITS eligibility of assets. ESMA considers that this policy approach ensures a high level of investor protection and transparency vis-a-vis UCITS investors and is therefore best placed to protect the reputation and trust in the UCITS brand due to a sound regulatory and supervisory regime.

The policy proposals put forward by ESMA aim to overcome the currently divergent NCA and market practices on this matter and therefore foster supervisory convergence and reduce the burden for UCITS management companies operating and/or marketing UCITS on a cross-border basis.

Conscious of the need for an orderly transition, the proposals provide for granting sufficiently long transitional periods to allow relevant UCITS management company to adapt their portfolios, where needed. Furthermore, ESMA sees merit in allowing some level of flexibility to gain limited indirect exposures (up to 10%) to alternative assets with a view to improving risk diversification and generating returns from uncorrelated asset classes.

Contents

This Final Report is split up in several sections as follows:

- Section 3 explains the background to this paper.
- Sections 4 to 17 cover the key aspects on which the European Commission requested technical advice and ESMA's respective policy assessments in light of the stakeholder feedback and the feedback gathered from NCAs.
- Annex I includes the full text of the European Commission mandate.
- Annex II summarises the stakeholder responses to the Call for Evidence.
- Annex III provides an overview of NCA positions on the UCITS eligibility of relevant asset classes
- Annex IV provides an overview of the data collected by ESMA and related risk/economic analyses on a list of relevant asset classes.
- Annex V provides a cost-benefit analysis regarding the policy proposals.
- Annex VI contains proposals to the European Commission on how the legal texts could be revised to reflect the policy recommendations made in Sections 4 to 17.

Next Steps

ESMA will cooperate closely with the European Commission in its review of the UCITS EAD.

2 List of acronyms

ABS	Asset-backed Security
AIFMD	Directive 2011/61/EU on Alternative Investment Fund Managers
AIFMD review	Directive (EU) 2024/927 amending the AIFMD and UCITS Directive
AuM	Asset under Management
Benchmark Regulation	Regulation (EU) 2016/1011 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds
CESR	Committee of European Securities Regulators
CIUs	Collective Investments Undertakings
CLO	Collateralised Loan Obligation
CMO	Collateral mortgage obligation
CMU	Capital Markets Union
CoCo	Contingent Convertible
CRD VI	Directive (EU) 2024/1619 amending Directive 2013/36/EU as regards supervisory powers, sanctions, third-country branches, and environmental, social and governance risks
CRE	Commercial Real Estate
CSA	Common Supervisory Action
DLT	Distributed Ledger Technology
DLT Pilot Regime Regulation	Regulation (EU) 2022/858 on pilot regime for market infrastructures based on distributed ledger technology
ELTIF	European Long-Term Investment Funds (Regulation EU 2015/760)
EMIR	Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories
EPMs	Efficient Portfolio Management Techniques

ESMA	European Securities and Market Authority
ETC	Exchange-Traded Commodity
ETF	Exchange-Traded Fund
ETN	Exchange-Traded Note
ETP	Exchange-Traded Products
EuSEF	European Social Entrepreneurship Fund (Regulation EU 346/2013)
EuVECA	European Venture Capital Fund (Regulation EU 345/2013)
FoF	Fund of Fund
HF	Hedge fund
IRD	Interest Rate Derivative
ISIN	International Securities Identification Number
LEI	Legal Entity Identifier
LMTs	Liquidity Management Tools
MBS	Mortgage-Backed Security
MiCA	Regulation (EU) 2023/1114 on markets in crypto-assets
MIFID I	Markets in Financial Instruments Directive I (Directive 2004/39/EC)
MIFID II	Markets in Financial Instruments Directive II (Directive 2014/65/EU)
MIFIR	Regulation (EU) No. 600/2014 on markets in financial instruments and amending Regulation (EU) No 648/2012
MMF	Money Market Fund
MMFR	Regulation (EU) 2017/1131 on Money Market Funds
MTF	Multilateral Trading Facility
NAV	Net Asset Value
NCAs	National Competent Authorities

NFC	Non-Financial Corporate
NPPR	National Private Placement Regime
OTC derivatives	Over-the-counter derivatives
PE	Private Equity
Q&As	Questions and Answers
RE	Real Estate
Securitisation Regulation	Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation
SFTR	Regulation (EU) 2015/2365 on transparency of securities financing transactions and of reuse
SFTs	Securities financing transactions
SIU	Savings and Investments Union
UCITS	Undertakings for Collective Investment in Transferable Securities
UCITS Directive	Directive 2009/65/EC on Undertakings for Collective Investment in Transferable Securities
UCITS EAD	Directive 2007/16/EC on UCITS Eligible Assets
UCITS I	Undertaking for Collective Investment in Transferable Securities Directive I (Directive 85/611/EEC)
UCITS III	Undertaking for Collective Investment in Transferable Securities Directive III (Directive 2001/108/EC)

3 Overview

Background

1. Since the first adoption of the Council Directive 85/611/EEC of 20 December 1985 (so-called “UCITS I”), UCITS have greatly contributed to the EU and global capital markets. The global success of the UCITS brand is largely attributed to the high level of regulation and supervision, providing for a high degree of investor protection.

2. The UCITS sector has demonstrated its resilience to market challenges and adapted to new market needs and developments over time. This evolution necessitated updating the legal framework several times to account for market developments and ensure supervisory convergence. The original UCITS I Directive has been subject to several reviews over the past four decades.

3. The UCITS I Directive provided a rather narrow list of assets eligible for investments, mainly limited to the broad category of ‘transferable securities’. Over the past decades, however, the variety of financial instruments traded on financial markets has increased significantly, and with this some uncertainties and divergent views on the eligibility of these asset classes have emerged.

4. In 2007, the European Commission published the UCITS EAD, with the aim to help NCAs and market participants to develop a common understanding of the eligibility of assets under the UCITS framework and to ensure a convergent application of various key definitions and concepts set out in the UCITS legal framework.

5. The UCITS EAD draws on the work performed by ESMA’s predecessor CESR, notably the technical advice that CESR delivered in 2006[1]. In the following year, CESR also adopted guidelines covering parts of the technical advice which were not incorporated by the European Commission in the final legal text of the UCITS EAD[2].

6. Since its inception in 2011, ESMA has provided guidance to market participants and NCAs on a variety of UCITS investment-related matters, notably by publishing (1) a large number of ESMA Q&As[3], (2) an ESMA opinion on certain investment limits set out in the UCITS Directive[4] and (3) the ESMA guidelines on

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[1] CESR technical advice to the European Commission on clarification of definitions concerning eligible assets for investments of UCITS (CESR/06-005).
[2] CESR guidelines concerning eligible assets for investment by UCITS (CESR/07-44b).
[3] https://www.esma.europa.eu/publications-and-data/questions-answers.
[4] ESMA opinion on Article 50(2)(a) of Directive 2009/65/EC (ESMA/2012/721).

ETFs and other UCITS issues[5]. ESMA also performed a peer review on these guidelines in 2018[6] and a follow-up peer review in 2023[7], focusing on the topic of EPM techniques. Additionally, in 2021, ESMA performed a CSA on costs and fees jointly with all 30 EU/EEA NCAs, which assessed whether UCITS comply with the applicable legal requirements and ETF guidelines when using EPM techniques.[8]

7. In June 2023, ESMA received a formal request (the “mandate”) from the European Commission to provide technical advice on the review of the UCITS EAD. Given that the UCITS EAD dates back to 2007, the European Commission considers it important to ensure that the eligibility requirements are implemented in a uniform manner in all Member States, while also taking into account market and regulatory developments that have occurred over the past decades.

8. The mandate aims at ensuring legal certainty of the application of the UCITS rules and protect the reputation of the UCITS brand, both within the EU and in third countries, to preserve and strengthen the well-functioning of the UCITS framework and the operation of the UCITS management companies in the best interest of investors, as well as the quality of investment products offered to retail investors. Against this background, the mandate covers a broad array of topics, asking ESMA inter alia:

    - to analyse whether any divergences have arisen in the implementation of the UCITS EAD across Member States;

    - to propose clarifications on the key definitions and concepts set out in the UCITS EAD, analysing the merits of possibly linking them to other pieces of the EU acquis;

    - to gather insights on the manner and the extent to which UCITS have gained direct and indirect exposures to certain asset classes that may give rise to divergent interpretations and/or risk for retail investors;

    - to analyse the risks and benefits of UCITS gaining exposures to asset classes that are not directly investable for UCITS;

    - to advise on possible legislative clarifications to address any shortcomings identified by ESMA in the context of its supervisory convergence work on EPMs.

[5] ESMA guidelines on ETFs and other UCITS issues (ESMA/2014/937).
[6] ESMA peer review on the guidelines on ETFs and other UCITS issues (ESMA42-111-4479).
[7] ESMA follow-up report to the peer review on the guidelines on ETFs and other UCITS issues (ESMA42-111-7570).
[8] ESMA final report on the 2021 CSA on costs and fees (ESMA34-45-1673).

9. ESMA is also invited to recommend which changes, if any, would be appropriate and could be achieved in the UCITS EAD and, if appropriate, which amendments to the UCITS Directive would appear appropriate and necessary in the medium and long-term.

10. The full text of the Commission mandate is set out in Annex I.

Public consultation

11. In May 2024, ESMA published a Call for Evidence to gather stakeholders feedback on the matters raised in the mandate.

12. The public consultation closed in August 2024 and ESMA received 63 responses. Respondents were widely spread in terms of backgrounds and areas of expertise included associations of funds and their managers, investors and depositaries as well as individual fund managers, law firms and service providers.

13. A summary of the feedback received to the Call for Evidence is set out in Annex II.

Structure of the Final Report

14. The following section (Section 4) and Annexes II and III summarise the main areas where national divergences have been identified.

15. The subsequent sections (Sections 5-17) cover the most relevant policy issues, most of which have been addressed through proposals for legislative clarifications and amendments as set out in Annex VI.

16. Each policy section briefly summarises the most relevant feedback gathered from NCAs and stakeholders, the outcome of ESMA's analysis, the rationale behind the legislative proposals made, as well as the clarifications deemed necessary. The policy conclusions described therein therefore need to be read in conjunction with the legislative drafting proposals included under Annex VI.

4 Divergences in the implementation of the UCITS EAD across Member States

17. Following the receipt of the mandate, ESMA carried out a comprehensive survey with NCAs to gather information on divergences that may have arisen in the implementation and practical application of the UCITS EAD. Additionally, ESMA benefited from the feedback received from stakeholders through the Call for

Evidence, many of which referred to unlevel playing field issues due to divergent national rules and supervisory practices.

18. The responses demonstrated largely divergent national practices regarding the UCITS eligibility of all asset classes covered in the NCA survey (Annex III) and Call for Evidence. This was true both with respect to the question on those direct exposures that are allowed across Member States and inconsistent distinctions made between different types of indirect exposures (e.g. delta-one instruments, derivatives, index replication, ETNs, AIFs) relating to the *same* underlying asset. To that end, indirect exposures to the same underlying assets might be permitted or forbidden, depending on the legal form of the instrument used.

19. The treatment of delta-one instruments[9] proved to be a source of divergence, with some NCAs automatically considering that relevant securities embed a derivative (and thus require a look-through approach to the underlying to determine their eligibility) whilst other NCAs perform a case-by-case analysis to determine whether these instruments embed a derivative by assessing if there is any modification or cash flows or increase in risk profile.

20. The divergences also concern procedural aspects, e.g. NCA authorisation processes with respect to UCITS investing in certain asset classes, where some authorities have in place additional administrative requirements to scrutinise the eligibility of assets.

21. Divergences were observed also with respect to the interpretation of the eligibility criteria set out in the UCITS EAD, in particular on the requirement that risks should be "adequately captured" by the risk management process of the UCITS.

22. On financial indices and index-tracking UCITS, a recurrent source of divergence is linked to the UCITS Directive explicitly granting national discretion with respect to certain requirements and limits set out therein and the need to assess the eligibility of the individual assets that compose the index.[10]

23. Further divergences have been noted with regard to investments in units or shares of collective investment undertakings as well as the notion and the characteristics of the concept of 'ancillary liquid assets'[11].

24. Responses to the Call for Evidence also highlighted other issues related to the implementation of the UCITS Directive. By way of example, in one jurisdiction,

[9] Delta-one instruments are often understood as financial instruments with a delta at one with the asset or the basket of asset which their performance is linked to (that is a 1% move in the value of the underlying assets results in a 1% move in the value of the financial instrument, without optionality or leverage effects).
[10] Articles 51(3) and 53 of the UCITS Directive.
[11] Second subparagraph of Article 50(2) of the UCITS Directive.

the term 'asset segregation' has been reportedly translated incorrectly in the context of the rules on UCITS investments in AIFs.[12] Certain respondents noted that this translation issue, in their view, has resulted in a situation where UCITS management companies assess only the 'risk diversification' (not asset segregation) requirements set out in the UCITS Directive[13]..

25. Respondents to the Call for Evidence highlighted the need for greater harmonisation in the way the UCITS rules are implemented into national law and applied by NCAs[14].

26. Against this background, ESMA invites the European Commission to give consideration to using directly applicable EU regulations in the area of UCITS, as done in other areas of EU financial law. The current legislative approach of using minimum harmonisation directives has its inherent limits in terms of the level of harmonisation and convergence that can be achieved in practice. Using directly applicable EU regulations going forward would aim to ensure a greater level of harmonisation across Member States, reduce technical complexities and compliance burdens for market participants and NCAs and thereby help to alleviate many of the unlevel playing field issues observed in the context of this technical advice.[15]

5 The concept of liquidity under the UCITS framework

27. The liquidity of assets is an essential feature of the UCITS framework[16]. This necessitates the ability to sell financial instruments at limited cost in an adequately short time frame[17] and in a manner that does not compromise the ability of the UCITS to comply with the obligation to redeem investors at their request[18]. Consequently, liquidity risk is understood as the risk that a position in

[12] Article 50(1)(e)(ii) of the UCITS Directive, which requires that: "*the level of protection for unit-holders in the other collective investment undertakings is equivalent to that provided for unit-holders in a UCITS, and in particular that the rules on asset segregation, borrowing, lending, and uncovered sales of transferable securities and money market instruments are equivalent to the requirements of this Directive*".

[13] Article 52 of the UCITS Directive.

[14] For further details, please see the summary of responses (Annex II).

[15] This advice is in line with the views expressed by the European Court of Auditors set out in its special audit report on investment funds (paragraph 24). This is also in line with the recommendations ESMA issued to the European Commission and EU co-legislators in the context of its position paper on EU capital markets.

[16] The framework gives great prominence to the concept of liquidity, which has been strongly enhanced during the last years, including the recent changes in the context of the AIFMD review. Liquidity has been key focus of ESMA's convergence activities over the past years, e.g. the 2020 CSA on UCITS liquidity risk management (ESMA34-43-880) and ESMA guidelines on liquidity stress testing in UCITS and AIFs (ESMA 34-39-897). Recently, in accordance with the mandate received in the AIFMD review, ESMA has developed draft regulatory technical standards to determine the characteristics and a set of Guidelines on the usage of LMTs for UCITS and open-ended AIFs, with a view to implementing liquidity risk management and mitigating financial stability risks.

[17] Article 4(1) of the UCITS EAD with reference to the definition of money market instruments, which includes the characteristic of those instruments being 'liquid', see Article 2(1)(o) of the UCITS Directive.

[18] Article 84(1) of the UCITS Directive sets out the general obligation for which a UCITS shall repurchase or redeem its unit at the request of any unit-holder. This obligation stems from the definition of a UCITS under Article 1(2)(b) of the UCITS Directive as an

the UCITS portfolio cannot be sold, liquidated or closed at limited cost in an adequately short time frame and that the ability of the UCITS to comply at any time with its obligation to redeem investors at their request.[19] Liquidity risk management therefore plays a central role in the UCITS framework as UCITS management companies need to monitor on an ongoing basis the ability of their UCITS to redeem investor at their request and in accordance with the redemption profile of the fund.

28. The large majority of respondents to the Call for Evidence stated that they see no merit in introducing additional provisions on the concept of liquidity under the UCITS framework. This was primarily explained by the fact that liquidity is a dynamic concept that can change over time or due to market conditions and is difficult to define through static criteria. Moreover, many respondents argued that the recent regulatory updates in the context of the AIFMD review and ESMA guidance have adequately strengthened the concept.

29. However, some respondents saw merit in ESMA developing a clear and standardised definition of "liquidity" and "liquid financial assets". These respondents argued that this should be included in ESMA's technical advice to the European Commission and through additional convergence measures to be adopted by ESMA.

30. ESMA agrees that the regulatory changes introduced following the AIFMD review and previously issued ESMA guidance, in particular the ESMA guidelines on liquidity stress testing, help to strengthen the concept of UCITS liquidity and liquidity risk management practices of market participants.

31. ESMA also agrees that liquidity is a dynamic concept as the financial instruments in which a UCITS can invest may widely vary in terms of characteristics and features. Their liquidity may also be affected by multiple factors and varies across different markets, periods and jurisdictions[20].

32. Notwithstanding this, ESMA has identified some areas where targeted improvements and clarifications can be achieved in the context of the UCITS EAD review, taking into account the feedback received from NCAs and stakeholders and the experiences from previous ESMA supervisory convergence work.

undertaking with units which are, at the request of holders, repurchased or redeemed directly or indirectly, out of those undertakings' assets.

[19] Article 3(8) of Directive 2010/43/EU.

[20] FSB Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds, 20 December 2023 (Recommendation 3).

Liquidity criteria

33. ESMA sees merit in providing additional clarifications on the criteria to be taken into account by UCITS management companies when assessing the liquidity of assets. This can be done following a principles-based approach, drawing on the criteria included in the CESR guidelines, which are already widely applied by UCITS managers.[21] Incorporating these criteria in the legal text of the UCITS EAD aims to provide greater clarity, legal certainty and convergence.

34. The criteria for the assessment of asset liquidity are various and cover characteristics such as market-depth, prices and costs, as well as more targeted factors (such as rating, volatility, sector of the issuer, etc.). Conversely, the criteria for the asset-level liquidity assessments do not contemplate the portfolio level of the liquidity assessment of the fund, which may include further elements (e.g. the redemption policy or the LMTs). The latter are, however, of equal importance and relevance to ensure adequate liquidity risk assessment of the overall portfolio of the UCITS. A range of criteria need to be taken into consideration for the liquidity analysis at both asset and portfolio levels, together with all the elements that compose the liquidity management system of the UCITS (see further in the sub-sections below).

35. The asset liquidity assessment should be performed on the basis of a minimum common list of criteria, as relevant to the asset being assessed. The fact that a financial instrument does not fulfil one or more criteria does not mean that it should be deemed automatically as 'less liquid' or even 'illiquid'[22]. There might be other factors, intrinsic to the security that could lead to a different determination (e.g. listing, type of instrument, different weight or relevance of the criteria depending on the instrument etc.). The assessment should consider not only current liquidity, but also reasonably expected or predictable changes to the liquidity profile. The assessment should consider both normal and stressed market conditions.

Liquidity assessments at asset and portfolio level

36. Relatedly, ESMA has observed divergent interpretations on the question whether the analysis of liquidity is required at the level of the individual assets and/or the aggregate portfolio. In light of this, the Call for Evidence aimed at gathering insights and views from stakeholder on this matter.

[21] CESR guidelines concerning eligible assets for investment by UCITS (CESR/07-44b).

[22] Guidance on the notions of 'liquid', 'less liquid' or 'illiquid assets' can be found in the aforementioned Recommendation 3 of the FSB Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds, 20 December 2023, page 15.

37. Many respondents argued that the liquidity has to be assessed at the aggregate fund portfolio level. These respondents concluded that UCITS investments in assets with limited liquidity are permissible as long as the overall portfolio composition ensures a sufficient level of liquidity to redeem investors at their request and in accordance with the fund redemption profile. Some of these respondents pointed to certain legal provisions or ESMA guidance to support their view[23].

38. ESMA is not persuaded by the idea that the liquidity assessment should be performed solely at portfolio level. Although there is an important interrelation, ESMA is of the view that the liquidity assessment to determine the eligibility of an individual assets is to be distinguished from the broader liquidity risk management at portfolio level[24]. The former is a criterion to assess that an asset has the necessary qualities or satisfies the necessary conditions to be deemed investible for UCITS. The latter represents the overall system put in place by the UCITS management company in order to ensure on an ongoing basis the ability to redeem investors at their request. While the eligibility assessment on liquidity is performed at asset level, the liquidity risk management occurs at portfolio level. Despite their different purposes, both are equally important to ensure UCITS can comply with their obligations to redeem investors at their request. The references made by stakeholders to legal provisions and ESMA guidance relate in fact to liquidity risk management obligations and not the eligibility assessments.

39. ESMA is therefore of the view that the legal text should be amended to clarify this distinction.

Presumption of liquidity and negotiability

40. Another area where ESMA sees room for improvement relates to the presumption of liquidity and negotiability set out in the UCITS EAD for listed instruments.[25]

41. The majority of market participants responding to the Call for Evidence supported maintaining the current provisions on the presumption of liquidity. They argued that it is a well-functioning and reliable tool, helpful in particular in relation to recently issued securities where there is a lack of relevant (historical) data. These respondents also cautioned against the removal of the presumption of liquidity that may result in increased costs for funds due to the need of performing more

[23] Reference was made to (1) Article 40(3) of Directive 2010/43, (2) ESMA's guidelines on liquidity stress tests in UCITS and AIFs, and (3) recent changes under the AIFMD review and (4) Level 2 measures and guidance introducing further rules regarding LMTs and liquidity risk management, as mentioned in footnote 16.

[24] This is reflected also in Article 2(1)(a) of the UCITS Directive which clarifies that UCITS are undertaking with the sole object of collective investment in *transferable securities* or in *other liquid financial assets referred to in Article 50(1)* of the Directive, whereas Article 2(1)(b) of the UCITS Directive clarifies that UCITS are undertakings *with units which are, at the request of holders, repurchased or redeemed, directly or indirectly, out of those undertakings' assets.*

[25] Second subparagraph of Article 2(1) for transferable securities and Article 4(3) of the UCITS EAD for money market instruments.

detailed or burdensome analysis. However, these respondents did not deliver any data to quantify or assess the potential impact of the expected cost implications.

42. Given the importance that the UCITS framework attaches to ensuring the liquidity of UCITS and in light of the changed market environment since the introduction of the UCITS EAD in 2007, ESMA is of the view that the liquidity and negotiability of assets cannot be presumed but should always be assessed ex ante and on an ongoing basis.

43. The 2020 CSA on UCITS liquidity risk management demonstrated that, in some cases, UCITS managers placed an overreliance on the presumption granted in the UCITS EAD when investing in listed securities that might not have displayed sufficient liquidity. In addition, in the absence of explicit legal obligations for dedicated follow-up liquidity assessments on securities that were presumed liquid at the initial investment stage, some ongoing controls were insufficient as they were not based on reliable data on volumes e.g. past volumes, number of brokers and trading size. The exercise also identified cases where the presumption was applied to all assets, including financial instruments which were not admitted to or dealt in on a regulated market. In those cases, no pre-investment liquidity analysis and forecasts were performed for the relevant assets as the UCITS management companies misread the relevant provision.

44. ESMA therefore sees merit in clarifying in the UCITS EAD that the listing of an instrument is indeed an important criterion when assessing and forecasting the liquidity and negotiability of assets. However, it is not the only criterion and may not lead UCITS management companies to automatically presume the current and future liquidity and negotiability of their investments.

6 Transferable securities definition

45. The definition of transferable securities was introduced by UCITS III as follows:

    1) shares in companies and other securities equivalent to shares in companies (debt securities);

    2) bonds and other forms of securities debt (debt securities);

    3) any other negotiable securities which carry the right to acquire any such transferable securities by subscription or exchange.[26]

[26] Article 2(1)(n) of the UCITS Directive.

46. UCITS III did not provide for a further classification of transferable securities or criteria to be met in order to be eligible. These were first introduced by the UCITS EAD[27], drawing on work performed by CESR[28].

47. A number of respondents to the Call for Evidence expressed the view that the transferable securities criteria set out in the UCITS EAD are sufficiently clear and adequate.

48. Other respondents argued that the criteria should be updated with the view to aligning the UCITS framework with the market, technological and regulatory developments that have taken place since the adoption of the UCITS EAD.

49. Some stakeholders pointed to divergences in the way these criteria are applied and the need to ensure a level playing field. ESMA noted from the survey carried out with NCAs that interpretations of these criteria and practical outcomes varied significantly, resulting in divergences on all asset classes covered in the survey.

50. A couple of respondents to the Call for Evidence saw merit in aligning the definition of transferable securities in the UCITS Directive with the one provided in the MIFID II[29].

51. Several respondents supported the deletion of the criterion for which the risks of the financial instruments should be adequately captured by the risk management process of the UCITS, arguing that this is not pertinent for the eligibility of assets and that there have been divergent NCA interpretations of this criterion.[30]

52. One respondent suggested discarding the criterion that the acquisition of the instruments needs to be consistent with the UCITS' investment objectives, the investment policy, or both[31], arguing that this is more appropriate for the portfolio management function of the UCITS management company to assess rather than having this as a criterion to determine what is an eligible transferable security.

53. Some respondents recommended more targeted clarifications, suggesting amendments to certain criteria such as *reliable valuation*, *negotiable* and *freely transferable*[32].

[27] Notably in Article 2 of the UCITS EAD.
[28] CESR technical advice to the European Commission on clarification of definitions concerning eligible assets for investments of UCITS (CESR/06-005).
[29] Article 4(1)(44) of the MIFID II.
[30] Article 2(1)(g) of the UCITS EAD.
[31] Article 2(1)(f) of the UCITS EAD.
[32] Those respondents, in particular asked for the following clarifications: (1) the 'reliable valuation' should include a minimum frequency for the valuation, whose sources of information should be independent from the management company; (2) the 'negotiable' and 'freely transferable' criteria should be aligned with the equivalent ones set out in Article 4(1)(44-45) and in Article 51(1) of MIFID II (i.e. 'negotiable on the capital market' and 'freely negotiable').

54. ESMA is of the view that further clarification and ideally simplifications are needed to improve clarity and supervisory convergence going forward.

55. ESMA agrees that there is merit in ensuring a greater alignment between the transferable securities concepts used in the UCITS framework and MIFID II. At the same time, it is worth noting that the criteria set out in the UCITS EAD serve a more specific purpose, namely to ensure clarity and convergence on their eligibility for UCITS investments and such an approach will require careful calibration.

56. ESMA acknowledges that the criterion *adequately capture* risks might be too broad and there are different interpretations on how to apply it in practice. Some NCAs believe this requires that adequate policies and procedures are put in place or updated to manage the risks stemming from the potential investment and that the UCITS management company has staff with the required asset-specific knowledge and experience. Other NCAs rather interpret this criterion to require an assessment of the *inherent* risks of the asset itself. In particular, the latter approach has the propensity to create divergent outcomes since risk and economic assessments and forecasts on the same asset may vary significantly among market participants and NCAs. Depending on the data sources, risk metrics used and individual risk appetites, market participants and NCAs might therefore reach very different conclusions on whether an asset is inherently "too risky" to be adequately risk managed by a UCITS.

57. In this context, it is important to note that three years after the adoption of the UCITS EAD, the UCITS Directive was complemented with a comprehensive set of Level 2 requirements including on risk management.[33] Inter alia, these requirements oblige UCITS management companies to:

- ensure a high level of diligence in the selection and ongoing monitoring of investments;

- have adequate knowledge and understanding of the assets in which the UCITS are invested;

- ensure investment decisions on behalf of the UCITS are carried out in compliance with the objectives, investment strategy and risk limits;

- take into account the nature of a foreseen investment, to formulate forecasts and perform analyses concerning the investment's contribution to the UCITS portfolio composition, liquidity and risk and reward profile before carrying out

[33] Directive 2010/43/EU.

the investment. The analyses must only be carried out on the basis of reliable and up-to-date information, both in quantitative and qualitative terms.[34]

58. Therefore, ESMA sees merit in clarifying this criterion by linking it to the obligation of UCITS management companies to comply with the aforementioned requirements, meaning that the risks of the asset class, to be eligible for UCITS, shall be fully understood, managed and thus incorporated in the risk management procedures as described above.

59. ESMA sees also merit in clarifying the criterion of consistency of investments with the investment objectives or the investment policy, or both by way of linking the assessment with the due diligence obligations pursuant to the relevant Level 2 UCITS provisions.[35]

60. ESMA agrees that the "*reliable valuation*" criterion may benefit from further clarifications.[36] This is because ESMA considers it important to ensure that the valuation occurs on a periodic basis. This periodic basis should be assessed taking into account the subscription and redemption frequency set out in the fund documentation. In this context, NCAs reported issues where market participants used a valuation for securities which was based on market prices of listed transferable securities, but with illiquid exchange prices (e.g. market with little or no exchange of the security). As a result, a lack of liquidity creates a material risk of an inappropriate valuation. The UCITS EAD valuation-related criteria should therefore be clarified by specifying that the valuation assessment is supported by adequate liquidity of the market and adequate sources of information (e.g. multiple broker quotes).

7 UCITS exposures to alternative assets

61. The UCITS Directive sets out that UCITS have the *"sole object"* of investing in transferable securities or *"*other *liquid* financial assets*"* and provides an exhaustive list of traditional asset classes, in particular transferable securities and money market instruments.[37]

62. Investments in precious metals or certificates representing them are explicitly prohibited in the UCITS Directive.[38]

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34 Article 23 of Directive 2010/43/EU.
35 In the legislative draft proposal, Article 2(1)(f) of the UCITS EAD is linked with Directive 2010/43/EU.
36 Article 2(1)(c) of the UCITS Directive.
37 Article 1(2)(a) in conjunction with Article 50(1) of the UCITS Directive.
38 Article 50(2)(b) of the UCITS Directive.

63. Investments in financial derivatives were not permitted under the original UCITS I Directive.

64. However, the UCITS III Directive in 2002[39] expanded the list of eligible assets, in particular by introducing the possibility to invest in financial derivatives. Notwithstanding this, the UCITS Directive does not allow for derivatives on ineligible asset classes, meaning that e.g. derivatives on alternative assets are not permitted.[40]

65. The UCITS EAD in 2007 introduced the concept of "transferable securities *backed by*, or *linked* to the performance of" assets which are ineligible for direct investment pursuant to the narrow list of eligible assets set out in the UCITS Directive.[41]

66. The relevant provisions and their distinction from "transferable securities embedding derivatives"[42] have been subject to divergent interpretations among NCAs and market participants.

67. Moreover, market practices as well as the number and complexity of financial instruments have evolved since the adoption of the UCITS EAD in 2007. Market participants have developed a variety of sophisticated or structured financial instruments which meet different investor needs, in many cases involving the transfer of risks and/or liquidity transformation. These financial instruments wrap the assets (which may be illiquid) or the 'event' related to the risk to be transferred, providing an indirect exposure to them, and in many cases are listed and actively traded on regulated markets, and so meet the requirements of an eligible asset. Additionally, entirely new asset classes (e.g. crypto-assets) have emerged and gained popularity among some investors, including retail investors.

68. The insights and data gathered from NCAs and stakeholders show divergence with respect to the questions whether, when and what type of indirect exposures to various alternative assets are permitted[43].

69. These divergences pose the question how the future rules could be clarified or amended to ensure supervisory convergence and investor protection.

70. Additionally, it is worth bearing in mind that in 2011, four years after the UCITS EAD, EU legislators adopted the AIFMD, which became applicable as from 2013. The AIFMD framework is complemented by some product-specific EU

[39] Directive 2001/107/EC and Directive 2001/108/EC.
[40] Article 50(1)(g) of the UCITS Directive.
[41] Article 2(2)(c) of the UCITS EAD.
[42] Article 10 of the UCITS EAD.
[43] For an overview of the divergences among Member States, please see Annex III.

regulations for certain types of AIFs, namely EuVECA, EuSEF and ELTIF. It is therefore important to acknowledge that the AIFMD framework harmonised EU rules for collective investments in alternative assets. This in turn raises the question whether UCITS are the right vehicle for making large-scale investments in alternative assets as this would risk conceptually blurring the lines between UCITS and AIFs.

Look-through to the underlying asset

71. In light of this, ESMA asked in the Call for Evidence whether there is need to apply a look-through approach to determine the UCITS eligibility of securities. Similar to what is already prescribed in the UCITS Directive for investments in financial derivatives where exposures to ineligible assets are not permitted, a look-through to the level of the underlying asset would aim to ensure that UCITS may not gain exposures to ineligible assets wrapped in a securities form (e.g. by using delta-one instruments, ETNs or ETCs providing exposures to alternative assets).

72. The majority of respondents rejected a look-through, arguing that indirect UCITS exposures to alternative assets would provide for benefits in terms of risk diversification and fund performance whilst not demonstrating any investor protection issue. In some cases, these respondents provided additional data to evidence a past positive performance and/or low correlation of certain alternative assets or instruments providing exposures to them. Annex IV provides an overview of the data collected by ESMA and its risk/economic analysis on various relevant asset classes.

73. Some respondents, including an association representing consumers, supported the application of a look-through approach. They argued that it would help achieving an intellectually coherent policy approach and more convergent application of the UCITS eligible assets rules. This would aid to ensure a level playing field across Member States and improve investor protection.

74. Some respondents supported a middle way, namely to follow a look-through approach to prevent significant indirect UCITS exposures to alternative assets, while leaving some room for limited exposures with a view to improving risk diversification and fund performance.

75. ESMA agrees with the latter view. Not applying any form of look-through would risk allowing UCITS to gain significant exposures to alternative assets, in turn blurring the lines between UCITS and AIFs. In ESMA's view, indirect exposures to alternative assets raise significant challenges in terms of risk management and valuation. Moreover, such investments may also raise challenges and risks in terms of the transparency towards (retail) investors, who might expect UCITS to

invest primarily in traditional transferable securities and not instruments that provide significant exposures to alternative assets.

76. In this context, ESMA noted divergent NCA supervisory practices and policy preferences concerning the application of a look-through approach. As a consequence of this, there is no level playing field across EU Member States concerning the UCITS eligibility of all relevant asset classes covered (as illustrated under Annex III). With a view to ensuring supervisory convergence among NCAs and a level playing field for market participants across the EU, ESMA therefore invites the European Commission to clarify the applicability of the look-through approach.

77. Against this background, the draft legislative proposals put forward by ESMA[44] suggest the application of a look-through approach in the UCITS EAD, meaning that asset classes should not be backed by, or linked to the performance of, other assets which may differ from those referred to in Article 50(1) of the Directive 2009/65/EC[45]. To avoid any circumventions, ESMA expects that the look-through approach is performed to the level of the final underlying of the investment. For the avoidance of doubt, the look-through approach does not affect investments in traditional company shares or bonds[46], but rather aims to limit the use of instruments (e.g. certain delta-one instruments, ETNs, ETCs, AIFs etc.) that provide for exposures to alternative assets. Further guidance on the expected implications of the look-through approach is provided under Annex V.

78. ESMA is of the view that the well-established AIFMD framework including the product-specific EU regulations (EuVECA, EuSEF, ELTIF) might provide for better vehicles for collective investments in alternative assets.

79. ESMA acknowledges that many market participants prefer the UCITS label as it provides for a retail marketing passport, whereas the rules on marketing of AIFs to retail investors are not yet harmonised at EU level, but left to national discretion.[47] Conversely, the ELTIF Regulation provides for a retail passport[48], while the EuVECA/EuSEF Regulations allow only for marketing to certain categories of high-net worth individuals[49].

80. In light of the potential appetite of some retail investors to gain exposures to alternative assets through a collective investment vehicle and the possible

[44] See Annex VI.
[45] Although the precise formulation of the look-through approach may vary depending on the asset classes and the article of the UCITS EAD.
[46] Including shares or bonds from conglomerate holding companies (e.g. Berkshire Hathaway). There is no expectation to apply a look-through approach in those cases.
[47] Article 43 of the AIFMD.
[48] Chapter V of the ELTIF Regulation.
[49] Article 6 of the EuVECA and EuSEF Regulations.

benefits of some of these asset classes from a broader risk/economic perspective (see Annex IV), the question arises whether there would be merit in giving consideration to harmonising the currently divergent national rules on the marketing of AIFs to retail investors. Subject to further in-depth analysis in a future workstream, considerations could be given to an EU harmonisation of the retail distribution rules for certain AIFs and investment strategies. In that case, consideration would also need to be given to harmonising the product rules, strengthening the existing notifications for cross-border activities under the AIFMD framework, the equal treatment of investors and supervisory powers of NCAs where such funds are marketed.

81. Another and possibly mutually inclusive option would be to explore in a separate workstream the creation of a new EU harmonised AIF product (next to EuVECA, EuSEF and ELTIF) dedicated to investments in those asset classes that would be deemed not eligible under the proposed revised UCITS framework. This could enable investors to safely access the desired investment strategies and products within another sound regulatory framework with adequate investor protection safeguards tailored to the product-specific risks, as opposed to accessing them via unregulated or less-regulated products. Such AIF product might address the potential investor demand for a "semi-liquid" product situated between UCITS and ELTIF, e.g. focused on private market or (re)insurance-type of asset classes[50], taking into account broader policy considerations in terms of their potential added value for the purposes of the SIU.

82. ESMA therefore invites the European Commission to give consideration to these policy options, which would in turn alleviate the concerns raised by some stakeholders on the adverse impacts of applying a look-through approach.

83. By way of example, many stakeholders highlighted the benefits of investments in commodities, catastrophe bonds and crypto-assets (see Annex IV for data and ESMA's risk/economic analyses in this respect). However, conceptually, ESMA is of the view that large-scale investments in such alternative assets with their idiosyncratic risks would be better done under the AIFMD framework given its more suitable risk management, valuation and safekeeping provisions for such asset classes.

84. In terms of market impact, based on the NCA, stakeholder and commercial data available to ESMA (see further under Annex IV), the application of the look-through would concern only a relatively small portion of the total UCITS net assets on an aggregate basis, well below 10%. Those UCITS that are currently having minor indirect exposures to alternative assets would therefore remain largely

[50] For instance, where the European Commission would deem it appropriate in light of the SIU ambitions, certain AIFs focused on investments in private equity or cat bonds.

unaffected as they could benefit from the proposed exemption from the look-through within the 10% limit described below.

85. Based on the available data, the application of the look-through approach as proposed under Annex VI would therefore mainly impact a relatively small number of UCITS that are significantly (i.e. beyond 10%) or even predominantly indirectly invested in alternative assets.[51] For those types of investment strategies and products, ESMA recommends the use of the AIFMD label in the future for the reasons explained above. To alleviate the concerns about possible adverse market impacts (despite the relatively small numbers based on the available data), ESMA recommends in the sections below also granting sufficiently long transitional provisions.

10% limit for indirect UCITS exposures to alternative assets

86. The current text of the UCITS Directive includes a 10% limit for UCITS investments in transferable securities or money market instruments other than those meeting the requirements set out therein.[52] Commonly, this 10% limit is referred to as 'UCITS trash ratio', while noting that the UCITS Directive does not use this term and ESMA is of the view that it risks creating a misperception of the purpose of it.

87. Originally, this provision was introduced to allow for some limited investments in certain types of securities and debt instruments that might not meet all the criteria set out in the UCITS Directive, in particular unlisted securities and certain types of debt instruments that display characteristics similar to the ones set out in the UCITS Directive.[53]

88. Given the divergent interpretations on how to apply this 10% limit, ESMA issued an opinion in 2012, clarifying that it does not cover investments in collective investment undertakings.[54]

89. There might be merit in leaving room for some limited indirect exposures to alternative assets with a view to improving risk diversification and generation of returns from uncorrelated assets.

90. ESMA therefore proposes broadening the wording of the relevant UCITS provision.[55] This implies that the 10% limit should be extended to all eligible asset

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[51] By way of example, the data available to ESMA shows that there is a small number of thematic highly concentrated funds invested in cat bonds (72), normally marketed to professional investors.
[52] Article 50(2)(a) of the UCITS Directive.
[53] Commentary on the provisions of Council Directive 85/611/EEC of 20 December 1985 - "Towards a European market for the undertakings for collective investment in transferable securities" (paragraphs 81 ff).
[54] ESMA opinion on Article 50(2)(a) of Directive 2009/65/EC (ESMA/2012/721).
[55] Article 50(2)(a) of the UCITS Directive.

classes listed in the UCITS Directive[56], including financial derivative instruments and units or shares of open-ended AIFs Investments made under this 10% limit would be exempted from the look-through approach.

91. UCITS need to assess the liquidity of all transferable securities including those acquired under the 10% limit[57]. The assessment should be done both at asset level and portfolio-level. The UCITS shall take into account the specificities of the relevant asset class, in particular, with regard to the application of the asset-based criteria[58] set out for the liquidity assessment of transferable securities.[59] The assessment shall take into account the liquidity management system in place and the liquidity of the financial instrument shall not compromise the ability of the UCITS to comply with the unit-holders' redemption requests[60].

92. Importantly, while investments made within the 10% limit do not require the application of the look-through approach, all the other conditions and criteria set out in the UCITS EAD for the eligibility of the asset class (e.g. on risks, liquidity or valuation) continue being applicable. The UCITS management company should give great prominence and be aware of the overall risks related to the investments included in the 10% limit, the liquidity of the instruments, as well as the possible impacts of the underlying on the prices of the direct exposure.

93. In this context, ESMA highlights the importance of ensuring adequate disclosures in the fund rules or in the instrument of incorporation, as well as in its prospectus and marketing documents, ensuring that (retail) investors are able to understand the benefits and risks associated with the envisaged investments and how those risks are managed.

Expansion of the list of eligible assets set out in the UCITS Directive

94. A number of stakeholders have suggested to enlarge the list of eligible assets for UCITS to explicitly allow for investments in certain alternative asset classes, pointing in particular to their past positive performance and low correlation with traditional assets. This related in particular to commodities, crypto-assets and catastrophe bonds.

95. ESMA highlights that the Level 2 UCITS EAD cannot expand the list of eligible assets set out in the Level 1 UCITS Directive by explicitly referring to specific asset classes such as commodities, crypto-assets or catastrophe bonds. In the

[56] Article 50(1) of the UCITS Directive.
[57] See Article 2(2a) of the UCITS EAD in the legislative proposals (Annex VI).
[58] Article 2(1)(b) of the UCITS EAD in Annex VI.
[59] Considering also the differences that may exist between the different types of transferable securities eligible under Article 50(1)(a) to (d) of the UCITS Directive and the transferable securities eligible under Article 50(2)(a) of the UCITS Directive.
[60] Article 84 of the UCITS Directive.

case of commodities, this would even directly conflict with explicit requirements in the UCITS Directive that UCITS shall not invest in precious metals and certificates representing them.[61]

96. The UCITS EAD provides for clarifications on certain key concepts and definitions used in the UCITS Directive but cannot override or amend the list of eligible assets set out in the UCITS Directive. The list of eligible asset classes set out in the UCITS Level 1 Directive is a constituent element of the UCITS framework and it therefore goes beyond ESMA's present mandate on the EAD review which is limited to proposing clarifications set out in the UCITS Level 2 EAD on the key definitions and criteria against which the eligibility of an asset is assessed. To ensure consistency between the policy proposals put forward with respect to the Level 2 UCITS EAD and the related Level 1 provisions set out in the UCITS Directive, Annex VI includes a limited number of legislative drafting suggestions also with respect to the latter.

97. ESMA refrained from putting forward policy proposals for larger-scale Level 1 changes for any possible expansion or restriction of the list of *directly* eligible asset classes set in the UCITS Directive[62]. Any such expansion or restriction would need to be carefully assessed in separate future workstream[63].

98. This is also because any possible Level 1 amendments in this respect might have broader implications for the overall UCITS brand and calibration of its rules. By way of example, amending the UCITS Level 1 text to allow for *direct* investments in commodities or crypto-assets such as Bitcoin, as supported by many respondents to the Call for Evidence, might trigger the need for broader Level 1 legislative changes (including, but not limited to, the rules on diversification, risk management, disclosures, valuation and safekeeping), whereas the existing UCITS regulatory framework is designed for investments in transferable securities, as indicated already in its name (Undertakings for Collective Investment *in Transferable Securities*).

99. In light of the European Commission request to receive data and analyses on the know exposures as well as the risks and benefits of UCITS gaining exposures to a variety of relevant asset classes, Annex IV provides an overview of the data available to ESMA and provides risk/economic analyses in relation to those assets.

[61] Article 50(2)(b) of the UCITS Directive.
[62] Article 50(1) of the UCITS Directive.
[63] In this context, Level 1 clarifications could also be provided on the direct or indirect eligibility of new asset classes such as crypto-assets and the interaction with MiCA.

100. The European Commission may use this data and analyses in the context of any future review of the UCITS Directive. However, consistent with the considerations above, ESMA cautions that expanding the Level 1 list of eligible assets to enable direct UCITS investments in alternative assets might conceptually blur the lines between UCITS and AIFs. Permitting UCITS to directly invest in alternative assets would also raise new regulatory challenges that would need to be addressed carefully with a view to ensuring an adequate level of investor protection, in particular to adapt valuation, risk management, disclosures and safekeeping requirements accordingly.

<u>Transitional clause</u>

101. To alleviate the impact of a look-through approach on the (albeit relatively small) number of UCITS having indirect exposures beyond 10% to alternative assets, ESMA advises the European Commission to ensure there is an appropriate transitional period. Once the revised EAD enters into application, the concerned UCITS with significant indirect exposures to alternative assets (beyond the 10% limit[64]) should be given enough time either to (1) reduce their exposures to alternative assets or (2) to liquidate and instead set up an AIF.

102. Conversely, ESMA advises against grandfathering rules as these might risk creating a bifurcation of the UCITS brand (UCITS authorised *before* the application of the revised EAD vs. UCITS authorised *afterward*), which may persist for a long time/indefinitely and thereby increase the complexity of the overall regulatory regime.

103. Should the European Commission see merit in amending the list of UCITS eligible assets in the UCITS Level 1 Directive, harmonising the rules on the distribution of AIFs to retail investors or creating a dedicated AIF product as described above, ESMA would see merit in aligning the transitional period with the time needed for the entry into effect of the new provisions to ensure a smooth transition for market participants and investors. In any case, ESMA invites the European Commission to grant a sufficiently long transitional period to ensure relevant market participants can adapt their business practices.

8 Money market instruments

104. Money market instruments are defined in the UCITS Directive, UCITS EAD, MMFR and MIFID II.[65] The definitions set out in these legal acts diverge partially,

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[64] 50(2)(a) of the UCITS Directive.

[65] Article 2(1)(o) of the UCITS Directive, Articles 3 and 4 of the UCITS EAD, Article (2)(2) of the MMFR and Article 4(1)(17) of MIFID II.

both for reasons related to the time misalignments and for the different purposes of the respective acts[66].

105. Although the majority of respondents to the Call for Evidence have not encountered any significant issues, several respondents pointed to some potential misalignments among the different legal acts.

106. Some respondents noted that the UCITS EAD[67] is understood as requiring to reclassify a financial instrument as a money market instrument when it meets one of the criteria laid down therein[68]. According to these respondents, the consequence of this reclassification is that some kinds of securities, such as high-yield bonds, may fall within the classification of money market instruments even though they may not have the characteristics of money market instruments. Furthermore, according to some respondents, the reclassification of an instrument during its lifespan could be challenging from a depositary oversight perspective. Many other respondents also highlighted the existence of divergent interpretations among Member States with regard to the classification of specific asset classes, such as loans, as money market instruments.

107. Moreover, a few respondents questioned the consistency between the UCITS framework on eligibility with the MMFR. Some of them argued that reverse repurchase agreements should be considered as money market instruments for the purpose of UCITS EAD as they are very liquid and secure financial assets and are considered as an eligible asset for MMFs, provided that the requirements under the MMFR, which set out various conditions[69], are fulfilled.

108. ESMA acknowledges the issues raised with respect to the notion of money market instruments. Money market instruments are transferable instruments normally dealt in on the money market and include treasury and local authority bills, certificates of deposits, commercial papers, bankers' acceptances, and

[66] Article 4(1)(17) of the MIFID II defines the money market instruments as follow: "*'money-market instruments' means those classes of instruments which are normally dealt in on the money market, such as treasury bills, certificates of deposit and commercial papers and excluding instruments of payment*". Article 2(1)(o) of the UCITS Directive states that *'money market instruments' means instruments normally dealt in on the money market which are liquid and have a value which can be accurately determined at any time*. Article 3 of the UCITS EAD clarifies what are the features of instruments normally dealt in on the money market under Article 2(1)(o) of the UCITS Directive. Article 2(2) of the MMFR, even though it was adopted after the MIFID II, defines money market instruments by means of reference to Article 2(1)(o) of the UCITS and Article 3 of the UCITS EAD.
[67] Article 3(2) of the UCITS EAD states: *2. The reference in Article 1(9) of Directive 85/611/EEC to money market instruments as instruments normally dealt in on the money market shall be understood as a reference to financial instruments which fulfil one of the following criteria: (a) they have a maturity at issuance of up to and including 397 days; (b) they have a residual maturity of up to and including 397 days; (c) they undergo regular yield adjustments in line with money market conditions at least every 397 days; (d) their risk profile, including credit and interest rate risks, corresponds to that of financial instruments which have a maturity as referred to in points (a) or (b), or are subject to a yield adjustment as referred to in point (c).*
[68] Thus, a bond classified as an eligible financial security in accordance with Article 2 of UCITS EAD, may fall into the qualification as money market instrument when its residual maturity is under 397 days.
[69] Listed in Article 15 of the MMFR.

medium- or short-term notes[70]. Money market instruments are usually understood as securities which comply with maturity limits (medium to short-term), liquidity requirements, and are considered of a high credit quality[71].

109. The UCITS Directive defines money market instruments with regard to their characteristics, namely (1) being dealt in on the money market; (2) being liquid; (3) having a value which can be accurately determined at any time. The UCITS Directive also provide a list of money market instruments which are eligible[72], while the UCITS EAD clarifies the criteria to be used when assessing the eligibility of money market instruments for UCITS. The MMFR defines money market instruments by means of reference to the notions set out in the UCITS Directive and in the UCITS EAD (see above) and provides a set of criteria that money market instruments shall fulfil to be deemed eligible for the purpose of the MMFR as well[73].

110. ESMA agrees that some clarity is needed with regard to the possibility that some instruments could be reclassified as money market instruments during their lifespan. The qualification or reclassification of securities as money market instruments during their lifespan should be carefully assessed, taking into consideration the features expected from a money market instrument. To this end, ESMA is of the view that the relevant provision in the UCITS EAD[74] should not be viewed as an obligation to automatically classify an instrument with a maturity of no more than 397 days as a money market instrument. The latter may not suffice to qualify an instrument as money market instrument and other elements should be taken into consideration, such as: the liquidity of the instrument[75]; the risk profile of the instrument, including the credit quality of the issuer and of the instrument as well as the interest rate risks.

111. In light of this, ESMA proposes some recalibration of the criteria set out in the UCITS EAD (notably the risk management criterion and liquidity assessments)[76]. The criteria should also guide the qualification of specific instruments as money market instruments for the purpose of the UCITS eligibility assessment.

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[70] Recital 21 of the MMFR. An equivalent definition was also provided in Recital 4 of the UCITS III Directive, which amended the Directive 85/611/EEC with regard to investments in UCITS.
[71] This is particularly clear in the MMFR, where Articles 19 to 22 establish a credit quality assessment of the money market instrument as well as the issuer of the instrument. See also recital 21 of the MMFR.
[72] Money market instruments dealt in on a regulated market in accordance with Article 50(1)(a)-(d) of the UCITS Directive; money market instruments other than those dealt in on a regulated market which meet the criteria set by Article 50(1)(h) of the UCITS Directive; and money market instruments that do not fall in one of these two categories are eligible assets but are subject to a 10% ceiling along with other instruments in accordance with Article 50(2)(a) of the UCITS Directive.
[73] Article 10 of the MMFR.
[74] Article 3(2) of the UCITS EAD.
[75] To this end, the CESR guidelines concerning eligible assets for investment by UCITS (CESR/07-44b) clarify the criteria for the liquidity assessment of money market instruments under the UCITS framework (paragraph 19).
[76] Article 3 and 4 of the UCITS EAD. For further details, please see the legislative proposal.

112. Some respondents to the Call for Evidence argued that the UCITS Directive should provide for a derogation to the risk diversification limits where MMFs (and, more in general, money market instruments) are held for cash or collateral management purposes. According to these respondents, those instruments are liquid and represent a valid alternative – with higher yields – to cash held in accounts.

113. ESMA acknowledges that MMF investments are by design and nature a liquid exposure for UCITS. However, ESMA has some reservations to propose to the European Commission to lessen the rules on investment limits set out for these instruments in the UCITS Directive[77]. This assessment is based on the current framework of MMFs and should be reviewed in the light of the possible future amendments to the MMFR[78].

9 Financial derivative instruments

114. Since 2002, derivatives have been allowed for UCITS investment and hedging purposes[79]. While investments in derivatives have the potential to allow UCITS to access a wide range of strategies and alternative assets, it exposes UCITS to the inherent risks of these instruments. To this end, the UCITS legislative framework has specific rules in place on the management of risks arising from derivatives transactions, in particular OTC derivatives with a view of ensuring investor protection[80].

115. The UCITS EAD aims at providing greater legal certainty regarding the eligibility of financial derivatives instruments and tackles various aspects of the eligibility of these instruments, namely: (1) financial derivative instruments which are to be

[77] The 2007/2008 Global Financial Crisis and the more recent episodes of market stress displayed that MMFs may be subject to two broad types of vulnerabilities that can be mutually reinforcing: they are susceptible to sudden and disruptive redemptions, and they may face challenges in selling assets, particularly under stressed conditions (see FSB Final Report Policy Proposals to Enhance Money Market Fund Resilience as well as the Final Report on ESMA opinion on the review of the Money Market Fund Regulation (ESMA34-49-437)). In addition, MMFs, as other investment funds, are not eligible for the protection provided to bank deposits and, as securities, they are exposed to credit risks. The FSB final report illustrates the impacts that the 2008 and the 2020 crisis provoked to MMFs. In both episodes, although the sources of stress were different (credit crisis in 2008, pandemic-related uncertainties in 2020), large redemptions in MMFs seemed to have contributed to sharp increases in the cost of short-term funding for borrowers and a reduction in availability of some types of short-term funding, such as term CP and negotiable CDs, including USD-denominated instruments issued by non-US banks. In both the 2007/2008 and 2020 stress episodes, redemptions from MMFs did not abate until central banks and governments in several jurisdictions intervened in a decisive and substantial way.

[78] In 2022, ESMA, issued an opinion on proposed reforms to the MMFR. The proposals aim at improving the resilience of MMFs by addressing in particular liquidity issues and the threshold effects for constant net asset value (CNAV): Final Report on ESMA opinion on the review of the Money Market Fund Regulation (ESMA34-49-437).

[79] See recital 11 of the UCITS III Directive.

[80] Article 50(1)(g) of the UCITS Directive establishes the conditions for the eligibility of financial derivative instruments, including the application of a look-through approach. Article 51(3) of the UCITS Directive requires that the global exposure relating to derivative instruments of a UCITS shall not exceed the total net value of its portfolio. Where financial derivatives instruments are used in the context of EPM techniques, those conditions and requirements apply in addition to the specific ones provided for the employment of EPMs.

considered as liquid financial instruments[81]; (2) eligibility criteria for derivatives on financial indices[82]; (3) the subcategory of transferable securities and money market instruments which embed a derivative instrument[83]. The latter point is closely related to the categorisation of transferable securities which are backed by, or linked to, the performance of other assets.

116. For the sake of clarity, the current framework allows UCITS to gather exposure to derivatives either through a direct investment in financial derivative instruments or transferable securities embedding a derivative[84]. It worth mentioning that the UCITS EAD requires the application of rules on derivatives regardless of the fact whether the exposure to derivatives is direct or embedded within a transferable security. Among other things, already under the current rules, this implies in both cases the application of a look-through approach as well as all the safeguards set out for the investment in such asset class.[85] However, the distinction between transferable securities (1) backed by or linked to the performance of other assets and (2) embedding derivatives has raised interpretational questions in the past. This distinction is important since some NCAs and stakeholders took the position that a look-through approach is necessary only in the case of transferable securities embedding a derivative, but not in the case of transferable securities backed by or linked to the performance of other assets.

117. Some respondents to the Call for Evidence argued that the definition of "embedding" a derivative is sufficiently clear. Conversely, others raised issues related to the complexity and ambiguity of this concept, advocating for a simplification of the rules. Several respondents also saw merit in clarifying this concept by developing a list of instruments[86]. Furthermore, a consumer association warned that the average investor may not be able to understand the risks associated with the exposure to derivatives, recommending that investments in embedded derivatives should be limited to hedging purposes.

118. The same questions were raised with regard to delta-one instruments, where ambiguities exist whether these fall into the category of (1) transferable securities

[81] Article 8 of the UCITS EAD.
[82] Article 9 of the UCITS EAD.
[83] Article 2(2)(c), Article 2(3), and Article 10 of the UCITS EAD.
[84] Article 2(3) and Article 10 of the UCITS EAD. In the current framework, a transferable security or a money market instrument shall not be regarded as embedding a derivative where it contains a component which is contractually transferable independently of the transferable security or the money market instrument. Such a component shall be deemed to be a separate financial instrument (Article 10(3) of the UCITS EAD).
[85] See footnote 83.
[86] For instance, some respondents were in favour of excluding from the list callable bonds, inflation linked bonds, rating sensitive bonds, while others supported their inclusion. A couple of respondents were against the inclusion of cat bonds. Another respondent suggested a different classification approach according to which CoCo bonds should be qualified as debt-related issues rather than security embedding a derivative. Finally, some respondents posed the question whether specific asset classes (crude oil certificates or subscriptions rights) should be qualified as financial instruments embedding a derivative or securities.

embedding a derivative or rather (2) transferable securities backed by or linked to the performance of other assets.

119. Respondents generally believe that investments in delta-one instruments are beneficial for UCITS in terms of diversification, reduced costs, and lower risks associated to the underlying of the investment (compared to direct exposures to the relevant asset class). However, one investor protection association strongly disagreed with UCITS significantly investing in such instruments, as they expose the fund to additional counterparty and leverage risks. Another association expressed its concern regarding these instruments, as these may lead to a circumvention of the UCITS eligibility framework.

120. Several respondents pointed out that divergent interpretations exist among Member States, with some NCAs systematically including delta-one instruments in the category of financial instruments embedding a derivative and others adopting a case-by-case approach. Those divergences were viewed as detrimental to the UCITS brand and investor protection.

121. The majority of respondents encouraged ESMA to clarify the regulatory treatment of delta-one instruments. Some respondents did not agree with adding any restrictions to the usage of delta-one instruments. Conversely, other respondents expressed support for the adoption of a look-through approach or at least providing further clarifications in this respect.

122. Delta-one instruments are often understood as financial instruments with a delta at one with the asset or the basket of asset which their performance is linked to (that is a 1% move in the value of the underlying assets results in a 1% move in the value of the financial instrument, without optionality or leverage effects). The category is broad, and the market practice tends to include a wide spectrum of financial instruments with largely different features and characteristics. ESMA has observed divergent NCA and market practices with respect to the treatment of delta-one instruments and the application of the look-through approach in this context. Consistent with the previous sections, ESMA is of the view that there would be merit in clarifying the application of a look-through approach in the UCITS EAD with a view to improving supervisory convergence. Pursuant to the proposals set out in Annex VI, exposures to ineligible assets would be allowed only within the 10% limit set out in the UCITS Directive[87], regardless of the inclusion of delta-one instruments in the category of financial instruments that embed a derivative.

[87] Article 50(2)(a) of the UCITS Directive.

123. For the sake of clarity, investments in financial derivative instruments with underlyings that are not directly eligible within the 10% limit (i.e. without the application of a look-through approach) remain subject to all relevant limits and conditions provided for investments in derivatives[88]. This is particularly important with regard to the assessment of risks. UCITS management companies shall always fully understand the risks related to the investment in derivatives, including the underlying risks[89], the impacts on the portfolio of the UCITS, the compatibility of the financial derivative instrument with the characteristics of the UCITS, as well as the accurate assessment of the value of the derivative.

124. Although the introduction of the look-through approach should provide legal certainty and ensure supervisory convergence, as mentioned, investments in derivatives are subject to specific limits and conditions. For this reason, ESMA sees merit in clarifying some aspects related to the perimeter of financial instruments embedding a derivative.

125. An embedded derivative is a component of a hybrid contract that also includes a non-derivative host with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided that in the case of a non-financial variable, that variable is not specific to a party to the contract. A derivative that is attached to a financial instrument but is contractually transferable independently of that instrument, or has a different counterparty, is not an embedded derivative, but a separate financial instrument[90]. A financial instrument embedding a derivative usually shows specific features, such as non-standard payoff[91] or the linkage to derivatives components[92].

126. The CESR guidelines concerning eligible assets for investment by UCITS[93] already provided a non-exhaustive list of financial instruments embedding a derivative, which ESMA believes is useful and should be considered for the classification of some financial instruments as embedding a derivative[94]. Furthermore, the legislative proposals set out in the Annex VI[95] include some

[88] For instance: (1) criteria set out in the UCITS EAD for the eligibility of financial derivative instruments; (2) risk management process; (2) global exposure related to derivative instruments that does not exceed the total NAV of the UCITS; (3) compliance with the limits set out in Article 52 of the UCITS Directive.
[89] Article 51(1) of the UCITS Directive.
[90] Par. 4.3.1 of IFRS 9.
[91] The payoff of the host contract depends on more than the traditional cash flow of the host contract (e.g. market conditions, barrier prices, etc.).
[92] Such as future commitment and settlement modalities, volatility, correlation, leverage, optionality, etc.
[93] CESR/07-044.
[94] Paragraph 23 of the CESR's guidelines concerning eligible assets for investment by UCITS (CESR/07-044b).
[95] Annex VI, see Article 10(3) of the UCITS EAD.

criteria that can be considered by a UCITS to assess if a transferable security or money market instrument shall be regarded as embedding a derivative or if the derivative component shall be deemed to be a separate financial instrument. These criteria focus on the possibility that the derivative component can contractually or economically be considered an independent financial instrument from the host transferable security or money market instrument.

10 Financial indices

127. UCITS may use financial indices for different purposes: (1) to pursue investment strategies or deploy portfolio management techniques, gaining exposures to the basket of assets composing the index; (2) to track or replicate the performance of the basket of assets within the financial index[96]; (3) to measure the performance of the UCITS, including for the purpose of calculating the performance fees of the fund.

128. Diversification is a key criterion for UCITS using financial indices for investment purposes[97]. Under the current rules, UCITS can use a broad spectrum of indices (equity, bond, commodity, currency, sector and strategy-specific indices), which may also include exposures to assets that are not eligible for direct investment[98].

129. The regulatory framework on financial indices is multilayered and complex. Since 2016, the UCITS framework[99] coexists with the Benchmark Regulation, which has introduced a common framework to ensure the accuracy and integrity of indices used as benchmark. The Benchmark Regulation focuses on the reliability of benchmarks[100], namely on the requirements that benchmark administrators should comply with, as well as the requirements of specific types of benchmarks. It contains rules on (1) the governance of benchmarks, focusing

[96] The tracking/replication can be physical or synthetic. Physical replication mirrors the performance of the underlying index by investing in all the securities of that index or a representative sample of those securities. Synthetic replication envisages the use of derivatives (usually, total return swaps), where the UCITS holds a basket of securities as collateral and exchange the performance of these securities with a counterparty in return for the performance of the index.

[97] In particular, the financial indices used for investment purposes or that are replicated by a UCITS should always be composed by assets that are at least diversified in accordance with Article 53 of the UCITS Directive (see Article 9(1)(i) and Article 12(2) of the UCITS EAD). Where the composition of assets used as underlying by financial index derivatives does not meet the criteria set out therein, such financial index derivatives are considered to be financial derivatives on a combination of assets in which the fund may invest. In the case of hedge fund indices, the CESR guidelines concerning eligible assets for investment by UCITS on the classification of hedge fund indices as financial indices (CESR/07-433) apply.

[98] In case of indices whose underlying are assets not eligible for UCITS, the index should be diversified in a way which is equivalent to that provided in Article 53 of the UCITS Directive, see Article 9(1)(a)(iii) of the UCITS EAD.

[99] For the purpose of financial indices, the UCITS framework includes the UCITS Directive (Article 51(3), Article 53), the UCITS EAD (Article 9 and Article 12), the CESR guidelines concerning eligible assets for investment by UCITS (CESR/07-044b), the CESR guidelines concerning eligible assets for investment by UCITS on the classification of hedge fund indices as financial indices (CESR/07-433), the ESMA guidelines on ETFs and other UCITS issues (ESMA/2014/937).

[100] Article 3(1)(3) of the Benchmark Regulation defines 'benchmark' as any index by reference to which the amount payable under a financial instrument or a financial contract, or the value of a financial instrument, is determined, or an index that is used to measure the performance of an investment fund with the purpose of tracking the return of such index or of defining the asset allocation of a portfolio or of computing the performance fees.

on the administrators, entities which are licensed in the Union; (2) the input data of the benchmarks, as well as the methodology and the transparency and (3) the contributors to the benchmarks. Benchmarks are classified as critical or significant. These have different regimes taking into account their impact on markets. The Benchmark Regulation also provides for a specific set of rules depending on the types of benchmarks (i.e. regulated-data, commodity, EU Climate Transition Benchmarks (EU CTB) or EU Paris Aligned Benchmarks (EU PAB) and interest rate benchmarks). The Benchmark Regulation has recently been reviewed with a view to recalibrating some regulatory burden on administrators of smaller benchmarks in the Union. The effect of the review would be that several administrators might be excluded from the scope of the Benchmark Regulation.

130. A number of respondents expressed the view that a simplification of the regulatory framework would be helpful to achieve greater clarity and harmonisation. Some respondents were of the view that the simplification should alleviate the administrative burden and possible overlap or inconsistencies between the UCITS EAD and the Benchmark Regulation[101]. They argued that the EAD should be limited to requiring that the financial indices are sufficiently diversified, since the Benchmark Regulation already covers the other issues (in particular, governance and transparency of financial indices). For the same reasons, respondents also advocated for removing or amending some of the requirements set out in the ESMA guidelines on ETFs and other UCITS issues as these are by now covered by the Benchmark Regulation. Many stakeholders highlighted the existence of divergences among Member States. Some of these divergences arise from the existence of certain requirements in the UCITS Directive providing for national discretion[102]. Respondents pointed to divergences on the eligibility of assets comprising the financial index and certain additional requirement that have been put in place by some NCAs for those indices that exceed the (5/10/40) UCITS diversification requirements[103]. Some of those respondents also sought clarification on the eligibility criteria of indices exposed to assets classes that are not eligible for direct investment, where divergent approaches among NCAs exist, including on the application of the look-through approach.

[101] Respondents have mentioned potential overlapping between Article 9 of the UCITS EAD and the provision set out in the Benchmark Regulation, including Article 4 of the Benchmark Regulation on the management of conflict on interests.
[102] Third subparagraph of Article 51(3) of the UCITS Directive with reference to the combination rule on investments in index-based financial derivative instruments and Article 53(1) and (2) of the UCITS Directive with regard to concentration rules of UCITS whose investment policies consist in replicating the composition of a certain stock or debt securities index.
[103] As a general rule, Article 52 of the UCITS Directive states that a UCITS shall invest no more than 5% of its assets in transferable securities or money market instruments issued by the same body. This limit could be raised to a maximum of 10% by Member States, provided that the total value of the transferable securities and the money market instruments held by the UCITS in the issuing bodies in each of which it invests more than 5 % of its assets shall not exceed 40 % of the value of its assets. ESMA Q&A 951 clarified that the 40% limit set out in Article 52(2) of the UCITS Directive does not apply to index-tracking UCITS that comply with the requirements set out in Article 53 of the UCITS Directive.

131. ESMA agrees that there would be merit in providing greater legal clarity on financial indices. Notwithstanding this, it is important to acknowledge that the financial indices-related rules in the UCITS framework have not been made entirely redundant by the introduction of the Benchmark Regulation as they still serve the important purpose of ensuring that UCITS adhere to certain investor protection safeguards when using financial indices. In particular, the provisions on diversification and adequacy of indices set out important criteria that an index should fulfil in order to be eligible for UCITS investments. Those criteria shall be fulfilled taking into account UCITS rules on diversification and the best interest of the fund[104]. Conversely, requirements related to the transparency and existence of a recognised methodology of benchmarks[105] are already included in the Benchmark Regulation, when the administrator of the benchmark is licensed under this regulation. On the contrary, in case of indices and index providers are out of the scope of the Benchmark Regulation, the UCITS management company should verify the adequacy of the benchmark as well as its transparency[106].

132. ESMA is of the view that the application of a look-through approach should include financial indices, in order to address the convergence issues raised by stakeholders relating to the eligibility of financial indices comprising assets that are not eligible for direct investment. Notwithstanding this, consistent with the rationale explained in the above sections, UCITS would be able to invest in financial derivative instruments providing exposures to financial indices comprising assets that are not eligible for direct investment within the 10% limit[107]. However, it is important to ensure that these indices are sufficiently diversified.[108]

133. The feedback to the Call for Evidence, the data collection exercise as well as the NCA survey evidenced that there are divergent interpretations among NCAs and market participants on whether UCITS are allowed to invest in derivatives on financial indices providing for exposures to asset classes that are not directly eligible such as commodities. Consistent with the policy rationale explained in the previous sections, ESMA is of the view that the proposed look-through approach will provide legal clarity and ensure convergence going forward. Should the European Commission have different policy preferences or consider expanding the list of eligible assets set out in the UCITS Directive allowing exposures to commodities or other ineligible assets though derivatives on financial indices, ESMA recommends to give consideration to incorporating the safeguards set out in the ESMA guidelines on ETF and other UCITS issues in the text of the UCITS

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[104] Article 9(1)(a) and Article 9(1)(b)(i and iii) of the UCITS EAD.
[105] Article 9(1)(b)(ii) and Article 9(1)(c) of the UCITS EAD. UCITS shall assess the adequacy of the index in the best interest of the fund, taking into consideration the methodology and procedures developed by the administrator of that benchmark.
[106] This is why the draft proposal keeps a reference to what criteria an index should fulfil for being eligible for UCITS when it is out of the scope of the Benchmark Regulation.
[107] 50(2)(a) of the UCITS Directive.
[108] Article 53 of the UCITS Directive.

Directive as investment limits[109] and that the assessment on the characteristics of the single constituents of the financial indices shall always be required. Equally, investments that might result in the physical delivery of ineligible asset classes should not be allowed.

134. For the avoidance of doubt, the 10% limit set out in the UCITS Directive[110] is an aggregate figure meaning that all possible forms of exposures need to be combined and not exceed 10%, this includes any exposures to financial indices comprised of assets other than those referred to in the UCITS Directive[111]

135. ESMA acknowledges the concerns shared by some respondents that the national discretion granted in the UCITS Directive may have led to divergent approaches across Member States. To ensure greater harmonisation and a level playing field, ESMA recommends to the European Commission to amend the relevant provisions, in line with the legislative drafting proposals set out in Annex VI[112]. Where the index refers to regulated markets or MTFs where certain transferable securities or money market instruments are highly dominant and the concentration limit is raised to 35%[113], the proposals made aim to ensure that such derogation is included in the fund rules or instruments of incorporation and shall be approved by the home NCA of the UCITS. The latter gives NCAs the opportunity to verify the existence of the conditions triggering the derogation in the context of the authorisation of the UCITS or the approval of amendments to the fund documentation.

136. Finally, ESMA is of the view that some of the points raised by respondents with regard to the ESMA guidelines on ETFs and other UCITS issues would be better assessed in the context of a future review of those guidelines. This will allow for a holistic review of the ESMA guidelines[114], which may also need to take into consideration the outcome of the UCITS EAD Review.

11 UCITS investments in AIFs

137. The UCITS Directive distinguishes between UCITS and "*other collective investment undertakings*". Where UCITS intend to invest in open-ended collective investment undertakings, these must meet a number of conditions specified in

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[109] Section XIII of ESMA Guidelines on ETF and other UCITS issues.
[110] Article 50(2)(a) of UCITS Directive.
[111] Article (50)(1) of the UCITS Directive.
[112] The deletion of the provisions providing for national discretion would have the effect that Member State will apply the derogation more uniformly, whereas currently there are divergent practices to whether such derogation is granted.
[113] Article 53(2) of the UCITS Directive.
[114] In this context, it is worth noticing that in ESMA Q&A 1165, ESMA clarified that the guidelines on ETFs and other UCITS issues take precedence over the guidelines on eligible assets issued by CESR in 2008 (Ref. CESR/07-044b) and that UCITS should not invest even a small amount of their assets in financial indices that do not comply with paragraphs 49 to 61 of the guidelines.

the UCITS Directive[115]. Additionally, the UCITS EAD includes provisions that specify under which conditions closed-ended collective investment undertakings could qualify as transferable securities and therefore become eligible.[116]

138. Given the introduction of the AIFMD in 2011 and the subsequently adopted EU product regulations for EuVECA, EuSEF and ELTIFs, many respondents to the Call for Evidence noted that the terminology used in the UCITS Directive and UCITS EAD appears outdated.

139. More on substance, many respondents argued that UCITS should be allowed to invest in AIFs, and in particular ELTIFs. Several respondents believe that the distinction made in the UCITS legislative framework between closed-ended and open-ended funds appears unclear and should be reconsidered.

140. Additionally, a number of respondents pointed to challenges for UCITS to invest in non-EU ETFs as those might often not meet the conditions set out in the UCITS Directive, notably on equivalence of supervision and level of regulatory protection.[117] Some of these respondents advocated for greater flexibility, by adapting some of the conditions or at least allowing UCITS to invest more freely in non-EU ETFs within the 10% limit set out in the UCITS Directive[118] which is currently limited to transferable securities and money market instruments as clarified in an 2012 ESMA Opinion.[119] Some other respondents expressed the view that non-EU ETFs should always be considered as meeting the eligibility requirements set out in the UCITS legislative framework.

141. ESMA agrees that the wording used in the UCITS Directive and UCITS EAD might benefit from an update in light of the evolution of the EU legislative framework since 2007, in particular the introduction of the AIFMD in 2011.

142. On substance, the AIFMD has put in place a robust harmonised regulatory and supervisory framework for authorised EU AIFMs, whereas the same is not yet true for non-EU AIFMs marketing AIFs in the EU[120]. Moreover, it is important to acknowledge that the product regulation of EU AIFs is not yet harmonised at EU level and therefore differs significantly across Member States.

143. Investment strategies and risk profiles of AIFs - including EuVECA, EuSEF and ELTIFs - can be significantly different from one another and from UCITS. Subject to the relevant national or EU product frameworks, AIFs may be permitted e.g. to

[115] Article 50(1)(e) of the UCITS Directive.
[116] Article 1(2)(a) and (b) of the UCITS EAD.
[117] Article 50(1)(e)(i) and (ii) of the UCITS Directive.
[118] Article 50(2)(a) of the UCITS Directive.
[119] ESMA opinion on Article 50(2)(a) of Directive 2009/65/EC (ESMA/2012/721).
[120] This is why the draft proposals set out in Annex VI preserve the application of the investor protection safeguards set out in Article 50(1)(e)(i)-(iii) of the UCITS Directive to non-EU AIFs and EU AIFs managed by non-EU AIFMs.

invest in illiquid or less liquid assets (in some cases this is possible even for open-ended AIFs[121]), use leverage on a substantial basis or engage in transactions that would not be allowed for UCITS such as short selling. This is also why ESMA issued Q&As on the existing UCITS rules aiming to ensure that fund investments do not result in a circumvention of the investment strategies or restrictions set out in the fund rules or instruments of incorporation and prospectus of the investing UCITS[122]. In this context, consistent with other ESMA Q&As, it is also worth to clarify that in case of UCITS investments in umbrella funds, the assessment should always be performed at the level of the individual sub-fund in which the UCITS intends to invest[123].

144. In light of the above, the legislative proposals set out in Annex VI aim to ensure that UCITS investments in AIFs do not result in a circumvention of the investment restrictions and investor protection standards set out in the UCITS Directive. Consistent with the rationale set out in the previous sections, this includes also the application of a look-through approach, while granting some level of flexibility to invest in AIFs without the application of a look-through within the 10% limit[124].

145. The legislative drafting proposals set out in Annex VI distinguish between open-ended AIFs and closed-ended AIFs. This is consistent with the approach already set out in the UCITS Directive and the UCITS EAD.

146. In accordance with the UCITS Directive, open-ended AIFs are eligible where (1) they meet the conditions included in the definition of UCITS[125]; (2) they are authorised under laws which provide that they are subject to a supervision considered equivalent by Member States; (3) the level of protection for unit-holders in the other collective investment undertakings is equivalent to that provided for unit-holders in a UCITS; (4) the business of the open-ended AIF is reported half-yearly and annually; (5) no more than 10 % of the assets of open-ended AIF whose acquisition is contemplated can be invested in aggregate in units of other UCITS or open-ended AIFs[126].

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[121] Article 1(2) of the Commission Delegated Regulation (EU) No. 694/2014 indirectly (through the definition of "AIFM of an open-ended AIF") defines open-ended as an AIF the shares or units of which are, at the request of any of its shareholders or unitholders, repurchased or redeemed prior to the commencement of its liquidation phase or wind-down, directly or indirectly, out of the assets of the AIF and in accordance with the procedures and frequency set out in its rules or instruments of incorporation, prospectus or offering documents. Article 1(3) of the Commission Delegated Regulation defines indirectly closed-ended AIFs as those other than AIFs covered by Article 1(2).

[122] In particular ESMA Q&A 956: ESMA clarified that the prospectus of a UCITS should clearly disclose whether in the case of fund of fund investments, the target fund(s) might have different investment strategies or restrictions and that UCITS management companies/self-managed investment companies should carry out proportionate due diligence to ensure that fund of fund investments do not result in a circumvention of the investment strategies or restrictions set out in the fund rules or instruments of incorporation and prospectus of the investing UCITS.

[123] This is in line with the Q&As issued by ESMA with regard to the application of UCITS investment limits (ESMA Q&As 949 and 950).

[124] 50(2)(a) of the UCITS Directive.

[125] Article 1(2)(a) and (b) of the UCITS Directive.

[126] The criteria from (2) to (5) are listed in Article 50(1)(e)(i)-(iv) of the UCITS Directive.

147. In consideration of the level of harmonisation introduced by the AIFMD framework, ESMA is of the view that where authorised EU AIFs are managed by authorised AIFMs under the AIFMD[127], the condition related to the supervision (see point 2 of the previous paragraph) can be presumed, unless the UCITS is aware of information that may lead to a different conclusion.

148. Furthermore, ESMA sees merit in clarifying that units or shares of open-ended funds shall not be understood as transferable securities and shall always apply the eligibility criteria set out in Article 50(1)(e) of the UCITS Directive[128].

149. Conversely, closed-ended funds constitute an asset class which is not explicitly referred to as eligible for UCITS in the UCITS Directive. However, under the UCITS EAD, the possibility for UCITS to invest in units or shares of closed-ended funds is clarified, provided that these qualify as transferable securities[129]. Against this background, ESMA is of the view that UCITS investments in closed-ended AIFs shall continue being allowed where these financial instruments prove to have the same characteristics as transferable securities and thus fulfil the eligibility criteria for transferable securities set out in the UCITS EAD[130]. This likely happens when these units or shares of AIFs are listed on a regulated market[131] and are liquid financial instruments. In addition, ESMA is of the view that investments in units or shares of closed-ended AIFs, coherently with investments in open-ended AIFs, need to adhere to certain investor protection safeguards. To this end, the legislative proposals contemplate a reference to the criterion for which these closed-ended AIFs shall be subject to an equivalent level of supervision[132] and the criterion for which no more than 10% of the portfolio of the targeted UCITS or AIFs can be invested in units of other UCITS or AIFs, in accordance with their fund rules or instruments of incorporation.

150. In application of the look-through approach, UCITS shall not invest in AIFs providing exposures to ineligible asset classes, regardless of whether they are of the open-ended or the closed-ended type.

151. Consistent with above, the proposals set out in Annex VI set out that UCITS investment in units or shares of AIFs shall not compromise the ability of the

[127] This should ensure a high level of protection for the UCITS, considering that the AIFM is fully subject to the requirements set out in the AIFMD, including its authorisation and supervision requirements.
[128] The same is true for UCITS ETFs and open-ended AIF ETFs. These also qualify as units/shares of funds for the purposes of the UCITS framework and not as transferable securities.
[129] Recital 7 of the UCITS EAD.
[130] Article 2(1) of the UCITS EAD.
[131] The fact that the units or shares of closed-ended AIFs are dealt in on a regulated market is also relevant in order to permit the UCITS to disinvest, in accordance with its strategy and/or redemption policy.
[132] As for the investment in open-ended AIFs, the proposal envisages a presumption when the EU AIF is managed by an authorised AIFM under the AIFMD.

UCITS to comply with the requirements set out in the UCITS Directive, the EAD or in other regulations applicable to UCITS.

152. Finally, units or shares of AIFs falling within the 10% limit[133] are financial instruments that fulfil the criteria set out in the UCITS EAD, subject to certain exceptions as set out in Annex VI. The proposed legislative amendments aim at clarifying the eligibility regime with respect to units or shares of AIFs which do not meet all the requirements set out in the UCITS Directive[134]. However, a UCITS may invest in these units or shares of AIFs within the aforementioned 10% limit, subject to certain requirements as specified in Annex VI[135]. This is important to ensure consistency with the overall policy approach followed and the investor protection safeguards needed to avoid any circumvention of key provisions laid down in the UCITS Directive. Should the European Commission consider it more appropriate, these criteria could alternatively be included in the UCITS Level 1 Directive, rather than in the UCITS EAD.

12 Ancillary liquid assets

153. Since the UCITS I Directive, UCITS are permitted to *hold* ancillary liquid assets[136]. The UCITS Directive does not provide for any explicit limits concerning the amount of ancillary liquid assets that can be held.[137] The recitals of the UCITS Directive[138] clarify that the holding of such ancillary liquid assets may be justified, inter alia, in order to (1) cover current or exceptional payments; (2) in the case of sales, for the time necessary to reinvest in transferable securities, money market instruments or in other financial assets provided for in this Directive; or (3) for a period of time strictly necessary when, because of unfavourable market conditions, the investment in transferable securities, money market instruments and in other financial assets is suspended. Since UCITS III, UCITS are additionally allowed to *invest* in bank deposits within the limit of 20% of deposits made with the same body[139].

154. Some respondents to the Call for Evidence pointed out that a definition of ancillary liquid assets does not exist and recommended to introduce one in the context of the UCITS EAD review. In this context, different asset classes were mentioned as equivalently liquid to bank deposits at sights, such as units or shares of MMFs or, in case of "unfavourable market conditions", short-term bank

[133] 50(2)(a) of the UCITS Directive.
[134] Article 50(1)(e) of the UCITS Directive.
[135] See Article 2a(5) of the UCITS EAD in the legislative draft proposal (Annex VI).
[136] Article 19(4) of Directive 85/611/EEC, now set out in Article 50(2) of the UCITS Directive.
[137] Except for UCITS master-feeder structures, where Article 58(2)(a) of the UCITS Directive sets out that feeder funds shall *invest* at least 85% of its assets in units of the master fund and may *hold* up to 15% of its assets in ancillary liquid assets.
[138] Recital 41 of the UCITS Directive.
[139] Article 50(1)(f) in conjunction with Article 52(1)(b) and recital 41 of the UCITS Directive.

deposits (maximum three months). Other respondents supported the enlargement of the circumstances in which UCITS may *hold* ancillary liquid assets.

155. Some other respondents pointed out that the UCITS Directive does not provide for explicit limits concerning ancillary liquid assets and that this has led to divergence among Member States. In this context, some respondents pointed out that in May 2024, several countries, including the United States, Canada, and Mexico, transitioned to a shortened settlement cycle of T+1 for domestic securities transactions, highlighting the need to grant more regulatory flexibility given the specific needs stemming from T+1 as well.[140] Additionally, some respondents supported the view of specifying the application of any counterparty limits.

156. ESMA notes that risk diversification is a core principle of the UCITS Directive and that *holding* ancillary liquid assets may expose UCITS to similar or even the same counterparty risks that are associated with *investments* in bank deposits. Therefore, ESMA recommends the European Commission to clarify in the legal text of the UCITS Directive that the 20% counterparty limit for deposits made with the same body applies also to ancillary liquid assets.[141]

157. Conversely, ESMA does not see merit in prescribing a maximum amount of ancillary liquid assets that UCITS may hold, bearing in mind that they might be required to cover for exceptional payments and unfavourable market conditions.[142]

158. Finally, ESMA is of the view that there is no major need for an exhaustive definition of ancillary liquid assets. Deposits at sights appear most suitable to qualify as ancillary liquid assets. Notwithstanding this, ESMA would not exclude that some other asset classes (e.g. short-term deposits) may also qualify as ancillary liquid assets, provided that those assets (1) serve the purpose of covering a liquidity need; (2) their amount is coherent with that need; (3) they are readily available; (4) they are held for a period of time strictly necessary to cover the liquidity need; and (5) the UCITS is always able to demonstrate to its NCA the connection between the holding of ancillary liquid assets and the circumstances that justifies it.

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[140] See also ESMA's feedback statement to the Call for Evidence on shortening the settlement cycle (ESMA74-2119945925-1959), paragraphs 235 ff.
[141] Article 52(1)(b) of the UCITS Directive.
[142] As set out in the non-exhaustive examples provided in recital 41 of the UCITS Directive.

13 UCITS investments in foreign currencies

159. The foreign exchange market (also called 'forex market' or 'FX market') is a decentralised OTC global financial market where market participants[143] directly negotiate, buy, sell and trade in world's currencies. It is recognised as one of the most liquid markets in place[144], even though the investments in currencies may expose investors to risks related to complexities of transactions, credit risks, interest rate risks, counterparty risks, high volatility, and leverage, transparency and information asymmetry[145]. In the banking sector, positions in foreign currency investments are treated under prudential regulatory provisions[146]. Foreign currencies are essential for international transactions, which are considered as an asset class on its own as well.

160. The vast majority of respondents supported the view that UCITS should be permitted to gain, directly or indirectly, exposures to foreign currency for both liquidity and investment purposes, provided that the associated risks are properly disclosed and managed.

161. Some respondents argued that foreign exchange-related questions should be addressed more explicitly in the UCITS Directive. Conversely, one respondent argued that, given the potential exchange rate and high volatility risks linked to currencies, holding them should not be allowed beyond liquidity purposes.

162. One association supported the view that only in a few cases UCITS should be allowed to invest a limited portion of their assets in a set of foreign currencies with an established track record of rate stability and high liquidity. Moreover, the association adds that this type of investments should be duly justified.

163. ESMA notes that the current wording of the UCITS Directive does not specifically address the holding of foreign currencies for investment purposes, directly or indirectly. The only explicit reference to foreign currency is made by allowing UCITS to acquire foreign currency through a back-to-back loan[147] and to invest in derivatives whose underlying are foreign rates or currencies[148]. In this

[143] Usually banks, investment firms, investment funds, brokers and retail investors.
[144] According to the latest Triennial Central Bank Survey of the Bank for International Settlements (BIS), trading in OTC FX markets reached $7.5 trillion per day in April 2022.
[145] With the aim to protecting retail investors in the FX markets, ESMA has published a warning in 2011 (ESMA Investor Warning, 5 December 2011).
[146] CRR establishes a set of rules on how to calculate banks' own funds and the treatment of FX exposure. On this, after having adopted in 2020 own-initiative guidelines (EBA/GL/2020/09), EBA has recently launched a public consultation on draft technical standards for structural foreign exchange positions under the CRR regime.
[147] Article 83 of the UCITS Directive. From the preparatory discussions of the UCITS I Directive, it emerges that a back-to-back loan is a loan in foreign currency that a UCITS obtains in the course of its purchasing and holding of foreign transferable securities while at the same time depositing an amount in its own currency equal to or more than the amount borrowed with the lender, the lender's agent or any other person nominated by the lender.
[148] Article 50(1)(g)(i) of the UCITS Directive and Article 8(1)(a)(iii) of the UCITS EAD.

context, ESMA notes that foreign currencies can be relevant when engaging in EPM techniques that serve the purpose of hedging against currency risks related to investments.

164. The UCITS Directive does not clarify whether other forms of exposure to foreign currencies are allowed.

165. ESMA is of the view that holding foreign currencies as ancillary liquid assets is permissible. With respect to investments, ESMA acknowledges that there are no explicit references to foreign currencies in the list of eligible assets set out in Article 50 of the UCITS Directive. Equally, there are no explicit risk diversification requirements in the UCITS Directive. However, Article 50(1)(f) of the UCITS Directive allows for deposits with credit institutions, including certain third country credit institutions. Article 52 provides for risk diversification requirements in relation to deposits. In light of this, ESMA is of the view that UCITS investments in foreign currencies are allowed.

166. Against this background, ESMA is of the view that the UCITS EAD needs no amendments with regard to foreign currencies, and that exposure to this asset class are allowed provided that these fall within the category of deposits, are underlying of financial derivatives instruments, qualify as ancillary liquid assets or EPMs. The investment or the holding of foreign currencies shall always comply with the criteria and conditions set out in the relevant provisions for those types of exposures.

14 Efficient Portfolio Management

167. The UCITS framework allows deploying EPM techniques related to transferable securities and money market instruments[149]. The EAD, inter alia, specifies that they are entered into for one or more of the following specific aims: (1) reduction of risks; (2) reduction of costs; (3) generation of additional capital or income for the UCITS with a level of risk which is consistent with the risk profile of the UCITS and the risk diversification rules[150]. It is worth noting that EPMs do not fall under the definitions of transferable securities and money market instruments[151] and under no circumstances shall those operations cause the UCITS to diverge from its investment objectives as laid down in the UCITS' fund rules, instruments of incorporation or prospectus[152].

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[149] See Article 51(2) of UCITS Directive.
[150] Article 11 of the UCITS EAD. In consideration of these *specific aims* that they shall fulfil to be eligible, ESMA is of the view that EPMs should always be seen as complementary to the main investment strategy of the UCITS and not a core strategy in itself.
[151] Recital 13 of the UCITS EAD.
[152] Article 51(2) third subparagraph of the UCITS Directive. In order to provide greater clarity, this reference has been included among the eligibility criteria for EPMs in Article 11 of the UCITS EAD in the legislative proposal (see Annex VI).

168. The regulatory framework with relevance to EPMs is broad. It includes the UCITS Directive, the UCITS EAD, the ESMA guidelines on ETFs and other UCITS issues, the CESR guidelines concerning eligible assets for investment by UCITS, as well as a number of Q&As issued by ESMA on these guidelines. In 2015, the SFTR[153] was adopted with the aim of enhancing the transparency of securities financing transactions, thereby creating a thematic overlap with the EPM-related requirements in the UCITS legislative framework.

169. In addition to the aforementioned guidelines and Q&As, ESMA carried out several in-depth supervisory convergence workstreams with relevance to EPMs. Notably, in 2017-2018, ESMA conducted a peer review focusing on the requirements for UCITS when engaging in EPMs[154]. In 2021, ESMA performed a CSA on costs and fees covering, inter alia, EPM. In 2023, ESMA performed a follow-up to assess the measures implemented by the NCAs involved in the peer review[155]. These workstreams identified in particular supervisory challenges with respect to the notion of EPM, the deduction of EPM-related costs and fees at a fair market rate and certain collateral arrangements.

170. Respondents to the public consultation highlighted the relevance of EPMs for UCITS in order to reduce risks and costs and generation of additional income. Many respondents viewed the EPM-related rules as too strict. The most relevant points of concerns raised related to costs, selection and management of collateral as well as the alignment with the SFTR.

171. On costs, a majority of respondents expressed support for allowing fee splitting arrangements that enable UCITS management companies to deduct fees for initiating, preparing, and executing EPMs, while ensuring adequate disclosures of the generated and retained fees to investors. These respondents expressed the view that such arrangements help to preserve the competitiveness and the quality of the EPM services provided to UCITS (and, ultimately, to investors), regardless of whether the activity is delegated to a third party or performed internally by the UCITS management company itself.

172. One consumer association, on the basis of comprehensive research, expressed investor protection concerns about these fee split models pointing inter alia to risks of UCITS management companies sharing too much revenue with affiliated intermediaries ("agent fees") and/or itself retaining a large share to generate income (beyond the deduction of necessary "operational costs"). In both cases,

[153] Regulation (EU) 2015/2365 on transparency of securities financing transactions and of reuse and amending Regulation (EU) No 648/2012 (‘EMIR’).
[154] ESMA final report peer review on the ESMA guidelines on ETFs and other UCITS issues (ESMA 42-111-4479).
[155] ESMA follow-up report to the peer review on the ESMA guidelines on ETFs and other UCITS issues (ESMA 42-111-7570).

the risk arises of UCITS investors being overcharged, while ultimately bearing the risks arising from EPM techniques such as securities lending.

173. ESMA acknowledges the benefits of allowing UCITS to engage in EPM techniques with a view to generate additional income or reduce risks for investors. At the same time, it is important to ensure that the economic benefits of these transactions flow to the investors and are not retained by the UCITS manager or affiliated party.

174. This view is consistent with the ESMA guidelines on ETFs and other UCITS issues and related ESMA Q&As, the ESMA peer review and its follow-up. The ESMA guidelines on ETFs and other UCITS issues[156] clarify that all revenues arising from EPM techniques, net of direct and indirect operational costs, should be returned to the UCITS. The ESMA Q&As clarified that the guidelines do not prohibit the deduction from revenues of costs incurred in the use of such techniques, provided that adequate disclosure is made in the annual report of the UCITS[157]. Moreover, the ESMA peer review highlighted, inter alia, that the option of splitting of revenues on a *net basis* (i.e. after the deduction of operational costs) does not adhere to the guidelines, which indeed require all net revenue to be returned to the UCITS.

175. While further legal clarity could aid NCAs to supervise and enforce this matter more effectively, ESMA notes that it would go beyond the scope of the Level 2 UCITS EAD to address cost-related matters. This will have to be done in the Level 1 UCITS Directive or separate legal act (such as the Retail Investment Strategy[158]). ESMA hence recommends to the Commission to consider providing further legal clarity on EPM-related costs and fees including on the fee split models with a view to ensuring investor protection.

176. In this context, ESMA is of the view that the policy proposals included in the 2023 ESMA opinion on undue costs of UCITS and AIFs may significantly help to tackle the risk of UCITS investors being charged with undue EPM costs, notably the proposals included therein on related-party transactions, due diligence to ensure that all charged costs are equal or better than market standards and the

[156] Paragraph 29.
[157] ESMA Q&A 1108: The question concerned the possibility of paying the securities lending agent for their services in the context of EPMs. ESMA answered that "[the] *guidelines do not prohibit the deduction from gross revenues arising from efficient portfolio management techniques of fees paid to securities lending agents as a normal compensation for their services in the context of such techniques. However, pursuant to paragraph 35 of the guidelines, the annual report of the UCITS should contain details on the revenues arising from efficient portfolio management techniques for the entire reporting period together with the direct and indirect operational costs and fees incurred*".
[158] https://finance.ec.europa.eu/publications/retail-investment-strategy_en.

investor compensation obligations in cases where undue costs have been charged.[159]

177. On collateral arrangements, several respondents advocated for clarification of the possibility for UCITS to engage in collateral arrangements that do not provide for the title transfer, often explicitly referring to pledge collateral arrangements. Other respondents recommended reducing restrictions on the usage of cash and other kind of collaterals to improve liquidity and to allow UCITS to access to the centralised clearing services of CCPs with the same conditions provided for banks[160].

178. In this context, the ESMA peer review on the ETF guidelines highlighted potential inconsistencies between the ESMA guidelines and the subsequent legislative changes introduced by the UCITS V Directive[161]. This has led to divergent applications and in some cases the disapplication of the ESMA guidelines with respect to collateral arrangements that do not provide for title transfer.

179. ESMA is of the view that the perimeter of 'eligible' collateral arrangements should be clarified in order to have a greater level of harmonisation. ESMA sees merit in assessing the opportunity to amend the UCITS Directive[162] to allow for the deployment of 'other collateral arrangements', provided that certain conditions are met to mitigate relevant risks[163].

180. The ESMA guidelines on ETFs and other UCITS issues clarify the limits and conditions related to the reuse of collaterals, including cash[164]. These conditions and limits were set out to mitigate the risks related to the reinvestment of collateral by UCITS. Any potential amendments of the ESMA guidelines on ETFs and other UCITS issues would be better assessed in the context of a future review of those

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[159] ESMA opinion on undue costs of UCITS and AIFs (ESMA34-45-1747).
[160] It is worth noting that ESMA Q&A 1143 clarifies that UCITS cannot use cash collateral received in the context of EPM techniques or OTC financial derivative transactions for clearing obligations under EMIR, because it can be placed or invested only in the assets listed in paragraph 43(j) of the ESMA guidelines on ETFs and other UCITS issues.
[161] Article 22(7)(d) of the UCITS Directive stipulates that the assets held in custody by the depositary are allowed to be reused only where the transaction is covered by high-quality and liquid collateral received by the UCITS under a title transfer arrangement. Paragraph 43 of the ESMA guidelines on ETFs and other UCITS issues seems to allow both collateral arrangements with title transfer and 'other types of collateral arrangements'.
[162] Article 22(7)(d) of UCITS Directive.
[163] This assessment on the risks and compliance with the requirements of the UCITS Directive, to be performed by UCITS managers that intend to engage in this kind of collateral arrangements, should be considered of utmost importance. In particular, pledge arrangements represent a collateral arrangement widespread in practice and largely referred to by respondents to the Call for Evidence. The collateral provided by the borrower in such arrangements is not transferred to the lender, but to a secured account with a third-party custodian, and the borrower retains a property interest in the collateral assets. The fact that there is no title transfer should not result in an increase in the fund's risks, nor in a lower level of investor protection.
[164] Paragraph 43(j) of the ESMA guidelines states that cash collateral received should only be: placed on deposit with entities prescribed in Article 50(f) of the UCITS Directive; invested in high-quality government bonds; used for the purpose of reverse repo transactions provided the transactions are with credit institutions subject to prudential supervision and the UCITS is able to recall at any time the full amount of cash on accrued basis; finally, invested in short-term MMFs as defined in the guidelines on a common definition of European Money Market Funds.

guidelines, which may also need to take into consideration the outcome of the UCITS EAD Review.

181. On the alignment between the UCITS framework and SFTR, the vast majority of respondents did not support any such ideas. These respondents argued that SFTR considers a narrow spectrum of EPMs, excluding in particular derivatives and any possible EPM techniques that the financial market may develop in the future. Moreover, the list of SFTs under SFTR are not tailored to the characteristic of UCITS and what is permitted under the UCITS framework. Conversely, some respondents were of the view that such alignment is needed to ensure consistency between the different legislative frameworks.

182. ESMA acknowledges that linking the EPM and SFT notions might raise interpretational issues, bearing in mind also that the latter covers techniques which are not permitted to UCITS such commodities lending or borrowing. ESMA also does not see merit in developing an exhaustive list of EPMs since this might risk stifling innovation and restricting current or future EPM techniques that the market may develop.

183. The use of SFTs and total return swaps by managers of collective investment undertakings as EPM techniques is recognised in the SFTR[165]. To this end, ESMA is of the view that the definitions of these transactions and instruments included in the SFTR are relevant also in the context of the UCITS Directive, provided that these definitions are compatible with the eligibility requirement of EPMs for UCITS and coherent with the other obligations of a UCITS[166]. Notwithstanding the reference to the definitions set out in the SFTR, the transactions and instruments included therein should not be intended as exhaustive for UCITS purposes.

15 Securitisations

184. UCITS can invest in securitisations that meet the requirements set out in the Securitisation Regulation[167]. UCITS investments in securitisations are also subject to the limits and risks set out in the UCITS Directive, including the 10% concentration limit for debt securities issued by the same body[168].

[165] Recital 15 of SFTR. These transactions and instruments could increase the general risk profile of the collective investment undertaking whereas their use is not properly disclosed to investors. It is crucial to ensure that investors in such collective investment undertakings are able to make informed choices and to assess the overall risk and reward profile of collective investment undertakings. When assessing SFTs and total return swaps, the collective investment undertaking should consider the substance of the transaction in addition to its legal form.
[166] Recital 13 of UCITS EAD. The reference is made, in particular, with regard to the restrictions on short sales and borrowing.
[167] Article 50a of the UCITS Directive.
[168] Article 56(2)(b) of the UCITS Directive.

185. The majority of respondents to the Call of Evidence highlighted the relevance of securitisations for the EU capital market. Several responses were focused on their contribution to the growth of the real economy across the EU and the opportunity to revising the EU securitisation framework. Some respondents therefore expressed support for allowing UCITS exposures to this asset class, pointing out the benefits of these investments such as enhanced returns, diversification during market stress, positive past performance and tranching, which allows investor to choose their level of risk, as well as the possibility to gain exposure to asset classes that are rarely available through traditional bond holdings.

186. Conversely, other respondents highlighted the risks embedded in the securitisation process. Those respondents emphasised the potential spread between the expected cash-flow and the performance of the underlying exposures, the credit and counterparty risks, as well as the other risks related to the securitisation and the general exposure to loan-structured financial products (namely liquidity, concentration, operational risks, etc.).

187. The different views expressed by the respondents on the general merits of UCITS investments in this asset class impacted their policy recommendations.

188. Those respondents that expressed support for UCITS investments in securitisations advocated for (1) reducing the due diligence requirements set out in the Securitisation Regulation for institutional investors [169] as these were considered too burdensome with little or no value added; (2) removing other regulatory or administrative requirements to UCITS investment in this asset class (e.g. disclosures, valuation procedures, retention rules); (3) removing the 10% concentration limit for debt securities[170], as securitisations already provide diverse credit risks exposures.

189. Conversely, the respondents that expressed concerns or doubts about UCITS investments in this asset class supported the introduction of additional provisions such as (1) listing requirements for debt instruments; (2) application of the look-through approach; (3) limiting UCITS investments to those instruments that qualify as simple, transparent and standardised ('STS') securitisations.

190. ESMA takes note of the divergent positions expressed by the respondents. With respect to the policy suggestions expressed by respondents in relation to the Securitisation Regulation, ESMA is of the view that those would go beyond the scope of this technical advice. The relevant assessment has already been carried

[169] Article 5 of the Securitisation Regulation.
[170] Article 56(2)(b) of the UCITS Directive.

out in the Joint report of the Joint Committee of the European Supervisory Authorities (ESAs) regarding the functioning of the Securitisation Regulation[171].

191. With respect to the investment limits and requirements set out in the UCITS Directive, ESMA is of the view that this should be holistically discussed in the context of future amendments to the investment limits of UCITS on securitisations, also provided that the current 10% limit[172] is dedicated to the broad category of debt securities. This limit aims at ensuring adequate risk-spreading and therefore preventing UCITS from gaining excessive exposure to any single borrower, sector, or type of asset.

192. The exposure or the pool of exposures of securitisations under the Securitisation Regulation framework might be receivables arising from loan agreements. ESMA is of the view that the requirements applying to securitisations shall be solely the ones provided in the Securitisation Regulation[173]. Furthermore, it is worth noting that UCITS cannot grant loans or act as a guarantor on behalf of third parties[174]. To ensure greater clarity, the European Commission might consider updating Article 88 of the UCITS Directive, by adding a reference to Article 50a of the UCITS Directive in the incipit clause[175].

16 Alignment with MIFID II, DLT Pilot Regime Regulation and MiCA

193. The UCITS Directive, as many other EU acts in the area of finance, makes several references to MiFID I. These references have not yet been updated since the introduction of MIFID II in 2014. The legislative drafting proposals set out in Annex VI therefore include a number of provisions with updated legal references.

194. A significant area for regulatory alignments or updates concerns the treatment of MTFs. MIFID I defined both the concepts of *regulated market* and *MTF*[176].

[171] JC 2025 14 Joint Committee report on the functioning of the securitisation regulation.
[172] Article 56(2)(b) of the UCITS Directive.
[173] In case a securitisation no longer meets the requirements set out in the Securitisation Regulation, UCITS shall, in the best interest of the investors, act and take corrective action, if appropriate.
[174] This is clearly stated, as a general obligation, in Article 88 of the UCITS Directive.
[175] For details, see the legislative draft proposals in Annex VI.
[176] Article 4(1)(14) of MIFID I defined 'regulated markets' as a multilateral system operated and/or managed by a market operator, which brings together or facilitates the bringing together of multiple third-party buying and selling interests in financial instruments – in the system and in accordance with its non-discretionary rules – in a way that results in a contract, in respect of the financial instruments admitted to trading under its rules and/or systems, and which is authorised and functions regularly and in accordance with the provisions of Title III. Article 4(1)(15) of MIFID I defined the 'multilateral trading facility' as a multilateral system, operated by an investment firm or a market operator, which brings together multiple third-party buying and selling interests in financial instruments – in the system and in accordance with non-discretionary rules – in a way that results in a contract in accordance with the provisions of Title II.
It is worth noting that, before MIFID I, Directive 93/22/EEC ('investment service Directive') defined 'regulated market' differently, i.e. a market that fulfilled the following criteria: (i) appears on the list provided for in Article 16 drawn up by the Member State

Those definitions did not change with MIFID II which, however, introduced the definition of 'organised trading facilities'[177] (OTF) as a third type of multilateral trading system. MiFID II also modified the rules applicable to regulated markets and MTFs[178]. The concept of regulated markets in the UCITS Directive corresponds to the definition included in MIFID I[179]. The UCITS Directive also envisages the category of '*another* regulated market' in a Member State, for which it sets out the following conditions: (1) operating regularly and (2) being open to the public[180]. If the instruments were dealt in on another regulated market established in a third country, the choice of that market should be also approved by the NCA or should be provided for in law or the fund rules or the instruments of incorporation of the UCITS[181].

195. Some respondents to the Call for Evidence expressed support for aligning the definition of regulated market under the UCITS Directive with MiFID II. Other respondents advocated for treating EU MTFs as regulated markets, in line with the conditions provided by ESMA in its Q&As on the application of the UCITS Directive[182]. Furthermore, respondents agreed that, in order to avoid unduly limiting the universe of UCITS eligible assets, the equivalence rules set out in the MIFID II should not be applied for the purposes of UCITS investments. Consequently, they argued that UCITS should be able to invest in third-country markets meeting the conditions set out in the UCITS Directive[183], regardless of the equivalence decision by the European Commission from a MiFID perspective.

196. ESMA agrees that MTFs could be considered a regulated market[184] in line with the answer provided in its Q&As[185]. The relevant Q&A was adopted with reference to the definition and rules in force under the MIFID I regime. MIFID II significantly enhanced the safeguards for MTFs. Against this background, ESMA is of the

which is the home Member State as defined in Article 1(6)(c); (ii) functions regularly; (iii) is characterised by the fact that regulations issued or approved by the competent authorities define the conditions for the operation of the market, the conditions for access to the market and, where Directive 79/279/EEC is applicable, the conditions governing admission to listing imposed in that Directive and, where that Directive is not applicable, the conditions that must be satisfied by a financial instrument before it can effectively be dealt in on the market; (iv) requires compliance with all the reporting and transparency requirements laid down pursuant to Articles 20 and 21.

[177] Article 4(1)(23) of MIFID II.

[178] The main changes introduced stricter rules to MTFs aligning some of their obligations more closely with those of regulated markets (e.g. transparency and reporting requirements, best execution obligations, data reporting quality).

[179] Recital 37 of the UCTIS Directive.

[180] Article 50(1)(b) of the UCITS Directive. Since the UCITS I, there was no exact definition of such other markets. However, during the preparatory deliberations, it was clear that this referred primarily to the second-tier stock markets that had been created in several Member States and to the various, as they were called, '*unofficial markets*' (Commentary on the provisions of Council Directive 85/611/EEC of 20 December 1985 - "Towards a European market for the undertakings for collective investment in transferable securities", paragraph 89).

[181] Article 50(1)(c) of UCITS Directive.

[182] ESMA Q&A 948, ESMA clarified that an MTF operating within the EU is considered a regulated market under the UCITS framework, provided it meets the requirements outlined in Article 50(1)(b) of the UCITS Directive. The instruments in which a UCITS invests that are traded on such an MTF on behalf of a UCITS must comply with the Eligible Assets Directive, in particular with its Article 2(1).

[183] Article 50(1) of the UCITS Directive.

[184] Article 50(1) of the UCITS Directive.

[185] ESMA Q&A 948.

view that EU MTFs can be considered an eligible trading venue for UCITS. Therefore, ESMA recommends to the European Commission to (1) introduce the definition of regulated market and MTFs by way of adding a cross-reference to MIFID II and (2) amend the UCITS Directive[186], as well as the UCITS EAD[187], with the aim to including EU MTFs as an eligible trading venue for UCITS. ESMA considers it important to emphasise that where the UCITS intends to invest in financial instruments traded on MTFs all aspects relating to the eligibility of assets should be carefully assessed notably regarding liquidity and negotiability of the instruments.

197. ESMA agrees that the European Commission's equivalence decisions pursuant to MIFID II and MIFIR should not be the sole determinant for UCITS to invest in third-country markets. If a UCITS management company envisages to invest in such markets, it should actively carry out an assessment based on the eligibility criteria that the instruments have to meet, as well as all the other criteria that are of relevance for the investment itself (e.g. safekeeping rules, best execution, risk management). Notwithstanding this, the equivalence decision means that a third-country trading venue meets requirements that are equivalent to the requirements set out in the MIFID II framework. This decision, where adopted, should be taken into account when a UCITS management company performs due diligence on the envisaged investments.

198. In terms of qualification as financial instruments, two topics have been raised by the respondent to the public consultation: (1) the qualification of financial instruments issued using DLT as UCITS eligible assets, and (2) the eligibility of crypto-assets that qualify as financial instruments under MiCA[188].

199. Under MIFID[189], the financial instruments concept includes instruments[190] that have been issued by means of DLT. This element was included in the definition of 'financial instrument' under MiFID in order to ensure that such financial instruments could be traded on the markets under the existing legal framework. ESMA is therefore of the view that, the eligibility of those financial instruments should be assessed against the same criteria as for other instruments[191]. In other words, the technology used and the characteristics of the issuance or the market infrastructure should not exclude the eligibility of assets, unless the assessment whether the instrument meets the criteria set out for the eligibility of financial

[186] Article 50 of the UCITS Directive.
[187] See Annex VI for the legislative draft proposal.
[188] Article 2(4)(a) of MiCA.
[189] Article 4(1)(15) of MiFID.
[190] Section C of Annex I of the MIFID.
[191] The ESMA guidelines on the conditions and criteria for the qualification of crypto-assets as financial instruments clarified that the technological format of crypto-assets should not be considered a determining factor by NCAs and financial market participants when assessing the qualification as financial instruments and that tokenised financial instruments should continue to be considered as financial instruments for all regulatory purposes.

instruments or other information available to the UCITS would concretely lead to a different conclusion.

200. Crypto-assets that qualify as financial instruments under MiFID II or as AIFs under AIFMD fall outside the scope of MiCA[192]. Crypto-assets are not explicitly eligible for direct investments under the current UCITS framework[193]. However, a case-by-case analysis may lead to a different conclusion taking into account the following: (1) the qualification as a financial instrument under MIFID II (and, where relevant, other EU acts such as the AIFMD); (2) the instrument meeting the criteria and conditions set out in the UCITS Directive and in the UCITS EAD for being an eligible asset; (3) the UCITS being able to comply with all the requirements set out in the UCITS Directive and other regulations applicable to it.

17 Short positions

201. Without prejudice to the rule according to which UCITS cannot engage in uncovered sales of transferable securities, money market instruments or other financial instruments[194], UCITS are able to build up short positions e.g. through the use of derivatives or delta-one instruments. The CESR guidelines[195] provide clarity on the cover rules for transactions in financial derivatives instruments. These are applicable to all circumstances where a UCITS has commitments under the terms of the derivative contract, including synthetic short positions[196].

202. The majority of respondents to the Call for Evidence saw no need for legislative changes and expressed support for continue allowing UCITS to build up short positions through derivatives or other instruments or techniques. Respondents pointed out that short positions can be used to hedge against downturns in specific asset classes or markets, get access to certain investment strategies, generate additional revenue or to diversify the fund risk profile. On the other hand, building up short positions exposes UCITS to additional risks. Respondents highlighted that short positions may "theoretically" lead to unlimited losses. Respondents, including a consumer association, also pointed out that it could be difficult for retail investors to understand the associated risks and that UCITS

[192] Article 2(4) and (5) of MICA.
[193] As crypto-assets are not referred to as an eligible asset class under Article 50(1) of the UCITS Directive.
[194] Article 89 of the UCITS Directive.
[195] CESR/10-778.
[196] The cover rules set out in CESR 10/778 are the following: "*1. UCITS should, at any given time, be capable of meeting the obligations incurred by transactions involving financial derivative instruments and which give rise, for UCITS, to delivery as well as payment obligations. 2. Monitoring to ensure adequate coverage of the financial derivative transactions should form part of the risk management process*".
Synthetic short positions are defined as "*transactions in which a UCITS is exposed to the risk of having to buy securities at a higher price than the price at which the securities are to be delivered*"

management companies need implement sophisticated risk management techniques to monitor the added layer of complexity.

203. ESMA is of the view that there is no need for legislative amendments to the UCITS EAD in this respect. UCITS may build up short positions through derivatives or other financial instrument or techniques only where all requirements and limits set out in the UCITS framework are met. While ESMA acknowledges that short positions may expose UCITS to additional risks, it is of the view that these should be carefully considered in the operational and risk management processes of UCITS management companies in line with the CESR guidelines. Additionally, ESMA highlights the need to ensure adequate disclosures to investors including on whether the UCITS intends to take long positions, short positions, or both and the associated risks.

Annex I – European Commission mandate

Ref. Ares(2023)3906255 - 06/06/2023

EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR FINANCIAL STABILITY, FINANCIAL SERVICES AND CAPITAL MARKETS UNION

Director General

Brussels
FISMA.C.4/IK/mp(2023)5536037

Ms Verena Ross
Chair
European Securities and
Markets Authority (ESMA)
201-203 rue de Bercy 75012
Paris, France

Subject: Formal request to ESMA for technical advice on the review of Commission Directive 2007/16/EC on UCITS eligible assets

Dear Ms Ross,

Directive 2009/65/EC on Undertakings for Collective Investment in Transferable Securities ("UCITS Directive") is a key pillar of the EU Capital Market Union and has created a harmonised and well-functioning regime throughout the European Union for the management and marketing of mutual funds to retail investors.

The success of UCITS as a brand for retail and institutional investors, both within the European Economic Area and globally, is tied to their reputation as sound and well-regulated investment products. In particular, UCITS invest in assets subject to eligibility criteria aimed at ensuring that they are able to meet all their obligations, including in terms of portfolio liquidity, net asset value calculation and limits monitoring.

The scope of UCITS eligible assets is specified in Commission Directive 2007/16/EC of 19 March 2007 (*see* OJ L79, 20.3.2007, p. 11; hereinafter "Eligible Assets Directive") which, in turn, refers to Directive 85/611/EEC, a previous version of the UCITS Directive. The Eligible Assets Directive being in force since 2007, the Commission deems it important to take stock of the market practices to ensure that the eligibility rules are implemented in a uniform manner in all Member States, also taking into account market and regulatory developments that have occurred over the past 16 years.

The Commission therefore mandates ESMA to carry out an assessment of the implementation of the Eligible Assets Directive in the Member States, to analyse whether any divergences have arisen in this area and to provide the Commission with a set of recommendations on how the Eligible Assets Directive should be revised to keep it in line with market developments. In particular, ESMA should analyse the merits of linking certain definitions and concepts to other pieces of the EU acquis given the need to provide greater clarity, legal certainty and uniformity to UCITS management companies and additional protections to UCITS investors (e.g. MIFID II, EMIR, the Benchmark Regulation or MMFR). ESMA is invited to analyse the consistent application, amongst others, of "delta-one" instruments related provisions, indices, efficient portfolio management (EPM) techniques, the definition of money market instruments as well as the notion of liquidity and presumption thereof in relation to certain transferable securities.

In this context, ESMA is invited to propose clarifications on the key definitions and the criteria against which the eligibility of an asset is assessed. ESMA is also requested to analyse whether and to what extent cross-references to other EU legal frameworks could improve legal clarity and, where appropriate, consistency between these frameworks.

ESMA is also invited to assess the risks and benefits of UCITS gaining exposures to asset classes that are not directly investable for UCITS, e.g. through delta-one instruments, (embedded) derivatives and financial indices. In relation to EPM, ESMA is also invited to advise on possible legislative clarifications to address the shortcomings identified in the context of its supervisory convergence work, notably the 2018 peer review on the ESMA guidelines on ETFs and other UCITS issues[197] and its follow-up work performed in this respect as well as the ESMA Common Supervisory Action (CSA) on costs and fees in 2021[198].

To this end, ESMA is invited to conduct a data gathering exercise with NCAs, and, where needed, with market participants to gather insights on the manner and the extent to which UCITS have gained direct and indirect exposures to certain asset class that may give rise to divergent interpretations and/or risk for retail investors (e.g. structured/leveraged loans, catastrophe bonds, emission allowances, commodities, crypto-assets, unlisted equities, and other relevant asset classes). ESMA should use the technical input and the data by the NCAs and collect, where needed, the empirical evidence and data to be provided by NCAs to the extent required and deemed necessary by ESMA. NCAs are urged to fully cooperate with

[197] https://www.esma.europa.eu/sites/default/files/library/esma42-111-4479_final_peer_review_report_-_guidelines_on_etfs.pdf

[198] https://www.esma.europa.eu/sites/default/files/library/esma34-45-1673_final_report_on_the_2021_csa_on_costs_and_fees.pdf

ESMA in providing the requested data and to dedicate sufficient time and effort to ensure good-quality input as per ESMA's request.

Where the definitions and eligibility criteria proposed by ESMA might allow for exposure to the abovementioned asset classes, ESMA shall assess whether these exposures are adequate in the context of the UCITS taking into account the characteristics of the underlying market (e.g. availability of valuation, liquidity, safekeeping, etc.). ESMA is invited to rely upon and provide the Commission services with up-to-date data that would allow the latter to obtain insights into the absolute and relative size of such asset classes in the context of the UCITS market. In particular, ESMA should make a preliminary assessment of the impacts of the proposed regulatory adjustments, if any, taking into account the characteristics of the underlying market (e.g. availability of valuation, liquidity, assets safekeeping, etc).

ESMA is also invited, in its technical advice, to recommend which changes, if any, would be appropriate and could be achieved at Level 2 level and, if appropriate, which Level 1 amendments would appear appropriate and necessary in the medium and long-term.

To allow for a comprehensive public consultation, ESMA is requested to deliver its technical advice by **31 October 2024**.

To ensure legal certainty of the application of the UCITS rules and protect the reputation of the UCITS brand, both within the European Union and in third countries, I would like to emphasise that this request for a technical advice should aim to preserve and strengthen the well-functioning of the UCITS framework and the operation of the UCITS management companies in the best interest of investors, as well as the quality of investment products offered to retail clients.

Any respective discussions at ESMA's level in connection herewith or the technical advice delivered by ESMA shall not be used, referred to or relied upon as representing an official position or pre-judge any possible action of the European Commission.

I look forward to receiving ESMA's input and remain at your disposal for any questions.

Yours sincerely,

Electronically signed

Annex II – Summary of responses

1. Summary of stakeholder responses to Q1-Q19 and Q21-Q25

Q1. In your view, what is the most pressing issue to address in the UCITS EAD with a view to improving investor protection, clarity and supervisory convergence across the EU?

1. 41 respondents provided their views. This question received the highest amount of feedback. Many of the respondents illustrated their general view on the UCITS label and the reasons of its success as a global financial product. A large part of respondents supported broadening the universe of UCITS eligible assets.

2. The overarching remark is that the UCITS product has demonstrated its resilience and its capacity of being a trusted global retail investment product, even though two respondents highlighted also the importance of the UCITS brand for professional and institutional investors. The main reasons for its success have been linked to its features (a well-diversified, flexible, liquid and transparent investment product) and its stable and overall clear regulation, focused on investor protection. Respondents also mentioned the competitiveness of the UCITS brand, within and outside the EU market. However, many respondents also highlighted the existence of national laws or supervisory practices which jeopardise the convergent application of the UCITS rules across the EU.

3. Several respondents emphasised the need for a more convergent approach, with clearer definitions and greater EU harmonisation of rules on the UCITS eligibility of assets. Respondents highlighted the importance of achieving better convergence and eliminating unlevel playing field issues. The maintenance of a stable and reliable UCITS product ensures its attractiveness also beyond the European market. Moreover, the harmonisation and convergent application of requirements for investing in UCITS can reduce costs of managing and trading the assets, leading to lower costs and fees for both market participants and investors.

4. Respondents expressed mixed views on how to enhance the level of harmonisation. Several respondents expressed the opinion that Level 3 measures (e.g. guidelines and Q&As) would be the appropriate tools to provide better clarity and legal certainty for managers rather than amending the UCITS Directive or the EAD Directive. Other respondents agreed that the UCITS EAD needs to be updated in order to reflect the changes to other sectoral rules and market developments. One respondent suggested that amendments should follow a principle-based approach.

5. Respondents generally supported broadening the universe of eligible investments for UCITS and advocated for an approach which emphasises diversification,

liquidity and a comprehensive understanding of risk across all asset classes. To this end, some respondents pointed to the need for clarity on the relevant eligibility criteria, in particular with regard to 'liquidity' and 'negotiability'. Other respondents focused on indirect exposures, recommending clear guidance on the eligibility of those exposures and disclosure requirements in marketing materials and prospectuses. Moreover, regulators should also provide risk management principles and valuation principles for indirect exposures.

6. Regarding the expansion of the eligible investment universe, respondents focused on various topics related to their specific areas of expertise. A few respondents suggested including ETPs in the list of eligible assets and creating guidelines for investing in crypto-asset ETPs. Some respondents expressed support for including gold, highlighting benefits such as increased risk diversification. One association proposed the inclusion of loans, while others called for the inclusion of ELTIFs, CLOs, and commodities derivatives. Another association highlighted the benefits of investing in CLOs and broadly syndicated leveraged loans. One association advocated for making UCITS investments more efficient by allowing direct investments in all financial instruments that can already be invested in indirectly. Finally, some respondents suggested to include all financial instruments currently available to retail investors under the Prospectus Regulation[199].

7. The main arguments invoked by stakeholders for broadening the list of eligible assets related to the positive past performances of those assets, as well as the benefits to UCITS in terms of risk diversification and low correlation with traditional asset classes. Some respondents also noted that many of the asset classes identified in the consultation are already available to retail investors for direct investments, without the benefits granted by investing via a highly regulated product such as UCITS.

8. Conversely, a few respondents expressed concerns with the idea of expanding the list of eligible assets. Two associations representing depositaries argued that the eligibility should be limited to financial instruments to be held in custody. This is because other assets which could only be subject to recordkeeping requirements may not provide the same level of investor protection. UCITS should hold highly liquid assets to able to redeem investors at their request pursuant to the frequency set out in the prospectus. Another association pointed out that UCITS, being often the most common type of funds marketed to retail investors, should remain subject to a clear, straightforward framework and that this has been the strength of the UCITS brand since the adoption of the first UCITS Directive. These respondents

[199] Regulation (EU) 2017/1129 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market.

suggested that the access to alternative asset classes and strategies could be done though the AIFMD framework, including harmonised AIFs.

9. Some stakeholders stated that some NCAs have introduced enhanced scrutiny processes that often lack transparency, leading to restrictions or even outright prohibitions on investing in certain asset classes. Those processes are perceived as unclear, and respondents pointed out that the level of supervisory scrutiny and related process should be harmonised across the EU.

10. Another topic of interest was the application of the look-through approach. Some respondents highlighted the importance of establishing criteria for its application. These respondents wondered whether this approach is necessary for evaluating the eligibility of financial instruments that may not be directly investible but meet the requirements to be qualified as transferable securities. Other respondents expressed concerns with the application of look-through requirements.

11. One association representing the industry focused on issues regarding the creation of a voluntary label for "basic" products applicable to certain UCITS, as discussed in a recent ESMA publication[200]. The association posed questions about the criteria that will be used and whether this would imply the creation of two separate groups of "basic" and "non-basic" UCITS. The association cautioned against imprecise criteria that could lead to different national interpretations.

12. **ESMA response:** Feedback on how respondents' input to this question was addressed is provided under several Sections in the advice. Given the main focus on general concepts, the most relevant sections are Sections 4, 5 and 7.

Q2. Have you experienced any recurring or significant issues with the interpretation or consistent application of UCITS EAD rules with respect to financial indices?

If so, please describe any recurring or significant issues that you have experienced and how you would propose to amend the UCITS EAD to improve investor protection, clarity and supervisory convergence. Where relevant, please specify what indices this relates to and what were the specific characteristics of those indices that raised doubts or concerns. Where possible, please provide data to substantiate the materiality of the issue.

13. ESMA received 26 responses to this question. While some of them did not encounter any major issue, most of them provided different insights. The main topics raised concerned the overlap between different pieces of regulations and the existence of national divergences among Member States.

[200] ESMA Position Paper: Building more effective and attractive capital markets in the EU.

14. One of the concerns raised is the complexity of the regulatory framework. It includes the UCITS Directive, the CESR guidelines on eligible assets and the guidelines on financial indices set out in ESMA's guidelines on ETFs and other UCITS issues. In addition to them, there is the Benchmark Regulation, that lays down rules on indices and benchmark administrators. Several respondents suggested that simplifying the regulatory framework could enhance clarity and harmonisation, while also addressing overlaps and inconsistencies between different texts. A simpler framework for assessing index eligibility would ease the operational and compliance burden, benefiting investors.

15. Relatedly, some responses noted overlaps between the UCITS EAD and the Benchmark Regulation. In particular, some respondents highlighted that, when the benchmark administrator is authorised or registered under the Benchmark Regulation, the UCITS EAD requirements should be applied only with reference to the diversification rules, while rules on governance and transparency are already regulated by the Benchmark Regulation. Two associations, responding to Q18, noted that the ongoing review of the Benchmarks Regulation may remove the majority of benchmarks and their administrators from the scope of those rules, which would impact on a rationalisation between the EAD and Benchmark Regulation and that, with respect to the definition of an index in the Benchmark Regulation, not all indices may fall into the scope of the Benchmark Regulation and therefore an alignment of the definition of an index would not be appropriate for the moment.

16. Furthermore, a few respondents advocated for clarifying that when investing in an index derivative, there is no restriction on the counterparty being from the same financial group, given the fact that governance and conflict of interest requirements for benchmark administrators are laid down in the Benchmark Regulation.[201]

17. A few respondents also advocated for a simplification of the procedural rules linked to investments in financial indices. In particular, two associations highlighted that the requirements to ensure financial indices are sufficiently diversified and to notify the home NCA of the UCITS where certain criteria are fulfilled are too burdensome. The same point was highlighted by an association, which expressed concerns that the due diligence requirements prescribed by ESMA’s ETF guidelines are too burdensome for plain-vanilla and bond indices. Thus, the EAD requirements were viewed to be sufficient for these indices. Those respondents asked ESMA to consider, where appropriate, ways to simplify this process, taking into consideration the developments that have taken place under the EU Benchmark Regulation.

[201] Article 4 of the Benchmark Regulation.

18. Many respondents highlighted divergences at national level, some of which related to the discretional powers granted to Member States. Two associations noted that divergent approaches arise from NCAs' discretion under the UCITS Directive[202] regarding whether UCITS must combine investments in index-based derivatives to meet the diversification limits[203]. One association pointed out divergences in the way some NCAs apply other relevant diversification provisions set out in the UCITS Directive[204]. While most NCAs permit such diversification, some seem to have additional requirements for those indices that exceed the diversification requirements laid down UCITS Directive[205].

19. Other respondents highlighted the importance of following a convergent approach across Member States with regard to the UCITS EAD provisions on financial indices composed of assets other than those referred to in the UCITS Directive[206], where there are currently divergent approaches to the exposures to ineligible assets. Those respondents also sought clarifications on whether it is permissible to exceed the 20% limit and reach 35% for an index component made up of ineligible assets, such as commodities.[207]

20. Those respondents also requested clarification on the application of the look-through approach. They saw merit in ESMA clarifying that there is no need to look through to the index components for ensuring compliance with concentration limits where the index is diversified in accordance with the UCITS Directive.[208] Other respondents added the observation that under the Benchmark Regulation, a look-through approach is not required with respect to financial indices, but the UCITS framework requires its application. This has led to misalignments among NCAs which should be removed in order to avoid an unlevel playing field. One association recommended that UCITS investments in financial indices should be limited to those indices that are sufficiently diversified considering the rules provided in the Benchmark Regulation.

21. Relatedly, respondents pointed out that costs for investing in financial indices are high, and that is also linked with the need to look through to the underlying of assets which composes the index as well as the due diligence to be performed by UCITS management companies where they invest in these. Those respondents advocated for a simplification of the rules set out, notably in the ESMA guidelines on ETFs and other UCITS issues.

[202] Article 51(3) of the UCITS Directive.
[203] Article 52 of the UCITS Directive.
[204] Article 53 of the UCITS Directive.
[205] Article 52 of the UCITS Directive.
[206] Article 9(1)(a)(iii) of the UCITS EAD in conjunction with Article 50(1) of the UCITS Directive.
[207] Article 53 of the UCITS Directive.
[208] Article 53 of the UCITS Directive.

22. In addition, some respondents saw merit in clarification regarding the term 'market' as well as the parameters for what constitutes an adequate market benchmark, where the index has been created and calculated at the request of one or a few market participants.[209]

23. Finally, two associations raised additional issues. One respondent reported encountering interpretation issues related to representativeness in the cases of equally-weighted indices, indices with one component heavily weighted, and strategy indices. They also noted challenges with diversification where long and short components are involved, particularly when the total weight is not equal to 100%. Furthermore, they raised concerns about publication issues where the information is only accessible via a link to a website that cannot be found through standard internet searches.

24. One respondent expressed support for ESMA to define clear and detailed criteria for index eligibility concerning digital assets. They also suggested that ESMA develops guidance on disclosures related to the composition, methodology, and risk factors of indices used in UCITS.

25. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 10.

Q3. Have you experienced any recurring or significant issues with the interpretation or consistent application of UCITS EAD rules with respect to money market instruments?

If so, please describe the issues you have experienced and how you would propose to amend the UCITS EAD to improve investor protection, clarity and supervisory convergence. Where relevant, please describe the specific characteristics of the money market instruments that raised doubts or concerns.

26. ESMA received 24 responses to this question. Several market participants did not encounter significant issues, and they agreed that the definitions and the criteria of money market instruments set out in the UCITS EAD are clear and do not need further clarifications. One respondent noticed that the various definitions of MMFs in the regulatory framework should be harmonised.

27. Conversely, some respondents raised questions with the qualification of securities as money market instruments, especially where they meet the criteria set out in UCITS EAD during their lifespan.[210] This may happen when an instrument,

[209] Article 9(b) of the UCITS EAD.
[210] Article 3(2) of UCITS EAD.

classified as an eligible transferable security under UCITS EAD[211], reaches a residual maturity of no more than 397 days. These respondents agreed that the current formulation of the UCITS EAD[212] obliges to automatically classify those instruments – including, for instance, high-yield bonds – as money market instruments, even though they do not have their characteristics. According to those respondents, such change in the classification may create issues in consideration of the different frameworks in place for transferable securities and money market instruments. Moreover, two associations pointed out that depositaries may face related challenges in their oversight process.

28. Therefore, those respondents recommended amending the UCITS EAD in order to avoid the aforementioned issues related to the requalification of securities as money market instruments. They suggested to clarify that money market instruments should have an interest risk and a credit risk that corresponds to the money market.

29. One association highlighted the existence of divergent interpretations regarding the possibility of qualifying some assets, in particular loans, as money market instruments.

30. Related to the qualification of instruments and techniques as money market instruments, other respondents proposed to align the UCITS EAD with the MMFR. Those respondents agreed that the UCITS EAD should include reverse repurchase agreements as an eligible money market instrument under the conditions set out in the MMFR[213].

31. A few respondents pointed out that limits on investments in money market instruments and MMF, resulted in diminished yields because of unused cash deposited in bank accounts. Therefore, they advocated for reconsidering this limit.

32. Lastly, a few respondents advocated for a greater alignment between the UCITS framework and the MMFR with respect their investment limits. Regarding investments in units or shares of funds, a UCITS is permitted to invest up to 10% in any unit or shares, while a UCITS MMF can only invest up to 5% in units or shares of another MMF[214]. Furthermore, divergences between the deposit limits set out in the UCITS Directive and the MMFR have been pointed out.

33. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 8.

[211] Article 2 of UCITS EAD.
[212] Article 3(2) of the UCITS EAD.
[213] Article 15 of the MMFR.
[214] Article 16 of the MMFR.

Q4. Have you experienced any recurring or significant issues with the interpretation or consistent application of UCITS EAD provisions using the notions of « liquidity » or « liquid financial assets »?

If so, please describe the issues you have experienced and how you would propose to amend the UCITS EAD to better specify these notions with a view to improving investor protection, clarity and supervisory convergence. Where relevant, please explain any differences to be made between the liquidity of different asset classes.

34. 23 respondents provided feedback on this question. There is consensus among respondents that liquidity is a dynamic concept, difficult to define precisely or quantify in legislative terms. Three main liquidity-related issues were highlighted: the notion of liquidity, the liquidity assessments, and the presumption of liquidity. The latter is covered in more detail under Q5.

35. On this basis, some respondents agreed that no major issues have arisen with regard to the current framework and believe that the requirements set out in the UCITS Directive are sufficiently clear. Those respondents also pointed out that a strict definition of liquidity may harm investors, by preventing UCITS from accessing highly investible assets.

36. Conversely, some respondents saw merit in addressing challenges around the notion of liquidity by following a principles-based approach complemented by guidance though Level 3 measures. Relatedly, one respondent suggested to take into consideration concepts such as market depth and liquidity mechanisms when clarifying the concept of liquid financial assets. Furthermore, another association expressed the opinion that ESMA could specify different liquidity requirements for assets belonging to unique markets such as digital and crypto-assets.

37. On the liquidity assessments, some respondents expressed the view that it should be focused on the overall portfolio, rather than at the asset level. These respondents argue that the UCITS liquidity framework[215] is calibrated for assessing liquidity at the portfolio level. The notion of liquidity relates to the ability to fulfil investors' redemption requests while upholding the interests of all unitholders.

38. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 5.

[215] Pointing to (1) Article 40(3) and (4) of Directive 2010/43/EU, (2) ESMA's guidelines on liquidity stress testing in UCITS and AIFs, (3) International Organization of Securities Commissions ("IOSCO") Recommendations for Liquidity Risk Management for Collective Investment Schemes, (4) recent amendments introduced by Directive (EU) 2024/927 to the UCITS Directive and (5) Level 2 measures regarding liquidity risk management and tools.

Q5. The 2020 ESMA CSA on UCITS liquidity risk management identified issues with respect to the presumption of liquidity and negotiability set out in UCITS EAD. In light of the changed market conditions since 2007, do you consider such a presumption of liquidity and negotiability still appropriate?

Where possible, please provide views, data or estimates on the possible impact of removing the presumption of liquidity and negotiability set out in the UCITS EAD.

39. 27 respondents provided feedback on this issue. Most respondents expressed the view that the presumption of liquidity is adequate and allows UCITS managers to operate under a pragmatic, risk-based approach, focusing their attention and resources more effectively on liquidity risk management across a broad range of asset classes. Several respondents argued that removing it could force UCITS managers to perform additional analysis, increasing operational costs.

40. Respondents argued that the efficacy of the presumption of liquidity and negotiability emerges also in conjunction with the liquidity management framework. In addition, the presumption of liquidity is especially useful for new primary issuance of bonds as there is no reliable historical trading data.

41. Two respondents pointed out that the ESMA public statement on the 2020 CSA on UCITS liquidity risk management did not oppose the presumption of liquidity but rather highlighted the importance of UCITS managers considering additional liquidity criteria (e.g. trading volumes), to complete their liquidity assessments. Moreover, it was noted that the CSA only revealed a few cases with significant liquidity risks.

42. One association suggested supplementing the presumption with further guidance on what may be considered sufficiently liquid and negotiable.

43. Conversely, one association was of the view that the presumption of liquidity and negotiability is too broad. This association pointed out that there are various cases (e.g. microcaps, unforeseeable real-world events) in which the admission to trading on a regulated market may not imply that a UCITS manager can effectively liquidate the asset in a timely manner.

44. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 5.

Q6. Please explain your understanding of the notion of ancillary liquid assets and any recurring or significant issues that you might have experienced in this context.

Please clarify if these are held as bank deposits at sight and what else is used as ancillary liquid assets. Where relevant, please distinguish between ancillary

liquid assets denominated in (1) the base currency of the fund and (2) foreign currencies.

45. ESMA received 24 responses to this question. The most recurring issue raised concerned the level of convergence and varying interpretations among Member States. While some NCAs have not introduced any limits, some have set counterparty limits or thresholds to the maximum amount of ancillary liquid assets. The majority of respondents advocated for a greater level of EU harmonisation and supervisory convergence.

46. Respondents shared different ideas on how to amend the rules in order to foster convergence in this area. Some respondents expressed support for having no limits on ancillary liquid assets, given their temporary nature, but have restrictions on any single counterparty.

47. One respondent expressed the need to specify the purposes that ancillary liquid assets serve and the categories of assets that can be used. Relatedly, two respondents expressed the view that the purpose of ancillary liquid assets is to provide flexibility in managing payments, reinvesting proceeds from the sale of portfolio holdings or pausing investments in other financial assets under certain market conditions.

48. Several associations proposed to recalibrate the use of adverbs, such as "temporary" or "ancillary", either by avoiding or specifying these, introducing a definition or a threshold. The latter approach was supported also by another association.

49. Some respondents advocated for clarifying the type of instruments that can be used as ancillary liquid assets. Those respondents proposed also to include in the definition not only bank deposits at sight, but also MMFs and government bonds

50. One association, in case of "unfavourable market conditions", suggested adding also short-term bank deposits (maximum 3 months). Another respondent expressed the view that UCITS managers should be allowed to increase the proportion for a limited period of time, under the condition of declaring such need to the NCA.

51. Finally, some respondents pointed out that in May 2024, several countries, including the United States, Canada, and Mexico, transitioned to a shortened settlement cycle of T+1 for domestic securities transactions. Mismatches between a fund's dealing cycle and the standard settlement cycle for securities in a domestic market have caused operational problems for UCITS managers. In some cases regulatory requirements on deposits and ancillary liquidity assets limits are violated as a result.

52. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 12.

Q7. Beyond holding currency for *liquidity* purposes, do you think UCITS should be permitted to acquire or hold foreign currency also for *investment* purposes, taking into account the high volatility and devaluation/depreciation of some currencies?

Where relevant, please distinguish between direct and indirect investments.

53. 31 respondents provided feedback on this question. A significant majority of respondents see merit in allowing UCITS getting, directly or indirectly, exposures to foreign currency for liquidity and investment purposes, provided that the associated risks are properly disclosed and managed. These respondents argued that this type of investment could provide benefits to investors by achieving greater portfolio diversification, risk reduction and enhanced overall returns because of advantageous exchange rate fluctuations. Moreover, it would support the competitiveness aims of the EU and could be beneficial in consideration of the new types of foreign currencies such as stablecoins denominated in USD, or CBDCs. In addition, they noted that the forex market is the largest financial market in the world, characterised by great liquidity, and that currency volatility usually is much lower than equity volatility.

54. Furthermore, a few respondents pointed out that UCITS can already gain exposure to foreign currency for investment purposes by investing in equities or stocks denominated in foreign currency. To this end, those respondents pointed out that investors are exposed to both currency risk and equity market risks.

55. From a legal perspective, a few respondents also argued that this issue should be dealt with at Level 1, which currently does not restrict investments in currencies.

56. Conversely, one respondent argued that, given the potential exchange rate and volatility risks linked to currencies, holding them should not be allowed beyond liquidity purposes.

57. One association expressed a middle view according to which UCITS should only in a few cases be allowed to invest a limited portion of their assets in a set of currencies with an established track record of rate stability with high liquidity, where justified.

58. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 13.

Q8. Have you observed any recurring or significant issues with the interpretation or consistent application of the 10% limit set out in the UCITS Directive for

investments in transferable securities and money market instruments other than those referred to in Article 50(1) of the UCITS Directive?

If so, please explain the issues and how you would propose to address them in the UCITS EAD with a view to improving investor protection, clarity and supervisory convergence.

59. ESMA received 35 responses to this question. The overall view is that the 10% limit[216] should allow UCITS to gain exposures to those asset classes that are not formally eligible to UCITS.

60. Although some respondents noted that there are no major issues, they pointed to national divergences. In this context, several respondents suggested introducing a more specific definition of transferable security or money market instrument other than those listed in the UCITS Directive[217] or even including specific asset classes, such as ETPs on crypto-assets.

61. Several respondents also linked the 10% limit with investments in units or shares of funds, including – for some respondents – funds investing in assets that are ineligible under the UCITS Directive. Contrary to the 2012 opinion by ESMA[218] stating that UCITS may only invest in units or shares of CIUs as defined in the UCITS Directive[219], some of these respondents argued that certain CIUs should be included in the 10% limit, provided that they meet the criteria for being a transferable security or a money market instrument. In terms of process, this change could be done either through an update of the ESMA Opinion, other Level 3 measures or amending the UCITS Directive[220] or EAD.

62. Some respondents expressed concerns regarding the investment limits set out in the UCITS Directive, viewing them as too strict and detrimental to the attractiveness of EU capital markets. These respondents saw merit in ESMA recommending a broader review of the UCITS Level 1 Directive to assess potential adjustments of the investment limits set out in the UCITS Directive. Some of these respondents shared the view that actively managed UCITS should be subject to limits which are equal to the ones set out in for index-replicating UCITS.[221]

63. One respondent highlighted that under the UCITS Directive[222], a UCITS can only invest in transferable securities and money market instruments listed on a third country exchange or market if that exchange or market is listed in the UCITS

[216] Article 50(2)(a) of the UCITS Directive.
[217] Article 50(1) of UCITS Directive.
[218] ESMA opinion on Article 50(2)(a) of Directive 2009/65/EC (ESMA/2012/721).
[219] Article 50(1)(e) of the UCITS Directive.
[220] Article 50(2)(a) of UCITS Directive.
[221] Article 53 of the UCITS Directive.
[222] Article 50(1)(c) of the UCITS Directive.

prospectus. These respondents proposed an amendment of the legislation in order to consider as eligible transferable securities or money market instruments *"(i) listed or traded on an EU regulated market, (ii) listed on a market specified in the UCITS prospectus, or (iii) certified by the management company as operating regularly, recognized, and open to the public*".

64. Finally, one association proposed a recalibration of the 10% limit to 15%, which would allow for greater strategic discretion.

65. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 7.

Q9. Are the 'transferable security' criteria set out in the UCITS EAD adequate and clear enough?

If not, please describe any recurring or significant issues that you have observed and how you would propose to amend the UCITS EAD to improve investor protection, clarity and supervisory convergence.

66. 29 respondents answered this question. The majority of respondents agreed that the notion and the criteria for the qualification as 'transferable security' are clear and sufficient, and that there have not been major issues in their application. Notwithstanding these views, various respondents advocated for clarifying the definition and the criteria set out in the UCITS Directive and UCITS EAD.

67. A few respondents were of the view that the notion of transferable security should be broadened to include all tradable financial assets, including delta-one instruments. A few respondents suggested including in the definition digital trading exchanges under the MiCA regime, arguing that those instruments satisfy the requirement for a transferable security to be traded on a 'regulated market' under MiFID[223]. Similarly to traditional stock exchanges these were described as providing a mechanism for trading and liquidity and playing an important role in the price discovery process.

68. Two associations suggested aligning UCITS and MiFID[224] definitions of 'transferable security' in order to increase clarity and supervisory convergence.

69. Several respondents saw merit in certain amendments to the existing criteria set out in the UCITS EAD for the qualification as transferable security..

70. In particular, some respondents suggested that the criterion of "*reliable valuation*" should be specified, including a minimum frequency for the valuation and stating

[223] Article 4(14) of MiFID II.
[224] Article 4(1)(44) of MiFID II.

that the information source for this valuation should be independent of the UCITS manager. Moreover, other respondents promoted changing the terms "*negotiable*" and "*freely transferable*".

71. To improve clarity and convergence, other respondents suggested that ambiguous criteria such as the one related to risks (see further under Q10 below) or "consistency with the investment policy of the UCITS" should be either removed from the eligibility criteria and limited to the UCITS management company's risk management process or specified with the aim to providing greater clarity.

72. Finally, one association highlighted the need the focus the eligibility assessment on the type of underlying rather than the type of instrument.

73. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 6.

Q10. How are the valuation and risk management-related criteria set out in the UCITS EAD interpreted and applied in practice, in particular the need for (1) risks to be "adequately captured" by the risk management process and (2) having "reliable" valuation/prices.

Please describe any recurring or significant issues that you have observed with the interpretation or consistent application of these criteria and how you would propose to amend the UCITS EAD to improve investor protection, clarity and supervisory convergence.

74. ESMA received 28 responses to this answer. The majority of them pointed out that the criteria on risk management and valuation should be clarified or reconsidered. Some responses acknowledged that the industry has put in place common practices in this respect and that no significant issues have been encountered.

75. A few respondents noted that the systems adopted for risk management and pricing models are suitable for the assessment of risks and valuation of both traditional and new assets. With regard to the former, those are already covered by the risk management process and valuation policies in place, whose effectiveness is periodically assessed and amended as needed. With regard to the latter, before the investment, new instruments are subject to a dedicated risk and valuation assessment. UCITS managers integrate new financial instruments into their UCITS portfolios only if internal processes can adequately price the instrument and capture the risks related to the investment.

76. Some stakeholders interpreted these criteria to imply that the manager has the obligation to ensure that all risks associated with the investment are covered by the risk and investment compliance processes.

77. Conversely, several respondents reported that there are diverging interpretations on the extent to which the risks of a financial instrument are *"adequately captured by the risk management process of the UCITS*". Some of these respondents advocated for further clarification of this criterion. Within this group, a few respondents were of the view that this criterion should be considered fulfilled to the extent that sufficient historical data or a proxy that may be identified by the UCITS exist. Others reasoned that risk management and valuation-related matters should remain outside the perimeter of the eligibility assessment.

78. A few associations requested further clarification concerning the criterion relating to "*reliable*" valuations and prices. One of them expressed the need to specify it with regards to "other securities". It was suggested to introduce a minimum set of requirements on valuation processes, either in the UCITS EAD or through technical standards or guidelines.

79. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 6.

Q11. Are the UCITS EAD provisions on investments in financial instruments backed by, or linked to the performance of assets other than those listed in Article 50(1) of the UCITS Directive adequate and clear enough?

Please describe any recurring or significant issues that you have observed in this respect and how you would propose to amend the UCITS EAD to improve investor protection, clarity and supervisory convergence.

80. ESMA received 27 responses to this question. A few of them noted that the provision is adequate, while several others highlighted divergences among Member States.

81. Respondents pointed out that divergences have risen with regard to the application of the look-through approach and some specific financial instruments backed by or linked to the performance of assets other than those listed in the UCITS Directive. Furthermore, some respondents mentioned issues related to the interpretation of some instruments as derivatives or as financial instrument backed by or linked to the performance of other assets than those listed in the UCITS Directive.

82. With reference to the look-through approach, respondents highlighted that it is not clear whether such obligation exists. On this point, respondents noted that different approaches are in place across Member States. Several respondents argued that EU harmonisation is needed on this matter in order to facilitate cross-border distribution, remove competitive distortions and offer a higher level of transparency to investors. One association argued that UCITS should be permitted to invest in securities, irrespective of their underlying.

83. Some respondents pointed to inconsistencies regarding instruments listed and traded on regulated markets that offer exposure to ineligible assets. For instance, these respondents noted that certain Member States do not consider transferable securities backed by crypto-assets as eligible, even if they comply with the Prospectus Regulation and are listed on EU/EEA Regulated Markets and are already widely available to retail investors.

84. One association highlighted the ambiguity of the concept of financial instruments backed by or linked to the performance of assets other than those referred to in the UCITS Directive, pointing out two key aspects. Firstly, it is unclear whether it encompasses ETFs, in addition to ETCs and ETNs. Secondly, although they believe the look-through approach is not necessary, UCITS managers still have obligations concerning the eligibility of each individual security. For instance, this association noted that UCITS managers assess the individual risk positions of these financial instruments, verifying that the purchase does not imply physical delivery and the appropriate disclosures are provided.

85. Finally, one association expressed the need to add an exemption for certain delta-one instruments in order to align UCITS eligible investment with accessible retail products in the EU.

86. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 7. Furthermore, please refer also to the relevant sections related to the investment in specific asset classes (namely, Sections 8, 9, 10, 11).

Q12. Is the concept of « embedded » derivatives set out in the UCITS EAD adequate and clear enough? Please describe any recurring or significant issues that you have observed with the interpretation or consistent application of this concept and how you would propose to amend UCITS EAD to improve investor protection, clarity and supervisory convergence.

87. 29 respondents answered this question, expressing split views. Some responses noted that the concept is sufficiently clear. Conversely, several respondents considered the notion a source of unclarity, pointing to divergent national approaches in places. An association noted that the average investor may not be able to understand the risks associated with exposures to derivatives. Therefore, investments in embedded derivatives should be limited to hedging purposes.

88. Part of the respondents pointed out that Member States have developed their own definition of "embedded derivatives", concerning transferable securities that refer to other assets. To this end, these respondents suggested ESMA clarifying the definition through Level 3 measures, in order to enhance EU harmonisation.

89. Some respondents sought clarification on the extent to which an embedded derivative must qualify as an eligible derivative under the UCITS Directive.[225] They noted that there does not appear to be any text explicitly stating that an embedded derivative must comply with the requirements outlined the UCITS Directive.

90. Some responses focused on individual asset classes, explaining why they should be viewed as embedding or not embedding derivatives.

91. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 9.

Q13. Linked to Q11 and Q12, ESMA is aware of diverging interpretations on the treatment of delta-one instruments under the EAD, taking into account that they might provide UCITS with exposures to asset classes that are not eligible for direct investment (see also Section 3.2). How would you propose to amend the UCITS EAD to improve investor protection, clarity and supervisory convergence?

Please provide details on the assessment of the eligibility of different types of delta-one instruments, identify the issues per product and provide data to support the reasoning.

92. 32 respondents answered this question. Respondents agreed that a legal definition of delta-one instruments currently does not exist and focused their attention to the advantages and disadvantages of UCITS exposed to the asset class and the application of the look-through approach. In general, these pointed to divergences across Member States and unclarity on the treatment of delta-one instruments.

93. Respondents outlined several advantages of investing in these instruments, such as diversification, reduced costs, and lower risks associated with the underlying assets, access to certain markets and instruments that might otherwise not be eligible to UCITS. Additionally, they offer institutional-grade product due diligence, increased liquidity, transparency and overall efficiency. These respondents did not support a revision of the EAD that would impose restrictions or result in significant changes.

94. Conversely, one investor protection association strongly disagreed with making substantial investments in these instruments, as they expose the UCITS to additional counterparty and leverage risk. Another association expressed its concern regarding these instruments, which are perceived as a form of circumvention by some managers that invest in commodities, crypto-assets, and

[225] Article 50(1) of the UCITS Directive.

other ineligible asset classes via delta-one instruments. Hence, this respondent argued that a look-through approach is required, except for those instruments that have a daily quotation from independent third parties.

95. A few respondents argued that delta-one instruments are already recognised as transferable securities and are therefore eligible for UCITS. Others argued that these instruments should be assessed, like other financial instruments, to determine if they qualify as transferable securities. Some respondents agreed that delta-one instruments should be eligible regardless of the underlying asset, as long as they are simple and do not embed derivatives. Those that supported the eligibility of delta-one instruments also highlighted the need for sufficient investor disclosures.

96. Some respondents argued that the look-through approach should be performed from a risk management perspective, as part of the regular monitoring. One of them suggested including their ineligible underlying in the 10% limit set out int he UCITS Directive[226] and specified that these changes should be done at Level 3.

97. Various respondents highlighted that divergent interpretations exist among NCAs. For instance, some NCAs take the position that a delta-one instrument should not automatically be seen as embedding a derivative, while others view them by default as embedding a derivative and therefore require a look-through.

98. A few respondents called for clearer criteria for the qualification as delta-one instruments. Another suggestion proposed was to pursue convergence through a common tool, such as a standardised questionnaire, leaving NCAs room to manoeuvre and adapt to their specific market conditions. Lastly, another suggestion was to define a ratio or to allow managers to determine limits to the investment in relevant assets based on their risk management practices.

99. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 9.

Q14. Have you observed any recurring or significant issues with the interpretation or consistent application of the rules on UCITS investments in other UCITS and alternative investment funds (AIFs)? In this context, have you observed any issues in terms of the clarity, interaction and logical consistency between (1) the rules on investments in UCITS and other open-ended funds set out in the UCITS Directive and (2) the provisions on UCITS investments in closed-ended funds set out in the UCITS EAD?

[226] Article 50(2)(a) of the UCITS Directive.

Please describe any recurring or significant issues that you have observed in this respect and how you would propose to amend the relevant rules to improve investor protection, clarity and supervisory convergence. Where relevant, please distinguish between different types of AIFs (e.g. closed-ended, open-ended), investment strategies (real estate, hedge fund, private equity, venture capital etc.) and location (e.g. EU, non-EU, specific countries). In this context, please also share views on whether there is a need to update the legal wording used in the UCITS EAD and UCITS Directive given the fact that e.g. they refer to 'open-ended' and 'closed-ended funds', whereas it might seem preferable to use the notion of 'AIFs' by now given the subsequent introduction of the AIFMD in 2011.

100. ESMA received 26 responses to this question. The overarching view was to broaden UCITS investments in AIFs, with some respondents arguing that these investments should be deemed as eligible and others that advocated for the inclusion of investment in AIFs within the 10% limit set out in the UCITS Directive[227]. Several respondents also advocated for an update of the definitions used in the UCITS Directive and in the UCITS EAD, as they predate the introduction of the AIFMD. Only one response explicitly stated that it is not necessary to reopen the EAD, as the discrepancy between the current legislations has not led to major issues. One association did not agree with an application of the look-through approach as that would mean an ongoing assessment of the portfolio of the target fund.

101. The majority of respondents advised to update the provisions in the UCITS framework. Some respondents pointed to the need to update the EAD to specify the types of funds in which UCITS are allowed to invest. Several other respondents did not support a distinction between 'open-ended' and 'closed-ended funds' in this context, arguing that it is outdated, considering the new legislative developments (i.e. AIFMD and ELTIF Regulation).

102. Some respondents also suggested that the amendments should consider non-EU AIFs. These respondents asked for more clarity on how to apply the equivalence rule set out in the UCITS Directive[228].

103. Some respondents advocated for the inclusion of ETFs in the 10% limit[229], as they grant exposure to certain assets not directly eligible for UCITS (e.g. commodities, crypto-assets), provided these are ETFs admitted to trading on regulated markets in the EU or in jurisdictions offering a similar level of protection.

[227] Article 50(2)(a) of the UCITS Directive.
[228] Article 50(1)(e) of the UCITS Directive.
[229] Article 50(2)(a) of the UCITS Directive.

104. One respondent argued that UCITS should be permitted to invest also in ELTIFs, as they operate under a robust regulatory framework that offers investor protection comparable to those of UCITS and are specifically designed for distribution to retail investors.

105. In addition, a few respondents agreed that it should be clarified through guidance that REITs are considered as CIUs for the purposes of the EAD. Others simply stated that clarification regarding REITs is needed, without expressing a preference.

106. A few respondents highlighted the existence of interpretative issues, specifically related to the national implementation of the UCITS framework. By way of example, in one jurisdiction, the term 'asset segregation' has been reportedly translated incorrectly in the context of the rules on UCITS investments in AIFs.[230] Certain respondents noted that this translation issue, in their view, has resulted in a situation where UCITS management companies assess only the 'risk diversification' (not asset segregation) requirements set out in the UCITS Directive[231]

107. Lastly, one association pointed out that it is not clear how much disclosure is needed where the target UCITS has an investment objective and/or policy that is not completely in line with that of the investing UCITS.

108. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under section 11.

Q15. More specifically, have you observed any recurring or significant issues with the interpretation or consistent application of the rules on UCITS investments in (1) EU ETFs and (2) non-EU ETFs?

Please describe any issues that you have observed in this respect and how you would propose to amend the relevant rules to improve investor protection, clarity and supervisory convergence.

109. 25 respondents answered this question. A few respondents did not encounter major issues and argued that the investment in non-EU ETFs should guarantee the same level of protection for investors. However, a large part of respondents pointed to divergent approaches across Member States, calling for a greater level of EU harmonisation.

[230] Article 50(1)(e)(ii) of the UCITS Directive, which requires that: "*the level of protection for unit-holders in the other collective investment undertakings is equivalent to that provided for unit-holders in a UCITS, and in particular that the rules on asset segregation, borrowing, lending, and uncovered sales of transferable securities and money market instruments are equivalent to the requirements of this Directive*".
[231] Article 52 of the UCITS Directive.

110. In particular, several stakeholders highlighted that issues may arise with the application of the UCITS rules to non-EU ETFs, especially the ones ruled under the US Investment Company Act of 1940 (1940 Act). In fact, non-EU ETFs are generally not restricted from holding more than 10% in units or shares of other funds. Therefore, this rule may prevent UCITS from accessing highly liquid and cost-effective US ETFs, even though these are generally consistent with the investment criteria for UCITS.

111. Several respondents noticed also that, pursuant to the interpretation set out in ESMA's aforementioned opinion from 2012, US ETFs cannot be acquired under the 10% limit[232] either. These respondents would support US ETFs to be considered eligible, since they operate in a highly regulated, closely supervised, and liquid marketplace.

112. Consequently, some respondents argued that those ETFs shall be qualified as transferable securities for the purposes of the UCITS Directive as long as they are traded on regulated markets within the EU or in jurisdictions with similar regulatory safeguards and meet the criteria for a transferable security. Other respondents recommended including them in the 10% limit set out in the UCITS Directive[233].

113. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 11.

Q16. How would you propose to amend the UCITS EAD to improve investor protection, clarity and supervisory convergence with respect to the Efficient Portfolio Management (EPM)-related issues identified in the following ESMA reports:

(1) Peer Review on the ESMA guidelines on ETFs and other UCITS issues:

(2) Follow-up Peer Review on the ETF guidelines; and

(3) CSA on costs and fees.

In this context, ESMA is interested in also gathering evidence and views on how to best address the uneven market practices with respect to securities lending fees described in the aforementioned ESMA reports with a view to better protect investors from being overcharged.

114. 23 respondents answered this question. The majority of respondents pointed to the benefits of EPMs techniques. Some of them considered the rules to be appropriate and sufficient, while the majority raised questions and proposed suggestions, mostly related to the Level 3 provisions included in the ESMA

[232] Article 50(2)(a) of the UCITS Directive.
[233] Article 50(2)(a) of the UCITS Directive.

guidelines on ETFs and other UCITS issues. The responses focused mostly on costs and collateral arrangements.

115. With regard to costs, the majority of respondents were of the view fee-split arrangements should be permitted, enabling UCITS management companies to deduct a fair market rate fee for initiating, preparing and executing securities lending transactions, with the portion of the generated fees that UCITS receive clearly communicated to investors. This approach would help address concerns about the potential for hidden fees, ensure transparency in how revenues from securities lending are allocated, and keep a high level of competitiveness. Some respondents also pointed out that lower costs may lead to a lower quality of the services provided when some EPMs techniques, especially securities lending, are deployed.

116. Conversely, one association's research indicated that many UCITS may not adhere to the requirement to return all net profits from securities lending to unit-holders by directing substantial portions of the revenue to affiliated intermediaries as "agent fees" or retaining a large share under "other operational costs”. To address this issue, this association recommended that the UCITS EAD rules should be revised to impose stricter requirements and enhance enforcement, ensuring full transparency in passing revenues to investors. Specifically, the concepts of "net profit" and "operational costs" should be assessed together, and any significant discrepancies with market peers using third-party agents should be explained to NCAs.

117. On securities lending, one respondent also pointed out that UCITS management companies may not be able to regularly review costs and fees, especially when the management company relies on the infrastructure of third parties. This respondent expressed the view that comprehensive reviews are challenging due to issues like lack of information, difficulties in comparisons with competitors, volumes of securities operations and borrower quality.

118. With regard to collaterals, the main issues raised concerned the possibility of engaging in collateral arrangements with no title transfer and the opportunity of broadening the reuse of cash.

119. Some respondents focused on the use of pledge collateral, with a few of them suggesting that UCITS should be explicitly allowed to engage in pledge arrangements. This issue arises due to a perceived conflict between the ESMA guidelines and the UCITS Directive, the former of which explicitly permits pledge arrangements. Allowing UCITS to use pledge collateral could increase their attractiveness as a source of borrowing without compromising investor protection, and respondents recommended that ESMA clarifies that pledge arrangements are permissible under the UCITS framework.

120. To enable voluntary central clearing of EPM techniques, some respondents advocated for UCITS having more flexibility to deviate from certain regulatory restrictions on collateral requirements and counterparty limitations. This would help UCITS to access to CCP clearing services under EMIR and improve access to liquidity.

121. Some respondents raised concerns about the use of repurchase agreements as a liquidity tool for UCITS. Recent regulatory developments[234] impose stricter collateral and reporting requirements, limiting the use of repurchase agreements and potentially increasing borrowing costs. Respondents suggested adjusting these rules to maintain repurchase agreements as an effective liquidity tool. Additionally, a few respondents noted that the ESMA guidelines on ETFs and other UCITS issues restrict the use of liquidity from repurchase and reverse repurchase agreements, accounts, or government bonds, thereby limiting UCITS' ability to use liquidity efficiently. To address this, respondents recommended amending the UCITS EAD in order to allow the deployment of those techniques also for "temporary liquidity generation".

122. One respondent also expressed the view that the limitation on investing no more than 10% of UCITS assets in other UCITS or AIFs limits the commercial viability of using cash collaterals in securities lending transactions, as UCITS are unable to reinvest the collateral effectively. Therefore, clarifying rules around cash collateral reinvestment would help UCITS to generate an important income stream for investors.

123. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under Section 14.

Q17. Would you see merit in linking or replacing the notion of EPM techniques set out in the UCITS Directive and UCITS EAD with the notion of securities financing transaction (SFT) set out in the SFTR?

Beyond the notions of EPM and SFT, are there any other notions or issues raising concerns in terms of transversal consistency between the UCITS and SFTR frameworks?

124. ESMA received 21 responses to this question. Most respondents did not see merit in replacing the notion of EPM techniques with the notion of SFTs as the latter does not include all instruments (e.g. derivatives) used also for EPM purposes. These respondents expressed the view that this would limit EPM techniques to securities lending transactions, repurchase agreements and reverse purchase agreement transactions. Additionally, these respondents highlighted the

[234] Pointing, inter alia to EMIR and SFTR.

risk that any techniques developed in the future would not fall under such definition.

125. Moreover, respondents noted that under the SFTR, both securities lending and securities borrowing are defined as an 'SFT', while UCITS are only able to lend their securities but not borrow. Therefore, it would not seem appropriate to replace the notion of EPMs with SFTs.

126. On the contrary, one association supported the idea of replacing the UCITS EAD rules on EPM techniques with a reference to the rules defined in the SFTR, which would better reflect the current market practices. A few other respondents expressed the view that they would not foresee major issues with such approach, but they do not consider this matter to be urgent or relevant.

127. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under section 14.

Q18. Apart from the definitions and concepts covered above, are there any other definitions, notions or concepts used in the UCITS EAD that may require updates, further clarification or better consistency with definitions and concepts used in other pieces of EU financial legislation, e.g. MiFID II, EMIR, Benchmark Regulation and MMFR?

If so, please provide details on the issues you have observed and how you would propose to clarify or link the relevant definitions or concepts.

128. 27 respondents provided feedback on this question. While a few of them did not observe any major issues, the majority focused on miscellaneous topics that require clarifications. Some of these topics are related to questions already covered under other questions of the Call for Evidence.

129. As a general remark, one respondent noted that the UCITS EAD makes references to previous iterations of the UCITS Directive. Therefore, it was suggested that updating the legal references would enhance clarity.

130. Another respondent stressed the importance of convergence across Member States, encouraging ESMA to enhance consultations with market participants in order to ensure the UCITS framework remains up-to-date and effective.

131. A recurrent recommendation was to improve transversal consistency on some topics. In particular, some respondents suggested aligning the notion of 'financial instrument' in the UCITS framework to the one included in MIFID II. Inter alia, it was argued that instruments such as emission allowances and tokenised traditional financial instruments (e.g. fixed income instruments or funds whose

shares or units are issued on a distributed ledger) should also be considered eligible assets under the UCITS framework.

132. With regard to MIFID II, a few respondents advocated also for aligning the notion of "regulated market". Others supported the inclusion of EU MTFs as additional trading venues where a financial instrument may be listed. In addition, another respondent advocated for the review of MIFID II (rather than the UCITS Directive or the UCITS EAD) concerning non-EU MTFs, for which a decision of equivalence by the European Commission is required.

133. One respondent noted that certain requirement set out in the Securitisation Regulation for non-EU issuers may limit UCITS access to this asset class. Therefore, they recommended reviewing the securitisation-related framework more broadly.

134. Some respondents focused on CCPs. They observed regulatory inconsistencies between how banks and funds are treated when interacting with CCPs. Banking regulations have clear rules on how banks treat exposures to CCPs, but the EU investment management rules have not been aligned, leading to discrepancies. One of them, pointed out that there is a regulatory inconsistency where repurchase agreements cleared through recognised CCPs require haircuts, while these are not required when the agreements are traded with third-country investment managers and banks in certain jurisdictions. Respondents that shared such observations recommended that MMFs that engage in those agreements should not face haircuts when trading cleared repurchase agreements with recognised CCPs, aiming for a more consistent regulatory treatment.

135. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under sections 6, 8, 14, 15, and 16.

Q19. Are there any national rules, guidance, definitions or concepts in national regulatory frameworks that go beyond ('gold-plating'), diverge or are more detailed than what is set out in the UCITS EAD?

If so, please elaborate whether these are causing any recurring or significant practical issues or challenges.

136. 27 respondents replied, providing valuable insights and highlighting several challenges. Various respondents highlighted the existence of divergences among Member States. Many respondents argued that since Member States have discretion to establish national requirements, there is a lack of consistent application of EU rules in many parts of the UCITS framework. These respondents therefore expressed the view that a greater level of EU harmonisation is needed. Avoiding gold-plating and providing greater legal certainty would benefit investors and help removing obstacles for market participants engaging in cross-border

distribution. This opinion was also supported by one investor protection association. Some respondents proposed either converting the UCITS EAD into a directly applicable EU regulation or adding a provision which states that Member States should not create additional requirements.

137. Respondents reported various areas of divergences across EU Member States such as:

- Eligible asset classes: Divergent national rules and supervisory practices with respect to a range of asset classes (see Annex III).
- Investments in units or shares of funds: One NCA requires a UCITS to only allocate investments to other funds that adhere to the risk-spreading principles set out in the UCITS Directive, which appears more stringent than required by EU law.
- Financial indices: There are divergent national interpretations with respect to eligibility criteria and approval processes for financial indices.
- Ancillary liquid assets: There are divergent rules at national level with regard to both the notion and the limits set out for ancillary liquid assets.
- Prospectus: There are divergent national approaches concerning the information to be included in the UCITS prospectus.
- Derivatives: One Member State applies specific local requirements on the use of derivatives by UCITS. Another Member State requires compliance with rules on the method for the calculation of the amount to cover cash commitments arising from short positions in financial derivative instruments. Yet another Member State applies the look-through approach to some ETPs.
- Securities lending: One Member State does not allow securities lending at all, while another one applies a threshold of 20% of the UCITS assets, which creates an unlevel-playing-field for UCITS established in this Member State.
- Global Exposure: Ine NCA permits financial derivatives to be netted only against "cash which is invested in risk free assets", meaning that cash would have to be invested in certain assets to be considered "risk free" and thus eligible for netting. This has resulted in a situation where some UCITS management companies use the VaR-calculation method instead of the commitment approach. Respondents advocated for ensuring a level-playing field by clarifying at EU level that "cash" is eligible for netting, as it is a risk-free asset.
- Enhanced scrutiny: One NCA requests additional information when authorising UCITS that intend to invest in specific asset classes such as ABS and CLOs. Another NCA requires additional due diligence where UCITS invest in catastrophe bonds, contingent convertible bonds or certain securitisations.
- Loans: There is no equal treatment with respect to banking loans, where some Member States exclude their potential qualification as money market instruments.

138. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under section 4.

Q20. Please fill in the table below on the merits of allowing direct or indirect UCITS exposures to the asset classes listed therein, taking into account the additional instructions provided in the footnotes.

To substantiate your position, please fill the table with any available data and evidence (e.g. on liquidity or valuation of the relevant asset classes and underlying markets). ESMA acknowledges that the availability of data on direct/indirect exposures to some of the asset classes listed in this table is limited and would welcome receiving any available data (whether on individual market participants and products or market-wide) and even rough estimates that help to understand the practical relevance of the relevant asset class for UCITS and the possible impact of any future policy measures.

Please refer to Section 2 of this annex for a summary of the feedback to this question.

Q21. Please assess and provide evidence on the merits of such exposures in light of their risks and benefits taking into account the characteristics of the underlying markets (e.g. availability of reliable valuation information, liquidity, safekeeping).

139. 29 respondents provided feedback on this question. Responses focused mostly on the benefits for UCITS to gain indirect exposures to asset classes that are not directly eligible. However, only limited technical observations on the availability of reliable valuation information, on liquidity or safekeeping of those assets have been provided.

140. The overarching view is that indirect exposures to the asset classes mentioned in Q20 are beneficial for UCITS (e.g. via instruments such as open or closed-ended AIFs, derivatives or ETPs). A few respondents pointed out that indirect investments allows access to non-conventional assets, facilitating portfolio diversification and de-correlation. The main advantages of indirect exposures are operational ease and regulatory security, which helps reducing costs and risks for UCITS investors. In particular, cost reductions may be achieved through economies of scale. Additionally, counterparty risks were described as generally limited due to the structuring of the relevant instruments.

141. Some respondents argued that if these instruments qualify as products registered under the Prospectus Regulation, meaning they are publicly available to retail investors in the EU/EEA, they should automatically be considered UCITS eligible, provided they comply with the relevant investment, borrowing, and exposure limits.

142. Conversely, some respondents noted that such indirect exposures may result in higher expenses due to fees for structuring, licensing indices, and acquiring market data. Moreover, managing indirect exposures often requires more

sophisticated investment strategies and technical expertise, resulting in higher management fees and costs for investors. In this context, it was also noted that some UCITS managers may lack the expertise or resources required for direct investments in certain assets, such as carbon emission allowances, crypto-assets, or precious metals, as these would require specialised custody arrangements or access to specific liquidity venues.

143. Some stakeholders expressed support for allowing indirect exposure to crypto-assets, particularly through ETPs or ETFs. They argued that such exposure can mitigate risks and costs, enhance market accessibility, and offer diversification without the need for direct custody. One respondent noted that offering UCITS with exposures to crypto-assets would help regulate a sector increasingly popular with retail investors, providing a safer environment for the development of the crypto-assets industry.

144. One association pointed out that ETCs can allow exposures to commodities with a degree of diversification. These instruments offer inflation protection and returns. Investing indirectly in ETCs through UCITS provides optionality, reduces costs and risks and simplifies operational aspects.

145. One respondent argued that ETPs and OTC instruments should only be eligible if they are transparent and provide a full disclosure on costs.

146. One respondent advocated for direct investment in physical gold, explaining that delta-one instruments, derivatives or ETNs offer lower investor protection. Additionally, direct gold investment is the most cost-efficient way to invest in gold.

147. Another respondent noted that there has been an increasing use of REITs, due to fiscal reasons, in particular in USA, Canada, Australia, Singapore and Hong Kong. Major equity index providers include many REITs in their indices. Any changes to the eligibility of REITs or the EAD's criteria for closed-ended funds should take into account the distinction between listed companies and listed closed-end funds with similar liquidity levels to avoid disadvantaging the latter.

148. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under section 7. Further details are also included in Annex IV (data and risk/economic analysis) and Annex V (cost-benefit analysis).

Q22. Under the EAD, should a look-through approach be required to determine the eligibility of assets?

Please explain your position taking into account the aforementioned risks and benefits of UCITS gaining exposures to asset classes that are not directly investible as well as the increased/decreased costs associated with such indirect investments.

A look-through approach would aim to ensure that the list of eligible asset classes set out in the UCITS Level 1 Directive would be deemed exhaustive and reduce risk of circumvention by gaining indirect exposures to ineligible asset classes via instruments such as delta-one instruments, exchange-traded products or derivatives. Where possible, please provide views, data or estimates on the possible impact of such a possible policy measure.

149. 35 respondents provided feedback on this topic. The majority of respondents were not in favour of applying a look-through approach. Several respondents argued that its application would limit the universe of eligible assets and the strategies that can be deployed under the UCITS framework.

150. Some respondents noted that the UCITS framework is based on the concept of transferable securities, which are designed to be easily tradeable and liquid. Those respondents commented that applying a look-through approach to them would contradict their characteristics and the principles of the UCITS framework, which guarantees that such securities adhere to high standards of transparency, liquidity and risk management. Additionally, the use of a look-through approach may push retail investors to invest directly in products without the protections offered by the UCITS framework. Furthermore, one respondent highlighted that some of the concerns regarding investments in ineligible assets are mitigated through indirect exposures, where issues such as liquidity, investment challenges, and custody risks are mitigated by the financial instrument that provides exposures to the underlying asset.

151. One respondent suggested that prioritising clear risk assessments and communication, rather than imposing detailed look-through requirements, can ensure strong investor protection without introducing unnecessary complexity.

152. Other respondents emphasised the need for clarity and convergence across the EU to overcome competitive imbalances, regulatory arbitrage, and legal uncertainties. Moreover, one respondent suggested using a common questionnaire among NCAs outlining their approaches, in order to achieve a greater level of convergence. In addition, respondents advocated for broadening the list of UCITS eligible assets, in order for investors to gain exposures to a broader variety of asset classes via professionally-managed UCITS.

153. Conversely, some stakeholders expressed support for the use of the look-through approach to determine the UCITS eligibility of assets, arguing that UCITS managers must have a clear understanding of the assets they invest in and their underlying assets in order to able to effectively (risk) manage them. Additionally, this approach was viewed as ensuring a high level of investor protection.

154. A few respondents proposed an intermediate view. They recommended the introduction of the look-through approach, but considering a provision which specifies a maximum, in percentage, of the fund's assets that can be indirectly exposed to ineligible assets, arguing that exposures to ineligible assets must be proportionate and not lead to circumvention.

155. Some respondents stated that the look-through approach is valuable where UCITS invest in instruments that are derivatives or embed derivatives. In these cases, the look-through is necessary to ensure that the underlying assets are fully assessed in terms of risk management, liquidity, diversification and leverage.

156. Some respondents argued that the look-through approach should not apply to delta-one instruments that do not embed derivatives, provided they meet the following conditions: (1) daily trading and (2) market price determined by third-party transactions. On the contrary, one respondent suggested that the look-through approach should apply to delta-one instruments.

157. One respondent argued that for financial indices that meet the requirements of the ESMA guidelines on ETFs and other UCITS issues, a look-through approach is not necessary, as a well-established and effective regulatory framework already exists for them.

158. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under section 7.

Q23. What are the risks and benefits of UCITS investments in securities issued by securitisation vehicles?

Please share evidence and experiences on current market practices and views on a possible need for legislative clarifications or amendments.

159. ESMA received 26 responses. Respondents shared their knowledge and views on securitisations, covering a broad range of relevant topics.

160. Some stakeholders highlighted the key benefits of investing in securitisations such as enhanced returns, positive past performance, diversification and tranching, which allows investor to choose their level of risk. They also pointed out the possibility to gain exposure to asset classes that are rarely available through traditional bonds (they referred to ABS, MBS and CLOs as examples). These investments could be a source of liquidity and prove valuable during periods of market turbulence. Moreover, they noted that securitisations may contribute to the growth of the real economy across the EU.

161. A few respondents highlighted the need to explore ways to streamline the due diligence and transparency processes for securitisations. They also suggested

exploring methods to incentivise compliance by non-EU issuers, thereby expanding the UCITS investable universe. Additionally, these respondents noted that the valuation procedures require institutions to cross-check valuations by obtaining quotes from independent third parties, where a representative market price is not available. This process incurs additional costs for institutions, limiting the interest in such investments.

162. Respondents also covered the potential risks associated with such investments. Some pointed to the differences between the cash flows generated by the underlying assets versus the actual cash flows of the instrument, which can be lower. In addition, the interest rate volatility may affect borrowers' ability to make payments. There may also be a higher-than-expected ex-post default rate or correlation.

163. Other risks identified were the following: credit risk related to the underlying assets, concentration risks, liquidity risk inherent to the securitisation, market risks, complexity of the securitisation structure. In particular, one association advised to be cautious when investing in securities issued by securitisation vehicles, emphasising that such investments should only be allowed when the following conditions are met:

- the ABS are listed on a liquid market;
- a look-through approach must be implemented to assess the risks associated with the underlying assets and the structure of the securitisation;
- the UCITS framework should be amended to include reference to the Securitisation Regulation and to limit investments to the safest and simplest type of securitisations;
- the securitised assets must be directly eligible for UCITS.

164. One respondent did not see merit in amending the UCITS Directive, although mentioning that some issues could be solved via Level 3 measures. Some respondents supported expanding the UCITS eligible assets universe to include securitisations not governed by the Prospectus Regulation and removing, or at least amending, the 10% limit on debt instruments issued by the same body, as securitisations already provide diverse credit risks exposures[235].

[235] Article 56(2)(b) of the UCITS Directive.

165. One respondent did not see merit in applying the look-through approach to securitisations, as the way UCITS gain exposures to these instruments avoids the liquidity issues usually associated with them.

166. Some respondents also highlighted the need to follow a pragmatic and principles-based approach to securitisation-related disclosures and simplified templates for non-EU and private securitisations to enable better risk assessment, allowing for safer investments by UCITS. Furthermore, they advocated for aligning EU risk retention requirements with global standards to create a level playing field between EU and non-EU transactions, boosting the competitiveness of EU capital markets.

167. Finally, one respondent focused on catastrophe bonds in this context, noting that market evidence shows they provide strong risk transfer mechanisms, in particular through SPVs that offer fully-funded protection. This respondent argued that catastrophe bonds have proven effective in covering large-scale losses from catastrophic events and serve as a valuable diversification tool for UCITS. Furthermore, SPVs offer a stable platform for risk transfer, allowing investors to trade catastrophe bonds and manage insurance risks.

168. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under section 15.

Q24. What are the risks and benefits of permitting UCITS to build up short positions through the use of (embedded) derivatives, delta-one instruments or other instruments/tools?

Please share evidence and experiences on current market practice and views on a possible need for legislative clarifications or amendments.

169. 31 respondents answered this question. Many argued that building up short positions through derivatives or other instruments could be beneficial for UCITS, even though several respondents cautioned also about the risks stemming from these investments.

170. Several respondents highlighted the benefits of using derivatives to create short positions, in particular hedging, enhanced returns, diversification and market efficiency. They agreed that the current rules should not be amended.

171. One respondent argued that the UCITS framework provides a good balance between the risks and benefits of building up short positions using derivatives. This respondent also explained that the NCA of its jurisdiction has regulated both the method of calculation of the amount to cover the cash commitments arising

from short positions in financial derivative instruments and the assets that may be used to cover such commitments.

172. The risks highlighted by respondents related mainly to the possibility of unlimited losses if the price of the underlying rises significantly and counterparty risk. Hence, respondents noted that UCITS shall apply sophisticated risk management techniques and ensure compliance with regulatory requirements when they build up short positions.

173. One responded focused on the 'short squeeze' risk where a significant increase in a security's price leads to margin calls for the UCITS, with the need to cover the exposure with extra source of cash. Additionally, holding excessive short positions can result in higher leverage, leading to performance declines. The importance of adequate disclosures was therefore highlighted.

174. One investor protection association argued that the use of short positions in the context of UCITS is very risky for retail investors and may not contribute to funding the real economy. Therefore, such strategies should be limited, and the disclosures should include prominent warnings to retail investors.

175. **ESMA response**: Feedback on how respondents' input to this question was addressed is provided under section 17.

Q25. Apart from the topics covered in the above sections, have you observed any other issues with respect to the interpretation or consistent application of the UCITS EAD?

If so, please describe the issues and how you would propose to revise the UCITS EAD or UCITS Directive with a view to improve investor protection, clarity and supervisory convergence.

176. 21 respondents responded to this question, mostly related to topics already covered above. Many responses related to national divergences which are already reflected above in the summary of the feedback to Q19.

177. Concerning derivatives on commodities, one association advocated for a convergent application of regulatory/market practices, to ensure that the eligibility rules on direct and indirect investments in commodities are applied consistently across Member States. This association also expressed the view that it should be clarified whether cash-settled commodity futures (and other possible cash-settled commodity derivatives that are likely to refer to price indices for commodities rather than to commodities as such) are eligible financial instruments.

178. Some respondents argued that certain diversification rules set out in the UCITS Directive[236] are too restrictive and should be reconsidered. In this context, one respondent also pointed to some interpretation issues linked to a related ESMA Q&A[237] and saw merit in amending the UCITS Directive or the relevant Q&A.

179. One respondent suggested that ESMA lists on its website the markets meeting the criteria set out in the UCITS Directive, nothing that at the moment there is lack of clarity regarding which markets are recognised by NCAs.

180. **ESMA response**: ESMA took note of these proposals, some of which went beyond the UCITS EAD mandate. Additional feedback on how respondents' input to this general question was addressed is provided under the relevant sections of the advice.

2. Summary of stakeholder responses to Q20

Asset class[238]	Merits of allowing direct UCITS exposures	Merits of allowing *indirect* UCITS exposures[239]	Extent/amount of existing UCITS exposures[240]	Additional comments[241]
1. Loans[242]	One respondent suggested allowing bank loans, subject to a predetermined maximum limit (e.g. 20% of the UCITS assets) and to the most liquid part of the market, as they are very similar to high yield bond markets. Other respondents supported including	Respondents saw merit in indirect exposures via ETFs, CLOs, ABS, ETPs, closed-ended AIFs, loan ETFs. Indirect exposure presents an attractive risk and return profile and would permit	Answers included some generic data on potential exposures to loans. According to one respondent, many UCITS may have less than 10% exposure. One respondent highlighted that	A few respondents suggested that loans should be allowed only if they have the form and substance of CLOs, ABS, MBS and meet the eligibility criteria. Others pointed out that loans, especially the syndicated loans, have significant structural similarities with floating

[236] Notably Article 54 of the UCITS Directive.
[237] ESMA Q&A 1199.
[238] ESMA acknowledges that most of the asset classes listed below have not been clearly defined in EU legislation and this might be a source of divergent interpretations and misunderstandings. Where possible, ESMA invited stakeholders to specify their understanding or definition of the relevant asset classes under the "additional comments" box.
[239] ESMA asked respondent to, where relevant, distinguish between indirect exposures via instruments such as delta-one instruments, exchange-traded products, derivatives, or AIFs (EU or non-EU).
[240] ESMA asked respondents to share any available data or estimates that help to assess the amount or extent to which there are existing UCITS exposures (distinguishing between direct and indirect, where possible) to these asset classes. Where no reliable data is available, ESMA asked for receiving estimates in terms of numbers and/or percentages of UCITS exposed to these asset classes and what is the average proportion in the relevant portfolios. ESMA highlighted that any additional data and insights on strategies, techniques and instruments used to gain exposure to these asset classes would be also highly appreciated.
[241] ESMA asked to include under this column any other evidence or views that respondents would like to share.
[242] ESMA asked respondents, where relevant, to distinguish between leveraged/structured loans, collateralised loan obligations (CLOs) and other types of loans or loan participations.

	leveraged/structured loans, CLOs and direct private and syndicated loans. Key benefits highlighted include: 1) diversification; 2) access to established markets; 3) potential for higher yields to investors; 4) liquidity; 5) low-interest rate sensitivity; 6) transparency of the security; 7) investing in large floating markets; 8) supporting the real economy. Moreover, when UCITS invests also in assets related to the issuer of the loans, it can permit the participation of the UCITS in restructuring actions of that issuer.	UCITS to diversify and gain exposure to a wide range of counterparties. Other benefits include high regulatory protection standards, tranching and past performance. However, one respondent pointed out that indirect exposure may incur higher costs and reduced transparency.	direct exposure is 0-1%, while indirect exposure through CLOs is 5-35%. Dedicated funds may have up to 100%. Some Member States impose limits varying from 10% to 20% on the amount a UCITS can invest in CLOs. In bank loans, the investment is limited to 10% due to lack of regulated markets. One respondent reported direct and indirect exposure of CLOs was about 1.3 billion Euro in July 2024.	rate notes or high yield bonds. According to one respondent, exposure to senior secured loans should be allowed, as they are transferable and more liquid than many instruments. Some respondents suggested extending Article 50(2)(a) to open and closed-ended AIFs, as indirect exposure to loans through them would be beneficial. A few respondents proposed creating a new category specifically for loans, rather than fitting them into the existing categories of eligible assets. An investor protection association argued that UCITS should only invest in the safest loans with sufficient investor protections.
2. Catastrophe bonds ('cat bonds')	Respondents highlighted the following main benefits: 1) low correlation to the broader financial market; 2) higher interests in respect to bonds; 3) low volatility; 4) diversification; 5) fixed and floating rate return; 6) low duration, which reduce risks; 7) resilience to insurance industry; 8) role in the climate	A few respondents noted indirect exposure through other CIUs, using a fund-of-funds structure, provides similar benefits to direct exposure. In addition, it enables investment by means of professional management.	One respondent stated that the total market size for cat bonds is indicated in approximately \$50 billion, and around \$12-\$13 billion of the cat bond market is held by UCITS, which represents more than 25% of the total market.	One respondent argued that cat bonds should not be allowed, as they are not related to a permissible asset under Article 8(1)(a) EAD. Conversely, few respondents noticed that Insurance -linked securities (ILS), including cat bonds, are an indispensable risk management tool for primary insurers,

	resilience and climate change 9) reliable valuation and risk methodologies; 10) loss limited to the capital exposure; 11) instrument compatible with Articles 8 and 9 of SFDR. It was mentioned that in 2023 the ECB and EIOPA highlighted that catastrophe insurance plays a crucial role in mitigating macroeconomic losses after extreme climate-related events. One respondent observed that cat bonds improve resilience of developing countries.	One respondent argued that indirect exposure should be permitted where they are eligible for direct investment or when they are the underlying assets for a transferable security/MMI and there is no embedded derivative.	One respondent noticed that dedicated cat bonds UCITS consist only of cat bonds and cash, while cat bonds account for 85 – 97%. In one jurisdiction, cat bond UCITS can hold up to 100% of cat bonds.	reinsurers, and insurers of last resort. Therefore, denying UCITS eligibility could increase systemic risk. Another respondent highlighted that cat bonds have an active secondary market, with high turnover and have proven resilient during events such as Covid-19 and hurricanes. One respondent argued that indirect exposures would require a revision of Article 50(2)(a) UCITS Directive, as they are not permitted in some jurisdictions. Lastly, one respondent noticed that the average Summary Risk Indicator (SRI) for UCITS cat bonds is around 2 out of 7, compared to 4-5 for many UCITS.
3. Contingent Convertible bonds (‘CoCo bonds’)	The main benefits of investing in CoCo bonds are: 1) higher yields than traditional bonds; 2) diversification; 3) liquidity; 4) reliable valuation; 5) reduced credit risk through conversion to equity; 6) potential for capital appreciation; 7) access to unique market. As pointed out by some respondents, banks and insurers, which are the predominant issuers of	Respondents pointed out that indirect exposure can provide access to a broadly diversified universe and expertise. They mentioned the same benefits of direct exposure. A few respondents specified that indirect exposure should be allowed through investment in another	One respondent noticed that dedicated subordinated funds can have exposures up to 50% or even over 75%; while other funds’ exposures are 10-20%, depending on the risk profile. According to another respondent, allocations across	One respondent focused on the risks inherent to CoCo bonds, including discretionary coupon payments and the potential for write-downs or conversion into equity upon certain triggers. These risks are managed by UCITS managers using a multi-factor analysis. A few respondents preferred allowing only listed CoCo bonds, while another advocated for a

	CoCo bonds, are highly regulated entities with high credit rating and robust oversight regimes. In addition, risks are manageable, and the market has increased in terms of volumes, standardisation, and transparency. Further, there are no custody or safekeeping issues. Moreover, CoCo bonds are a key funding source for the banking sector.	regulated vehicle or product, such as UCITS or AIFs.	relevant funds range from less than 10% to 100% A respondent explained that its default limit is 5% unless specifically referred to in the fund's investment policy. Some funds have more than 10% limit allowance. One respondent noticed a wide range of exposure, both direct and indirect. 10% or 20% limits have been applied, both by managers and by the NCA as part of their enhanced scrutiny process.	100% allocation to a diversified CoCo portfolio without investor restriction. As there are already UCITS ETFs tracking CoCo indices, a level playing field should be established. A common definition of CoCo bonds was also suggested for greater clarity.
4. Unrated bonds	Benefits of investing in unrated bonds: 1) higher yields and enhanced risk-adjusted returns; 2) diversification and additional source of performance; 3) reduced dependence on rating agencies; 4) access to undervalued investment opportunities and potential for capital appreciation; 5) access to niche markets and smaller issuers. Moreover, as one respondent pointed out, unrated bonds are not	Respondents explained that indirect exposure offers some of the same benefits of direct exposure, in particular: 1) diversification and additional source of performance; 2) access to undervalued investment opportunities; 3) lower reliance on rating agencies. One respondent emphasised that it	One respondent noticed that typical allocations range from 0-5%, with some cases reaching up to 10%. In one jurisdiction, most exposure is between 5%-10%, while in another the average is 8.3%. One respondent argued that there should be no limit, as long as UCITS risk diversification requirements	Some respondents stated that unrated bonds are already eligible, as the Directive does not require a rating from at least one rating agency. Unlisted bonds are eligible under the 10% limit. A few respondents noted that the rating status neither undermines the status of the bonds as a transferable security nor is a measure of credit quality. UCITS managers must internally assess the risk

	subject to any trading restrictions and valuations are reliable.	also offers greater flexibility. A few respondents argued that indirect exposure should be allowed on the basis that direct exposure is permitted, and others supported indirect exposure via convertible notes.	applicable to transferable securities are met. Another observed a broad allocation across relevant funds, with some having almost 100% allocation.	of default of the issuer and the broader risk of the bond following an internal rating policy, which is required in accordance with the CRA Directive (Directive 2013/14/EU). One consumer association stated that is preferrable to allow exposure only to listed bonds, while another respondent suggested leaving the decision on using unrated bonds to the risk management of the UCITS.
5. Distressed securities	Respondents highlighted the following benefits: 1) potential for capital appreciation and higher yields from undervalued securities; 2) interest rate sensitivity; 3) appropriate risk management. One respondent argued that UCITS managers are not obliged to sell defaulted or downgraded bonds that may recover. One respondent pointed out that limited exposure to distressed securities can increase active risk and returns but requires specialised expertise and clear risk disclosure. Another respondent argued that direct exposure should not be allowed but only held in case of an event, with	Some respondents argued that indirect exposure should be allowed on the basis that direct exposure is permitted.	One industry association reported that typical exposures to distressed securities are well below 10%, commonly between 0 – 5% and it would typically be found in UCITS marketed as High Yield and Opportunistic. One respondent stated that existing exposure to this asset class ranges from below 5% up to 15%. Another respondent argued that there should be no limits if UCITS requirements are met.	A few respondents argued that this type of investment should only be held passively and must meet eligibility conditions. In the event of delisting, distressed securities fall into the 10% limit of Article 50(2)(a) of the UCITS Directive, but they become prohibited in the absence of liquidity. One respondent pointed out that distressed securities are more illiquid, but mangers mitigate redemption risks by limiting holdings, monitoring regularly, stress testing, and staggering maturities. A consumer association advocated for a very

	side pockets as an alternative.			limited exposure to such asset class.
6. Unlisted equities[243]	The benefits include potential for high returns, diversification and access to different sectors and strategies, in particular exposure to non-traditional assets and innovation. A few respondents noted that exposure to unlisted equity can be passively created through corporate debt restructuring involving debt-for-equity swaps, providing positive optionality. This market has grown as a source of capital formation and value-creation over the last 20 years, with mutual funds increasingly engaging in private investing. One respondent highlighted that accepting unlisted equity during financial restructuring is sometimes necessary to avoid disadvantaging UCITS. Few respondents argued that unlisted equities are eligible under the 10% limit if liquidity and eligibility conditions are met.	One respondent argued that indirect exposure can be obtained via, e.g., rights and convertibles. Another respondent observed that exposure through a listed closed-ended fund, which is a transferable security, allows investors access the growth potential of this asset class while maintaining portfolio liquidity. Some respondents mentioned the same benefits as for direct exposure, while a respondent emphasised the benefit of (direct) professional management and access to non-conventional assets.	One association reported exposures of below 5%, while a few other respondents noticed exposure up to 10%.	One association highlighted that these assets are less liquid, and in case of no price coverage, internal valuation processes can be established. Some members typically only invest if there is a commitment to list or be publicly traded within 1 year. One respondent noted that liquidity and valuation are more challenging for unlisted equities. An investor protection association emphasised the diversity of unlisted equities, suggesting that private equity could be allowed if it offers sufficient information and investor protection. Some respondents called for harmonised criteria for unlisted securities investment.

243 Where relevant, stakeholder were asked to distinguish between equity instruments issued by (1) private companies and (2) shares in public companies that that are not listed.

	One respondent pointed out that more capital has been raised via private raises than in initial public offerings since 2015 and limiting this access could harm UCITS.			
7. Crypto-assets[244]	Respondent pointed out several benefits of crypto-assets: 1) low correlation amongst each other and with other traditional assets; 2) diversification; 3) better performance, especially with a rebalancing policy; 4) availability of reliable valuation information; 5) high liquidity; 6) innovative asset classes; 7) good level of protection for investors. Some respondents argued that, with the increased transparency and rules proposed by MiCA, should a crypto-asset meet the EAD and UCITS requirements, it may be considered as eligible. Additionally, one respondent noticed that some international regulators, most notably in the US, have taken the view that crypto-assets such as Bitcoin can be eligible for retail investment via traditional product wrappers.	Some respondents stated that indirect exposure can be obtained via ETPs, investment in other CIUs, derivative products and thematic equities. One respondent argued that ETFs can offer a straightforward and transparent way for investors to gain exposure to crypto-assets as well as reducing the dependence on US markets. Allowing indirect UCITS exposures to crypto-assets has similar effects on a portfolio, such as low correlation to major asset classes and improvement of risk-adjusted performance metrics while relatively small increases in risk, as	One industry association reported that exposure to crypto-assets through UCITS is less than 1%. One respondent noticed that there are already funds investing directly or indirectly in crypto-assets within the EU. For instance, there are private funds offering direct exposure to Bitcoin. Additionally, blockchain funds focus their strategy on companies related to blockchain technology, providing investors with indirect investment to crypto-assets.	Some respondents argued that investments (either direct or indirect) in crypto-assets that are not transferable securities are not eligible for a UCITS, while others argued that investment in crypto-assets should be included in the 10% limit of Article 50(2)(a) of the UCITS Directive. One respondent noticed that, on a regulatory perspective, there are divergences among Member States (for instance, some prohibit UCITS investing in crypto-assets, whereas another allows indirect exposure via delta-one instruments). Another respondent pointed out that it is important to differentiate between MiCA crypto-assets and tokenised traditional instruments ("MiFID crypto-assets"), which are also eligible assets for UCITS.

[244] Where relevant, respondents were asked to specify the type of crypto-assets and whether the implementation of MICA will change anything in terms of their assessment. With respect to indirect exposures, ESMA particularly asked for stakeholder input on ETPs including ETFs with crypto-assets as an underlying.

	Moreover, one respondent pointed out that more flexibility regarding the eligibility of digital assets for UCITS could be a way to modernise the EU fund industry and to attract younger investors. One respondent focused on a few interesting points: 1) from an investor's perspective, it is much better to gain exposure to a high-risk / high-reward asset class through a familiar structure; 2) from a regulator's perspective, it is desirable to oversee crypto-assets investments, reducing risks (e.g, risks of bad intermediaries or illicit activities); 3) from a market's perspective, direct crypto-assets investments through UCITS represents an opportunity for the EU's capital market to become the global standard for crypto-assets. Another respondent, while stating that further detailed analysis will be required on whether the UCITS framework is the most appropriate setting for facilitating retail access to these assets, expressed support for the general principle in the MiCA not to change the regulatory treatment of	highlighted for direct exposures. In terms of the benefits of indirect exposures via ETPs, respondents noted: 1) extensive due diligence questionnaires on crypto-assets before being used as an underlying; 2) reporting/ transparency obligations; 3) availability of reliable valuation information; 4) liquidity; 5) safekeeping. ETPs can be held in normal securities accounts and provide the same level of protection as UCITS holding crypto-assets directly with a custodian; 6) professional management by the issuer. Some respondents pointed out that indirect crypto-asset exposure enables UCITS managers to gain exposure via traditional wrappers while removing certain challenges of direct investments (e.g. specialised crypto-		MiCA, once implemented, will significantly impact potential UCITS exposure to crypto-assets through increased regulatory clarity, enhanced investor protection and categorisation of crypto-assets, which will be helpful in determining their eligibility for UCITS. As one respondent pointed out, according to Article 60(5) of MiCA, UCITS managers can offer crypto-asset services. Hence, it would be logical that these managers could manage funds that are exposed to crypto-assets regulated under MICA. Conversely, some respondents were opposed to crypto-assets exposure via UCITS. One of them explained that their risk profile is not compatible with UCITS as the track records exhibit frequent jumps. In addition, the capital is not channelled to the real economy and the reputation risks are at stake because of the mining activities' carbon footprint. Another respondent argued that the market is not yet ready to welcome an active strategy on

	financial instruments which already qualify as transferable securities, just because they have been tokenised. Tokenisation can enhance liquidity, reduce costs and enable smoother and faster settlement, increasing efficiency and value for UCITS investors.	asset custody setup and access to crypto asset-specific liquidity venues).		crypto-assets within UCITS, arguing that: 1) traditional finance actors are not yet prepared for analysing crypto-assets, 2) custody of these assets is a challenge, 3) liquidity is not yet comparable with traditional assets and 4) disclosure and transparency for retail investors may also be challenging.
8. Commodities and precious metals[245]	Respondents mentioned the following merits of exposure to these asset classes: 1) diversification; 2) potential for high returns; 3) participation in trends; 4) inflation hedge (as commodity prices tend to rise with inflation, including them in a UCITS can help protect them during inflationary periods); 5) hedge against geopolitical risks; 6) investor protection; 7) UCITS exposure are the most cost-efficient way to invest in gold; 8) re-patriation of AuM from non-UCITS gold funds to EU. Further, direct exposure may be more cost efficient as there would be no additional swap fee or product-related fees.	The main benefits are diversification, high liquidity, low or no correlation with traditional financial assets, inflation protection and returns. Moreover, they reported indirect holdings by way of ETFs, equities related to commodities, delta-one and derivatives, and commodity indices (deemed eligible if in line with the ESMA guidelines on ETFs and other UCITS issues). One respondent stated that ETPs and derivatives offer investors	One industry association stated that exposures are between 0 and 10%, gained indirectly. However, for UCITS specialised in this asset class, the minimum indirect exposure (via derivative, ETC, ETF) can be at least 30%. A few respondents reported that a relatively small number of UCITS have indirect exposure to this asset class (around 10%). One respondent stated that around 19.2% of UCITS some indirect	One respondent argued that precious metals could be eligible through delta-one instruments with no physical delivery, arguing that Article 50(2)(b) of the UCITS Directive should be read as limited to certificates which allow the physical delivery of commodities. One respondent noticed that there are many jurisdictions in the world that allow investments in Gold ETFs (e.g. North America and Asia). A consumer association commented that some exposures to commodities and precious metals might be acceptable, when they are in line with the UCITS' investment policy, which must be

[245] With respect to indirect exposures, ESMA is particularly interested in stakeholder input on ETFs with commodities/precious metals as underlying. Please note that under the current UCITS rules, precious metals and certificates representing them are not eligible (Article 50(2)(b) of the UCITS Directive).

	However, direct exposure would pose difficult questions relating to custody, delivery and handling of these commodities. One respondent stated that there is no merit in allowing UCITS exposures to gold.	indirect exposure to commodities/ precious metals in a safe, cost-effective, and reliable manner. Investor assets are kept in reputable, safe custodians, at a fraction of the cost. Further, investors benefit from ease of trading, price tracking, flexibility, and reduced operational complexities.	exposure to commodities and precious metals. In one jurisdiction, indirect exposure was reported to be worth €3 bn in July 2024.	presented to the investor in a clear manner. However, one respondent argued that direct exposures need amendments at Level 1. Regarding indirect exposures, Article 8(5) of EAD states that references in the UCITS Directive to liquid financial assets in the context of derivatives shall be understood as excluding derivatives on commodities. Some respondents added that it is not acceptable for a UCITS to invest exclusively in different securities that are linked to the same underlying asset. One respondent suggested introducing diversification limits at fund level, similar to that is required for UCITS indices.
9. Exchange-traded commodities ('ETCs')	Respondents highlighted the following benefits: 1) exposure to non-traditional assets via transparent and well-regulated instruments; 2) diversification; 3) liquidity; 4) high trading volumes; 5) simplification and cost reduction; 6) increased protection; 7) reliable valuations; 8) higher returns; 9) low or no	One respondent argued that indirect exposure should be allowed on the basis that direct exposure is permitted. A few respondents argued that indirect exposures provide the same benefits as direct exposures plus additional flexibility linked to	One industry association stated that exposure is between 0% and 10%. One respondent answered that they permit holdings of up to 10% per issuer allowance, and in aggregate this may be above 10% for	Some respondents observed that there is divergence among NCAs. Others argued that the ETC is directly linked to the physical underlying (e.g. gold) and therefore does not comply with the diversification rules or concentration rules of the UCITS directive. One respondent explained that issuance

	correlation to traditional financial asset classes. However, a few respondents pointed out that there are some conditions for eligibility, in particular there must be daily trading, and the market price must be determined based on sale transactions performed by third parties.	the relevant financial instrument.	commodity-focused funds. Another respondent reported that it was not possible to assess which part of the market (ETCs listed in Europe is approximately $90 bn with the majority being in gold backed ETCs ~$76 bn) is held by UCITS but many multi asset funds across Europe use commodity ETCs for diversification purposes, more tactical positioning and inflation hedge.	and redemption process of an ETC is similar to that of a daily UCITS, in that there is a daily NAV and an ability to create and redeem the product on a daily basis leading to prices on exchange tracking the NAV of the product very closely. Another added that ETCs with single commodity underlying or commodities underlying with a strong correlation should be banned.
10. Real estate	The main benefits were described referring to diversification and attractive returns. Real estate can offer higher performance and thereby ensure that also in a low-interest environment UCITS remain one of the most attractive investment opportunities for retail investors. Moreover, one respondent added the following merits: 1) capital appreciation; 2) inflation hedge, as asset values and rents have historically tended to rise with inflation, providing a hedge	A few respondents pointed out that this is already possible via REITs, which provide effective indirect exposure, in terms of cost and liquidity. Others added that indirect exposure may be possible also through collective investment vehicles, derivatives and property securities. Respondents argued that indirect exposures would give a better diversification and		Some respondents argued that this asset class is ineligible for a UCITS also for the liquidity characteristics of the asset class and that the ELTIF product allows this type of asset and hence it should be used. One respondent commented that REITs are highly liquid, as they are publicly traded. Their prices are publicly quoted and based on the market price of the shares of the REIT traded on the exchange. For a CIU invested in real estate, the value

	against a loss of purchasing power; 3) leverage; 4) control over the management of the asset; 5) tangible asset; 6) transferability. One respondent stated that real estate should not be eligible, while another would allow only indirect exposure. An investor protection association argued that this asset class must be viewed as very illiquid assets and pointed to the need to apply diversification rules.	more attractive risk-return profiles as well as exposure to non-traditional assets. As one respondent pointed out, indirect exposures should be admissible whether reliable valuation, liquidity and safekeeping are in line with those of other UCITS assets. These features may be evaluated on a case-by-case approach.		would typically be based on the CIU's NAV. Whereas ABS, MBS, CLOs would be valued using a third-party valuer or price provider to obtain their fair market value. One respondent did not see merit in allowing direct exposure to real estate assets for UCITS, on the basis that the UCITS Directive focuses principally on investments in securities and other financial instruments and would need substantial changes to reflect non-custodial real asset investments such as real estate, while indirect investments might justify a different treatment.
11. Real Estate Investment Trusts ('REITs')	A few respondents expressed the view that exposures to REITs are already possible and can provide effective indirect exposures, in terms of cost and liquidity. Hence, they are more efficient (and flexible) than direct exposures to real estate. The main benefits are: 1) risk diversification; 2) positive performance; 3) liquidity; 4) reliable valuation; 5) exposure to non-traditional assets; 6) access to favourable tax treatments; 7) adequate risk	One industry association noted that indirect exposures are being obtained through investments in units of other UCITS. One respondent argued that exchange-traded REITs should be admitted. It is difficult to distinguish whether shares in REITs should be treated as securities or as AIFs, as it is not	One industry association reported that exposure can typically be up to 5 – 10%, although they noted some UCITS with exposure of between 80 and 97%. One respondent commented that there is a broad allocation across relevant funds, with some funds having almost 100% allocation. Another	A few respondents argued that REITs should be allowed only if listed and similar to listed real estate companies. Another respondent argued that, given their (potential) liquidity profile, it would appear to be a suitable investment class for a UCITS. One respondent suggested that open-ended REITs which meet the equivalence criteria applicable to CIUs or which meet the transferable securities

	management and regulation. In particular, REITs provide investors with an opportunity to access a diversified set of attractive income-producing properties that would not be attainable on an individual real estate property investment approach (economies of scale). REITs offer investors higher dividend yields and lower volatility when compared to broad market equities. Other mentioned merits include: 1) trading volumes; 2) potential for capital appreciation; 3) inflation hedge; 4) traded on regular markets.	always easy to separate an investment strategy and a corporate strategy. The respondent argued exchange-traded REITs should be allowed as securities if they meet the securities criteria of the EAD. In the case of non-exchange-traded REITs, the advice is to apply a case-by-case approach.	respondent stated that generally it represents less than 10% of fund value. In one jurisdiction the average exposure represents 2.18%. In another jurisdiction, total exposure of REITs was reported about €1.3 bn in July 2024.	criteria should be eligible for investments by a UCITS. Another respondent argued that for closed-ended REITs, there is no specific limit on exposures, subject to the risk-spreading rules applicable to transferable securities, while for open-ended REITs, which must be classified as AIF, there is an aggregate limit of 30% of net assets, as per Article 55 of the UCITS Directive.
12. Special Purpose Acquisition Companies ('SPACs')	Benefits of direct exposure to this asset class include: 1) risk diversification; 2) positive performance; 3) liquidity; 4) reliable valuation; 5) accessibility to private equity investments, with high-growth potential, or with emerging sectors or markets otherwise inaccessible; 6) potential for increased returns. Moreover, were described as offering access to companies at an attractive price point.	One respondent argued that indirect exposures may be generate through available specialised ETFs. Another respondent commented that allowing indirect UCITS exposures to this asset class should be permissible if reliable valuation, liquidity and safekeeping are in line with those of	One industry association reported that UCITS exposures may typically be up to 5 – 10% One respondent explained that it operates a default limit of 5% within relevant funds given the nature of the asset. In one jurisdiction, only 2 funds had up to 10% direct exposure to SPACs.	According to one respondent, the assessment of eligibility should be conducted on a case-by-case analysis, while another stated that given the (potential) liquidity profile of this asset class, it would appear to be a suitable investment class for a UCITS. For some respondents, they are similar to listed shares and therefore eligible for UCITS. Another respondent specified that the SPAC investment must comply

		other UCITS assets.		with the UCITS investment policy. Some Member States were reported to have issued specific guidance on this asset class. Some jurisdictions have introduced an investment limit of up to 10% and respondents argued that more EU harmonisation would be desirable.
13. EU AIFs[246]	Respondents argued that AIFs should be eligible, provided that they meet the eligibility criteria set out in the UCITS Directive. Moreover, UCITS should be allowed to invest in EU AIFs in which retail investors are allowed to invest directly (e.g. ELTIFs). The main benefits of direct exposure to EU AIFs are: 1) exposure to a diversified portfolio of underlyings (to which the UCITS may not be able to obtain direct exposure); 2) high returns; 3) regulation via AIFMD; 4) reliable external valuation; 5) flexibility and innovation; 6) limited leverage; 7) depositary oversight and safekeeping of assets.	Respondents explained that indirect exposures offers the same benefit as direct exposures, with more flexibility. Indirect exposure may be achieved through a fund of EU AIFs. However, allowing indirect exposures to this asset class should be permissible only if reliable valuation, liquidity and safekeeping requirements are met, equivalent to UCITS rules.	One industry association reported that exposures to EU AIFs are typically around 5-10%. One respondent argued that only a handful of funds have up to 10% exposures to EU AIFs, in line with the 30% limit in the UCITS Directive. Some funds have indirect exposure via structured notes. Another respondent argued that its default limit is 10% for open-ended AIFs.	Some respondents argued that EU AIFs should be eligible for UCITS if they comply with the criteria of Article 50(1)(e) of the UCITS Directive. Others asked for a review of the restrictive interpretation and the incorporation in Article 50(2)(a) of the UCITS Directive of both open and closed-ended AIFs. One respondent argued that to allow exposures to AIFs, the assets of the AIF must be analysed to ensure they are suitable investments. Moreover, funds of funds often add another layer of costs to be borne by the fund investor and increase the opacity of the underlying assets.

[246] Where relevant, respondents were asked to distinguish between different types of AIFs (e.g. open-ended, closed-ended) and investment strategies (e.g. real estate, private equity, hedge funds).

	In addition, this provides the benefits of raising capital from retail investors to contribute to CMU/SIU's objectives.			Furthermore, protective measures may include an assessment of the AIF's impact on the UCITS' liquidity profile, the liquidity profile of the AIF itself and whether the AIFs are constituted in a regulated format. One respondent pointed out that UCITS may only invest in EU AIFs up to 30% that invest in UCITS eligible assets. They argued that the UCITS directive should not be amended to permit wider investment in EU AIFs.
14. Non-EU AIFs	One respondent pointed out that through a non-EU AIF it is possible to invest in sectors outside the EU whose potential returns exceed those of EU AIFs. To limit risks, some conditions may be added (e.g. investment in jurisdictions that do not apply equivalent rules should be excluded). Respondents mainly cited the same benefits as for EU AIFs. Some respondents focused on the benefits of investing in US ETFs: 1) traded securities; 2) portfolio diversification; 3) access and exposure to US market with high liquidity.	One respondent argued that indirect exposure to this asset class should be permissible if reliable valuation, liquidity and safekeeping are in line with those of other UCITS assets. Others explained that indirect exposure has the same benefits as direct exposure.	One industry association reported that exposures to non-EU AIFs is between 0 and 10%. One respondent stated that a small number of funds invest up to 30% in non-EU AIFs in accordance with the diversification limits. These non-EU AIFs are all UK UCITS and Non-UCITS Retail Schemes ("NURS") funds. Another respondent explained that their default limit is 10%.	One respondent noted challenges in investing in non-EU ETFs, in particular US ETFs, given that US ETFs comply with different rules governing investment limits, borrowing, and reporting. A few respondents stated that investing in non-EU AIFs, even those that invest in UCITS eligible assets, is difficult, as the majority do not meet UCITS conditions such as a 10% investment limit restriction in other collective investment undertakings. A respondent mentioned, similar to EU AIFs, in order to allow

	One respondent added that for non-EU AIFs subject to supervision in certain jurisdictions that have been recognised by EU regulators as having equivalent regulation, investments by UCITS should be allowed.			exposures to non-EU AIFs, the assets of the AIF must be analysed to ensure these are suitable as investments.
15. Emission allowances	Respondents cited these benefits: 1) low correlation to equities, bonds, as well as other traditional UCITS assets classes; 2) capital appreciation; 3) compatibility with Article 8 and 9 of SFDR; 4) regulatory support; 5) inflation hedge.	Indirect exposures are possible via ETFs, ETCs, ETNs and derivatives. Indirect exposures can avoid the operational and regulatory hurdles faced in case of direct exposures. Respondents reported the same benefits as for direct exposures, while benefitting from more flexibility linked to the relevant instrument.	One industry body reported that their members have indirect exposures only through financial derivative instruments (swaps) on financial indices with emission allowance as constituent. A few respondents explained they do not currently invest in emission allowances via UCITS.	Some respondents argued that carbon credits are not eligible for UCITS. In addition, it is an immature market, with potential lack of liquidity. One respondent in favour of the eligibility of the asset class, commented that emission allowances have reliable valuation as they are traded on exchanges. A source of valuation will be the market price of the asset obtained from financial data providers or the exchange itself. Some respondents added that these are assets that are gaining in importance as the EU emission allowances market will grow over the next years, and that the EU Emissions Trading Scheme is the main tool of the EU to reduce greenhouse gas emissions.
16. Delta-one instruments	Respondents highlighted the following benefits: 1) efficient market access;	Respondents argued that indirect exposures provide	One respondent reported that the exposure is up to	A few respondents pointed out that there is no definition of delta-one

	2) hedging capabilities; 3) diversification; 4) exposure without physical holding; 5) regulatory compliance; 5) liquidity; 6) cost efficiency; 7) transparency; 8) flexibility; 9) reliable valuation and appropriate risk management models; 10) exposure to non-traditional assets. One respondent pointed out that direct exposure is already possible where certificates do not embed a derivative and can provide effective indirect exposure to ineligible assets in an appropriately risk-managed way.	broadly the same benefits as direct exposure. One respondent added that indirect exposures should be allowed if the delta-one instrument meets the UCITS requirements.	10% in UCITS that include delta-one instruments in their investment policies. An industry association pointed out that about 40% of funds have some exposures to certain delta-one instruments via futures, swaps, forwards net commitment. Another respondent explained that it has two UCITS with an average exposure of 100% to delta-one instruments.	instrument in the regulation. One respondent argued that it is appropriate for UCITS to invest in delta-one instruments where this is 1) aligned with the UCITS' investment strategy and objectives, 2) in the best interests of investors, and 3) the characteristics of trading in such instruments are appropriately disclosed. A consumer association commented that there is no merit in allowing UCITS exposures to derivatives beyond pure hedging purposes. A few respondents also focused on the conditions for eligibility, in particular there should be daily trading, and the market price should be determined based on sale transactions performed by third parties.
17. Exchange-traded notes ('ETNs')	The main benefits were described as follows: 1) diversification; 2) access to niche markets; 3) additional source of performance; 4) liquidity; 5) efficiency and flexibility; 6) transparency and performance tracking; 7) regulatory oversight, as ETCs and ETNs are	Respondents mentioned that benefits are broadly the same as for direct exposures.	One industry association commented that some of their members reported direct exposures of typically less than 5%.	Some respondents pointed out that an ETN that meets the transferable securities criteria is eligible. A UCITS could therefore be exposed to the performance of assets that would not be directly eligible, thus leading to a circumvention. Another respondent added that these

	listed on regulated trading venues. One respondent explained that to gain access to certain operationally challenging or restricted markets or securities, the use of ETNs is necessary. UCITS invest in these assets mostly via credit-linked notes. However, one respondent pointed out that it is not clear whether they are eligible for UCITS.			instruments have reliable valuation. In some cases, ETNs are considered within the category of ETFs for valuation purposes, with price sources including Bloomberg and Six-Financials.
18. Asset-backed securities ('ABS') including mortgage-backed securities ('MBS')	Respondents highlighted the following benefits: 1) highly regulated products; 2) exposure to a wide, diversified range of underlying assets; 3) tranching; 4) enhanced liquidity; 5) positive past performance; 6) additional yield. One respondent explained that secondary markets trading at a discount allow for an investor to customise the return profile and mitigate call risk. In addition, as pointed out by one respondent, structured credit has a relatively low correlation to other fixed-income sectors.	Some respondents argued that indirect exposures have the same benefits as direct exposures, particularly diversification and additional yield. One respondent stated that indirect exposure should be allowed on the basis that direct exposure is permitted. Another respondent added that derivatives on ABS are possible.	One industry association observed up to 10% exposure by certain UCITS, and in a small number of UCITS exposure via direct and indirect means can range from 10% and, in one noted case, up to 100%. Another respondent reported similar figures.	A few respondents pointed out that liquidity has been stable and resilient in recent years, with a high trading ratio, indicating a large proportion of ABS offered for sale are frequently traded. Supply volumes for ABS range from €60 to €100bn per year. Moreover, these instruments have reliable valuation. One respondent argued that a revision of the Securitisation Regulation would provide an opportunity to make the due diligence process more effective and to improve the ability of potential investors, such as UCITS, to invest

				in securities issued by securitisation vehicles. Others argued that UCITS could invest in ABS if they are listed on liquid markets, while a few suggested a relaxation of requirements to promote their attractiveness.
19. Other relevant asset classes (please specify)	The “other relevant asset classes” mentioned by respondents to be considered as UCITS eligible: **Sukuks** – to be included when they meet the conditions for being eligible for UCITS. They provide liquidity, reliable valuation and risk management. **Private credit** – it would be worth exploring their eligibility for UCITS, provided existing safeguards continue to be ensured. **Whole-business securitisation** – they have an attractive risk-adjusted return potential when compared to similar corporate credit investment opportunities of the same industry exposures. Their sensitivity to changes of interest rates is limited as they typically offer	One respondent pointed out that Exchange Traded Instruments are themselves an indirect exposure to an underlying strategy.	One respondent explained that it has encountered UCITS with 100% CLO exposures. However, in terms of exposures to multi-sector fixed income portfolios, the cap exposure is at 10%. This 10% limit is generally self-imposed but accepted by some NCAs in line with their enhanced scrutiny process. Moreover, a respondent argued that UCITS can invest up to 100% in Rule 144A securities subject to the usual UCITS diversification limits, provided that the Rule 144A securities satisfy the definition of a transferable security.	One respondent pointed out that as UCITS and their management companies are directly subject to regulation, collateralised mortgage obligations should not be excluded from the scope of eligible assets. An emphasis should be put on the risk management requirements set out in the UCITS framework. Moreover, national regulators apply enhanced scrutiny to UCITS investments in collateralised mortgage obligations beyond 10%.

	floating rate coupon payments. **Credit Risk Transfer** – they offer reliable primary and secondary supply, and often provide attractive risk-adjusted return potential. **CLOs** – they should remain eligible for UCITS. CLOs offer high income to risk ratio and diversification potential, and the risk of investing in them is easy for investors to understand as price fluctuations are primarily driven by a single factor (investors' perception of the risk of default by the underlying borrowers). Further, AAA Euro CLOs have historically low volatility. Lastly, CLOs, especially the most senior tranches, have the coverage tests, that protect the investors from losses. **Collateralised mortgage obligations** – the benefits include diversification, regular cash flow, customisable risk profiles, tailored solutions, liquidity, market size, trading volumes. **Exchange Traded Instruments** – they are exchange traded or			

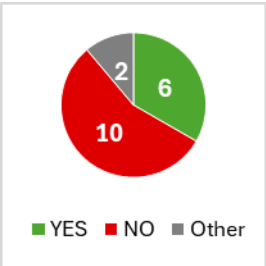
	privately placed depending on the underlying strategy, and liquidity can be provided either via the exchange or redeeming directly from the issuer. They offer access to more diverse strategies for investors and have transparent valuations with daily listings. **Contract for Difference** – they are already used by UCITS for long/short equity strategies mainly as a risk mitigation tool and as a cost-efficient alternative to direct equity investment in certain markets. **Rule 144A securities** – they are benchmark-eligible and held by most market participants, including institutional investors, UCITS, ETFs, mutual funds in the US, hedge funds and dealers. **American Depositary Receipts** – certificates representing a marketable security.			

Annex III – Overview of NCA positions on UCITS eligibility of relevant asset classes

ESMA performed a survey to understand the level of convergence in Member States concerning the UCITS eligibility of relevant asset classes. The charts in this section illustrate the number of NCAs that consider the asset classes as potentially eligible or ineligible for UCITS, distinguishing between direct and different types of indirect exposures. The 'national framework' charts relate to the question whether there are national rules or NCA guidance on the eligibility of those assets (whether on direct or indirect exposures).

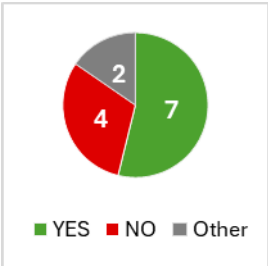
Structured/leveraged loans

a) UCITS eligibility of direct exposures

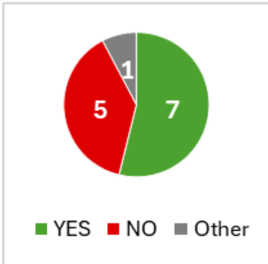


b) UCITS eligibility of indirect exposures

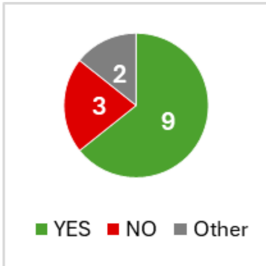
Delta-one securities



Derivatives

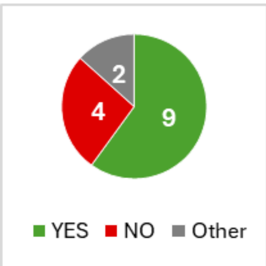


Financial indices

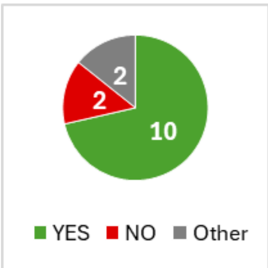


b) UCITS eligibility of indirect exposures

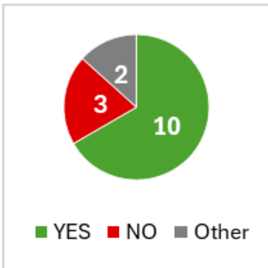
ETFs



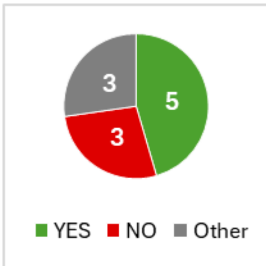
AIFs



ETNs

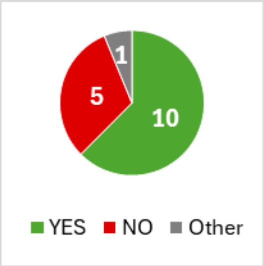


c) National framework



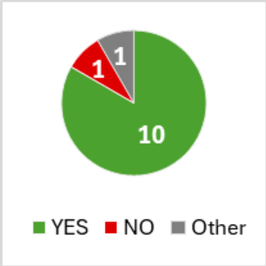
Collateralised loan obligations (CLOs)

a) UCITS eligibility of <u>direct</u> exposures

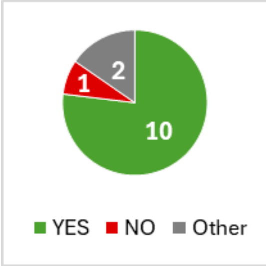


b) UCITS eligibility of <u>indirect</u> exposures

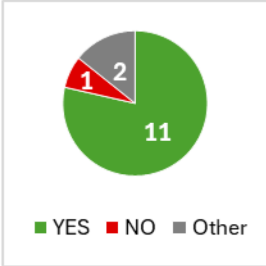
Delta-one securities



Derivatives

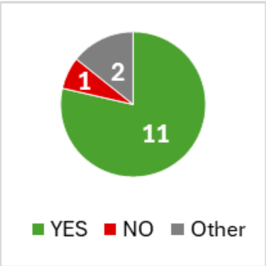


Financial indices

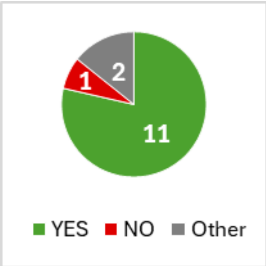


b) UCITS eligibility of <u>indirect</u> exposures

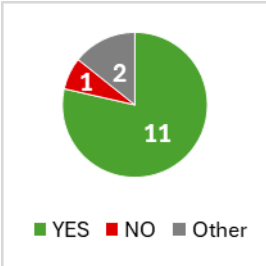
ETFs



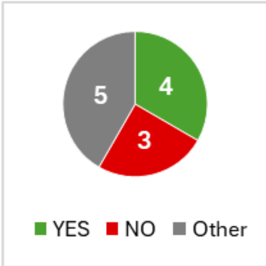
AIFs



ETNs

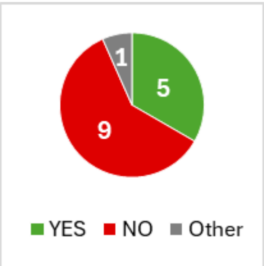


c) National framework



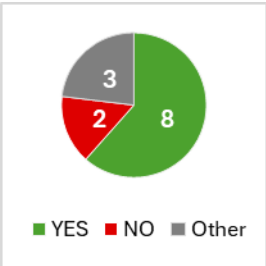
Other types of loans or loan participations

a) UCITS eligibility of <u>direct</u> exposures

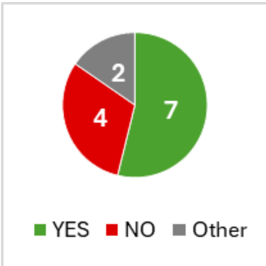


b) UCITS eligibility of <u>indirect</u> exposures

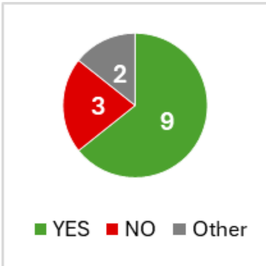
Delta-one securities



Derivatives

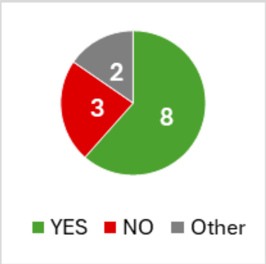


Financial indices

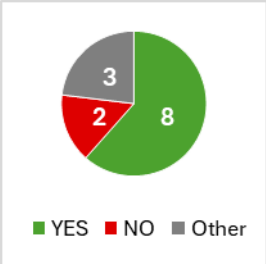


b) UCITS eligibility of <u>indirect</u> exposures

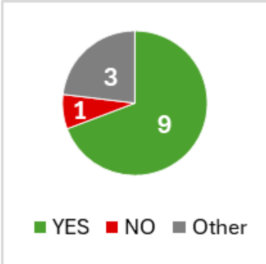
ETFs



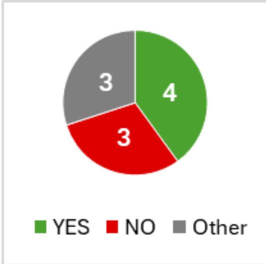
AIFs



ETNs

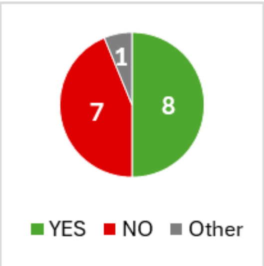


c) National framework



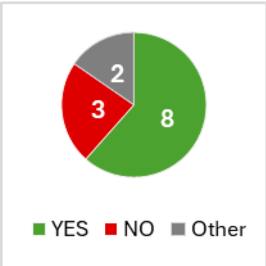
Catastrophe bonds

a) UCITS eligibility of <u>direct</u> exposures

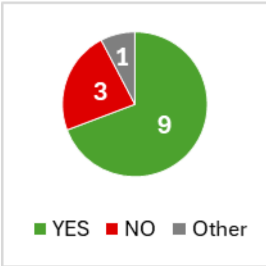


b) UCITS eligibility of <u>indirect</u> exposures

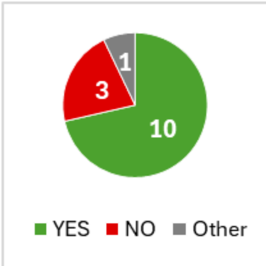
Delta-one securities



Derivatives

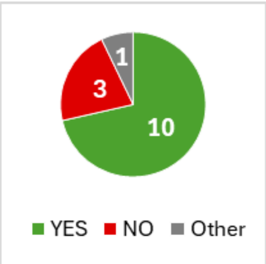


Financial indices

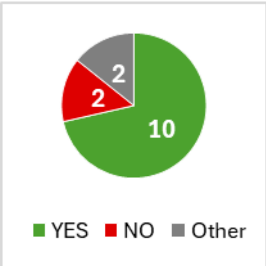


b) UCITS eligibility of <u>indirect</u> exposures

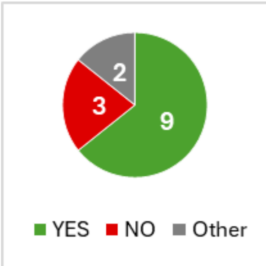
ETFs



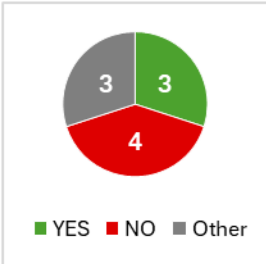
AIFs



ETNs

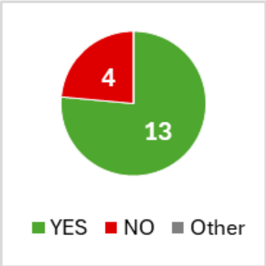


c) National framework



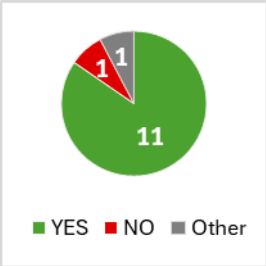
Contingent Convertible (CoCo) bonds

a) UCITS eligibility of direct exposures

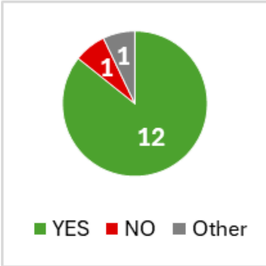


b) UCITS eligibility of indirect exposures

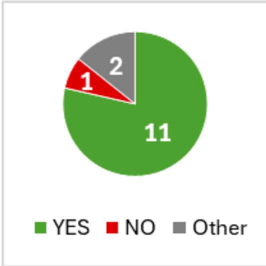
Delta-one securities



Derivatives

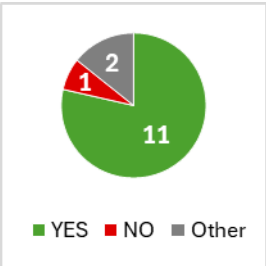


Financial indices

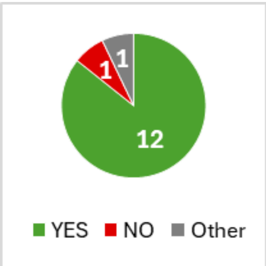


b) UCITS eligibility of indirect exposures

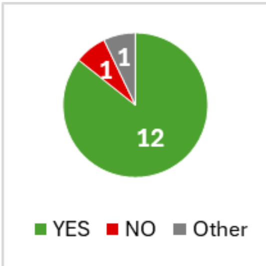
ETFs



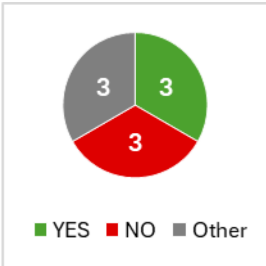
AIFs



ETNs

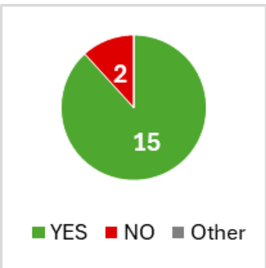


c) National framework



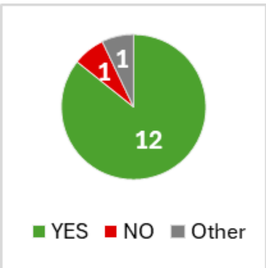
Unrated bonds

a) UCITS eligibility of direct exposures

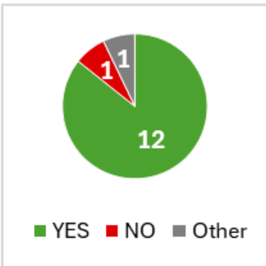


b) UCITS eligibility of indirect exposures

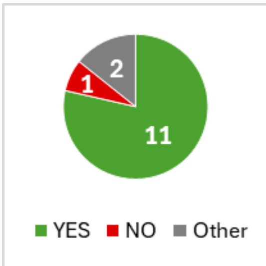
Delta-one securities



Derivatives



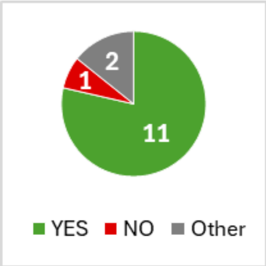
Financial indices



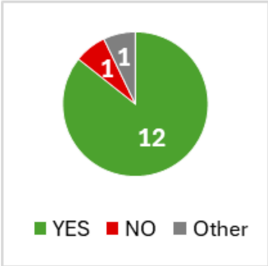
b) UCITS eligibility of <u>indirect</u> exposures

c) National framework

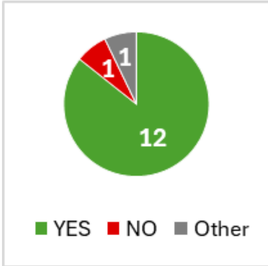
ETFs

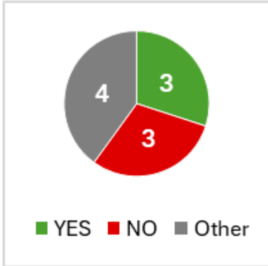


AIFs



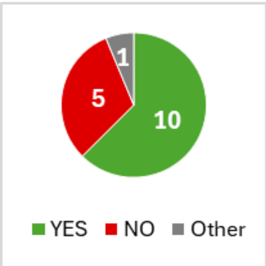
ETNs





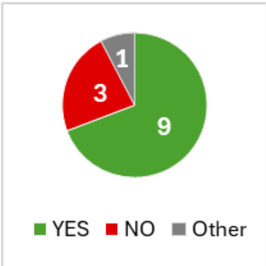
Distressed securities

a) UCITS eligibility of <u>direct</u> exposures

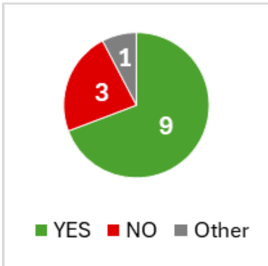


b) UCITS eligibility of <u>indirect</u> exposures

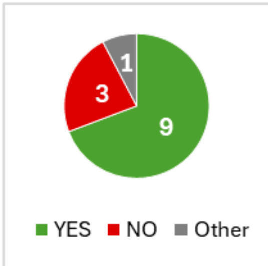
Delta-one securities



Derivatives



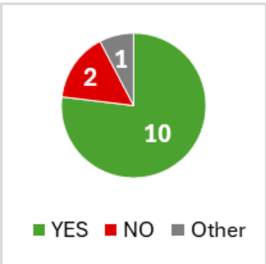
Financial indices



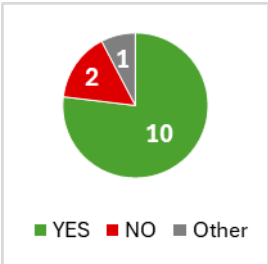
b) UCITS eligibility of <u>indirect</u> exposures

c) National framework

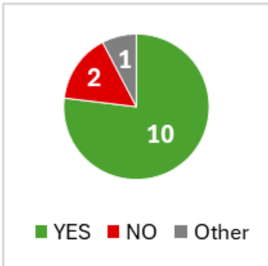
ETFs

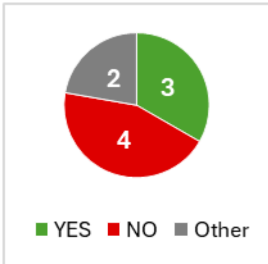


AIFs



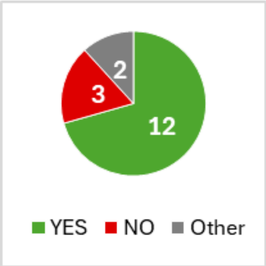
ETNs





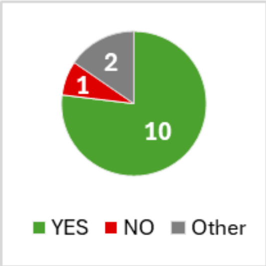
Unlisted equities

a) UCITS eligibility of direct exposures

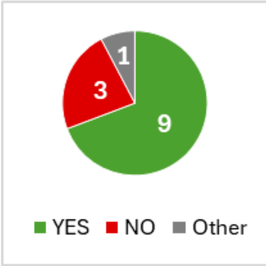


b) UCITS eligibility of indirect exposures

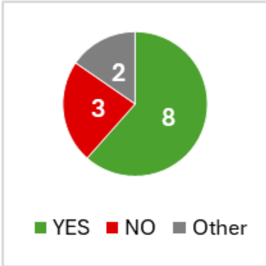
Delta-one securities



Derivatives

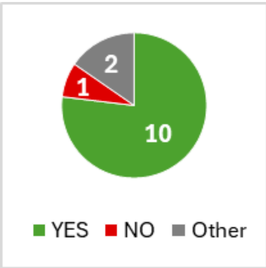


Financial indices

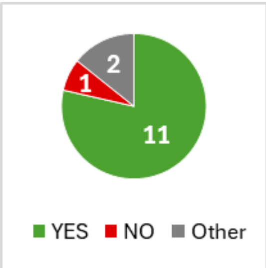


b) UCITS eligibility of indirect exposures

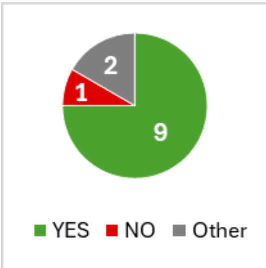
ETFs



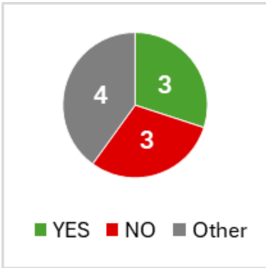
AIFs



ETNs

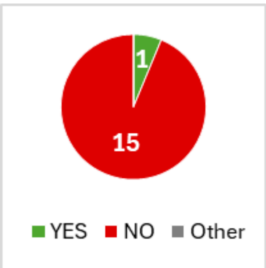


c) National framework



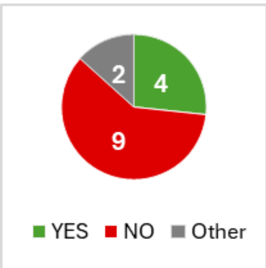
Crypto-assets

a) UCITS eligibility of direct exposures

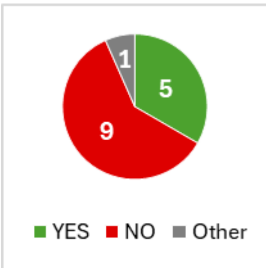


b) UCITS eligibility of indirect exposures

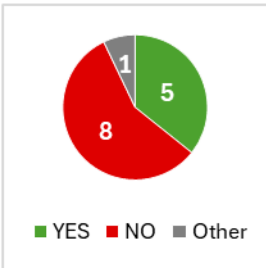
Delta-one securities



Derivatives

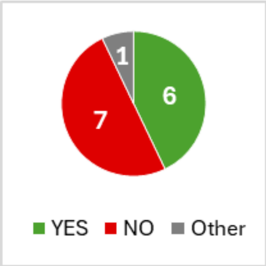


Financial indices

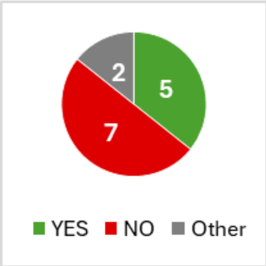


b) UCITS eligibility of <u>indirect</u> exposures

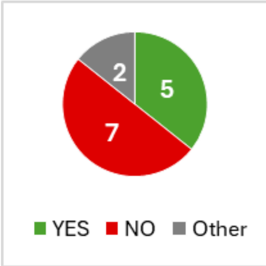
ETFs



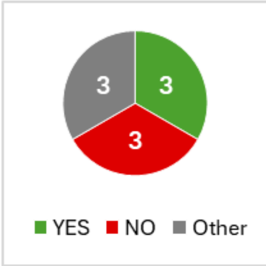
AIFs



ETNs

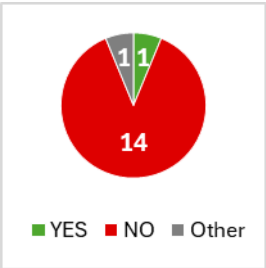


c) National framework



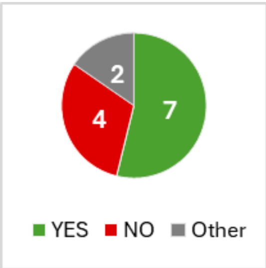
Commodities

a) UCITS eligibility of <u>direct</u> exposures

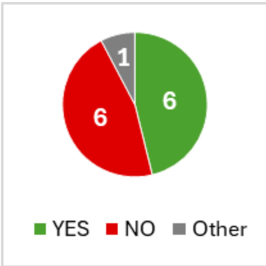


b) UCITS eligibility of <u>indirect</u> exposures

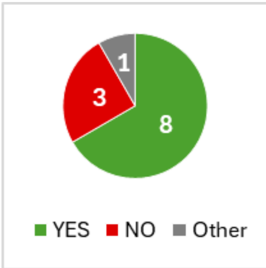
Delta-one securities



Derivatives

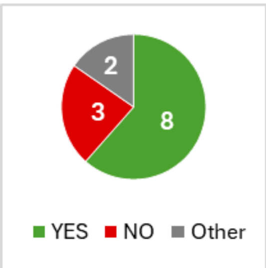


Financial indices

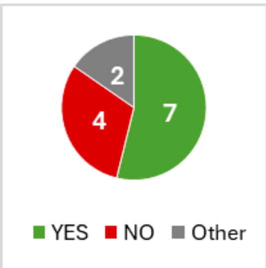


b) UCITS eligibility of <u>indirect</u> exposures

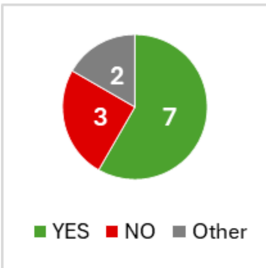
ETFs



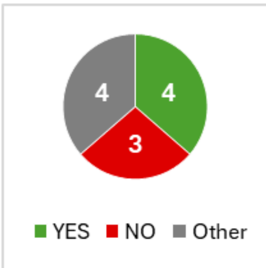
AIFs



ETNs

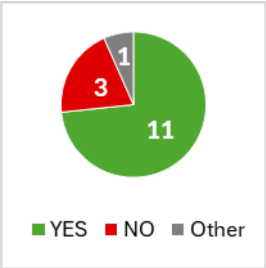


c) National framework



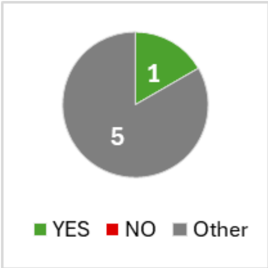
Delta-one securities

a) UCITS eligibility of direct exposures

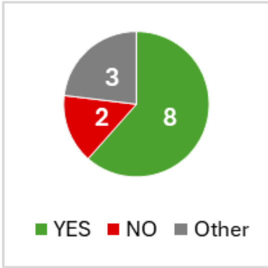


b) UCITS eligibility of indirect exposures

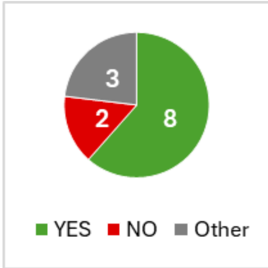
Delta-one securities



Derivatives

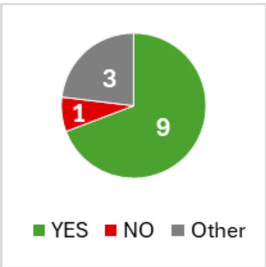


Financial indices

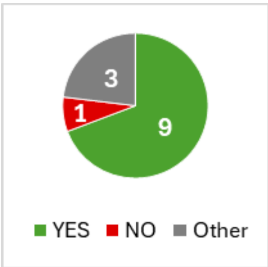


b) UCITS eligibility of indirect exposures

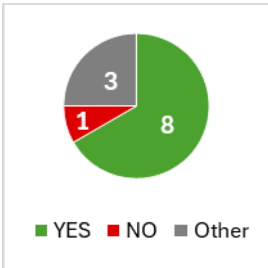
ETFs



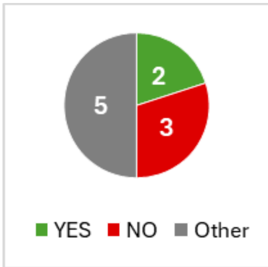
AIFs



ETNs

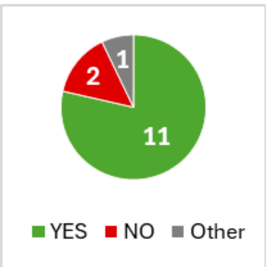


c) National framework



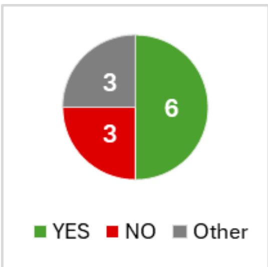
Exchange Traded Notes (ETNs) and Exchange Traded Commodities (ETCs)

a) UCITS eligibility of direct exposures

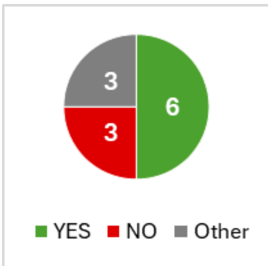


b) UCITS eligibility of indirect exposures

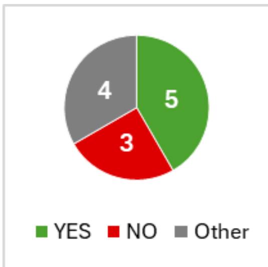
Delta-one securities



Derivatives



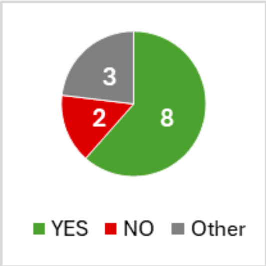
Financial indices



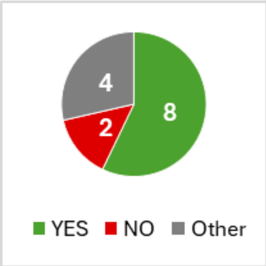
b) UCITS eligibility of indirect exposures

c) National framework

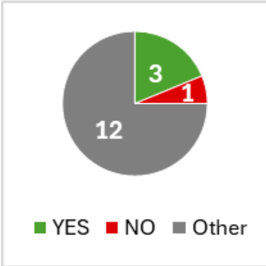
ETFs

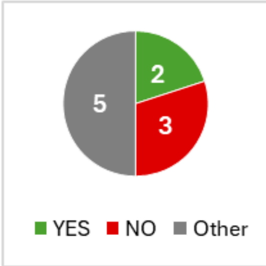


AIFs



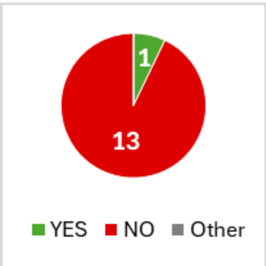
ETNs





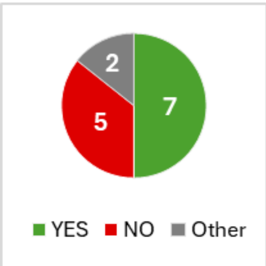
Emission allowances

a) UCITS eligibility of direct exposures

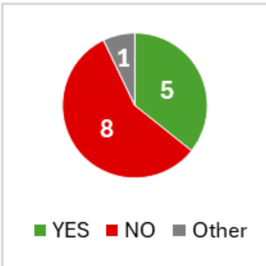


b) UCITS eligibility of indirect exposures

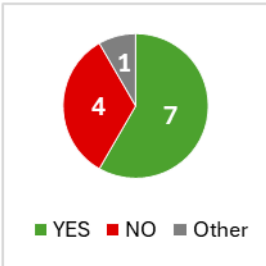
Delta-one securities



Derivatives



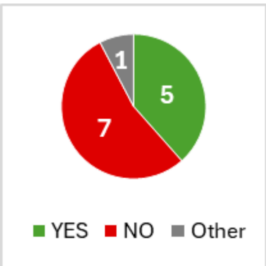
Financial indices



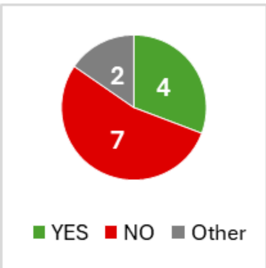
b) UCITS eligibility of indirect exposures

c) National framework

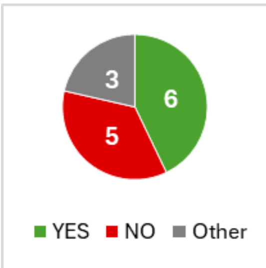
ETFs

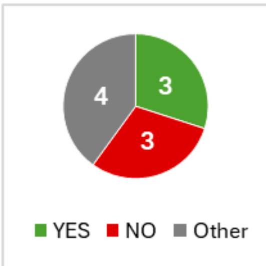


AIFs



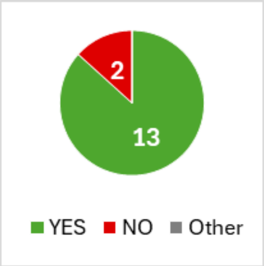
ETNs





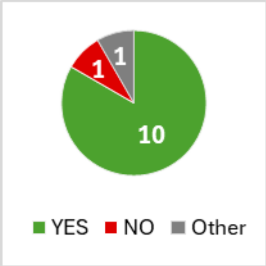
REITs

a) UCITS eligibility of direct exposures

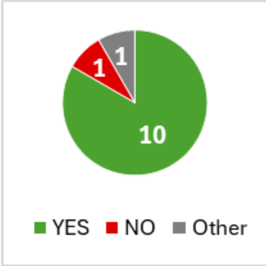


b) UCITS eligibility of indirect exposures

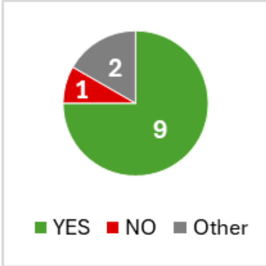
Delta-one securities



Derivatives

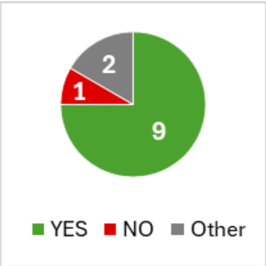


Financial indices

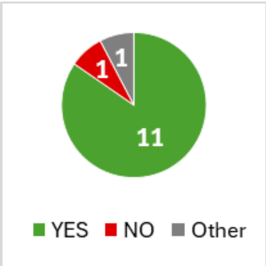


b) UCITS eligibility of indirect exposures

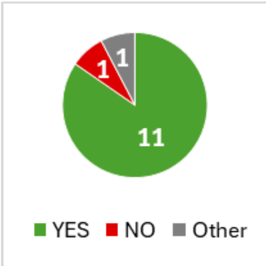
ETFs



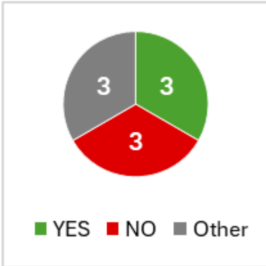
AIFs



ETNs

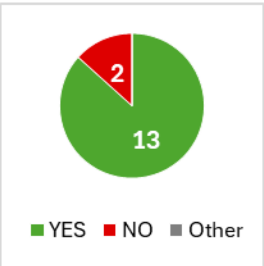


c) National framework



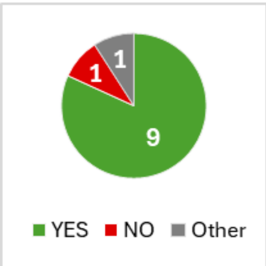
Securities issued by securitisation vehicles

a) UCITS eligibility of direct exposures

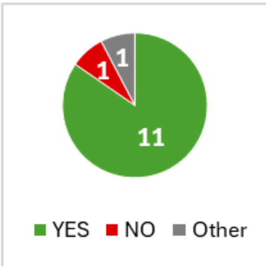


b) UCITS eligibility of indirect exposures

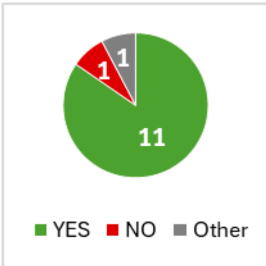
Delta-one securities



Derivatives

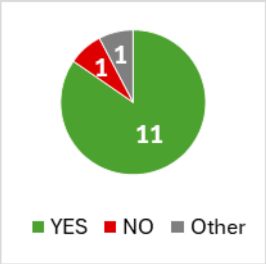


Financial indices

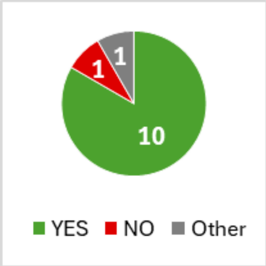


b) UCITS eligibility of <u>indirect</u> exposures

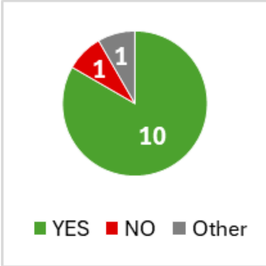
ETFs



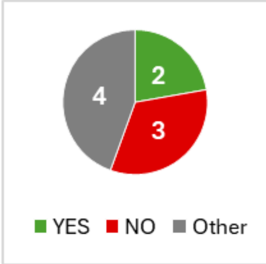
AIFs



ETNs

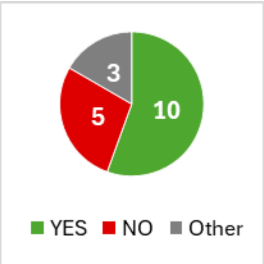


c) National framework



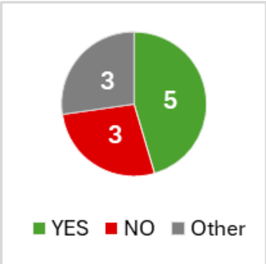
<u>SPACs</u>

a) UCITS eligibility of <u>direct</u> exposures

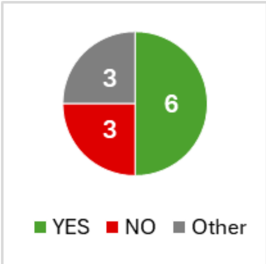


b) UCITS eligibility of <u>indirect</u> exposures

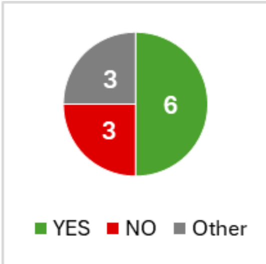
Delta-one securities



Derivatives

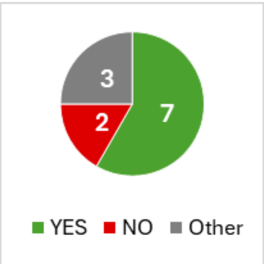


Financial indices

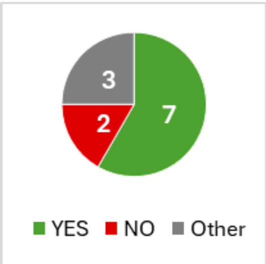


b) UCITS eligibility of <u>indirect</u> exposures

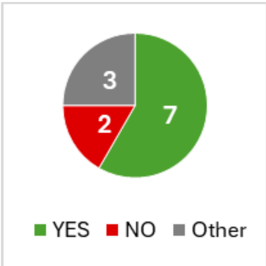
ETFs



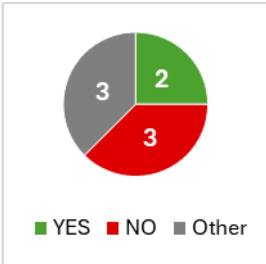
AIFs



ETNs



c) National framework



Annex IV – Data and risk/economic analysis

Overview of exposure to relevant assets

Following the mandate from the European Commission, ESMA conducted a targeted review to assess the exposure of UCITS to a range of relevant asset classes based on NCA data. The assessment of the absolute and relative size of exposures in the UCITS market is based on the feedback received in the context of the Call for Evidence and the supervisory data gathered from NCAs. The data on UCITS direct exposures are deemed reliable, while it is important to highlight that there are significant data availability and quality limitations with respect to indirect exposures.

Direct Exposure

- **Reference date and scope:**
  - Data as of end-2023, covering responses from 21 NCAs.
  - UCITS universe total size: approximately EUR 10tn.
- **Total exposure to relevant asset classes:**
  - Total direct exposure to relevant asset classes: ~EUR 822bn, representing ~8% of total UCITS NAV.
- **Asset class breakdown:**
  - Unrated bonds: Largest exposure among relevant assets, totaling EUR 416 billion (4% of UCITS NAV).
  - Structured products: Direct exposure is 1.5% of UCITS NAV, equivalent to 16% of total assets surveyed.
  - AIFs: Direct exposure is below 1% of UCITS NAV.
  - Remaining asset classes (e.g., cat bonds, emission allowances, REITs, crypto-assets): Collectively account for only 2.4% of UCITS NAV.
- **Fund and asset class concentration:**
  - Unrated bonds: Exposure widespread across more than 2000 UCITS.
  - Catastrophe bonds: Concentrated in a small number of specialised thematic funds (72 UCITS), typically aimed at professional investors.

- AIFs: Approximately 2,000 UCITS hold shares in other funds, including EU and non-EU AIFs.
  - Emission allowances: Very limited direct exposure reported, confined to a few UCITS (notably flagged by DE).
  - Other asset classes: Although exposure is negligible in aggregate, many UCITS report minor holdings (over 2,000 UCITS hold positions in REITs and unlisted equities).
- **Geographic breakdown of direct exposures:**
  - Direct exposure to alternative assets: Top 3 jurisdictions
    - IE: EUR 407bn (49% of direct exposure; ~4% of UCITS NAV).
    - LU: EUR 292.8bn (35% of direct exposure; 3% of UCITS NAV).
    - France (FR): EUR 94.8bn (11% of direct exposure; 1% of IUCITS NAV).
- **Notable specific exposures:**
  - Unrated Bonds: Total EU direct exposure of EUR 416bn (LU 47%, IE 40%, FR 12%).
  - AIFs: UCITS exposure appears to be concentrated in a few jurisdictions.[247]
  - Loans: Total direct exposure amounts to EUR 12bn (IE 99%)
  - ABS (incl. MBS): Total direct exposure: EUR 148bn (IE 67%, LU 31%)
  - ETCs: Total direct exposure of EUR 10bn (IE 57%, DE 26%).
  - ETNs: Total direct exposure of EUR 0.6bn.
  - Delta-ones: Exposures reported amounts to EUR 37 billion.[248]

Indirect exposure to alternative assets

- **Caveat:** Figures likely underestimate true exposure due to asset identification challenges in indirect holdings.
- **Size of indirect exposure:** Total indirect exposure estimated at EUR 7.8bn.
- **Asset class breakdown (indirect):**
  - Commodities: Largest component of indirect exposure (~81%).
    - Total EUR 6.3 billion indirect exposure to commodities.

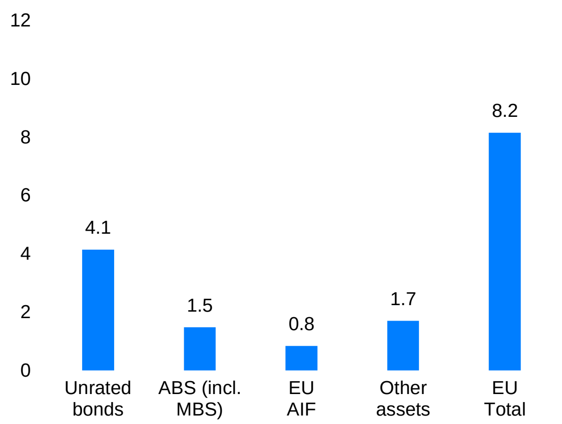
[247] Reported exposure to EU AIFs may be overestimated due to potential misclassification of vehicles.
[248] Figures may include exposures to EURO medium term notes.

- Primarily accessed via ETCs (EUR 5.8bn) and ETFs (EUR 0.4bn).
- Delta/one instruments: EUR 1.3bn indirect exposure, primarily through derivatives replicating equity indices or commodity baskets.
- Real estate: EUR 0.18bn indirect exposure gained through holdings in AIFs (EUR 0.11bn) and ETFs (EUR 0.03bn).
- Other alternative assets: Indirect exposure negligible across all remaining asset classes.

Direct and indirect exposure to relevant assets

Annex.1

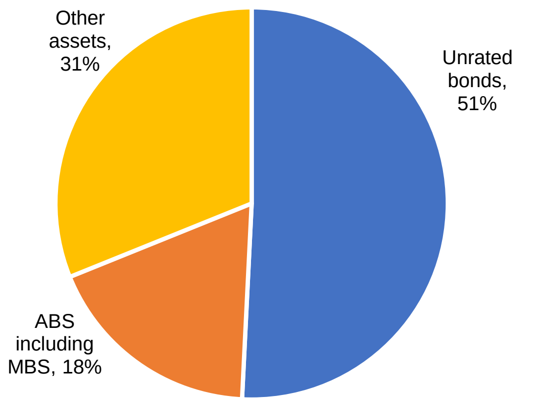
Total UCITS exposure to relevant assets



Note: Exposure to assets included in the Call for Evidence on the review of the UCITS EAD, in % of NAV.
Sources: NCAs, ESMA.

Annex.2

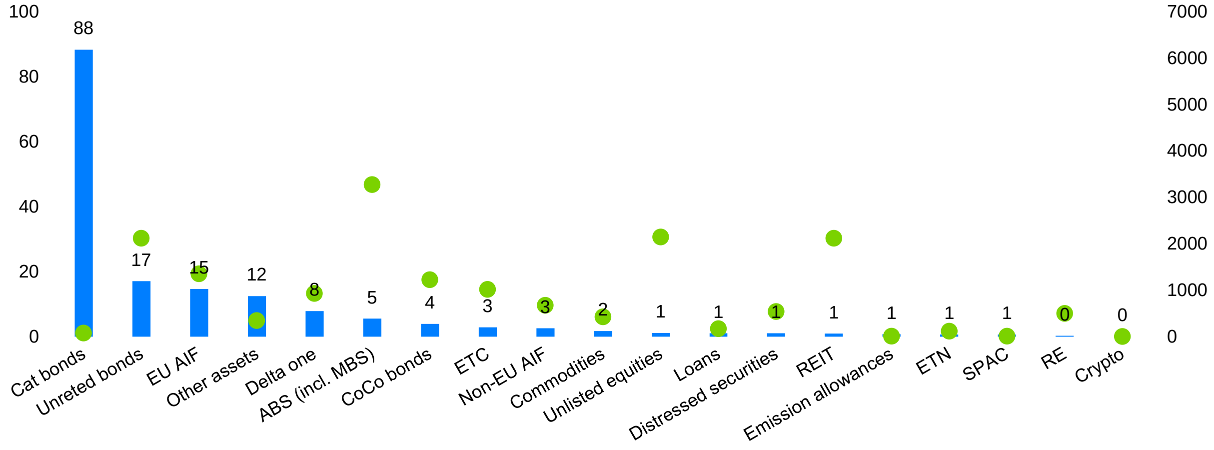
Share of relevant assets reported



Note: Weight of asset class exposure on total assets included in the Call for Evidence on the review of the UCITS EAD (%).
Sources: NCAs, ESMA.

Annex.3

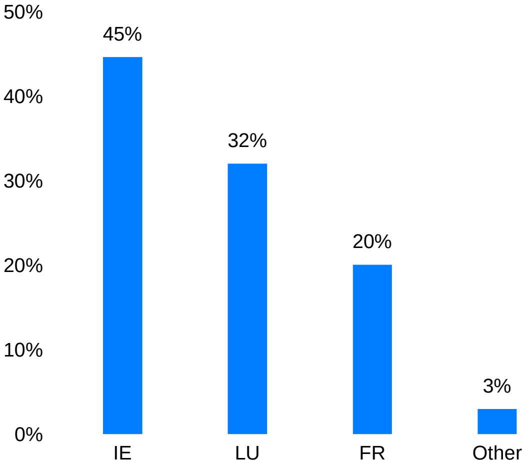
Concentration of relevant assets surveyed in UCITS portfolios



Note: Total direct exposure to specific asset class by funds invested in that asset class, % of NAV.
Sources: NCAs, ESMA.

Annex.4

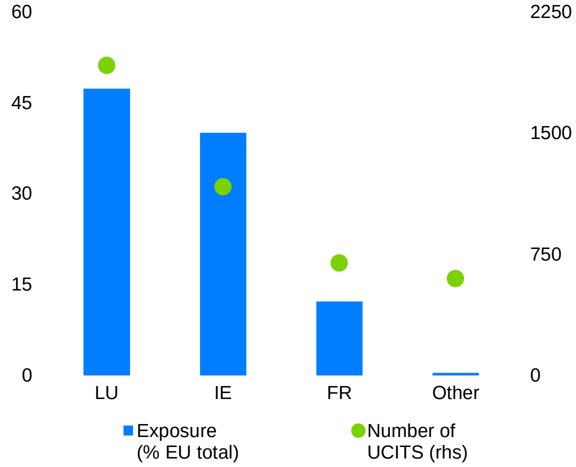
Direct exposure to relevant assets by jurisdiction



Note: Share of exposure to surveyed assets.
Sources: NCAs, ESMA.

Annex.5

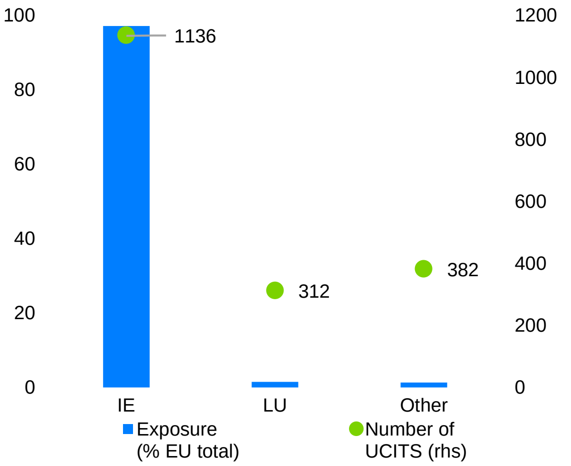
Direct exposure to unrated bonds by jurisdiction



Note: Direct exposure to unrated bonds by jurisdiction, as a % of total EU exposure. Number of UCITS directly exposed on rhs.
Sources: NCAs, ESMA.

Annex.6

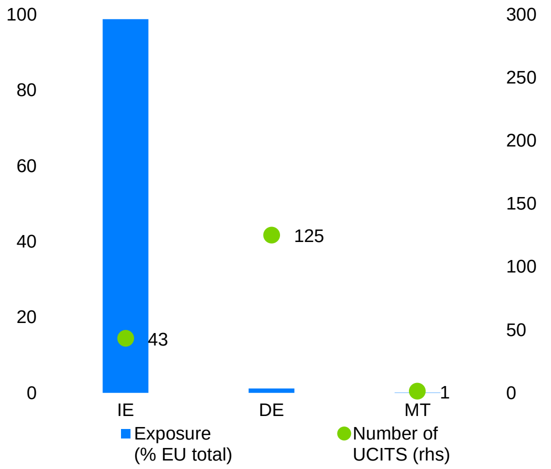
Direct exposure to AIFs by jurisdiction



Note: Direct exposure to EU and Non-EU AIFs by jurisdiction, as a % of tota EU direct exposure. Number of UCITS directly exposed on rhs.
Sources: NCAs, ESMA.

Annex.7

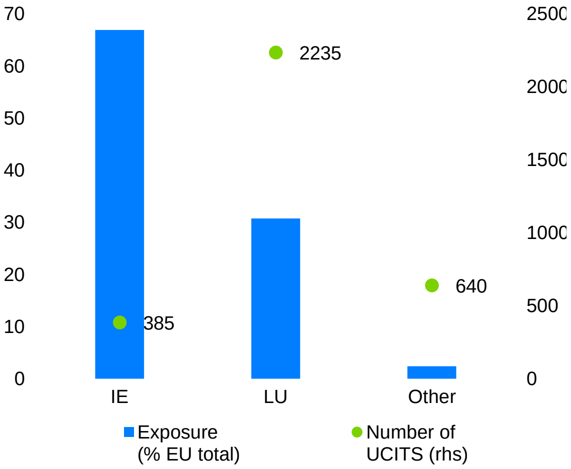
Direct exposure to loans by jurisdiction



Note: Direct exposure to loans by jurisdiction, as a % of total EU exposure. Number of UCITS directly exposed on rhs.
Sources: NCAs, ESMA.

Annex.8

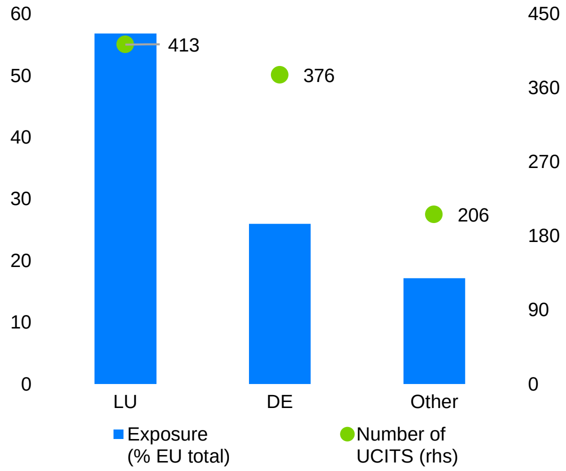
Direct exposure to ABS by jurisdictions



Note: Direct exposure to ABS (including MS) by jurisdiction, as a % of total EU direct exposure. Number of UCITS directly exposed on rhs.
Sources: NCAs, ESMA.

Annex.9

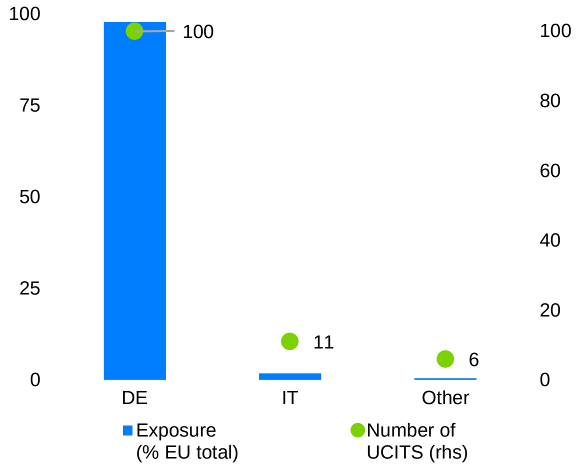
Direct exposure to ETCs by jurisdiction



Note: Direct exposure to ETC by jurisdiction, as a % of total EU direct exposure. Number of UCITS directly exposed on rhs.
Sources: NCAs, ESMA.

Annex.10

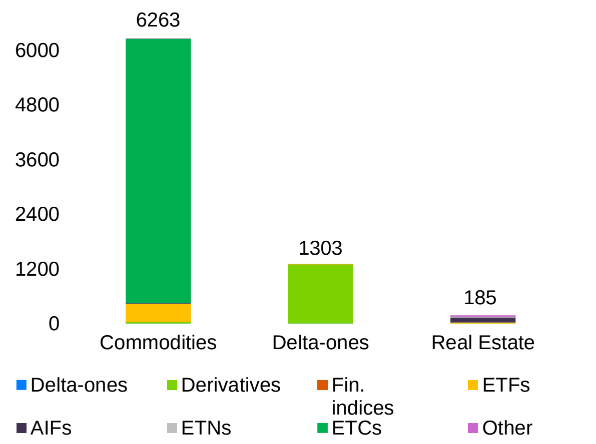
Direct exposure to ETNs by jurisdiction



Note: Direct exposure to ETN by jurisdiction, as a % of total EU direct exposure. Number of UCITS directly exposed on rhs.
Sources: NCAs, ESMA.

Annex.11

Largest indirect exposure to relevant assets



Note: Indirect exposure of UCITS funds to commodities, delta-one derivatives, and real estate, in EUR mn.
Sources: NCAs, ESMA.

Catastrophe bonds

Note: This description aligns with market terminology and is not intended to be prescriptive or exhaustive due to the lack of specific regulatory definitions.

Catastrophe bonds (cat bonds) are high-yield debt instruments and a form of insurance-linked securities (ILS) that enable insurance companies to transfer risks associated with catastrophic events to the capital markets. Issued primarily by insurance or reinsurance companies, cat bonds provide a mechanism to mitigate the financial impact of natural disasters such as earthquakes, hurricanes, or floods.

Investors purchase cat bonds and receive periodic coupon payments that are typically higher than those of traditional bonds, reflecting the risk assumed. These higher interest payments are often uncorrelated with traditional financial markets, providing diversification benefits.

The principal amount invested is held in a collateral account, usually invested in low-risk securities. If the specified catastrophic event does not occur during the bond's term, investors receive their principal back at maturity. However, if the event occurs and meets the predefined trigger conditions, the bond may forfeit interest payments, defer principal repayment, or both, with the funds used by the issuer to cover insurance claims, effectively shifting the financial burden of the disaster to the investors. They may be structured so that a payout is triggered only if the total losses from a natural disaster exceed a certain threshold or based on specific disaster metrics, such as the intensity of the event.

Cat bonds typically have maturities ranging from three to five years and can be structured with different trigger mechanisms, including:

- Indemnity triggers: Based on the issuer's actual losses.
- Industry loss triggers: Based on total losses across the insurance industry.
- Parametric triggers: Based on the physical parameters of the catastrophic event (e.g., earthquake magnitude).
- Modelled loss triggers**:** Based on modelled losses using predefined models.

Summary of asset characteristics and risks

Market Practices:

- **Investor base:** Mainly institutional investors such as hedge funds, pension funds, and specialised investment funds. The concentration of holdings among these entities can limit the number of potential buyers and sellers in the secondary market.
- **Special purpose vehicles (SPVs):** Issuers often set up SPVs to issue cat bonds, isolating the risk from the parent company.

- **Hold-to-Maturity strategy:** Investors in cat bonds may often adopt a buy-and-hold approach, planning to keep the bonds until maturity, which can further reduce secondary market activity.

Benefits:

- **High yield:** Offer higher interest rates compared to traditional bonds due to the risk of principal loss.
- **Social impact:** Investment supports the insurance industry's capacity to underwrite risks associated with natural disasters.

Risks:

- **Event risk:** If a triggering event occurs, investors may lose interest payments and principal.
- **Complexity:** Understanding the specific trigger conditions and underlying risks requires specialised knowledge.
- **Liquidity risk:** Cat bonds may have less liquidity compared to other fixed-income securities
    - **Limited Secondary Market:** The market for cat bonds is relatively small and specialised, with a limited number of participants. Trading volumes are generally lower than those of more conventional fixed-income securities, which can make it challenging to buy or sell positions without affecting the market price.
    - **Event-driven illiquidity:** Following a significant catastrophic event or during periods of increased risk (e.g., hurricane season), liquidity can decrease as investors become more cautious. Uncertainty about potential losses can lead to wider bid-ask spreads and reduced trading activity.

Key facts

- **UCITS exposure:** Cat bonds amount to ~0.1% of total UCITS NAV.
- **Sample:** Data provided by ILS Industry in response to ESMA Call for Evidence[249]. All figures are fully in line with the information disclosed by ARTEMIS, the reference portal for intelligence on the re/insurance sector.
- **Concentration:**
    - UCITS catastrophe bond funds allocate 88% of NAV to direct catastrophe bond exposure.

[249] ESMA34-1270380148-1032 Call for Evidence on the review of the UCITS Eligible Assets Directive

- Only 72 UCITS in EU invest in catastrophe bonds, reflecting niche, concentrated market.

- **Growing segment:** Overall outstanding amount has grown from EUR 28.7bn in 2021 to EUR 43.8bn in 2024 (+53%).
  - Catastrophe bond market has expanded consistently over the past 25 years.
  - Notable increases in market size, number of transactions, and tranches outstanding.
  - In 2024, Swiss Re market reached highest outstanding value of €43.76 billion.
- **Underlying risk exposure:**
  - Underlying events predominantly occur outside EU, with significant focus in US.
  - As of 31 May 2024, 89% of events contributing to Swiss Re catastrophe bonds' expected loss located in US.
  - Only 4% of such events located in EU.
- **Occasional high bid-ask spreads and TRACE sell volumes:**
  - Weighted monthly bid-ask spreads usually low, averaging 0.85 from March 2000 to May 2024 for Swiss Re bonds.
  - Reached maximum of 5.29 in September 2022.
  - TRACE sell volumes mostly low, averaging USD 280.6 million per month.
  - Peak of USD 1,089 million registered in March 2020.
- **Returns:**
  - Swiss Re catastrophe bonds display returns comparable to global market benchmarks.
  - Benchmarks include MSCI World Total Return Index and ICE BofA Global High Yield Total Return Index.
- **Correlation with other asset classes:** Correlations based on monthly returns from January 2002 through December 2023. Cat bonds represented by the Swiss Re Global Cat Bond Total Return Index. US Stocks represented by the S&P 500 Index. Commodities represented by the Bloomberg Commodity Index. US Agg IG Bonds represented by the Bloomberg US Aggregate Index. US HY Corp Bonds represented by ICE Bank of America US High Yield Constrained Total Return Index.

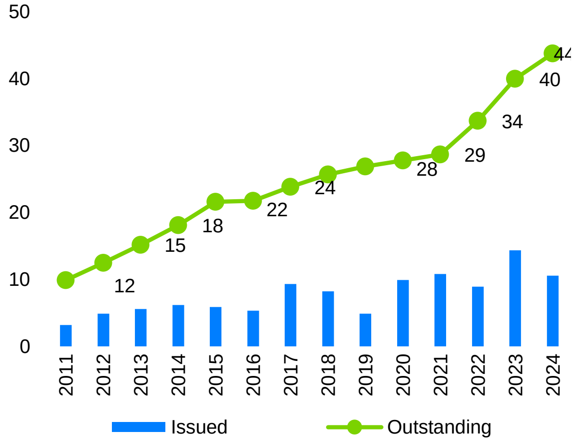
Observed correlation

	Cat Bonds	US Stocks	Commodities	US Agg IG Bonds	US HY Corp Bonds
Cat Bonds	1				
US Stocks	0.24	1			
Commodities	0.19	0.41	1		
US Agg IG Bonds	0.28	0.08	**0.01**	1	
US HY Corp Bonds	0.29	**0.71**	0.47	0.29	1
Source: Morningstar					

Catastrophe bonds

Annex.12

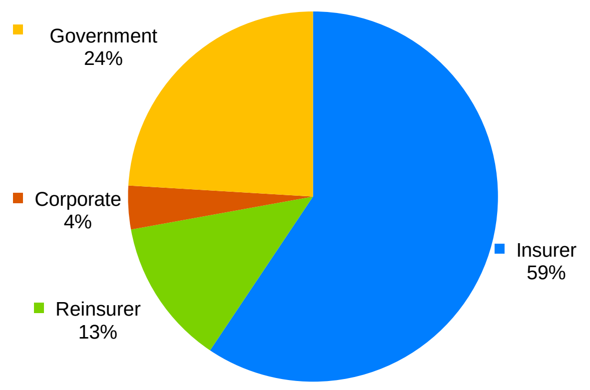
Issuance and outstanding amount



Note: Issuance and outstanding amount of catastrophe bonds, EUR br
Values for 2024 refer to May 2024.
Sources: ILS Industry, SRCM, received under ESMA CfE.

Annex.13

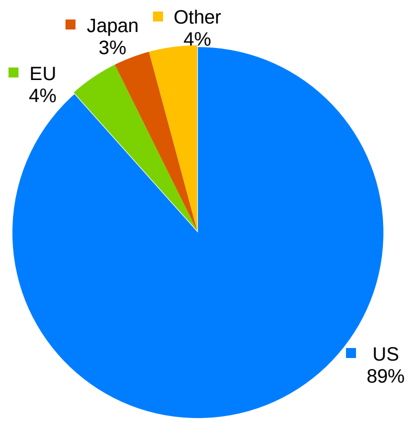
Sponsors



Note: Share of catastrophe bonds outstanding notional by sponsor type as of May 2024.
Sources: ILS Industry, SRCM, received under ESMA CfE.

Annex.14

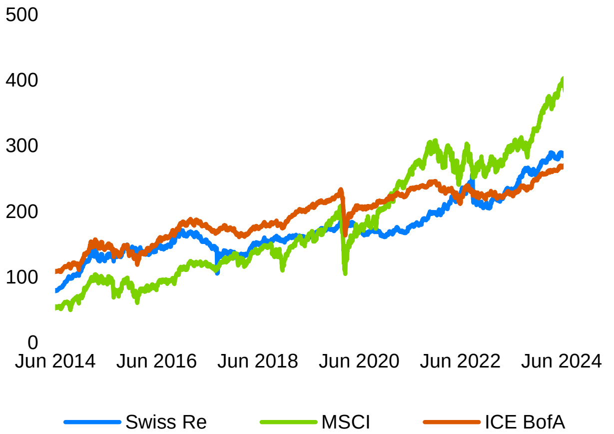
Geo-event contribution to losses



Note: Share of events contributions to catastrophe bonds expected loss by geographic location as of May 2024.
Sources: ILS Industry, SRCM, received under ESMA CfE.

Annex.15

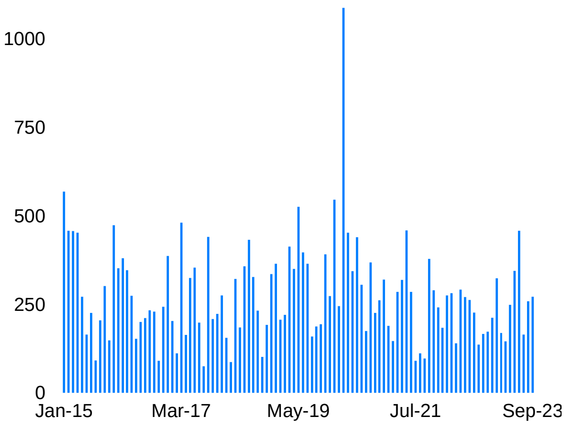
Performances



Note: Swiss Re Global Cat Bond Total Return Index versus other market benchmarks (MSCI WORLD US TOT RETURN IND and ICE BofA Global High Yield Index).
Sources: ILS Industry, SRCM, received under ESMA CfE.

Annex.16

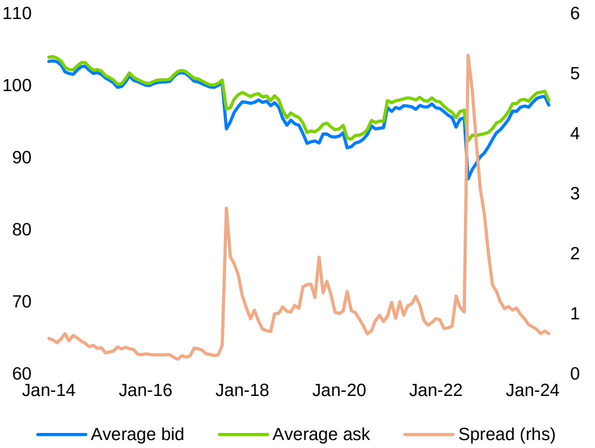
Trading volume



Note: TRACE sell volume of catastrophe bonds, in USD.
Sources: ILS Industry, SRCM, received under ESMA CfE.

Annex.17

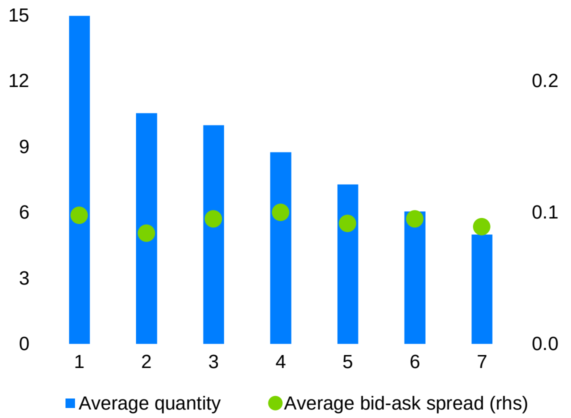
Average bid-ask prices and spread



Note: Catastrophe bond monthly weighted bid and ask prices, in %.
Sources: ILS Industry, SRCMC, received under ESMA CfE.

Annex.18

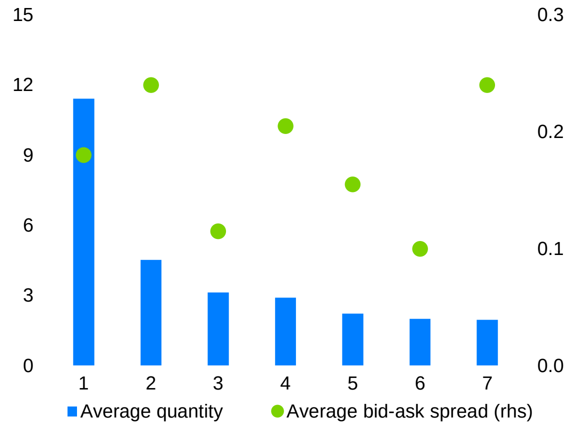
Bid-ask spread in March 2020



Note: Average quantity and average bid-ask spread by decile for Cat bonds TRACE trades taking place in March 2020, accounting for 96% of the trades by USD quantity. Quantity in USD mn.
Sources: ILS Industry, SRCM, received under ESMA CfE.

Annex.19

Bid-ask spread in fall 2022



Note: Average quantity and average bid-ask spread by decile for Cat bonds TRACE trades taking place in October-Novermber 2022, accounting for 83% of the trades by USD quantity. Quantity in USD mn.
Sources: ILS Industry, SRCM, received under ESMA CfE.

Contingent convertible bonds

Contingent convertible bonds (CoCo bonds) are a unique class of hybrid debt instruments designed to enhance the financial resilience of banks. Introduced as part of the regulatory reforms following the 2007/2008 Global Financial Crisis, CoCo bonds provide banks with an additional mechanism to absorb losses during times of financial stress, thereby safeguarding the broader financial system.[250]

CoCo bonds serve as a critical tool for maintaining stability within the financial system. By converting debt into equity or absorbing losses during periods of financial distress, CoCo bonds reduce the likelihood of external bailouts, mitigating the moral hazard associated with too-big-to-fail institutions. This ensures that banks can continue to operate and provide essential financial services even during periods of significant market turbulence.

Key Features and Mechanisms:

- **Purpose and regulatory context:**
  - CoCo bonds qualify as Additional Tier 1 (AT1) capital under the Basel III regulatory[251] framework, which mandates banks maintain sufficient capital buffers to absorb losses during crises.
- **Loss absorption mechanisms and triggers for activation**
  - Conversion to Equity: When a bank's capital levels fall below a specified trigger (typically based on the Common Equity Tier 1 (CET1) ratio), CoCo bonds convert into equity shares. This provides an immediate capital injection, reinforcing the bank's balance sheet.
  - Principal Write-Down: In some cases, instead of converting to equity, the principal value of the bonds may be partially or fully written down, either temporarily or permanently. This reduces the bank's liabilities and frees up capital.
  - The most common triggers are tied to a bank's CET1 ratio, typically set at predetermined thresholds. When these thresholds are breached, the loss absorption mechanism is activated automatically.
- **Subordination in the capital structure:**
  - CoCo bonds are subordinate to senior debt and traditional subordinated bonds but rank higher than equity in the event of a liquidation or bankruptcy. This prioritisation exposes investors to higher risks in exchange for higher returns.

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[250] This description aligns with market terminology and is not intended to be prescriptive or exhaustive due to the lack of specific regulatory definitions.
[251] Regulation (EU) 575/2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012.

Structure and Market Dynamics:

- **Hybrid nature:** CoCo bonds combine characteristics of debt and equity, reflecting their dual role in providing fixed income to investors and absorbing losses during crises.
- **Market participation, liquidity and trading**
  - Issuers: Primarily large European banks seeking to comply with Basel III capital requirements.
  - Investors: Mainly institutional investors such as hedge funds, pension funds, and specialised fixed-income funds due to the complexity and risk profile of CoCo bonds.
  - CoCo bonds are traded over the counter (OTC), with liquidity levels varying depending on the issuer's creditworthiness and market conditions.

Summary of asset characteristics and risks

Market Practices:

- **Investor base**: Predominantly institutional investors, such as asset managers, pension funds, and hedge funds. The market is less accessible to retail investors due to the complexity and risk profile of CoCo bonds.
- **Off-exchange trading (OTC and SI):**
  - CoCo bonds are predominantly traded off-exchange, with over 60% of volumes executed through Systematic Internalisers (SIs) and less than 15% through traditional OTC trading.
  - Combined, off-exchange trading channels account for the majority of CoCo bond transactions.
  - Concentration of holdings among institutional investors can limit the number of active buyers and sellers in secondary markets.

Benefits:

- **High yield**: CoCo bonds offer attractive yields compared to traditional subordinated debt, compensating investors for their higher risk exposure.
- **Diversification**: Provides institutional investors with exposure to a unique, high-yield asset class that complements traditional fixed-income instruments.

Risks:

- **Trigger risk:** If regulatory thresholds (e.g., CET1 ratio) are breached, CoCo bonds may convert to equity or suffer a principal write-down, leading to significant investor losses.

- **Coupon suspension:** CoCo bonds offer non-cumulative fixed coupon payments, which can be suspended at the issuer's discretion without constituting an event of default. This feature provides banks with additional flexibility during periods of financial stress.
- **Subordination:** CoCo bonds rank lower in the capital structure, exposing investors to higher losses in the event of default or liquidation.
- **Market volatility:** Prices are highly sensitive to issuer-specific risks, regulatory developments and market sentiment.
- **Liquidity risk:** Liquidity may be further constrained during periods of financial uncertainty or heightened regulatory concerns.

Key facts

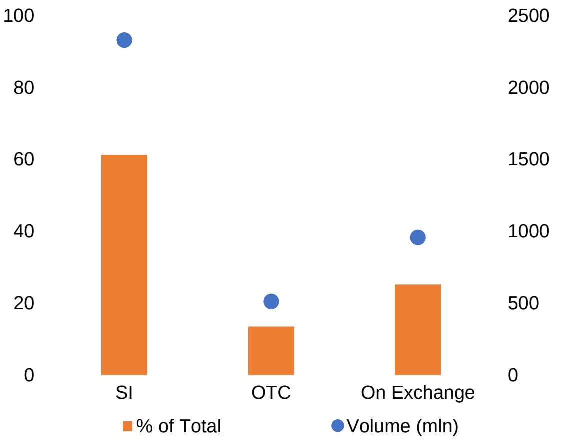
- **UCITS exposure:** CoCo bonds amount to ~0.4% of total UCITS NAV.
- **Sample mapped:**
  - 157 EU-listed CoCo bonds mapped using Refinitiv Eikon and FITRS data.
  - Period covered: January 2023 to May 2024.
- **High off-exchange trading**: 75% of total volumes are traded off-exchange, SI accounting for >60% and OTC for <15% of total activity (~75% combined); only 25% traded on-exchange.
- **Concentration in a few venues**: Most exchanges are concentrated in four trading venues: MLES (SI), BTFE, BNPS (SI), XOFF (OTC).
- **Growth trend in trading volumes:**
  - There was a notable upward trend in trading volumes from early 2023 to early 2024, reflecting increased market participation and investor activity.
  - In March 2023, monthly trading volumes in European markets reached 1.6 EUR billion.
- **European issuers:** Almost all CoCo bonds are issued in European countries (98%), Spain being the first in order (43%), followed by the Netherlands (15%) and Sweden (10%).
- **Trading activity predominantly denominated in USD:**
  - Majority of CoCo bonds trading volumes are in USD (60%), followed by EUR (27%) and GBP (13%).
  - In terms of number of transactions, the currency ratios do not differ significantly: 59% are in USD, 30% in EUR, and 11% in GBP.

• **Bid-ask spreads vary significantly by exchange:**
  - Few exchanges show consistently higher and more volatile spreads, suggesting lower liquidity and liquidity fluctuations.
  - Many venues show relatively low median spreads and tightest distributions, indicating better liquidity conditions and lower trading costs.

Contingent convertible bonds

Annex.1

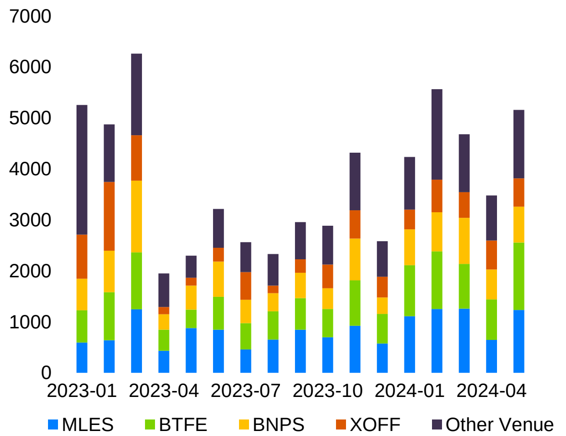
Trading infrastructures



Note: Composition of Coco bonds trading. Average monthly volumes in millions from January 2023 to May 2024 on rhs.
Sources: FRDS, FITRS, ESMA.

Annex.2

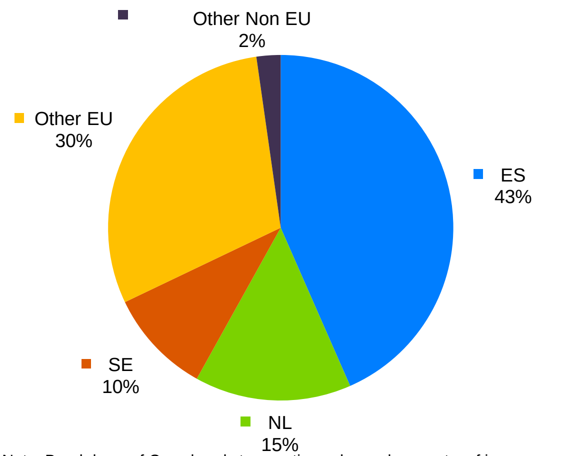
Trading volume by venue



Note: Monthly Coco bonds trading volume by venue, in millions.
Sources: FRDS, FITRS, ESMA.

Annex.3

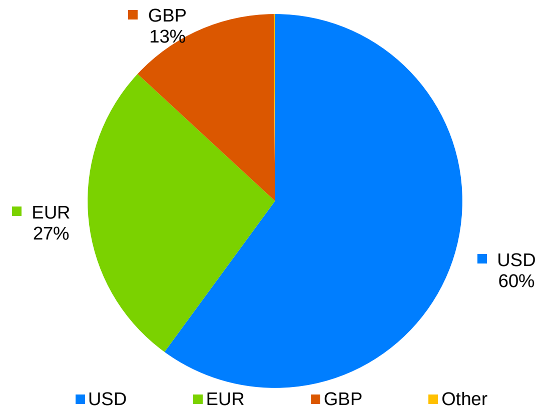
Country of issuance



Note: Breakdown of Coco bonds transaction volumes by country of issuance.
Sources: FRDS, FITRS, ESMA.

Annex.4

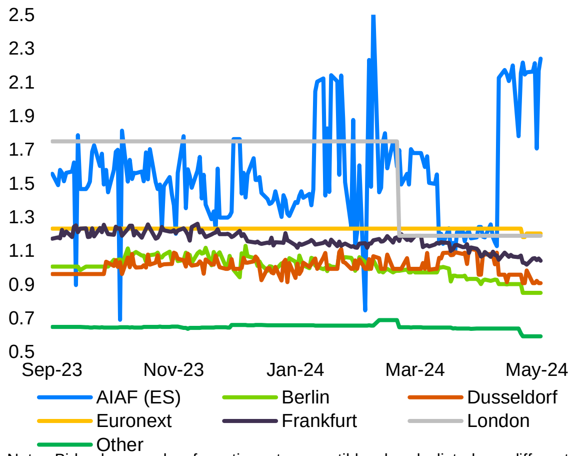
Currency of issuance



Note: Breakdown of the volume of Coco bonds traded from January 2023 to May 2024 by currency of issuance.
Sources: FRDS, FITRS, ESMA.

Annex.5

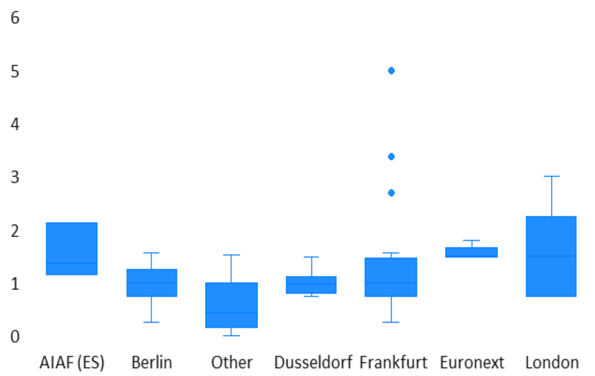
Bid-ask spread trends



Note: Bid-ask spreads of contingent convertibles bonds listed on different exchanges, in %.
Sources: Refinitiv Eikon, ESMA.

Annex.6

Liquidity disparities across venues



Note: Distribution of CoCo bonds bid-ask spreads exchanged or registered in selected exchange venues.
Sources: Refinitiv Eikon, ESMA

ESMA
European Securities and Markets Authority

Crypto-assets

Crypto-assets are defined under the markets in crypto-assets regulation (MiCA) as 'a digital representation of a value or of a right that is able to be transferred and stored electronically using distributed ledger technology or similar technology'.[252]

MiCA classifies crypto-assets into three types, namely (i) e-money tokens (EMTs)[253]; (ii) asset-referenced tokens (ARTs)[254]; and (iii) other types of crypto-assets. EMTs and ARTs are commonly known as stablecoins. Stablecoins, as their name suggests, are designed to maintain a stable value relative to a specified asset, or a pool or basket of assets. The rest of this section focuses on crypto-assets other than stablecoins.

Summary of asset characteristics and risks

Market Practices:

- **Regulatory framework:** MiCA fully applies in the EU since December 2024 but transitional measures may apply for CASPs in certain Member States until July 2026.[255] Holders of crypto-assets and clients of crypto-asset service providers may therefore not benefit from full rights and protections afforded to them under MiCA until as late as 1 July 2026. Crypto-asset services provided in a fully decentralised manner are also outside the scope of MiCA.[256] In addition, there is no equivalence regime to MiCA outside of the EU at this point, meaning that practices unlawful under MiCA may prevail outside of the EU with potential negative spillover effects on EU investors, especially considering the global nature of crypto markets.
- **Trading:** crypto-assets are available for trading on both centralised exchanges (CEXs) and decentralised exchanges (DEXs). CEXs are similar to traditional exchanges in their functioning. DEXs use liquidity pools and are governed by smart contracts, which provides certain benefits but may expose users to novel risks, such as new forms of market manipulation or operational risk. [257] Some DEXs may also fall beyond the scope of

[252] Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023.
[253] MiCA defines an EMT as a type of crypto-asset that purports to maintain a stable value by referencing the value of one official currency
[254] MiCA defines an ART as a type of crypto-asset that is not an electronic money token and that purports to maintain a stable value by referencing another value or right or a combination thereof, including one or more official currencies
[255] For further details on MiCA's transitional period, see ESMA, 2023. 'Markets in Crypto-Assets Regulation (MiCA)', June 2023. Derogations to MiCA also apply to crypto-assets (other than stablecoins) which were offered to the public prior to 30 December 2024. Issuers and offerors of such tokens have to comply with requirements relating to marketing communications published after 30 December 2024, not the entirety of Title II of MiCA. Operators of trading platforms (but not all other CASPs) have to ensure, by 31 December 2027, that white papers have been published for those tokens in relation to which they provide services.
[256] Recital 22 of MiCA provides that 'where crypto-asset services are provided in a fully decentralised manner without any intermediary, they should not fall within the scope of this Regulation'
[257] For further details on CEXs and DEXs, their functioning and the risks they pose see ESMA, 2023. 'Decentralised finance in the EU: developments and risks', October 2023.

MiCA.[258] The relative share of DEXs in the total volumes traded is limited (around 10% of spot volumes) but growing.

- **Custody:** custody for crypto-assets differs significantly from custody for traditional assets and requires ad-hoc resources and tools to manage blockchain-based assets, including advanced cryptographic techniques, such as multi-signature wallets, cold storage (offline storage), and hardware security modules.

Benefits:

- **Diversification:** Crypto-assets could – in principle – provide some diversification benefits to investors, as a new asset class that has limited interlinkages with traditional financial markets. However, between 2020 and 2024 the correlation between Bitcoin's and US equities' returns was significantly positive (56%) (Annex 20).
- **Support to innovation:** crypto-assets investments could support the development of blockchain technology, which could provide certain benefits to financial markets and their users (e.g., increased efficiency through faster settlement or easier access to financial services, for example through decentralised finance).

Risks:

- **Extreme price volatility:** crypto-assets markets have gone through a series of boom-and-bust cycles since the launch of Bitcoin in 2009 (Annex 21). In the absence of any tangible value or attached rights, most crypto-assets see their price fluctuate depending on investors' demand exclusively and are therefore subject to sudden and extreme price movements.
  - Bitcoin and Ether have been 3.3 and 4.3 times more volatile than US equities respectively on average between 2020 and 2024 (Annex 22), with a tail risk that is 4 to 5 times higher (Annex 23).
  - Meme coins, a sub-category of crypto-assets that originate from internet meme and jokes, are even more volatile. Dogecoin, the largest meme coin in size, was 6 times more volatile than Bitcoin's in early 2021 (Annex 24) and social media activity has a key influence on its price, as shown again in November 2024 (Annex 25).
- **Liquidity risks:** trading volumes tend to be concentrated in a few large crypto-assets, which are less liquid than comparable equities on average (Annex 26). In addition, while the ownership of crypto-assets in unknown due to pseudonymity, anecdotal evidence suggests that it may be concentrated, with some individuals or firms holding sizeable exposures. This can affect price formation and liquidity, especially in times of stress.[259]

[258] Ibid 8

[259] For example, Satoshi Nakamoto, the pseudonymous creator of Bitcoin, is believed to hold nearly 1 million BTC, which is around 5% of the total supply. Other large holders of Bitcoin include MicroStrategy (~2% of total supply). Coinweb found that the top 10 holders held 36% of the total circulating Ether in December 2023.

- **Market manipulation:** MiCA includes provisions to address market integrity issues but practices considered unlawful under MiCA may continue to exist outside of the EU and indirectly affect EU investors, because of the global nature of crypto-assets markets. Non-EU venues dominating trading volumes exacerbate this risk. Some DEXs may also fall beyond the scope of MiCA as highlighted above. Cases of market manipulation, e.g., wash trading or pump and dump schemes, were reported on multiple occasions in crypto-assets markets in the past.[260]
- **Hacks, operational risks and security issues:** several issuers and service providers for crypto-assets, including crypto exchanges and wallet providers, have experienced cyber-attacks and severe operational problems. Chainalysis found that funds stolen increased by approximately 21.07% year-over-year to USD 2.2bn in 2024.[261] In February 2025, Bybit, one of the largest crypto exchanges fell victim to the largest crypto hack ever, with the equivalent of USD 1.4 bn funds stolen.
- **High interconnectedness:** interconnectedness is high within crypto-assets markets, which means that an individual shock is more likely to propagate to the entire crypto system, like we saw with FTX's collapse in 2022.[262] This is due to a combination of factors, including the offer of a broad range of services by some individual firms or group of affiliated firms which are central to crypto-asset markets, close interrelationships between firms and the sharing of a common infrastructure.
- **Environmental Concerns:** High energy consumption. The growth of proof-of-stake networks, which are less energy intensive, may contribute to mitigating these concerns. For example, in September 2022, Ethereum shifted from proof-of-work to proof-of-stake. However, Bitcoin, the largest crypto-asset by far, continues to use proof-of-work.

Key facts

- **Market cap:**
  - Total crypto-assets market cap: EUR 3.3 trillion as of December 2024, x2 in a year.
  - High concentration: Bitcoin alone accounts for more than half of total (56% as of December 2024), followed by Ether (12%) and Tether USD (4%) (noting that Tether USD is a stablecoin).
- **Trading volumes:**

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[260] For example, Cong et al. (2022) found that wash trading averaged 70% of the reported volume on unregulated crypto exchanges. In October 2024, the FBI uncovered a major pump-and-dump operation involving NexFundAI.
[261] Chainalyis, 2025. 2025 Crypto Crime Report, February 2025.
[262] In November 2022, the collapse of FTX, one of the largest crypto exchanges, sent shock waves across the entire industry. Crypto markets lost 20% in value in a few days and several crypto native firms subsequently filed for bankruptcy.

- Trading volumes: EUR 1.34tn per month on average in 2024, high fluctuations through time (e.g., monthly trading volumes peaked at EUR 2.45tn in December 2024, to be compared with a low of EUR 0.77tn in September 2024) (Annex 27).
- Most widely traded crypto-assets: Tether USD (36% of monthly trading volumes in December 2024), followed by Bitcoin (14%) and Ether (8%)
- Binance largest exchange by far, although its market share has receded to 40% (from more than 60% in early 2023). Coinbase second largest exchange (~10%). DEXs' market share close to 10% and growing.

- **Funds and ETPs providing exposure to crypto-assets in the EEA:**
  - Crypto funds: combined NAV estimated at ~ EUR 5bn in December 2024 (0.02% of the EU fund universe).[263] Most funds very small in size, with only one having a NAV above EUR 1bn.
  - Crypto ETPs, combined market cap estimated at ~ EUR 10bn.[264]
- **Funds and ETPs providing exposure to crypto-assets outside of the EEA**
  - No comprehensive available data but US crypto ETPs seemingly representing the bulk of these funds/ETPs (~80%).
    - US spot Bitcoin ETPs: Total AuM: EUR 102bn as of end-December 2024; Net inflows: EUR 34.3 bn since launch in January 2024.
    - Spot Ether ETPs: Total AuM: EUR 11.7bn as of end-December 2024; Net inflows: EUR 2.6bn since launch in July 2024.

[263] ESMA estimates, based on the screening of commercial and AIFMD databases using key words
[264] ESMA estimates, based on the screening of commercial databases using key words

Crypto-assets

Annex.20

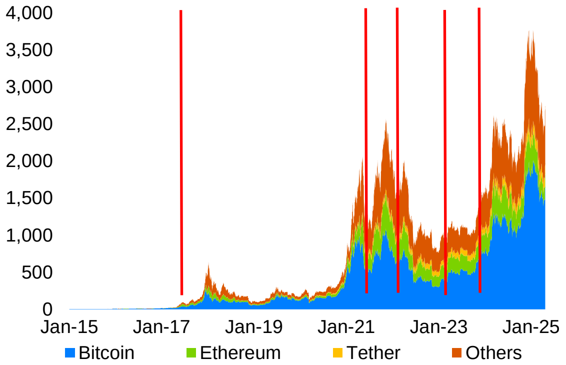
Bitcoin's correlation with traditional assets

	Bitcoin	Equities	Bonds (IG)	Bonds (HY)	Commodities	Gold
Bitcoin	-					
Equities	0.56	-				
Bonds (IG)	0.03	0.29	-			
Bonds (HY)	0.46	0.72	0.05	-		
Commodities	0.21	0.34	-0.16	0.38	-	
Gold	-0.02	-0.12	0.04	-0.07	-0.18	-

Note: Correlation of monthly returns from February 2020 to December 2024.
Sources: Kaiko, Refinitiv Eikon, Datastream, ESMA.

Annex.21

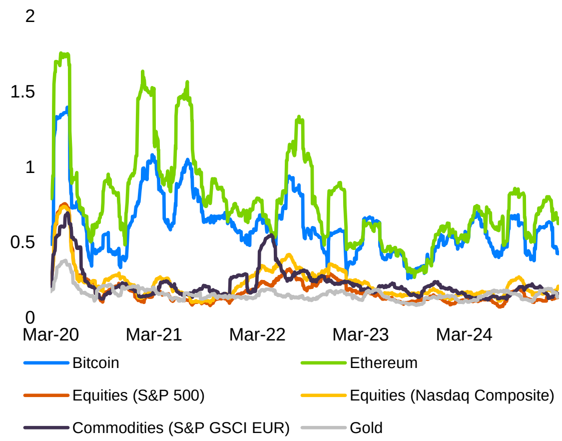
Crypto markets: series of boom-and-bust cycles



Note: Market capitalisation of Bitcoin, Ethereum, Tether and other crypto-assets, in EUR bn. The red vertical lines mark, chronologically, the ICO bubble, the Terra/Luna collapse, the FTX collapse, the launch of US spot Bitcoin ETPs and the re-election of Donald Trump in November 2024.
Sources: CoinMarketCap, ESMA.

Annex.22

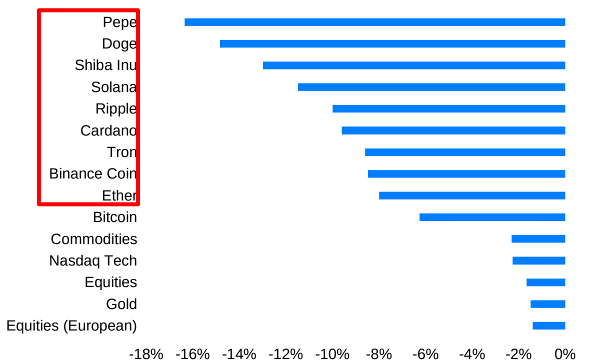
Volatility of crypto versus traditional assets



Note: 40-day annualised volatility of returns for selected assets.
Sources: Kaiko, Refinitiv Eikon, Datastream, ESMA

Annex.23

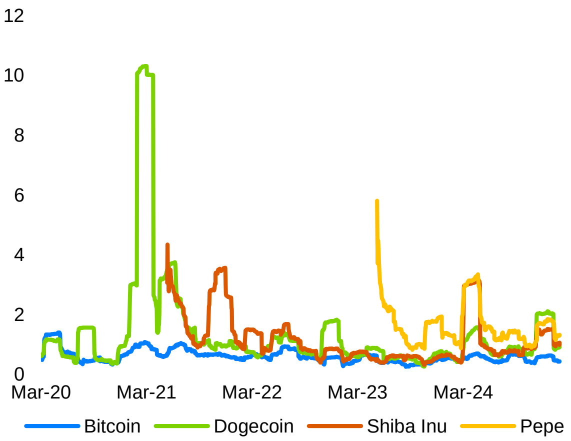
Value at Risk of crypto versus traditional assets



Note: 1-day value at risk (VaR) of daily log returns for selected assets at the 95% confidence level. VaR is calculated under the assumption of normal distribution of log returns, with mean and standard deviation dependent on the historical series of log returns (2020-2024).
Sources: Kaiko, Refinitiv Eikon, ESMA.

Annex.24

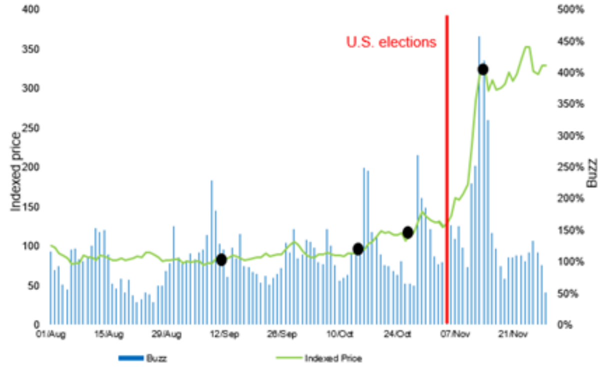
Volatility of meme coins versus Bitcoin



Note: 40-day annualised volatility of returns for Bitcoin and selected meme coins.
Sources: Kaiko, ESMA

Annex.25

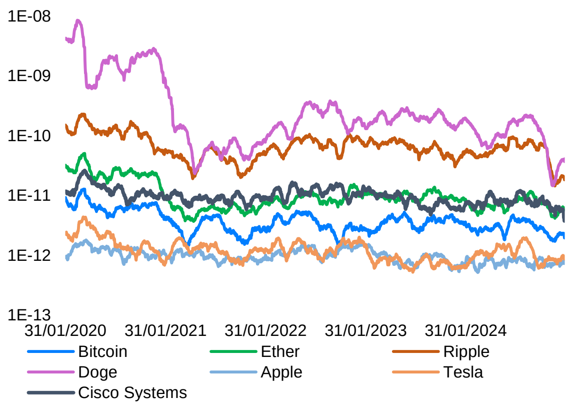
Dogecoin's price and social media attention



Note: On the left axis, indexed price of Dogecoin (price of August 1st =100). On the right axis, the buzz indicator regarding Dogecoin messages on social media. The black dots represent tweets from Elon Musk related to D.O.G.E or Dogecoin.
Sources: Stockpulse, CoinGecko, ESMA.

Annex.26

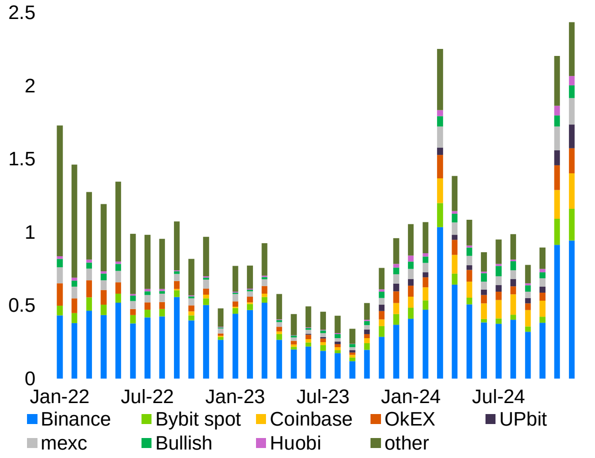
Amihud illiquidity ratio for crypto and Tech stocks



Note: 30-day rolling average of daily Amihud illiquidity ratio for selected assets. The Amihud illiquidity ratio is the absolute value of the asset's return divided by its traded volume.

Annex.27

Crypto trading volumes by exchange



Note: Volume traded by exchange, in EUR tn (monthly)
Sources: Kaiko, ESMA

Emission Allowances

Emission allowances are tradable permits granting the holder the right to emit a specific amount of greenhouse gases, typically measured in tons of carbon dioxide equivalents (tCO_2e). They are the cornerstone of cap-and-trade systems, such as the European Union Emissions Trading System (EU ETS), which aim to reduce overall emissions by setting a cap on allowable emissions and enabling the market to allocate emission rights efficiently.

The European Emission Trading System (ETS) is a key tool of the EU policy against climate change. It puts a price on the CO_2 that entities subject to compliance obligations can release to the atmosphere, with the overall objective of reducing net greenhouse gas emissions. Companies receive or purchase allowances, and at the end of each compliance period, they must surrender enough allowances to cover their verified emissions. Non-compliance results in financial penalties.

The EU ETS operates as a cap-and-trade mechanism where firms must surrender one allowance for each tonne of CO_2 equivalent emitted, with allowances distributed through a mix of free allocation (gradually decreasing over time) and auctioning (the primary allocation method, generating revenue for climate actions). Firms can trade allowances based on their needs, creating a carbon price. The effectiveness of the system is maintained through mandatory annual monitoring, reporting, and verification of emissions, followed by allowance surrender by April 30th of the following year, with significant penalties applied for non-compliance.

The tradable nature of allowances creates a dynamic market where entities with excess permits can sell to those in deficit. This flexibility helps achieve emission reductions at the lowest economic cost while providing price signals to incentivise low-carbon technologies.

Key Aspects of Emission Allowances:

- **Market structure**: Trading occurs on primary and secondary markets, with allowances initially allocated via auctions or, in some cases, freely distributed to industries facing global competition. Trading in the secondary market takes place through derivative contracts with emission allowances as underlying.
- **Derivative instruments**: Futures and options dominate the secondary market, allowing participants to hedge against price volatility or speculate on market movements. Spot contracts account for less than 1% of the market.
- **Underlying**: Futures and options dominate the secondary market, allowing participants to hedge against price volatility or speculate on market movements. Spot contracts account for less than 1% of the market.

Regulatory References:

The EU ETS is governed by **Directive 2003/87/EC**, which established the system as the cornerstone of the EU's climate policy. Over time, the system has been updated to reflect evolving climate targets:

- **Directive (EU) 2023/959**: Introduced strengthened emission reduction targets, expanded the system to additional sectors (e.g., shipping, buildings), and refined rules for allowance allocation.
- **Market Abuse Regulation (MAR) (EU No 596/2014)**: Ensures integrity and transparency in trading activities, prohibiting insider trading and market manipulation.
- **MiFID II (Directive 2014/65/EU)**: Classifies emission allowances as financial instruments, subjecting their trading to EU financial market regulations.
- **Auctioning Regulation (Regulation (EU) No 1031/2010)**: Defines rules for auctioning allowances within the EU ETS framework.

The EU ETS has become a model for emissions trading globally, inspiring similar systems such as China's National ETS and California's Cap-and-Trade Program.

Summary of asset characteristics and risks

Market Practices:

- **Primary market**:
  - Allowances are auctioned through centralised platforms under EU rules, with oversubscription reflecting strong demand.
  - Free allocations are granted to certain industries to prevent carbon leakage.
- **Secondary market**:
  - Trading occurs primarily on exchanges (e.g., ICE) and OTC markets.
  - Futures dominate trading volumes, while options account for a smaller but growing share of transactions.
- **Participants**: Investment firms or credit institutions dominate trading activity, while other non-financial entities (compliance-focused) and investment funds also participate, though less intensively.
- **Geographic distribution**: The most active participants are from the US, UK, and Germany.

Benefits:

- **Cost-Efficient emissions reductions**: Allows reductions where they are most economically viable.
- **Market flexibility**: Enables entities to trade allowances in response to operational needs.

- **Price incentive for decarbonisation:** Establishes a financial cost for emissions, encouraging low-carbon innovation.
- **Hedging opportunities**: Derivatives provide tools to manage price volatility.
- **Revenue for sustainability**: Auction proceeds fund renewable energy, energy efficiency projects, and climate adaptation initiatives.

Risks:

- **Price volatility**: Prices fluctuate due to regulatory changes, economic activity, and external factors like weather and geopolitics.
- **Regulatory risk**: Adjustments to cap levels, allocation methods, or market rules can disrupt stability.
- **Market concentration**: A small number of participants dominate trading, posing systemic risks.
- **Liquidity risk**: Low demand or heightened uncertainty can impact market efficiency, particularly in OTC segments.
- **Compliance penalties**: Failure to meet surrender requirements results in financial and reputational consequences.
- **Operational complexity**: Participants unfamiliar with market mechanisms may rely heavily on intermediaries.

Key facts

Market Dynamics

- **UCITS exposure:** Emission allowances amount to <0.001% of total UCITS NAV.
- **Pricing trends**:
  - 2023 average spot price: €83/tCO2e (2022: €81).
  - Prices peaked at €100 in February 2023 before falling below €70 by year-end due to reduced energy demand and economic conditions.
- **Volatility**:
  - Historical volatility averaged 1.9% in 2023, down from 3.3% in 2022.
  - Intraday volatility averaged 1.0% in 2023.

Primary Market

- **Auction volumes**:
  - Total allowances auctioned: 523 million in 2023, valued at €44 billion.
  - Monthly average turnover: 43 million allowances (€3.6 billion).

- **Oversubscription**: Auctions oversubscribed with an average cover ratio of 202%.
- **Concentration**: Top 10 participants acquired 90% of auctioned allowances.

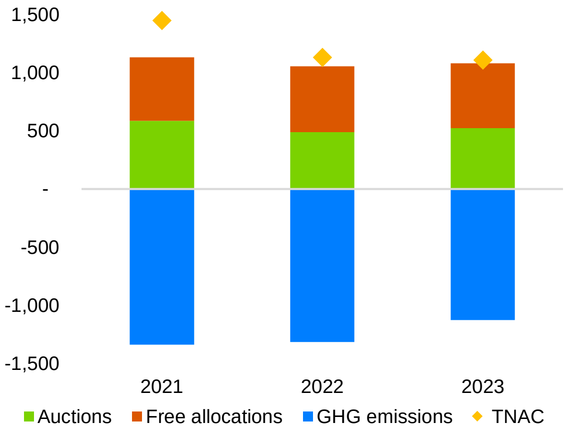
Secondary Market

- **Trading activity:**
  - On-exchange: 9.3 billion tCO2e (€648 billion) across 3.2 million transactions.
  - OTC: 864 million tCO2e (€72.5 billion).
- **Participants**: Dominated by financial institutions (56%), followed by non-financial entities (25%) and investment funds (12%).
  - Most activity originates from the US (34%), UK (24%), and Germany (14%).
- **Instruments**: Futures constitute 99% of traded volumes; options account for 18%.

Emission allowances market

Annex.32 ..

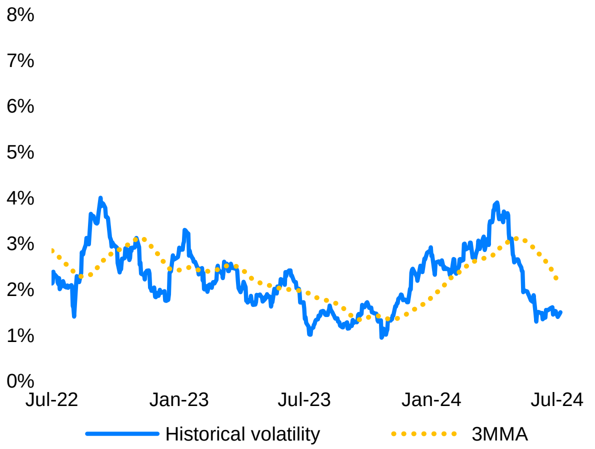
Supply and demand of EUAs



Note: Annual supply (free allocations and auctions) and demand (GHG emissions) of EUAs, in metric tonnes of CO2. TNAC=Total Number of Allowances in Circulation.
Sources: European Commission, ESMA.

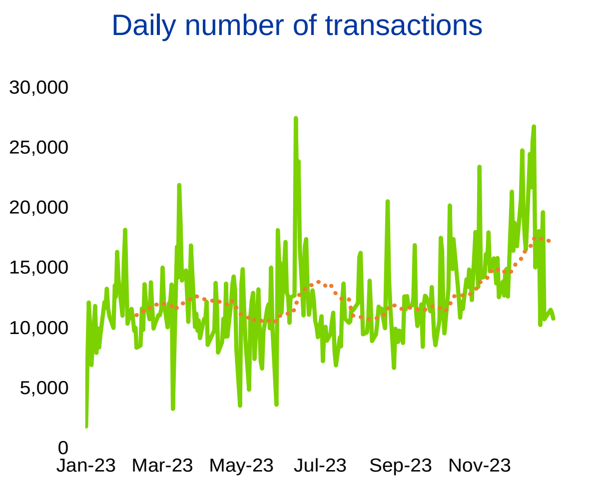
Annex.33

Historical volatility



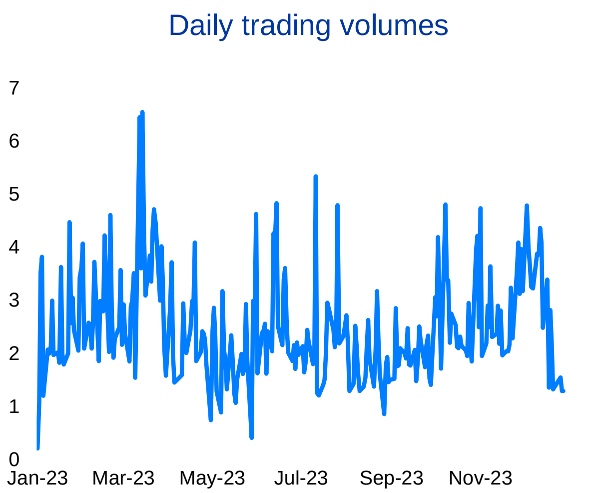
Note: Historical volatility of EU emission allowance prices calculated as 20-day standard deviation of daily returns. 3MMA= three-month moving average.
Sources: Refinitiv EIKON, ESMA.

Annex.34



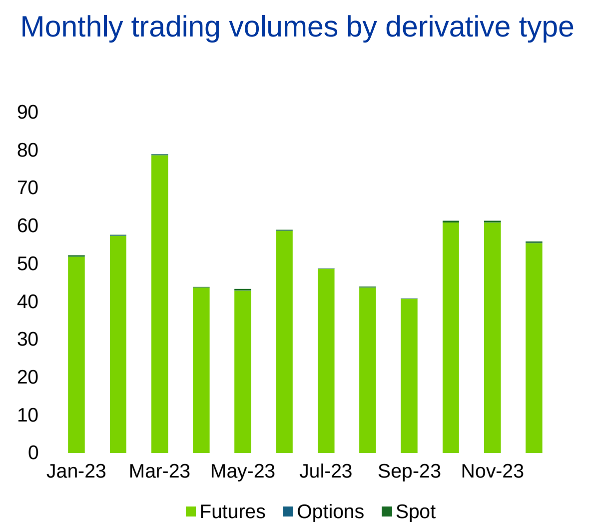
Note: Daily number of on-exchange buy transactions. 30/days moving average in orange.
Sources: MiFIR, ESMA.

Annex.35



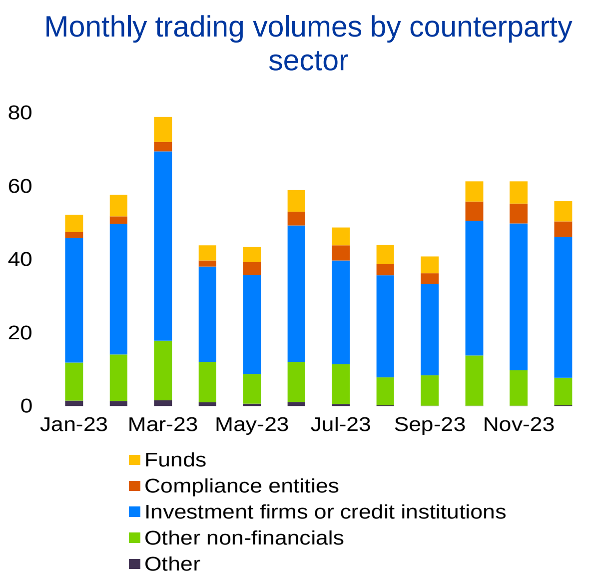
Note: On-exchange daily trading volumes in EUA derivatives, in EUR billion.
Sources: MiFIR, ESMA

Annex.36



Note: On-exchange monthly trading volumes in EUA derivatives, in EUR billion.
Sources: MiFIR, ESMA

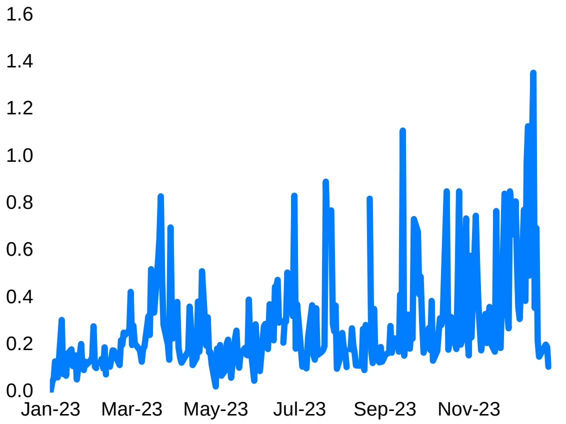
Annex.37



Note: Monthly trading volumes by counterparty sector, in EUR bn.
Sources: MiFIR, ESMA.

Annex.38

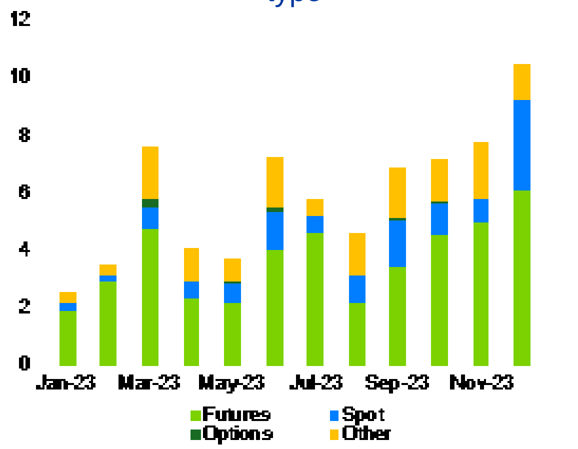
Daily trading volumes off-exchange



Note: Off-exchange daily trading volumes in EUA derivatives, in EUR billion.
Sources: MiFIR, ESMA

Annex.39

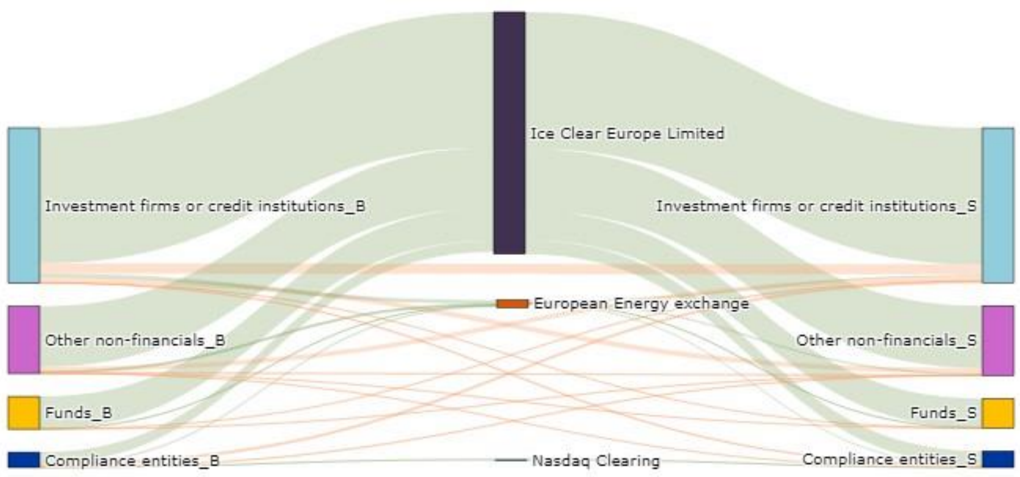
Monthly off-exchange volumes by derivative type



Note: Off-exchange monthly trading volumes in EUA derivatives by instrument type, in EUR billion.
Sources: MiFIR, ESMA.

Annex.40

Trading activity by counterparty sector on- and off-exchange



Note: Trading activity by counterparty sector on and off-exchange. Flows are proportional to tonnes of $CO2$ equivalent emissions exchanged. Orange lines represent off-exchange trading, while green lines are for on-exchange. _B indicates that the counterparty is in the buy leg of the transaction. _S indicates that the counterparty is in the swll leg of the transaction.
Sources: MiFIR, ESMA.

Exchange-Traded Commodities (ETCs)

Note: This description aligns with market terminology and is not intended to be prescriptive or exhaustive due to the lack of specific regulatory definitions.

Exchange-Traded Commodities (ETCs) are debt securities that provide investors with exposure to the performance of commodity markets, including precious metals, energy resources, agricultural products, and livestock. They enable investors to gain access to commodity returns without physically buying, storing, or managing commodities or trading futures contracts directly.

ETCs are typically structured as notes, issued by financial institutions, and collateralised by either physical holdings of the underlying commodity (such as gold bars) or by cash and other assets. Unlike traditional mutual funds or Exchange-Traded Funds (ETFs), ETCs are generally classified as debt instruments rather than as funds, which allows them to track individual commodities or baskets of commodities more flexibly under European regulations, particularly given the UCITS restrictions on direct commodity investment.

ETCs are listed and traded on major stock exchanges in a similar way to shares, offering daily liquidity, transparency, and accessibility to both institutional and retail investors.

Most standard ETCs are designed to behave as delta-one instruments. This means that their price movements closely mirror the price changes of the underlying commodity in a near one-to-one relationship, before accounting for fees, spreads, and other small operational costs.

Key points about delta-one behaviour in ETCs:

- **Direct tracking**: A 1% change in the underlying commodity price (e.g., spot price of gold or silver) should result in an approximately 1% change in the ETC's value.
- **No internal leverage**: Standard ETCs do not use embedded leverage (unless specifically structured as leveraged products), meaning their exposure is linear and direct to the underlying commodity's performance.
- **Physically backed ETCs**: ETCs backed by physical commodities (e.g., bullion for gold or silver ETCs) generally achieve very close delta-one tracking, as they directly reflect the value of the stored commodity.
- **Futures-based ETCs**: Some ETCs gain exposure by rolling futures contracts (especially for oil, natural gas, or agricultural commodities).
    - While they target delta-one exposure, they can experience small tracking differences due to roll costs and the effects of contango (futures prices higher than spot prices) or backwardation (futures prices lower than spot prices).
- **Impact of fees**: Management fees, collateral costs, and bid-ask spreads slightly erode the perfect delta-one tracking over time.

Example:

- Suppose an investor holds a physically backed gold ETC.
  - If the spot price of gold increases by 2%, the ETC's price should also rise by approximately 2% (minus the annualised management fee, which is typically very low, e.g., 0.2%-0.5%).
- Similarly, a crude oil ETC linked to front-month futures might move closely with oil prices but could slightly underperform if futures prices rise more slowly than spot prices because of roll costs.
- **Important distinction**:
  - Standard unleveraged ETCs are delta-one instruments.
  - Leveraged or inverse ETCs are not true delta-one products, because they aim to multiply or invert daily returns rather than match price movements exactly over time.

This delta-one characteristic makes ETCs a transparent, predictable, and efficient way for investors to gain direct exposure to commodity price movements without managing physical assets or futures contracts themselves.

Summary of asset characteristics and risks

Market Practices:

- **Issuance and structure:**
  - ETCs are issued as secured or unsecured debt securities by banks or financial institutions.
  - They are often collateralised by the underlying commodity (e.g., gold, silver) or by cash reserves.
- **Trading and liquidity:**
  - Listed on major exchanges (e.g., London Stock Exchange, Deutsche Börse).
  - Traded throughout the day, allowing for intraday liquidity and market access similar to equities.
- **Underlying exposure:**
  - ETCs may track individual commodities (e.g., gold, oil) or commodity baskets (e.g., energy, agriculture).
  - Some ETCs offer leveraged or inverse exposure, which deviates from standard delta-one behaviour.
- **Collateral management:** Issuers typically publish daily collateral reports, ensuring transparency about asset backing and counterparty risks.

Benefits

- **Efficient commodity exposure**: Provides simple and direct access to commodity markets without handling physical storage or futures trading.
- **Diversification tool**: Adding commodities can improve portfolio diversification due to low correlation with equities and bonds.
- **Liquidity and accessibility**: Exchange listing offers ease of entry and exit through normal brokerage accounts.
- **Collateral protection**: Physically backed ETCs reduce issuer credit risk by holding tangible assets.
- **Cost efficiency**: Lower management fees compared to active commodity funds or direct futures investment.
- **Transparent price behavior**: Delta-one exposure provides predictable tracking of underlying commodity price movements.

Risks

- **Issuer credit risk**: Investors are exposed to the creditworthiness of the issuing institution, especially for unsecured ETCs.
- **Tracking error**: Minor deviations between ETC performance and the underlying commodity can occur due to fees, collateral management, and futures roll costs.
- **Commodity market risks**: Commodity prices are influenced by global supply and demand, geopolitical events, inflation trends, weather conditions, and macroeconomic factors.
- **Price volatility**: Commodities exhibit higher volatility than traditional financial assets, impacting ETC price stability.
- **Liquidity risk**: Niche or low-volume ETCs may experience wider bid-ask spreads, especially in stressed markets.
- **Leverage risks (for leveraged ETCs)**: Leveraged products amplify returns but also magnify losses, introducing greater complexity and risk over holding periods longer than one day.

Key facts

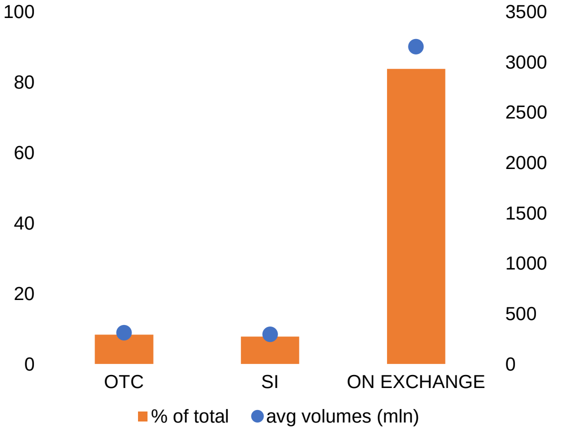
- **UCITS exposure:** ETCs amount to 0.1% of total UCITS NAV.
- **Sample mapped:**
  - 383 EU-listed ETCs mapped using Refinitiv Eikon and FITRS data.
  - Period covered: January 2023 to May 2024.

- **Trading venues and execution:**
    - 84% of total ETC trading volumes executed on regulated exchanges.
    - Limited off-exchange trading activity: OTC and Systematic Internalisers (SI) combined account for 16% of total volumes.
    - Higher average monthly trading volumes observed on exchanges compared to off-exchange venues.
- **Issuance:** All ETCs analysed issued in Ireland.
- **Currency breakdown:**
    - Majority of ETC trading volumes denominated in USD (58%), followed by EUR (42%).
    - Transaction count dominated by USD trades (82%), with EUR transactions accounting for 18%.
- **Exchange venue activity:**
    - Transactions identified across 53 European trading venues.
    - Market structure characterised by wide distribution of trading activity across multiple venues.
- **Market dynamics – Volume and Transactions:**
    - Number of ETC transactions remained relatively stable between early 2023 and early 2024.
    - Noticeable surge in transaction numbers observed in mid-2024.
    - Overall trading volumes remained stable over the observed period.
- **Venue concentration – Transactions vs. Volumes:**
    - Trading volume distribution more evenly spread across multiple venues. Certain trading venues dominate in terms of number of transactions, while overall trading volumes are more evenly distributed across multiple platforms.
    - Some venues facilitate a high number of smaller trades, whereas others handle fewer but higher-value transactions.

Market characteristics and exposure

Annex.32

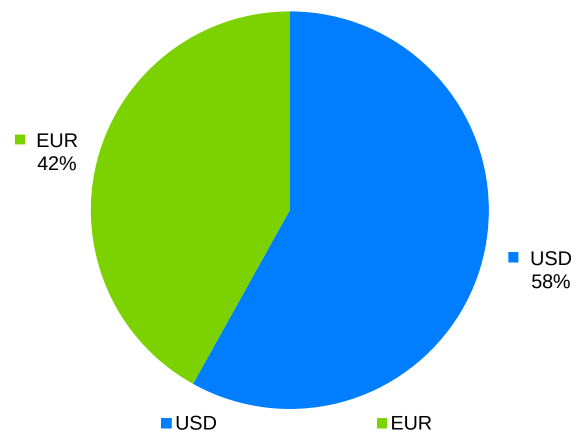
Trading venues



Note: Composition of ETC trading. Average monthly volumes in millions from January 2023 to May 2024 on rhs.
Sources: FRDS, FITRS, ESMA.

Annex.33

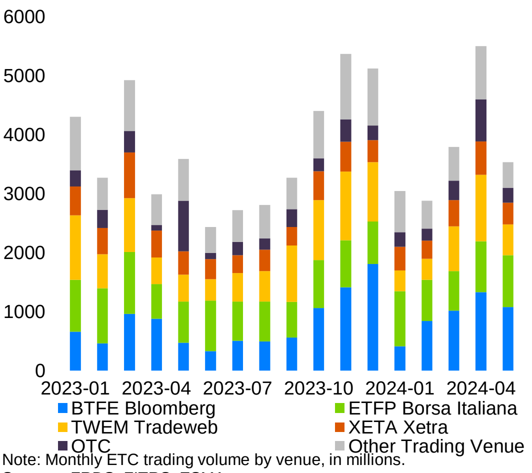
Currency of Issuance



Note: Breakdown of the volume of ETC traded from January 2023 to May 2024 by currency of issuance.
Sources: FRDS, FITRS, ESMA.

Annex.34

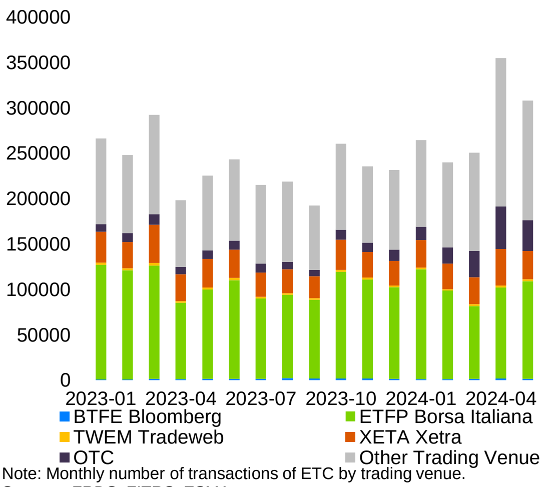
Trading volumes by exchange venue



Note: Monthly ETC trading volume by venue, in millions.
Sources: FRDS, FITRS, ESMA.

Annex.35

Number of transactions by trading venue



Note: Monthly number of transactions of ETC by trading venue.
Sources: FRDS, FITRS, ESMA.

Exchange-Traded Notes (ETNs)

Note: This description aligns with market terminology and is not intended to be prescriptive or exhaustive due to the lack of specific regulatory definitions.

Exchange-Traded Notes (ETNs) are unsecured, unsubordinated debt securities issued by financial institutions that track the performance of an underlying index, financial instrument, commodity, currency, or other benchmark. ETNs do not provide investors with ownership of the underlying assets but promise to pay the return of the index at maturity, minus any fees. ETNs generally do not pay periodic interest or coupon payments.

Unlike Exchange-Traded Funds (ETFs), which hold a portfolio of assets to replicate the performance of an index, ETNs are purely debt obligations of the issuer. Consequently, ETN investors are exposed to the credit risk of the issuer in addition to market risk associated with the underlying index.

ETNs are typically considered delta-one instruments because they aim to provide one-to-one exposure to the underlying asset or index, meaning that a 1% change in the underlying should result in approximately a 1% change in the ETN's value (before fees). This characteristic allows investors to track an index without the complexities of managing physical holdings or dealing with tracking error. However, it is important to note that while ETNs theoretically maintain a delta of one, factors such as issuer credit risk, fees, and market disruptions can occasionally cause slight deviations from perfect one-to-one tracking.

Summary of asset characteristics and risks

Market Practices:

- **Issuer due diligence and market making:** Investors need to assess the creditworthiness of the issuer. Commonly, issuers act as market makers.
- **Complex strategies:** Some ETNs track leveraged, inverse, or exotic indices, commodities, crypto-assets, requiring careful understanding.

Benefits:

- **Access to difficult markets:** Provide exposure to hard-to-access markets or complex strategies.

Risks:

- **Issuer credit risk:** If the issuer becomes insolvent, investors may lose their investment.
- **Market risk:** Subject to the same market risks as the underlying index.
- **Liquidity risk:** Traded on exchanges, allowing for market transparency. Niche indices may have limited interest and the related ETNs may have lower trading volumes, leading to wider bid-ask spreads.

Main differences with ETCs:

- **Structure and backing**:
  - ETNs are debt instruments backed solely by the creditworthiness of the issuing institution, with no underlying physical assets.
  - ETCs are debt securities but are typically backed by physical commodities or derivatives (like futures contracts). They are usually issued through a Special Purpose Vehicle (SPV), which provides additional security as the underlying assets are ring-fenced.
- **Credit risk**:
  - ETNs carry full issuer credit risk since they are unsecured debt obligations.
  - ETCs have reduced credit risk due to the collateralisation through physical commodities or derivatives held in the SPV structure. The segregation of assets protects investors in case of issuer default.
- **Asset focus**:
  - ETNs can track a wide range of underlying assets including indices, commodities, currencies, or strategies.
  - ETCs specifically focus on providing exposure to individual commodities or commodity indices.
- **Legal structure:**
  - ETNs are direct debt obligations of the issuing bank or financial institution.
  - ETCs are typically structured as debt securities but issued through an SPV, which holds the physical commodities or related derivatives, providing better investor protection.
- **Counterparty risk management:**
  - ETNs offer no specific protection against counterparty risk beyond the issuer's creditworthiness.
  - ETCs often employ collateral arrangements and the SPV structure to minimise counterparty risk, with the underlying assets typically held by independent custodians.

Both ETNs and ETCs can function as delta-one instruments, aiming to provide one-to-one exposure to their underlying assets, but ETCs offer additional security features through their collateralised structure.

Key facts

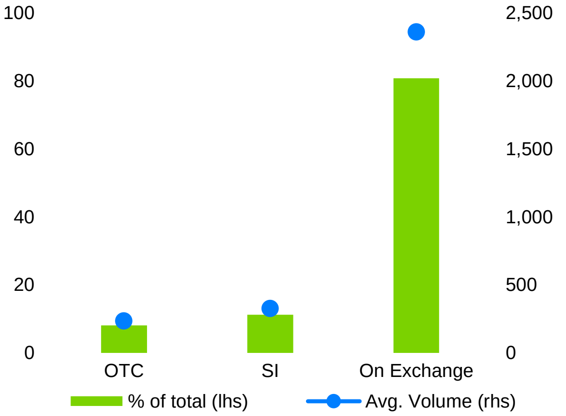
- **UCITS exposure:** ETNs amount to less than 0.01% of total UCITS NAV.

- **Sample mapped:**
    - 2225 EU-listed ETNs mapped using Refinitiv Eikon and FITRS data.
    - Period covered: January 2023 to May 2024.
- **Volumes growth:** Trading volumes increased steadily from early 2023, reaching a peak around January 2024.
- **Market share growth**: Crypto ETNs trading volumes surged in early 2024, likely driven by regulatory changes in the US, such as the “spot” Bitcoin ETF approval.
- **On-exchange trading:** 80% of total volumes are traded on exchange. OTC and SI combined represent 20% of traded volumes.
- **Transactions and volumes by ETN type**:
    - Crypto ETNs display a significant share of total number of transactions (42% on average), though in smaller ticker size (35% of total trading volumes on average) compared to leveraged ETNs.
    - Leveraged ETNs have a smaller share of total transactions (26% on average) but a high share in trading volumes, making up 46% of total traded value, and suggesting fewer but larger trades per transaction.
- **Exchange venues:** ETFP (Borsa Italiana) venue dominates trading volumes, but its share of trading volumes has declined over time, while other venues (especially XETA) have gained traction.
- **Issuance:** Almost all ETNs are issued in Ireland.
- **Currency:**
    - The majority of ETN trading volumes are in USD (58%), followed by EUR (37%).
    - In terms of number of transactions, 66% are in USD and 28% in EUR.

Market characteristics and exposure

Annex.36

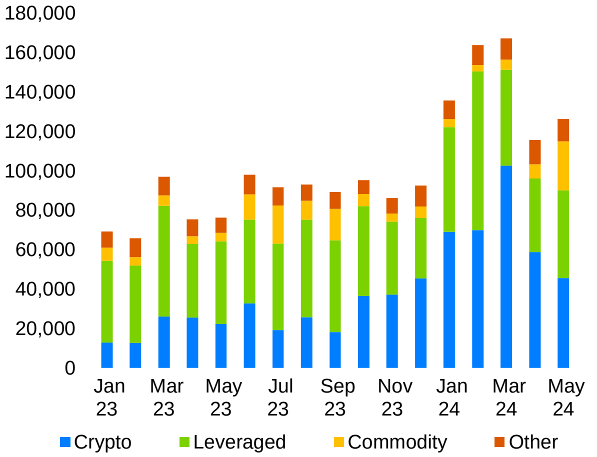
Trading venues



Note: Share of trading volumes (lhs) from January 2023 to May 2024 by trading venue, in % of total, and average monthly trading volumes (rhs), in EUR mm.
Sources: FITRS, Refinitiv Eikon, ESMA.

Annex.37

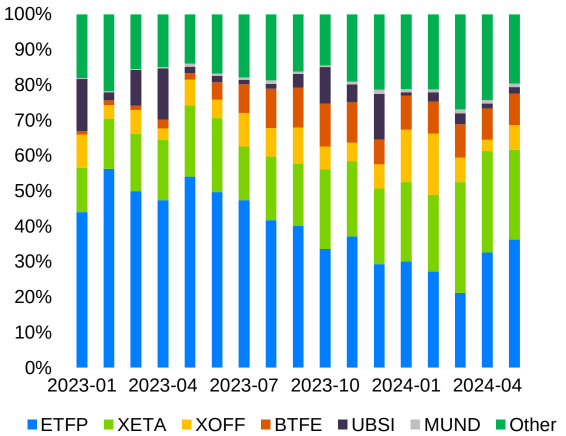
Trading volumes



Note: Daily average trading volumes of Crypto, Leveraged, Commodity and 'Other' ETNs, in EUR.
Sources: FITRS, Refinitiv Eikon, ESMA.

Annex.38

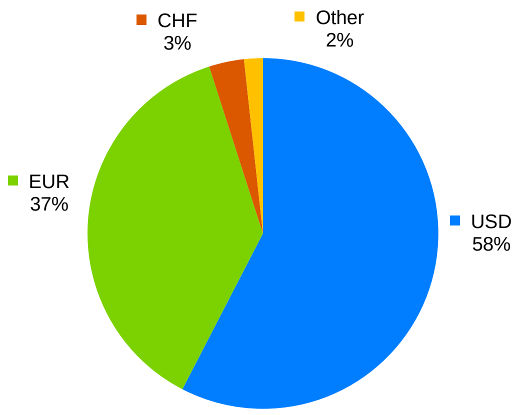
Trading volumes by exchange venue



Note: Monthly trading volume by exchange venue, in % of total trading volumes.
Sources: FITRS, Refinitiv Eikon, ESMA.

Annex.39

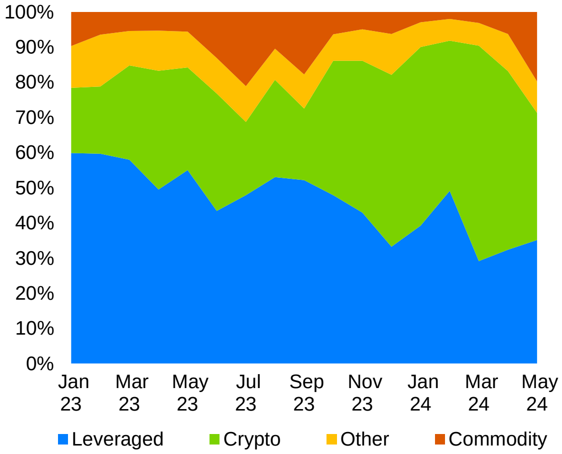
Currency of Issuance



Note: Share of trading volume by ETN currency of issuance.
Sources: FITRS, Refinitiv Eikon, ESMA.

Annex.40

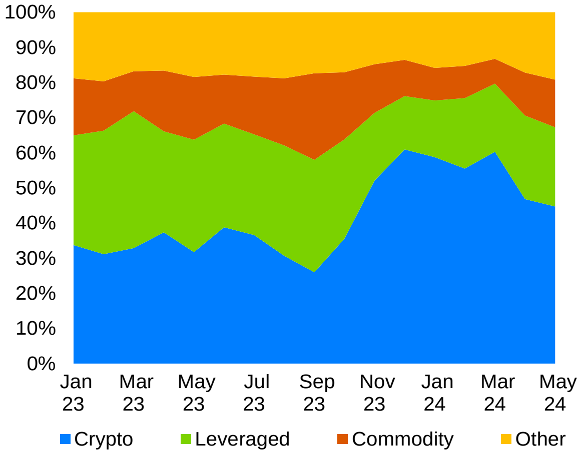
Daily average trading volumes



Note: Share of daily average trading volume of EU-traded ETN, in %.
Sources: FITRS, EIKON, ESMA.

Annex.41

Daily average number of transactions



Note: Share of daily average number of transactions of EU-traded ETN, in %.
Sources: FITRS, EIKON, ESMA.

EU and non-EU AIFs

Alternative Investment Funds (AIFs) are collective investment vehicles regulated under the Alternative Investment Fund Managers Directive (AIFMD) (Directive 2011/61/EU) in the EU. Unlike traditional UCITS, AIFs can invest in a broader range of assets and employ more sophisticated investment strategies. They represent any collective investment undertaking that pools capital from multiple investors but doesn't qualify as a UCITS.

AIFs encompass a wide range of investment vehicles, including but not limited to:

- **Hedge funds and Funds-of-Hedge-Funds:** Employ diverse and complex strategies, including long/short equity, global macro, event-driven, and relative value strategies.
- **Private equity funds:** Invest in private companies or take public companies private, aiming to improve their value before exiting through a sale or IPO. Venture capital funds, aiming to provide capital to startups and early-stage companies with high growth potential, belong to this group.
- **Real estate funds:** Invest in real estate properties or real estate-related assets.
- **Infrastructure funds:** Focus on investments in infrastructure projects like transportation, utilities, and communications.
- **Commodity funds:** Invest in physical commodities or commodity derivatives.

A distinctive characteristic is their flexibility in investment approach, unrestricted by the more stringent regulations that govern UCITS. These investment vehicles often employ sophisticated strategies such as leverage, short selling, and investments in illiquid assets. Leverage is used to magnify exposures and can be obtained in AIFs through:

- **Borrowing cash or securities:** Directly borrowing funds to invest.
- **Use of derivatives:** Employing instruments like options, futures, and swaps or any other type of complex derivatives for speculative purposes that can create synthetic leverage; and engaging in transactions that embed leverage (structured financing).
- **Rehypothecation of assets:** Using assets as collateral for additional borrowing.

AIFs typically feature less frequent redemption opportunities compared to traditional funds, reflecting their often-illiquid investment strategies. They may also employ lock-up periods or side pockets to manage liquidity risks. The redemption terms vary significantly, from open-ended structures offering periodic redemptions to closed-ended funds.

Leverage, particularly through the use of derivatives, can significantly affect the liquidity of an investment fund. While leverage may amplify potential returns, it also increases the fund's exposure to market risks resulting in a greater sensitivity to market fluctuations. In particular, the use of derivatives often introduces margin requirements that must be met to maintain these positions. During periods of market volatility, adverse price movements can trigger margin calls, requiring the fund to post additional collateral or liquidate assets quickly to meet these obligations. This can strain the fund's liquidity, forcing the sale of less liquid assets at unfavourable prices and impacting its ability to meet investor redemptions.

EU AIFMs with EU AIFs meeting certain conditions benefit from a marketing passport within the EU. Based on the third-country provisions under AIFMD, non-EU AIFMs and AIFs are subject to national private placement regimes (NPPR under Article 42 of AIFMD), with potential future access to passports. The largest share of non-EU AIFs marketed under NPPRs are US-ETFs.

Regulatory references:

- Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010
- Commission Delegated Regulation (EU) No 231/2013 of 19 December 2012 supplementing Directive 2011/61/EU of the European Parliament and of the Council with regard to exemptions, general operating conditions, depositaries, leverage, transparency and supervision

Summary of main AIFs characteristics and risks

Authorisation, operating conditions and transparency requirements:

- **Thresholds:** AIFMs managing portfolios exceeding certain assets under management (AUM) thresholds must be authorised.
  - EUR 100mn: For AIFMs managing AIFs with leverage.
  - EUR 500mn: For AIFMs managing unleveraged AIFs with no redemption rights for five years.
- **Risk and liquidity management:** Functional and hierarchical separation of risk management from portfolio management; procedures for monitoring liquidity risk, including stress testing.
- **Appointment of depositary:** Responsible for safekeeping of assets, oversight, and cash flow monitoring.
- **Disclosure to investors:** Pre-investment and ongoing disclosures regarding investment strategy, risks, leverage, valuation, fees, and redemption rights.
- **Reporting to regulators:** Regular reports on principal markets, instruments, exposures, and systemic risk data.

Benefits:

- **Diversification:** Access to alternative asset classes and strategies can reduce overall portfolio risk through low correlation with traditional investments.
- **Flexible investment strategies:** AIFs are not constrained by regulations that limit investment choices, allowing for innovative approaches.

Risks:

- **Concentration risk:** Investments may be concentrated in specific sectors, regions, or asset classes.
- **Complexity:** Strategies can be complex and difficult to understand, requiring specialised knowledge.
- **Leverage risk:** Leverage magnifies both gains and losses.
- **Operational risk:** Dependence on the fund manager's expertise, systems, and controls.
- **Valuation risk:** Difficulty in accurately valuing non-public or complex assets can affect NAV calculations.
- **Liquidity risk**: It is a significant consideration for AIFs due to
  - **Illiquid assets**: Investment in assets like private equity, real estate, or distressed debt that may not be quickly sold without substantial price concessions.
  - **Redemption terms**: Less frequent redemption opportunities compared to traditional funds.

Non-EU ETFs

- **Functional Role:** Large and structurally important investment segment, combining liquidity, accessibility, and portfolio efficiency, offering exposure to both traditional markets (equities, bonds) and alternative assets (e.g., crypto, commodities, SPACs, catastrophe bonds).
  - Exchange-based trading ensures transparency and real-time pricing aligned with market developments.
  - Indirect exposure to alternative or otherwise restricted asset classes is enabled via ETF wrappers, particularly for digital assets and precious metals.
  - Use of leverage remains limited overall, but relevant in specialised strategies.

Key facts: EU AIFs

- **NAV size and growth:**
  - At the end of 2024, total NAV of EU AIFs reached EUR 7.7tn.

- Strongest growth observed in the years 2020 to 2021 (+18%), and in 2023–2024 (+10%).
- The largest jurisdictions by NAV at end-2024: Germany (EUR 2.4), Luxembourg (EUR 2tn), France (EUR 1tn), Ireland (EUR 866bn), Netherlands (EUR 644bn),

- **Composition by Strategy (end of 2024):**
  - AIF market dominated by “Other” strategies (EUR 3.8tn, ~50% of total AIF NAV).
  - Fund of Funds (FoF): EUR 1.5tn, stable upward trend since 2021.
  - Private Equity (PE): EUR 932bn, fastest-growing AIF segment, up from EUR 134 billion in 2017.
  - Real Estate (RE): EUR 1tn, continued growth despite some corrections in 2022–2023.
  - Hedge Funds (HF): EUR 117bn, relatively stable over time, representing ~1.5% of total AIF NAV.
  - Unclassified (“None”): EUR 307bn, these vehicles normally follow uncategorised strategies.
- **Liquidity Risk:** Liquidity shortage suggests material liquidity shortfalls for some AIF strategies:
  - FoFs: -13.6% (1-day), -10.1% (1-week)
  - HF: -7.3% (1-day), -3.9% (1-week)
  - RE funds: -4.8% (1-day), -6.3% (1-week)
  - Other AIFs: -15.4% (1-day), -7.0% (1-week)
  - PE funds: Mostly closed-end vehicles; open-ended PE funds do not present pronounced to liquidity shortage (0% on day 1; -0.2% over 1 week).
- **Redemption frequency of open-end AIFs:**
  - Daily redemptions are available for approximately 68% of total open-end AIF NAV.
- A further 18% offers weekly to monthly redemption frequencies.
  - Only 14% of NAV is subject to quarterly or less frequent redemption.

- FoFs:
  - Approximately 62% of FoF NAV is redeemable daily.
  - About 25% allows weekly to monthly redemptions.
  - Roughly 7% is subject to quarterly or less frequent redemption.
- Hedge Funds (HF):
  - Only 16% of HF NAV is redeemable daily.
  - Around 41% allows weekly to monthly redemptions.
  - Another 40% follows quarterly redemption cycles.
  - Just under 3% redeems less frequently than quarterly.
- PE funds:
  - Daily liquidity accounts for only 4% of NAV.
  - Weekly to monthly redemptions represent ~14%.
  - Approximately 75% of NAV is subject to quarterly or longer redemption frequencies.
- Real Estate (RE):
  - About 24% of NAV offers daily redemption.
  - Approximately 44% allows weekly to quarterly redemptions.
  - 26% is redeemable on a quarterly or less frequent basis.
- Other AIFs:
  - Most liquid category, with ~79% of NAV redeemable daily.
  - Weekly to monthly redemptions apply to ~16%.
  - Quarterly or less frequent redemption accounts for ~4%.
- Unclassified (None): Almost all NAV (>98%) subject daily liquidity arrangements.

- **Leverage**: Leverage in AIFs is reported using multiple metrics under the AIFMD framework:

- Economic Leverage (AuM/NAV): Captures the notional size of the portfolio relative to NAV, reflecting gross exposures including derivatives.
- Adjusted Gross Leverage: Excludes interest rate and FX derivatives used for hedging purposes.
- Financial Leverage: Measures actual borrowings, including debt instruments, reverse repos, and borrowing via prime brokers. Hedge Funds show significantly higher financial leverage (114%), consistent with their active use of margin and credit financing. All other AIF strategies exhibit low financial leverage (RE: 10%; PE 3%; FoFs 1%; Other AIFs: 2%).
  - HFs: Economic leverage 1,382%; adjusted gross leverage 344%.
  - RE AIFs: Economic leverage: 146%; adjusted gross leverage: 127%.
  - Other AIFs: Economic leverage: 148%; adjusted gross leverage: 113%.
  - PE AIFs: Economic leverage: 119%; adjusted gross leverage: 110%.
  - FoFs: Economic leverage: 112%; adjusted gross leverage: 110%.
  - Unclassified (“None”): Economic leverage: 166%; adjusted gross leverage: 106%.

Key facts: Non-EU AIFs

- **NAV size and growth:**
  - As of end-2024, total NAV of non-EU AIFs reached EUR 3.98tn, up from EUR 1.68 trillion in 2017 (+137%).
  - Non-EU AIF size has increased significantly since 2022, with 2023–2024 alone accounting for a 19% increase in reported NAV.
- **Geographical breakdown:**
  - United States is by far the dominant domicile, accounting for approximately 67% of total non-EU AIF NAV.
  - Other significant domiciles include: Cayman Islands (~9% of NAV), Guernsey (~4% of NAV), UK (~3% of NAV). Jersey, Japan and other non-EU jurisdictions combined account for ~17% of non-EU AIFs marketed in the EU under Article 42 AIFMD.

- **Fund type composition:**
    - Non-EU AIFs are primarily invested in the "Other" strategy category, which makes up ~74% of NAV.
    - Remaining breakdown includes: PE (~11% of NAV), HF (~8% of NAV), RE (~6% of NAV), FoFs (~2%).
- **US-domiciled AIFs**: The US dominates across nearly all fund strategies, as the largest shares in "Other" strategies (EUR 2.68 trillion) and Private Equity (EUR 166.5 bn). Most on the “Other” AIFs domiciled marketed in EU under Article 42 AIFMD are ETFs.
- **Offshore financial centres:** Cayman Islands and Guernsey serve as important domiciles for hedge funds and private equity structures.
- **Regional Investment Focus:** Overall, the non-EU AIF segment remains heavily US- and North America-centric, with only modest diversification into other global regions.
    - North America accounts for the overwhelming majority of NAV, representing ~75% of total non-EU AIF investment focus.
    - Asia ranks second, attracting ~10% of NAV.
    - EEA and Other Europe combined make up ~13% of investment focus (split ~8% EEA, ~5% Other Europe).
    - Allocations to Rest of the World and Supranationals remain limited (~2% combined).
- **Redemption Frequencies:**
    - Daily liquidity is available for ~87% of total non-EU AIF NAV under NPPR.
    - The remaining 13% is subject to restricted redemption (weekly to monthly ~4% of NAV); quarterly or longer ~9% of NAV).
    - Other AIFs dominate daily liquidity (over 96% of their NAV offers daily redemption).
    - HFs are more evenly distributed: ~13% daily, ~41% monthly, ~35% quarterly.
    - RE funds are predominantly illiquid: over 80% of NAV redeems quarterly or less frequently.
    - PE funds show very limited liquidity, with >80% of NAV locked into illiquid terms.
    - FoFs skew liquid: ~45% daily, ~43% monthly.

- **Leverage:**
  - HFs: Economic leverage 2,018%; adjusted gross leverage 469%.
  - PE funds: Economic leverage 118%; adjusted gross leverage: 120% (notably higher than in EU PE AIFs).
  - RE AIFs: Economic leverage 148%; adjusted gross leverage ~100%.
  - FoFs: Economic leverage 127%; adjusted gross leverage 48%.
  - Other AIFs: Economic leverage 104%; Adjusted gross leverage 47%.
  - Financial Leverage: HFs again lead by a wide margin, with 151% financial leverage, reflecting high use of direct borrowing channels. RE AIFs shows a moderate financial leverage at 31%. The other fund types have lower and not significant levels of financial leverage.

Key facts: US ETFs

- **Market size and growth:**
  - As of October 2024, total US ETF market size reached approximately EUR 7.4tn, reflecting +48% growth since October 2022.
  - Growth observed across all asset classes and ETF strategies, confirming broad investor demand and diversification of use cases.
- **Asset class breakdown:**
  - Equity ETFs represent the core of the market, with EUR 5.6tn in NAV (76% of total; +47% since 2022).
  - Fixed income ETFs account for ~EUR 1.4tn (19% of NAV; +57%).
  - Commodity ETFs represent EUR 155 billion (2% of total NAV; +26%), with gold (EUR 120bn) and other precious metals (EUR 19tn) comprising nearly 90% of this segment.
  - Crypto ETFs total EUR 80bn (1% of NAV), led by bitcoin-related ETFs (~EUR 70bn, ~90% of crypto ETF NAV).
  - Trading tool ETFs (inverse and leveraged strategies) represent EUR 100bn (1% of NAV; +44%).

- **Market diversity and innovation:** The US ETF universe is highly heterogeneous, covering traditional market segments and emerging themes. Examples of specialised strategies include ETFs tracking SPAC performance (2 products) and even catastrophe bonds (1 product launched in July 2024). ETFs range from broad index replication to highly specific thematic, sectoral, and alternative exposures.

- **Trading venues and liquidity:** ETF trading ensures real-time price discovery, narrow bid-ask spreads, and deep secondary market liquidity, comparable to equity markets.

  - US ETFs are listed and traded across multiple venues, including NYSE Arca, NYSE, Nasdaq, Cboe, and OTC Markets/OTCQX.

  - Daily average trading volume is approximately EUR 140bn, distributed as follows:

    - Equity ETFs: ~70%

    - Fixed income and trading tool ETFs: ~14%

    - Crypto and commodity ETFs: smaller shares, but steadily increasing volumes.

- **Trading patterns:**

  - Crypto ETFs:

    - Daily average volume since Q1 2024 is approximately EUR 3bn.

    - Leveraged crypto ETFs (e.g., BITX), launched in Q2 2023, already account for 7–17% of total crypto ETF trading.

  - Trading Tool ETFs:

    - Daily volumes remain stable at ~EUR 19 billion.

    - Between 90% and 95% of these trades involve leveraged ETFs, highlighting their use for short-term trading, tactical allocation, or niche exposure strategies.

  - Commodities: Increased turnover for precious metals, especially gold and silver. Energy ETFs (e.g., oil) exhibit comparatively higher trading activity relative to NAV.

- **Leverage usage:** Overall market characterised by low structural leverage.

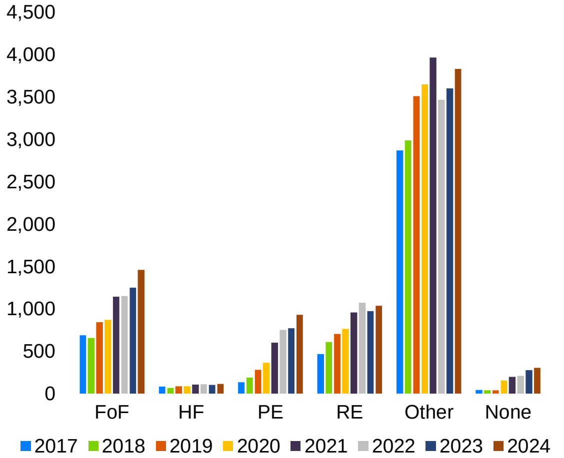
  - Leverage is concentrated in specific segments, especially crypto-linked ETFs (EUR 2.6 billion leveraged exposure) and tactical trading tools.

- The majority of US ETFs are unleveraged or apply modest embedded leverage only in specific inverse or magnified products.

EU AIFs

Annex.42

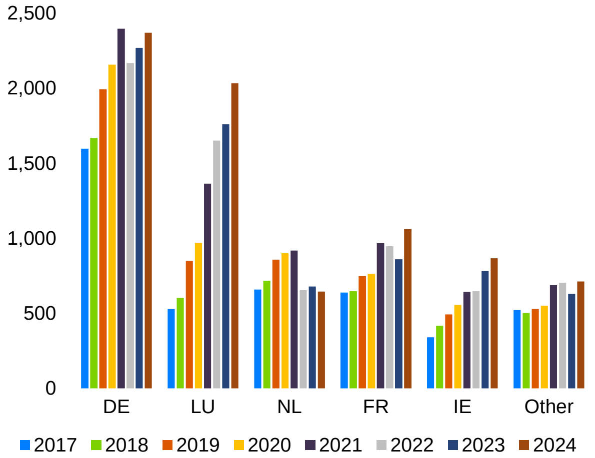
AIFs by domicile of the manager



Note: NAV of AIFs managed and/or marketed by EU AIFMs, in EUR bn. End of year EEA data.
Sources: AIFMD database, National Competent Authorities, ESMA.

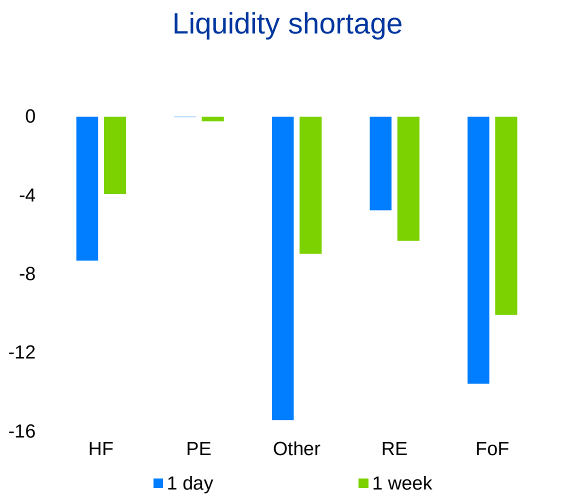
Annex.43

AIFs by type



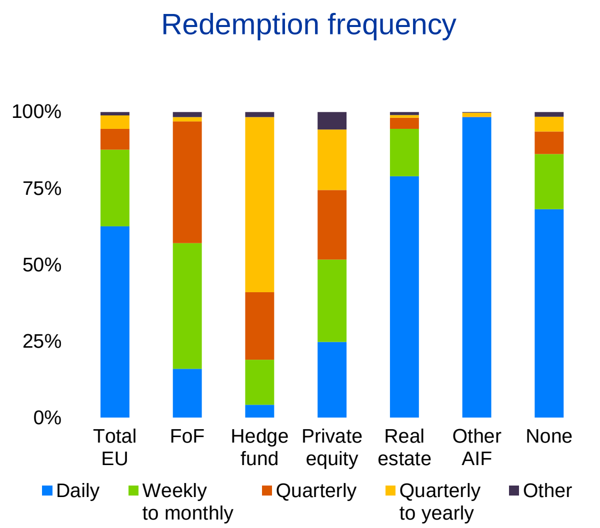
Note: NAV of AIFs managed and/or marketed by EU AIFMs, in EUR bn. End of year EEA data.
Sources: AIFMD database, National Competent Authorities, ESMA.

Annex.44



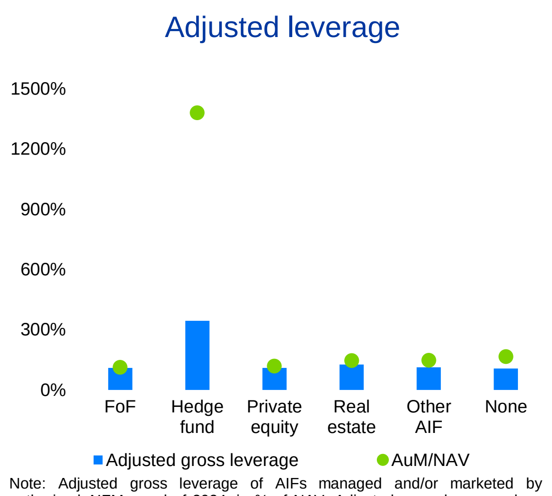
Note: Liquidity shortage by AIF type over 1 day and 1 week, % of NAV. Liquidity shortage is defined as the sum of liquidity deficits at the level of the funds, as non compensated by liquidity surplus. End of 2024 EEA data. PE= Private equity, RE= Real estate, HF= Hedge funds, FoF= Funds-of-funds.
Sources: AIFMD database, National Competent Authorities, ESMA.

Annex.45



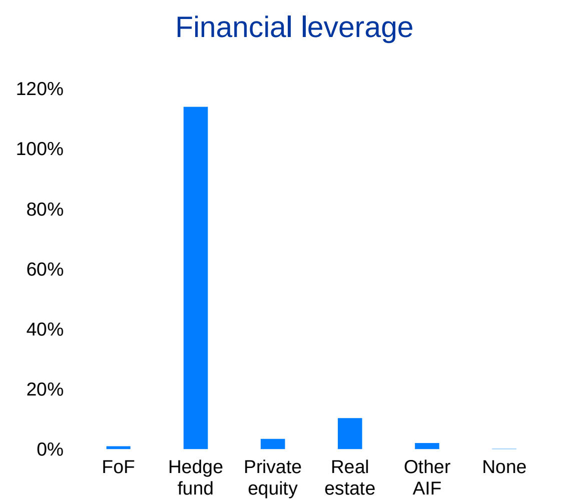
Note: Investor redemption frequencies allowed by open-end AIFs managed and/or marketed by EU AIFMs, in % of NAV. End of year EEA. FoF=Fund of Funds, None=No Predominant Type.
Sources: AIFMD database, National Competent Authorities, ESMA.

Annex.46



Note: Adjusted gross leverage of AIFs managed and/or marketed by authorised AIFMs, end of 2024, in % of NAV. Adjusted gross leverage does not include IRDs. FoF= Fund of funds, None=No predominant type. Data for the EEA30.
Sources: AIFMD database, National competent authorities, ESMA.

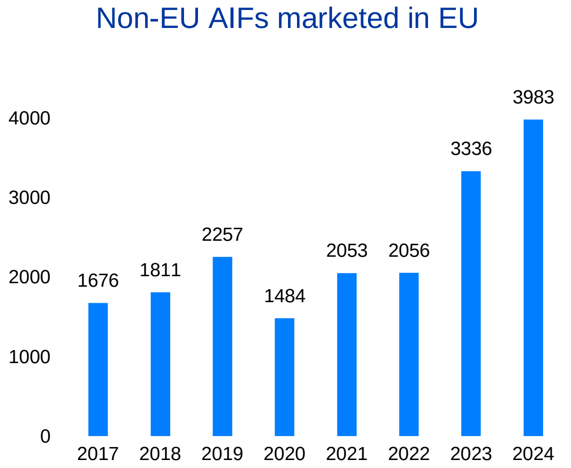
Annex.47



Note: Financial leverage, in % of NAV. End of 2024. FoF=Funds of Funds, None=No predominant ty
Sources: AIFMD database, National Competent Authorities, ESMA.

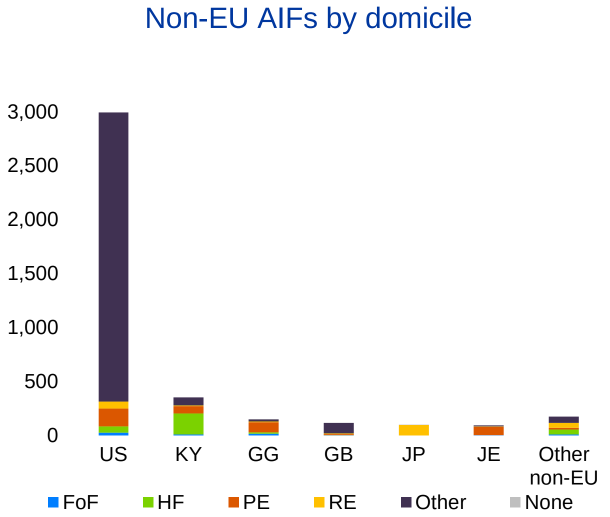
Non-EU AIFs (NPPR under art. 42 AIFMD)

Annex.48



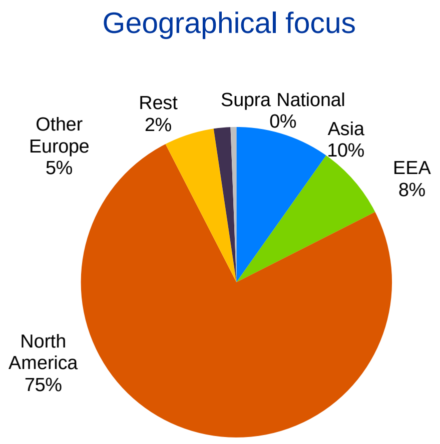
Note: NAV of AIFs marketed non-EU AIFMs w/o passporting rights (art. 42 of AIFMD), in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip).
Sources: AIFMD database, National Competent Authorities, ESMA.

Annex.49



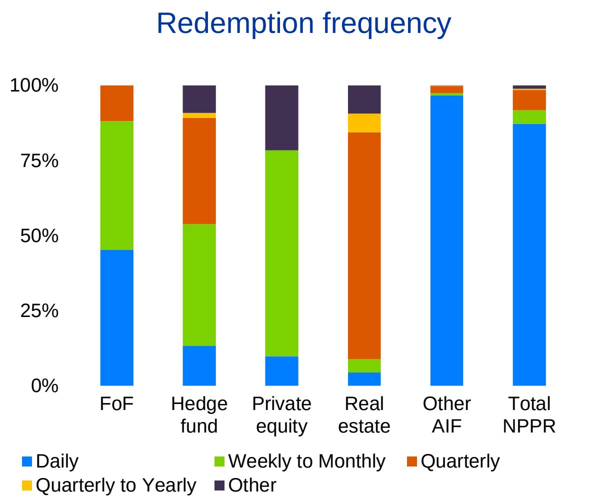
Note: NAV of non-EU AIFs by domicile, in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). in EUR bn.
Sources: AIFMD database, National Competent Authorities, ESMA.

Annex.50



Note: Regional investment focus of non-EU AIFs marketed w/o passporting rights (art. 42 of AIFMD), end of 2024, in EUR bn. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). in EUR bn.
Sources: AIFMD database, National Competent Authorities, ESMA.

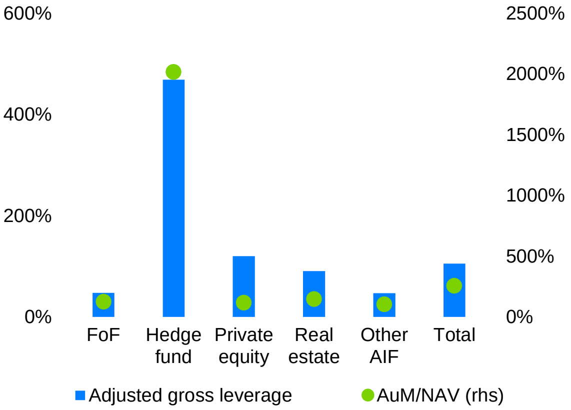
Annex.51



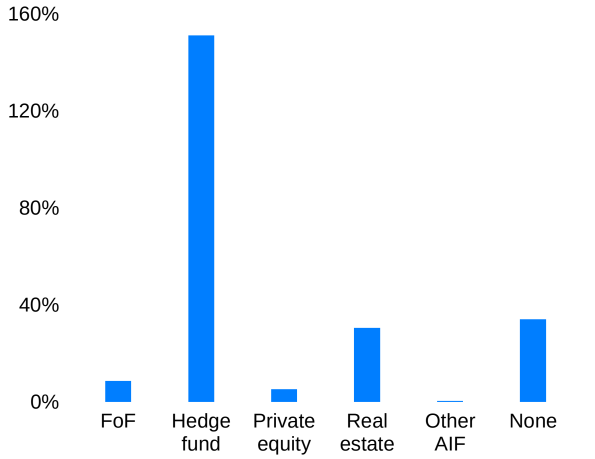
Note: Investor redemption frequencies allowed by open-end non-EU AIFs marketed w/o passporting rights (art. 42 of AIFMD), end of 2024, in % of NAV. AIFs identified via international standard identifiers (LEIs, ISIN, Cusip). FoF=Fund of Funds.
Sources: AIFMD database, National Competent Authorities, ESMA.

Annex.52

Leverage



Note: Adjusted gross leverage of non-EU AIFs marketed w/o passporting rights (art. 42 of AIFMD), end of 2024, in % of NAV. Adjusted gross leverage does not include IRDs. FoF= Fund of funds,
Sources: AIFMD database, National competent authorities, ESMA.

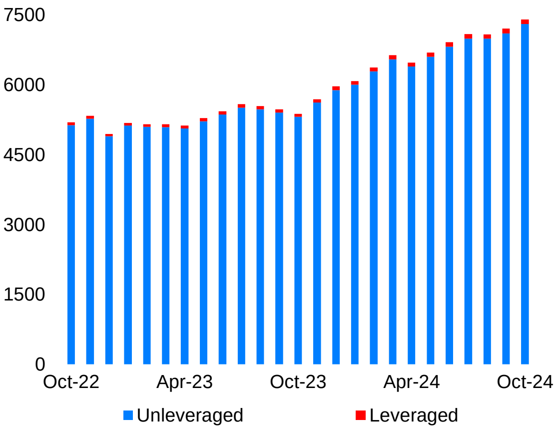


Note: Financial leverage, in % of NAV. End of 2024. FoF=Funds of Funds, None=No predominant ty
Sources: AIFMD database, National Competent Authorities, ESMA.

US ETFs

Annex.53

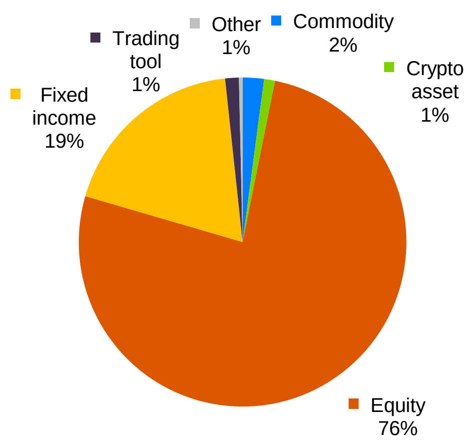
Size over time



Note: NAV of leveraged and unleveraged US ETFs, in EUR bn.
Sources: Morningstar Direct, ESMA.

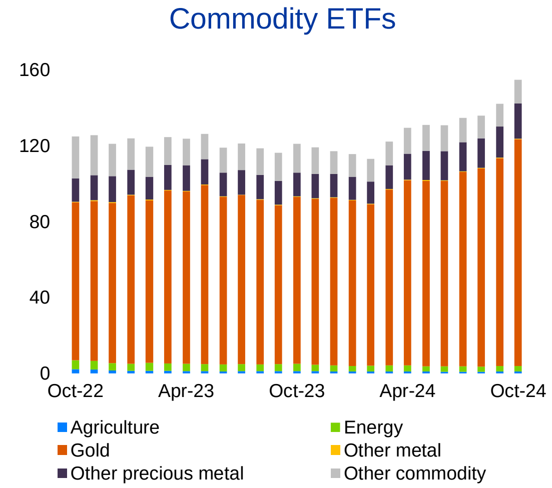
Annex.54

Investment strategy



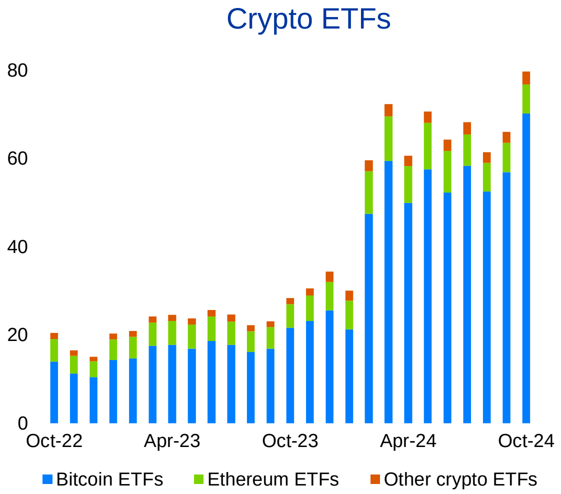
Note: Share of US ETFs' NAV by type and strategy at September 2024, in %.
Sources: Morningstar Direct, ESMA.

Annex.55



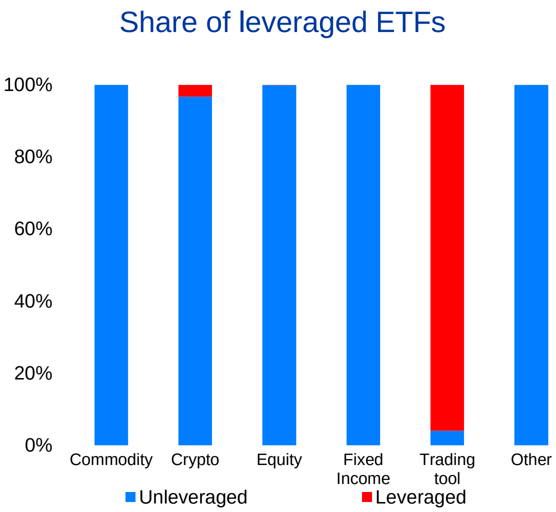
Note: NAV of commodity US ETFs, in EUR bn.
Sources: Morningstar Direct, ESMA.

Annex.56



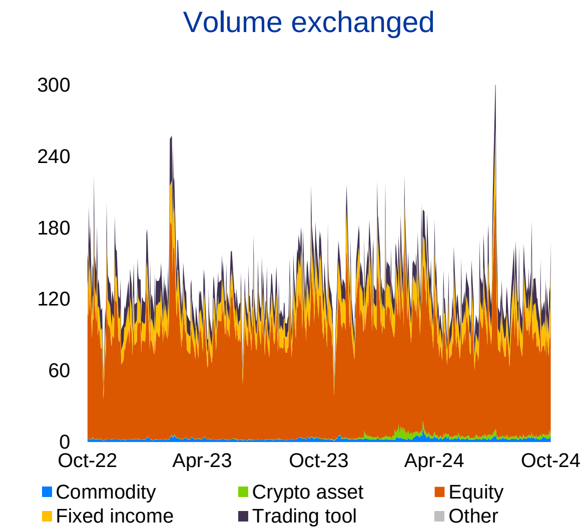
Note: NAV of crypto US ETFs, in EUR bn.
Sources: Morningstar Direct, ESMA.

Annex.57



Note: Share of leveaged US ETFs by type and strategy, in %.
Sources: Morningstar Direct, ESMA.

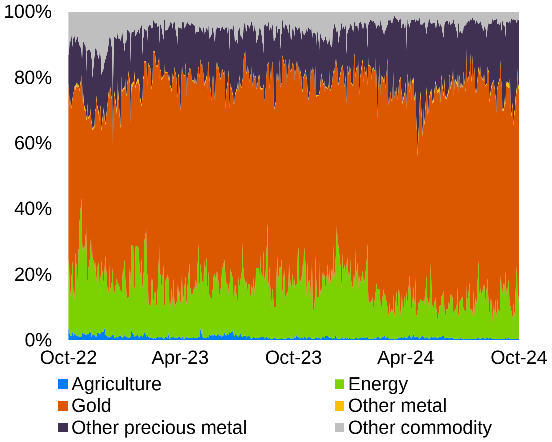
Annex.58



Note: US ETFs daily volumes, in EUR bn.
Sources: Morningstar Direct, ESMA.

Annex.59

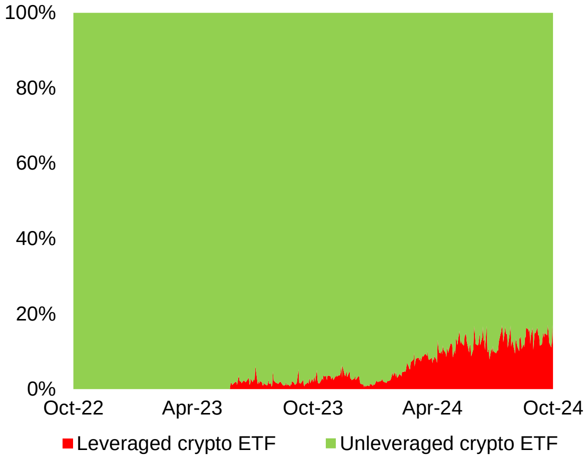
Share of commodity ETFs traded



Note: Share of trading volume of US commodity ETFs, in %.
Sources: Morningstar Direct, ESMA.

Annex.60

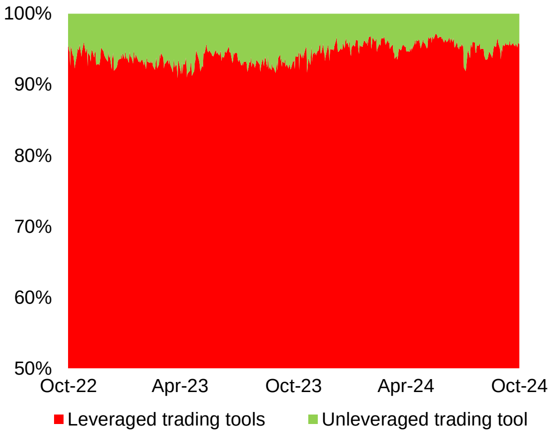
Share of crypto ETFs traded



Note: Share of trading volume of US crypto ETFs, in %.
Sources: Morningstar Direct, ESMA.

Annex.61

Share of leverage ETFs traded



Note: Share of trading volume of US ETFs used as trading tool, in %.
Sources: Morningstar Direct, ESMA.

Real Estate Investment Trusts (REITs)

Note: This description aligns with market terminology and is not intended to be prescriptive or exhaustive due to the lack of specific regulatory definitions.

Real Estate Investment Trusts (REITs) are investment vehicles that own, manage, or finance income-generating real estate assets. They provide investors with diversified exposure to real estate markets without requiring direct property ownership, offering liquidity, professional management, and passive income through dividends.

REITs primarily generate income from rental payments, lease agreements, and mortgage financing. They are normally required to distribute a significant portion of taxable income to shareholders, often benefitting from tax advantages.

Main characteristics and differences with direct real estate investment

Unlike direct real estate investment, where individuals purchase and manage properties, REITs allow investors to own shares in a professionally managed portfolio of real estate assets. The key distinctions between REITs and direct real estate ownership include:

- **Capital requirements:** Direct property investments require upfront capital, often including down payments and loan approvals. REITs allow investors to gain exposure to real estate only by purchasing shares.
- **Liquidity:** In the case of the publicly traded REITs, shares can be bought and sold on stock exchanges like regular stocks.
- **Leverage risks:** Normally, REITs use debt financing for property acquisitions, increasing both return potential and financial risk.
- **Tax advantages**: In serval EU and non-EU jurisdictions, based on national laws, REITs normally distribute a portion of their taxable income to shareholders annually in the form of dividends, making them attractive for income-focused investors.
- **Perpetual debt vehicles**: continuously leveraging RE assets to generate returns. Unlike traditional companies, REITs fundamentally rely on ongoing debt refinancing and restructuring as part of their core business model

The financing strategies of REITs differ depending on whether they operate in public or private markets. This creates distinct pros and cons for each structure. Public REITs depend on their stock market valuations, which fundamentally impacts their funding decisions between equity and debt. They must carefully balance leverage ratios with growth expectations from public market investors, maintaining debt levels that satisfy specific criteria. While they have access to multiple funding sources including corporate bonds, credit facilities, and public equity offerings, they also have greater exposure to market sentiment and stock price volatility that can affect their cost of capital. Private REITs operate with significantly more flexibility. They can reach higher leverage ratios without the immediate pressure of public market reactions.

They frequently utilise more complex debt structures, including mezzanine financing and preferred equity arrangements that might be less appealing than public REIT investors.

REITs operate on a "buy and hold" model as permanent property owners, maintaining ongoing debt as part of their capital structure that they continuously refinance and roll over, focusing on generating steady income streams for shareholders. In contrast, real estate funds (AIFs) employ a "buy-fix-sell" approach as property traders rather than long-term holders, with clearly defined investment horizons typically spanning 5-10 years and exit strategies precisely aligned with these timelines, allowing them to capitalise on value-add opportunities through renovation, repositioning, or operational improvements before selling at a profit. These strategic differences significantly impact everything from investment duration and risk profiles to capital requirements and return expectations, with REITs offering more consistent income and liquidity while funds potentially delivering higher total returns through appreciation upon property disposition.

The REIT business model

REITs operate on a high-yield, pass-through income model, designed to maximise rental revenue, property appreciation, and investor dividends.

- **Revenue generation:**
  - **Rental income**: REITs lease properties to tenants across various sectors, including residential, commercial, industrial, retail, and healthcare.
  - **Capital appreciation**: In addition to rental income, REITs benefit from the long-term appreciation of real estate assets.
  - **Mortgage lending** (for Mortgage REITs): REITs may provide real estate loans, earning interest on financing deals.
  - **Leverage use:** Normally, REITs use debt financing for property acquisitions, increasing both return potential and financial risk.
  - **Dividend yield:** Since REITs are primarily income-generating investments, investors assess yield relative to bond yields and equity dividends.

REITs’ performances are influenced by sector-specific demand. For instance, retail and office REITs have faced challenges due to post-pandemic structural shifts (see Annex 67).

Summary of Asset Characteristics and Risks

Market Practices

- **Types of REITs:**
  - **Equity REITs** own and actively manage income-producing real estate properties. They generate revenue primarily through collecting rent from tenants and may focus on

specific property types such as residential apartments, office buildings, shopping centers, healthcare facilities, or data centers.

- **Mortgage REITs (mREITs)** provide financing for real estate by originating or purchasing mortgages and mortgage-backed securities. Rather than earning income from rent, they generate revenue through interest payments on these debt investments. These typically offer higher yields but may carry greater interest rate sensitivity.
- **Hybrid REITs** combine both strategies by owning properties directly while also making real estate loans, allowing them to diversify their revenue streams between rental income and interest payments.

- **Trading and Liquidity:**
  - **Publicly traded REITs** are listed on major stock exchanges, offering investors the same liquidity as stocks with the ability to buy and sell shares during market hours. This structure provides transparency through regular financial disclosures and market-driven pricing.
  - **Non-listed REITs** (sometimes called public non-traded REITs) are registered with the NCA but do not trade on public exchanges. They typically feature restricted redemption programs that limit investors' ability to cash out, requiring longer investment horizons. Valuations may be less transparent and not reflect current market conditions.
  - **Private REITs** are generally exempt from registration and marketed almost exclusively to institutional investors or accredited individuals meeting specific wealth requirements. These investments typically have the least liquidity and transparency, with investment minimums often starting in the hundreds of thousands or millions of dollars.

Benefits

- **Diversification:** Exposure to varied property types and locations, reducing asset-specific risk.
- **Liquidity (for Public REITs):** Shares can be bought/sold without the long-term commitment of direct property ownership.

Risks

- **Liquidity risk (for private and non-listed REITs):** Redemption restrictions and valuation uncertainties make these less flexible investments.
- **Market volatility**: Public REITs are subject to stock market fluctuations, even if real estate fundamentals remain stable.

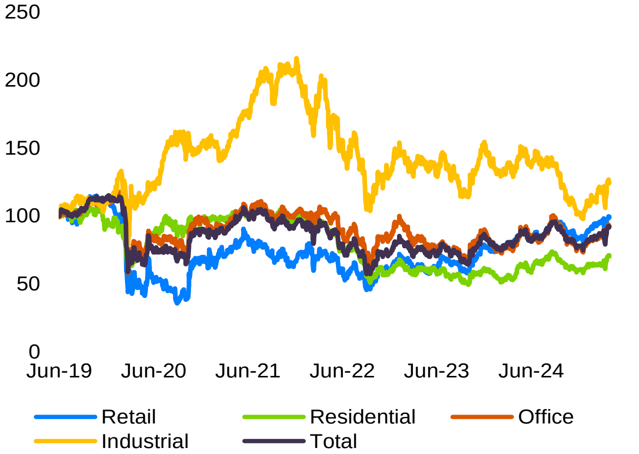
Key facts

- **UCITS exposure:** REITs amount to 0.1% of total UCITS NAV.

* **REITs indices**: After a sharp decline in 2H24 (-7.5% across the board), rebound in 2025 led by office and industrial buildings (+21% each as of April 2025)
* The performance of publicly listed REIT indices showed heterogeneity across sectors. This was particularly pronounced after the Covid-19 pandemic. While REITS focusing on industrial outperformed the others, retail and residential REITS have been lagging behind. Particularly residential REITS are now trading almost at par with the lows experienced during the market stress of the pandemic. This is mainly linked to the interest rate dynamics that deteriorated demand for residential buildings.

Annex.62

REITs performance across sectors



Note: Performance of S&P Europe (excluding UK) real estate investment trust (REITs) indices by subsector.
Sources: Refinitiv Datastream, ESMA.

Asset-backet securities (ABS)

Note: This description aligns with market terminology and is not intended to be prescriptive or exhaustive due to the lack of specific regulatory definitions.

Asset-backed securities (ABS) are fixed income securities. Structured as debt instruments, they are created by pooling together different assets via a Special Purpose Vehicle (SPV). Returns are derived from underlying loan cash flows, often through tranching. In other words, the assets are structured into layers with varying risk/return profiles.

ABS are backed by non-mortgage assets, such as credit card receivables, student loans, and auto loans. The main difference between asset-backed securities and mortgage-backed securities (MBS) is that the latter are backed by pools of mortgage loans, either residential or commercial.

Repayment patterns for both ABS and MBS are dictated by the asset characteristics and structural choices. In the case of ABS they vary by asset class, while MBS are strongly influenced by market dynamics.

Summary of asset characteristics and risks

Market Practices:

- **Investor base:** Mainly institutional investors such as hedge funds, pension funds, and specialised investment funds. The concentration of holdings among these entities can limit the number of potential buyers and sellers in the secondary market.
- **Cash flow pass-through**: Payments from underlying assets are passed to investors.
- **Tranching**: Often divided into tranches with varying risk and return profiles, senior tranches offering lower yields but reduced risk and subordinated tranches vice-versa.
- **Off-exchange trading**: Traded primarily off-exchange, with liquidity varying by issuer and market sentiment.

Benefits:

- **Credit enhancement**: Over-collateralisation and third-party guarantees help reduce default risk and broaden investor appeal.
- **Diversification**: ABS provide exposure to different asset classes that complement traditional fixed-income instruments.

Risks:

- **Credit risk exposure:** Investors face risks based on borrowers' creditworthiness

- **Market sensitivity:** Yields and repayment speeds affected by economic and market conditions
- **Complexity:** Understanding the specific underlying risks requires specialised knowledge.
- **Liquidity risk:**
    - **Limited secondary market:** Many ABS are buy-and-hold instruments, with investors like insurance companies or pension funds holding them to maturity.
    - **Event-driven Illiquidity:** In times of market stress (e.g., GFC, COVID shock), ABS markets can freeze quickly. Events like credit rating downgrades, underperformance of the underlying pool, or regulatory changes can also make trading harder or disincentivise buyers.

Main differences with MBS:

- **Type of underlying assets**:
    - ABS are backed by pools of non-mortgage assets such as auto loans, credit card receivables, or student loans.
    - MBS are backed by residential or commercial mortgage loans.
- **Structure and market characteristics:**
    - MBS are typically larger and more standardised, especially in the U.S. market.
    - ABS are more diversified asset classes but often smaller in deal size than MBS.
- **Prepayment risk:**
    - Borrowers may be paying more than their required monthly payments, thereby reducing the interest of the loan.
    - This risk is especially high for MBS, particularly residential MBS, as borrowers can refinance or repay early.
- **Market exposure and risk factors:**
    - MBS provide exposure to the housing market, as fluctuations in interest rates and home prices affect borrowers' risk profiles and repayment capacity.
    - ABS provide exposure to a variety of asset classes (e.g., auto loans, credit card receivables), with risk factors tied to the performance of those specific markets.

Key facts

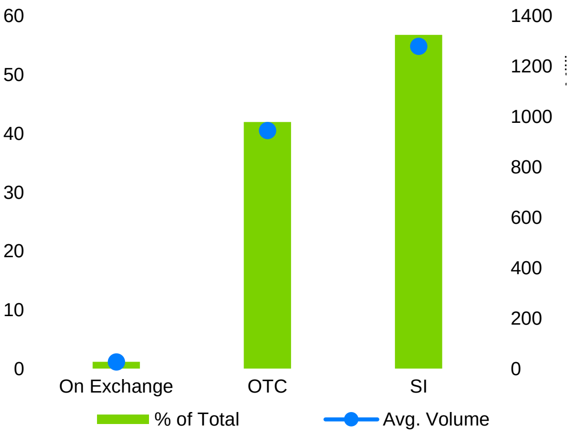
- **UCITS exposure:** ABS and MBS amount to 1.5% of total UCITS NAV.

- **Sample mapped:**
    - 1542 EU-listed ABS and MBS mapped using Refinitiv Eikon and FITRS data.
    - Period covered: January 2023 to May 2024.
- **High off-exchange trading activity:**
    - The evident majority of trading occurs off-exchange, both for transaction volume and number of transactions.
    - Only 1% of total volumes are traded on exchange
    - OTC and Systematic Internalisers (SIs) account for 42% and 57%, respectively.
    - SIs are investment firms that execute client orders internally on a frequent and substantial basis, rather than on a regulated market; it is a key part of the market structure under MiFID II, which seeks to increase transparency in EU financial markets.
- **Relatively stable number of transactions**: The number of instruments traded over time is reasonably constant, i.e. 230 transaction per month on average, concentrated in few SIs and OTC.
- **Fluctuations in trading volumes:** Large changes in monthly volumes exchanged.
- **Data quality**: Outliers' role might more relevant than for other asset classes given the relatively small number of transactions.
- **Issuer domicile**: The EU market is dominated by instruments issued in a few jurisdictions.

ABS and MBS

Annex.63

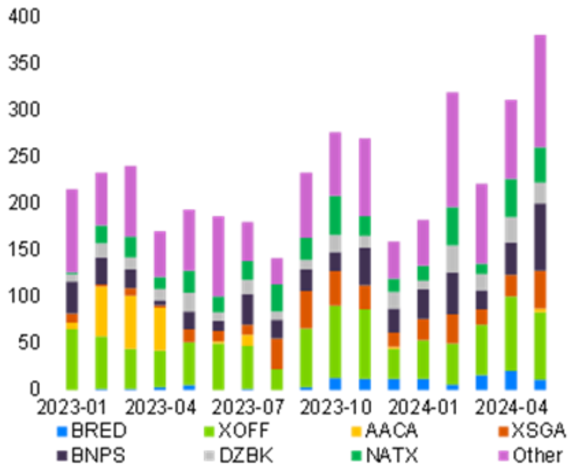
Trading venues



Note: Composition of ABS and MBS trading. Average monthly volumes in millions from January 2023 to May 2025 on rhs.
Sources: FITRS, EIKON, ESMA.

Annex.64

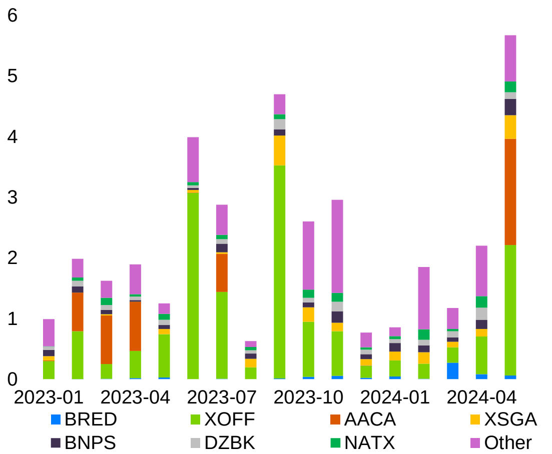
Number of transactions



Note: Monthly number of transactions of ABS and MBS.
Sources: FITRS, EIKON, ESMA.

Annex.65

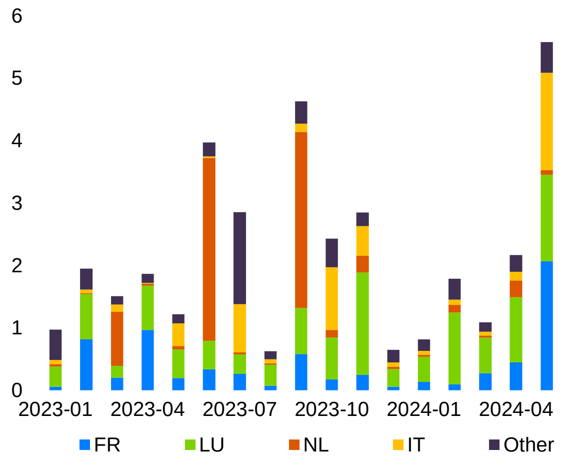
Trading volumes



Note: Monthly trading volume by trading venue of ABS and MBS, in billions.
Sources: FITRS, EIKON, ESMA.

Annex.66

Volumes by issuer domicile



Note: ABS and MBS monthly trading volumes by issuer country, in billions.
Sources: FITRS, EIKON, ESMA.

Annex V – Cost-benefit analysis

Background

1. Since the first adoption of the Council Directive 85/611/EEC of 20 December 1985 (so-called "UCITS I"), UCITS have greatly contributed to the EU and global capital markets. The global success of the UCITS brand is largely attributed to the high level of regulation and supervision, providing for a high degree of investor protection. The UCITS sector has demonstrated its resilience to market challenges and adapted to new market needs and developments over time.

2. This evolution necessitated updating the Level I UCITS Directive several times. In 2007, the Level 2 UCITS EAD was adopted with the aim of providing some clarifications and definitions on the eligible asset classes set out in the UCITS Directive. Almost two decades after the adoption of the UCITS EAD, there is merit in updating the EAD framework. The European Commission therefore mandated ESMA to provide a technical advice on the review of the EAD and to propose clarifications on the key definitions and concepts included therein.

3. This annex includes a cost-benefit analysis (CBA) with respect to the ESMA proposals for changes and clarifications to the definitions and concepts included in the EAD and some related clarifications in the UCITS Directive. The paragraphs below contain a description of the key elements of the proposals and the impact in terms of costs and benefits of the policy changes compared to the baseline.

4. Although the technical advice carries out an assessment on UCITS investments in foreign currencies (Section 13), securitisations (Section 15), the alignment with MIFID II, DLT Pilot Regime and MiCA (Section 16) as well as short positions (Section 17), this annex does not include a CBA for these subjects. This is because the technical advice does not propose policy changes or impactful legal amendments or clarifications with respect to these topics. Should the review of the Securitisation Regulation impact UCITS investments in securitisations, an assessment of the costs and benefits of such changes will be conducted in that context.

The impact of the proposed changes

<u>The concept of liquidity (Section 4)</u>

5. Based on the feedback received from stakeholders to the Call for Evidence, ESMA has identified areas for targeted improvement and clarification, which are described below with the relative costs and benefits.

6. **Asset-level liquidity criteria**: ESMA proposes that the asset-level liquidity assessment should be performed on the basis of a minimum common list of criteria, relevant to the characteristics of the asset being assessed. The criteria put forward take into account the criteria set out in previous CESR, ESMA as well as NCA guidance, where available. Therefore, many of these criteria are already used by UCITS management companies in the context of their liquidity assessments. The incorporation of such criteria in the legal text of the UCITS EAD will have the benefit of providing greater clarity, legal certainty and convergence, including the fact that the liquidity assessment should be firstly performed at asset level. At the same time, the proposals preserve some flexibility that is needed for market participants. This is because of the fact that where a financial instrument does not fulfil one or more of the non-exhaustive criteria provided, this does not mean that it should automatically be deemed as 'less liquid' or even 'illiquid' as there might be other factors, intrinsic to the security, that could lead to a different determination. Against this background, the costs' impact will likely be limited.

7. **Liquidity assessment at asset and portfolio level**: ESMA proposed to clarify the distinction between the liquidity assessment at the level of individual assets and at the level of overall portfolio as well as the related legal obligations. This aims to address the current divergent approaches and interpretations on these matters. The costs' impact is expected to be limited, considering that UCITS shall invest, by definition, in liquid assets. The impact will therefore be solely on UCITS management companies that currently do not perform such assessments on both levels, which might generate additional costs. However, it is important both from an investor protection and financial stability perspective to ensure that all UCITS management companies perform sufficiently sound liquidity analyses, and this is done at both the level of the relevant asset to be invested in and the aggregate portfolio.

8. **Presumption of liquidity and negotiability**: The technical advice proposes the removal of the presumption of liquidity and negotiability, requiring that these are assessed ex ante and on an ongoing basis. The mere fact that an instrument is listed alone cannot be deemed sufficient when assessing and forecasting the liquidity and negotiability of the assets. While such presumption might have been merited in the pre-financial crisis market environment when then UCITS EAD was written, market conditions since 2007 have clearly demonstrated that a mere listing does not automatically guarantee actual liquidity. The removal of the presumption will have the benefit of avoiding UCITS managers to place an overreliance on the presumption granted in the UCITS EAD when investing in listed securities that might not have displayed sufficient liquidity. According to some respondents to the Call for Evidence, this may result in increased costs for funds due to the need of performing more detailed and burdensome analysis. However, no actual data to quantify such cost increase was provided by any stakeholder. Bearing in mind that the liquidity of UCITS is a paramount

feature of this retail investment product, ESMA considers that these costs are justified with a view to preserving the high confidence and trust in the UCITS brand.

Transferable securities definition (Section 5)

9. ESMA sees merit in clarifying the eligibility criteria of transferable securities. In particular, the clarifications refer to the risk management criterion, the consistency of the investments with the investment objectives or investment policy, and 'reliable valuation'[265]. This would have the benefit of providing further clarification and simplification on the eligibility assessment of transferable securities and ultimately improve clarity and supervisory convergence. ESMA is of the view that most of these legal clarifications will mainly impact market participants that might insufficiently apply the already existing pre-investment due diligence requirements. Hence, the proposed amendments in this respect are more of a clarificatory nature and are not expected to have major cost implications for the UCITS sector as a whole.

UCITS exposures to alternative assets (Section 6)

10. ESMA is proposing changes to the UCITS EAD[266] and several provisions of the UCITS Directive[267]. The amendments aim at ensuring a convergent application of a look-through approach to determine the UCITS eligibility of assets, while simultaneously broadening the 10% limit set out in the UCITS Directive[268] to allow for some limited (up to 10%) indirect exposures to alternative assets.

11. ESMA carried out a comprehensive survey with NCAs to gather information on divergences that may have arisen in the implementation and practical application of the UCITS EAD. Additionally, ESMA considered feedback received from stakeholders through the Call for Evidence, many of which referred to unlevel playing field issues and challenges with cross-border activities due to divergent national rules and supervisory practices.

12. As demonstrated by the insights and data gathered (see Annexes II-IV), there is evidence of largely divergent national supervisory and market practices regarding the UCITS eligibility of all asset classes assessed. Annex IV provided an overview of the UCITS data collected. In this context, it is worth nothing that ESMA faced some significant limitations in terms of data availability and quality, mainly due to the fact that neither NCAs nor market participants have fully comprehensive and reliable data on all indirect UCITS exposures to alternative assets. Notwithstanding these limitations,

[265] Article 2(1)(c), (f), and (g) of the UCITS EAD.
[266] Article 2, 3, 9, 11, 12 of the UCITS EAD.
[267] Article 50 of the UCITS Directive.
[268] Article 50(2)(a) of the UCITS Directive.

Annex IV provides a useful overview of the known UCITS exposures to alternative assets as well as on the size of the relevant UCITS.

Benefits

13. The application of a look-through approach is the regulatory tool proposed by ESMA to provide clarity on how UCITS management companies shall assess the eligibility of transferable securities and the other liquid financial assets referred to in the UCITS Directive[269].

14. The application of a look-through approach will ensure:

- a level playing field and a convergent approach regarding the important assessment of UCITS eligibility across Member States (for further details on the expected implications, please see the "UCITS eligibility table" below);

- reducing complexities and ensuring a more adequate risk profile of UCITS, in line with the key characteristics and the features of the UCITS brand. The 2007/2008 Global Financial Crisis and the Covid-19 pandemic showed that (indirect) exposure to unregulated or less transparent markets and/or complex financial instruments could lead to severe liquidity mismatches and contribute to the amplification of systemic risks due to financial interconnectedness when these markets or instruments experience shocks.

- a greater level of investor protection through improved transparency, given the fact that, without the application of the look-through approach, investors (notably retail investors) would not be in a position to understand what asset classes the UCITS is actually invested in;

- a clearer conceptual delineation between UCITS and AIFs. Investment funds with significant exposures to alternative assets (beyond 10%) will be subject to the AIFMD;

- UCITS will maintain the possibility to benefit from some exposures to alternative assets (up to 10%) with a view to improving risk diversification and generating revenue from asset classes with low correlation with traditional financial assets;

- increased simplicity of the UCITS eligible assets framework, i.e. at least 90% to be invested in more traditional financial assets (stocks, bonds, money

[269] Article 50(1) of the UCITS Directive.

market instruments etc.), while leaving flexibility to gain up to 10% exposures to alternative assets.

- reduced legal and compliance costs for UCITS management companies operating and/or marketing UCITS on a cross-border basis. Currently, UCITS eligibility-related matters are subject to largely divergent national rules and supervisory practices (see Annex III). The policy proposals aim to harmonise the national approaches on this issue and would therefore reduce legal and compliance costs for relevant market participants. This is important also in light of the SIU objective as the look-through approach will contribute to reducing the current fragmentation across Member States. It also aims foster confidence and trust in the UCITS brand and thereby improve retail participation in EU capital markets.

Costs

15. In light of the proposed qualitative expansion of the 10% limit, the application of a look-through approach will mainly impact UCITS with significant exposures to alternative assets[270]. These UCITS will therefore have to reduce their exposures to such assets or their managers may alternatively consider setting up an AIF under the AIFMD framework where they intend to invest significantly in alternative assets. To allow for an orderly transition and avoid any risks of fire sales or adverse impact on relevant asset classes and underlying markets, ESMA advises the European Commission to grant sufficiently long transitional periods for the application of the revised rules.

16. Based on the data available to ESMA[271], aggregate UCITS exposures to alternative assets are well below 10%. The proposals would therefore mainly concern a relatively small number of UCITS with large-scale exposures to alternative assets (i.e. beyond 10%) where ESMA is of the view these might be better set up as AIFs. The data at ESMA's disposal therefore suggests that the risk of adverse market impact and related costs will be rather limited.

UCITS eligibility table

17. The following table aims at providing a simplified overview of the expected implications of the look-through approach on relevant asset classes. Importantly, this table merely aims at providing a general high-level overview on the likely implications. For a more precise determination and to avoid any circumventions, a case-by-case analysis of the relevant financial instrument will always be required, following a substance-over-form

[270] Article 50(2)(a) of the UCITS Directive.
[271] See Annex IV.

approach taking into account the characteristics of the relevant instrument. It is also worth highlighting that the table is exclusively focused on providing an indication of the likely impacts of the look-through approach and does therefore not consider the other conditions and criteria prescribed for the UCITS eligibility of assets (e.g. assessment of liquidity, valuation, risk management, etc.), which always need to be assessed on a case-by-case basis.

Asset class	Potential eligibility under Article 50(1) following a look-through approach[272]	Potential eligibility of certain exposures within the 10% limit set out in Article 50(2)(a) (without look-through)[273]	Notes[274]
1. Loans	✗	✓	Loans are not included in the list of eligible asset classes set out in the UCITS Directive.[275] UCITS can invest only in financial instruments and cannot grant loans.[276] Some *indirect* exposures might be possible within the 10% limit where all relevant requirements are met (e.g. on liquidity and valuation).

[272] It includes all the exposure to the asset classes that can be gained through a financial instrument formally eligible under the UCITS framework (e.g. transferable securities, money market instruments, financial derivative instruments, units or shares of AIFs, etc.), provided that all the proposed criteria under the UCITS EAD are met.

[273] Article 50(2)(a) of the UCITS Directive where no look-through approach applies. It is important to highlight that the indications provided on the potential eligibility relate to the case where all proposed requirements set out in the UCITS Directive and UCITS EAD are met (e.g. liquidity, valuation etc.). Additionally. It is worth noting that under the proposed approach solely investments in transferable securities, units or shares of open-ended AIFs, financial derivatives instruments or money market instruments are eligible under the 10% limit set out in Article 50(2)(a) of the UCITS Directive without application of a look-through. Therefore, for many of the asset classes, only *indirect* exposures could be permissible. By way of example, the proposed policy approach might enable investments in transferable securities with commodities as underlying within the 10% limit, whereas direct investments in commodities remain ineligible, even within the 10% limit.

[274] The "Notes" column provides some brief reflections on why the application of the look-through approach results in the potential eligibility or ineligibility of the financial instrument for the purposes of Article 50(1) of the UCITS Directive, where all relevant requirements set out in the UCITS Directive and UCITS EAD are met. The eligibility indication takes into consideration the fact that the asset class and/or its underlying, where relevant, are listed in Article 50(1) of the UCITS Directive. Please, consider that asset classes which are flagged as potentially eligible in this table might be ineligible if they are backed by, or linked to, the performance of ineligible assets (e.g. where possible, unrated bonds backed by/linked to the performance of crypto-assets). For this reason, it is always important to bear in mind that a substance-over-form approach has to be applied to prevent circumventions.

[275] Article 50(1) of the UCITS Directive.

[276] Article 88 of the UCITS Directive.

2.Catastrophe bonds ('cat bonds')	✗	✓	The performance of cat bonds is in general linked to natural/catastrophic events. These instruments are therefore structured in a way which is closer to insurance products than a traditional transferable security. Some exposures might be possible within the 10% limit where all relevant requirements are met (e.g. on liquidity and valuation).
3.Contingent Convertible bonds ('CoCo bonds')	✓	✓	The underlying of CoCo bonds is equity. However, given the nature of the asset, the other eligibility criteria (e.g. liquidity or valuation) need to be particularly carefully assessed.
4. Unrated bonds	✓	✓	Unrated bonds are bonds that did not have a credit rating. In general, the underlying is debt securities. However, given the nature of the asset, the other eligibility criteria (e.g. liquidity or valuation) need to be particularly carefully assessed.
5. Distressed securities	✓	✓	In general, this asset class gives exposure to equity or debt. However, given the nature of the asset, the other eligibility criteria (e.g. liquidity or valuation) need to be particularly carefully assessed.
6. Unlisted equities	✓	✓	In general, this asset class gives exposure to equity and it is eligible within the stringent limits set out in the UCITS Directive[277].
7. Crypto-assets	✗	✓	Crypto-assets are not included in the list of eligible assets in the UCITS Directive[278]. The legal qualification of a crypto-asset may, however, require a case-by-case assessment (see Section 16 of the technical advice). Some *indirect* exposures might be possible within the 10% limit where all relevant requirements are met (e.g. on liquidity and valuation).
8. Commodities and precious metals	✗	✓	Commodities are not included in the list of eligible assets in the UCITS Directive [279]. Precious metals or certificates representing

[277] The eligibility as a direct form of investment takes into account Article 50(1)(d) of the UCITS Directive.
[278] Article 50(1) of the UCITS Directive. Please, see Section 15 for further considerations on the topic.
[279] Article 50(1) of the UCITS Directive.

			them are explicitly not allowed[280]. Some *indirect* exposures might be possible within the 10% limit where all relevant requirements are met (e.g. on liquidity and valuation).
9. Exchange-traded commodities ('ETCs')	✗	✓	ETCs are financial instruments backed by or linked to the performance of commodities.
10. Real estate	✗	✓	Real estate is not included as eligible assets in the UCITS Directive[281]. This is without prejudice to the application of certain specific rules in the UCITS Directive[282] allowing UCITS to acquire movable or immovable property which is essential for the direct pursuit of its business. Some *indirect* exposures might be possible within the 10% limit where all relevant requirements are met (e.g. on liquidity and valuation).
11. Special Purpose Acquisition Companies ('SPACs')	~	✓	The underlying is usually equity. However, given the nature of the asset, the other eligibility criteria (e.g. liquidity or valuation) need to be particularly carefully assessed.
12. EU AIFs	~	✓	The impacts of the look-through approach will depend on the asset classes in which the EU AIFs invest in.
13. Non-EU AIFs	~	✓	The impacts of the look-through approach will depend on the asset classes in which the non-EU AIFs invest in.
14. Emission allowances	✗	✓	Emission allowances are backed by, or linked to the performance of assets which are not eligible under the UCITS Directive (permissions to emit a certain amount of greenhouse gases).
15. Delta-one instruments	~	✓	The impacts of the look-through approach will depend on the asset classes the delta-one instrument is backed by or linked to.

[280] Article 50(2)(b) of the UCITS Directive.
[281] Article 50(1) of the UCITS Directive.
[282] Notably Article 50(3), 58(2)(c) and 83(2)(b) of the UCITS Directive.

16. Exchange-traded notes (‘ETNs’)	~	✓	ETNs are often understood as unsecured debt securities issued by a bank or financial institution that track the performance of a specific index, commodity, currency, or strategy. The impacts of the look-through approach will depend on the asset classes the ETN is backed by or linked to.
17. Other relevant asset classes	~	~	The assessment on the impact of the look-through will depend on the features of the financial instrument.

case-by-case basis.

Money market instruments (Section 7)

18. ESMA proposes some recalibration of the criteria set out in the UCITS EAD which will provide the benefit of having more legal clarity and convergence on the qualification of relevant assets as money market instruments for the purpose of the UCITS eligibility assessment. The requirement of performing a risk assessment, in addition to the maturity criterion and the clarification that the qualification as a money market instrument shall occur at the time of the investment should avoid the risks of reclassification of an instrument during its lifespan, which could generate distortions and be challenging from a depositary oversight perspective. An effect of the recalibration would be a partial reduction of the financial instruments which may fall within the definition of money market instruments, given that the proposal requires the financial instrument to simultaneously meet both the maturity and riskiness requirements in line with money market conditions. The assessment of the risks related to the financial instrument should already be part of the risk management process of the UCITS. The proposals for legislative amendments are rather of a clarificatory nature and do not add new burdensome obligations. To this end, ESMA believes that the costs should likely be limited.

19. The proposal contemplates a clarification of the criteria to be used for the asset liquidity assessment of money market instruments. This is in line with the proposal included in the Section 4 with regard to the asset liquidity assessment of transferable securities, thus the considerations included in the liquidity-related part of this CBA above apply also to the amendments proposed for the liquidity assessment of money market instruments.

20. Finally, ESMA has not proposed any lessening of the rules on investment limits for MMF investments as this point might be considered in the context of possible future reviews of the MMFR framework.

Financial indices (Section 8)

21. ESMA proposes some legal clarifications, notably on the application of the look-through approach. The benefits are greater legal clarity and convergence. Based on the concerns shared by some respondents that the national discretion granted in the UCITS Directive may have led to divergent approaches across Member States, ESMA is advising the European Commission to clarify the relevant provisions. This also serves the purpose of alleviating the administrative burden and possible overlap/inconsistencies between the UCITS EAD and the Benchmark Regulation. ESMA is also proposing the European Commission to consider the deletion of the national discretionary powers linked to the use of financial indices.

22. UCITS will benefit from a greater alignment with the Benchmark Regulation. UCITS will not be required to assess the adequacy and the publication criteria when the financial indices and the benchmark administrator fall within the scope of the Benchmark Regulation. The proposals related to the removal of the national discretionary powers, if taken into consideration by the European Commission, would bring a greater legal clarity and EU harmonisation in this area.

23. For the costs and benefits associated to the look-through approach that is also applied in this context, please refer to the paragraphs above. The proposal would have the benefit of clarifying the eligibility of financial indices, including when these are composed of assets other than those referred to in the UCITS Directive[283].

UCITS investment in AIFs (Section 9)

24. Based on feedback from stakeholders on the need to update the wording used in the UCITS Directive and UCITS EAD, in particular following the introduction of the AIFMD framework, ESMA advises the European Commission amendments to ensure that UCITS investments in AIFs do not result in a circumvention of the investment restrictions and investor protection standards set out in the UCITS Directive. Consistent with the rationale set out in the previous sections, this includes also the application of a look-through approach, while granting some level of flexibility to invest in AIFs without the application of a look-through within the 10% limit.

[283] Article 50(1) of the UCITS Directive.

25. ESMA has also clarified in its drafting proposals the distinction between the eligibility of open-ended from the closed-ended AIFs. The former are eligible under the UCITS Directive, provide that the conditions and criteria set out therein are met[284]. The investment in units or shares of closed-ended AIFs shall be allowed when these financial instruments prove to have the same characteristics as transferable securities and meet the criteria of having an equivalent supervision and the target UCITS or AIF cannot invest more than 10% of their assets in units or shares of other funds. Differences between requirements for UCITS investments in 'open-ended' and 'closed-ended' AIFs might appear questionable not only in terms of the terminology used but also logical consistency of the rules themselves since the requirements for UCITS investments in closed-ended funds seem relatively low in some respects (i.e. lower than for open-ended funds with respect to the equivalence of rules and supervision). The proposal would solve this matter by way of reducing the existent gap between the investment in open-ended and closed-ended AIFs.

26. With regard to the criterion of the equivalent supervision, the proposal considers the introduction of a presumption of equivalence for (open and closed-ended) EU AIFs managed by an authorised AIFM, unless there is information available to the UCITS that would lead to a different determination.

27. In application of the look-through approach, UCITS shall not invest in AIFs providing exposures to ineligible asset classes, regardless of they are of the open-ended or closed-ended type. For the CBA related to the look-through approach, please refer to the paragraph above.

Ancillary liquid assets (Section 10)

28. ESMA advises the European Commission to clarify in the legal text of the UCITS Directive that ancillary liquid assets are subject to the counterparty limits set out in the UCITS Directive[285], without prescribing a maximum amount of ancillary liquid assets that UCITS may hold. This will have the benefit of addressing the current divergences of interpretation amongst Member States, while providing the regulatory flexibility necessary to the shortened settlement cycle of T+1. The cost is limited to the need that the UCITS shall respect the counterparty limits set out in the UCITS Directive for the kind of investment.

Efficient Portfolio Management Techniques - EPMs (Section 12)

[284] Article 50(1)(e) of the UCITS Directive.
[285] Article 52 of the UCITS Directive.

29. The technical advice mentions three topics related to EPMs: (1) costs, (2) collaterals, (3) alignment with the techniques and instruments defined in the SFTR.

30. With regard to costs, the technical advice is not proposing any changes in the EAD, but it recommends the European Commission to address this matter in the context of a systematic review of the UCITS Directive (either in the UCITS Directive or in other legal acts, such as the Retail Investment Strategy). ESMA advises the European Commission to give consideration to the policy proposals included in the 2023 ESMA opinion on undue costs. The benefits of incorporating these cost-related policy proposals are stated in the 2023 ESMA opinion. The costs and other impacts should be assessed further in the context of any such future review.

31. With regard to collaterals, the proposal made address the question related to the possibility of deploying collateral arrangements that do not envisage a title transfer. The technical advice proposes to the European Commission to clarify the wording of Article 22(7) of the UCITS Directive, allowing UCITS to deploy EPMs whose collateral arrangements do not envisage a title transfer, in line with ESMA guidelines on ETF and other UCITS issues. The benefits are therefore greater legal clarity and convergence. This policy proposal is in line with the flexibility advocated for by majority of respondents to the Call for Evidence. In terms of costs, the proposed changes are rather of a clarificatory nature, confirming what has been already said in the ESMA guidelines on ETFs and other UCITS issues. To that end, ESMA expects the cost implications to be limited.

32. With regard to the alignment with SFTR, in line with the feedback received by respondents, the proposal does not envisage a full alignment. However, in order to bring further clarity to the system, only as a matter of clarification, the technical advice explains that the notions and definitions used in the SFTR should be deemed relevant for the UCITS purposes, provided that 1) the notion and definition of the specific technique allows the UCITS to comply with its requirements (e.g. on borrowing and short selling) and 2) these notions and definitions are not intended as exhaustive. ESMA is of the view that these clarifications should not increase costs.

33. Finally, the legislative proposals clarify that EPMs shall never cause the UCITS to diverge from its investment objectives. This is in line with the UCITS Directive[286] and means that the deployment of such techniques should be understood to be complementary to the core strategy of the UCITS. The benefits are greater legal

[286] Article 51(2) subpar. 2 of the UCITS Directive.

certainty and convergence. Given the clarificatory nature of this proposal, ESMA expects the costs to be limited.

Financial derivative instruments (Section 13)

34. ESMA sees merit in clarifying some aspects related to the perimeter of financial instruments embedding a derivative and includes proposals to the Commission for criteria that can be considered by a UCITS to assess if a transferable security or money market instrument can be regarded as embedding a derivative, and whether the derivative component has to be considered to be a separate financial instrument.

35. The benefits of the proposal are twofold. The application of the look-through approach will provide greater legal clarity regarding the eligibility of financial instruments backed by or linked to the performance of assets other than those referred to in the UCITS Directive[287]. Secondly, the proposals clarify when financial instrument shall not be regarded as embedding a derivative, by way of introducing some criteria that might facilitate the analysis of the specific instrument. Notwithstanding the general application of the look-through approach, this is of relevance with regard to the application of the requirements for investments in derivatives set out in the UCITS Directive[288], which shall be applied when financial instruments embed derivatives. The main costs and benefits under this section also relate to the application of the look-through, which have been covered in the previous paragraphs.

[287] The look-through approach will be applied regardless of whether the financial instrument is embedding a derivative.
[288] Article 51 of the UCITS Directive.

Annex VI – Legislative drafting proposals

(Proposed amendments highlighted in **green**)

DIRECTIVE 2009/65/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 13 July 2009

on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS)

Article 2

1. For the purposes of this Directive the following definitions apply:

[…]

(u) 'AIFs' means alternative investment funds as defined in Article 4(1)(a) of the Directive 2011/61/EU.

(v) 'open-ended AIFs' means an AIF with the characteristics laid down in Article 1(2) of Commission Delegated Regulation (EU) No. 694/2014;

(w) 'regulated market' means a multilateral system as defined in Article 4(1)(21) of the Directive 2014/65/EU;

(x) 'multilateral trading facility' or 'MTF' means a multilateral system as defined in Article 4(1)(22) of the Directive 2014/65/EU.

Article 11

1. Qualifying holdings in management companies shall be subject to the same rules as those laid down in Articles 10, **11, 12** ~~**10a**~~ and **13**~~**10b**~~ of **Directive 2014/65/EU.** ~~**Directive 2004/39/EC**~~.

2. For the purposes of this Directive, the terms 'investment firm' and 'investment firms' referred to in Article 10 of Directive **2014/65/EU** ~~**2004/39/EC**~~, mean, respectively, 'management company' and 'management companies'.

3. In order to ensure consistent harmonisation of this Directive, ESMA may develop draft regulatory technical standards to establish an exhaustive list of information, as provided for in this Article, with reference to Article **13(4) of the Directive 2014/65/EU** ~~**10b(4) of**~~

~~Directive 2004/39/EC~~, to be included by proposed acquirers in their notification, without prejudice to Article 10a(2) of that Directive.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.

In order to ensure uniform conditions of application of this Article, ESMA may develop draft implementing technical standards to establish standard forms, templates and procedures for the modalities of the consultation process between the relevant competent authorities, as provided for in this Article, with reference to Article **11(2) of Directive 2014/65/EU** ~~10(4) of Directive 2004/39/EC~~.

Power is conferred to the Commission to adopt the implementing technical standards referred to in the third subparagraph in accordance with Article 15 of Regulation (EU) No 1095/2010.

Article 22

[…]

7. The assets held in custody by the depositary shall not be reused by the depositary, or by any third party to which the custody function has been delegated, for their own account. Reuse comprises any transaction of assets held in custody including, but not limited to, transferring, pledging, selling and lending.

The assets held in custody by the depositary are allowed to be reused only where:

(a) the reuse of the assets is executed for the account of the UCITS;

(b) the depositary is carrying out the instructions of the management company on behalf of the UCITS;

(c) the reuse is for the benefit of the UCITS and in the interest of the unit holders; and

(d) the transaction is covered by high-quality and liquid collateral received by the UCITS ~~under a title transfer arrangement~~**.**

Article 50

1. The investments of a UCITS shall comprise only one or more of the following:

(a) transferable securities and money market instruments admitted to or dealt in on a regulated market **or in a MTF**;

(b) transferable securities and money market instruments dealt in on another regulated market in a Member State, which operates regularly and is recognised and open to the public;

(c) transferable securities and money market instruments admitted to official listing on a stock exchange in a third country or dealt in on another regulated market in a third country which operates regularly and is recognised and open to the public provided that the choice of stock exchange or market has been approved by the competent authorities or is provided for in law or the fund rules or the instruments of incorporation of the investment company;

(d) recently issued transferable securities, provided that:

(i) the terms of issue include an undertaking that an application will be made for admission to official listing on a stock exchange**, MTF,** or to another regulated market which operates regularly and is recognised and open to the public, provided that the choice of stock exchange**, MTF,** or market has been approved by the competent authorities or is provided for in law or the fund rules or the instruments of incorporation of the investment company; and

(ii) the admission referred to in point (i) is secured within a year of issue;

(e) units of UCITS authorised according to this Directive or ~~**other collective investment undertakings**~~ **units or shares of open-ended AIFs meeting the requirements set out in** ~~**within the meaning of**~~ Article 1(2)(a) and (b), ~~**whether or not established in a Member State**~~**,** provided that:

(i) such ~~**other collective investment undertakings**~~ **open-ended AIFs** are authorised under laws which provide that they are subject to supervision considered by the competent authorities of the UCITS home Member State to be equivalent to that laid down in ~~**Community**~~ **Union** law, and that cooperation between authorities is sufficiently ensured;

(ii) the level of protection for unit-holders in the ~~**other collective investment undertakings**~~ **open-ended AIFs** is equivalent to that provided for unit- holders in a UCITS, and in particular that the rules on asset segregation, borrowing, lending, and uncovered sales of transferable securities and money market instruments are equivalent to the requirements of this Directive;

(iii) the business of the ~~other collective investment undertakings~~ **open-ended AIFs** is reported in half-yearly and annual reports to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period; and

(iv) no more than 10 % of the assets of the UCITS or **open-ended AIFs** ~~the other collective investment undertakings~~, whose acquisition is contemplated, can, according to their fund rules or instruments of incorporation, be invested in aggregate in units of other UCITS or **open-ended AIFs** ~~the other collective investment undertakings~~;

(f) deposits with credit institutions which are repayable on demand or have the right to be withdrawn, and maturing in no more than 12 months, provided that the credit institution has its registered office in a Member State or, if the credit institution has its registered office in a third country, provided that it is subject to prudential rules considered by the competent authorities of the UCITS home Member State as equivalent to those laid down in ~~Community~~ **Union** law;

(g) financial derivative instruments, including equivalent cash-settled instruments, dealt in on a regulated market **or a MTF** referred to in points (a), (b) and (c) or financial derivative instruments dealt in over- the-counter (OTC) derivatives, provided that:

(i) the underlying of the derivative consists of instruments covered by this paragraph, financial indices, interest rates, foreign exchange rates or currencies, in which the UCITS may invest according to its investment objectives as stated in its fund rules or instruments of incorporation;

(ii) the counterparties to OTC derivative transactions are institutions subject to prudential supervision, and belonging to the categories approved by the competent authorities of the UCITS home Member State; and

(iii) the OTC derivatives are subject to reliable and verifiable valuation on a daily basis and can be sold, liquidated or closed by an offsetting transaction at any time at their fair value at the UCITS' initiative; or

(h) money market instruments other than those dealt in on a regulated market **or a MTF**, which fall under Article 2(1)(o), if the issue or issuer of such instruments is itself regulated for the purpose of protecting investors and savings, provided that they are:

(i) issued or guaranteed by a central, regional or local authority or central bank of a Member State, the European Central Bank, the **European Union** ~~Community~~ or the European Investment Bank, a third country or, in the case of a Federal State, by one of the members making up the federation, or by a public international body to which one or more Member States belong;

(ii) issued by an undertaking any securities of which are dealt in on regulated markets **or MTF** referred to in points (a), (b) or (c);

(iii) issued or guaranteed by an establishment subject to prudential supervision, in accordance with criteria defined by **Union** ~~**Community**~~ law, or by an establishment which is subject to and complies with prudential rules considered by the competent authorities to be at least as stringent as those laid down by **Union** ~~**Community**~~ law; or

(iv) issued by other bodies belonging to the categories approved by the competent authorities of the UCITS home Member State provided that investments in such instruments are subject to investor protection equivalent to that laid down in points (i), (ii) or (iii) and provided that the issuer is a company whose capital and reserves amount to at least EUR 10 000 000 and which presents and publishes its annual accounts in accordance with ~~**Fourth Council Directive 78/660/EEC of 25 July 1978 based on Article 54(3)(g) of the Treaty**~~ **Directive 2013/34/EU** on the annual accounts of certain types of companies (1), is an entity which, within a group of companies which includes one or several listed companies, is dedicated to the financing of the group or is an entity which is dedicated to the financing of securitisation vehicles which benefit from a banking liquidity line.

2. A UCITS shall not, however:

(a) invest more than 10 % of its assets in transferable securities**, units or shares of open-ended AIFs, financial derivatives instruments** or money market instruments other than those referred to in paragraph 1; or,

(b) acquire either precious metals or, **without prejudice to point (a),** certificates representing them.

UCITS may hold ancillary liquid assets.

3. An investment company may acquire movable or immovable property which is essential for the direct pursuit of its business.

4. In order to ensure consistent harmonisation of this Article ESMA may develop draft regulatory technical standards to specify the provisions concerning the categories of assets in which UCITS can invest in accordance with this Article and with delegated acts adopted by the Commission which relate to such provisions.

Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.

Article 51

[…]

3. A UCITS shall ensure that its global exposure relating to derivative instruments does not exceed the total net value of its portfolio.

The exposure is calculated taking into account the current value of the underlying assets, the counterparty risk, future market movements and the time available to liquidate the positions. This shall also apply to the third and fourth subparagraphs.

A UCITS may invest, as a part of its investment policy and within the limit laid down in Article 52(5), in financial derivative instruments provided that the exposure to the underlying assets does not exceed in aggregate the investment limits laid down in Article 52. ~~**Member States may provide that,**~~ **Where** a UCITS invests in index-based financial derivative instruments, those investments are not required to be combined for the purposes of the limits laid down in Article 52.

When transferable securities or money market instruments embed a derivative, the derivative shall be taken into account when complying with the requirements of this Article.

Article 52

[…]

6. The ancillary liquid assets held by UCITS shall not exceed the limits laid down in this Article.

Article 53

1. Without prejudice to the limits laid down in Article 56, ~~**Member States may raise**~~ the limits laid down in Article 52 **are raised** to a maximum of 20 % for investment in shares or debt securities issued by the same body when, according to the fund rules or instruments of incorporation, the aim of the UCITS' investment policy is to replicate the composition of a certain stock or debt securities index which is recognised by the competent authorities, on the following basis:

(a) its composition is sufficiently diversified;

(b) the index represents an adequate benchmark for the market to which it refers; and

(c) it is published in an appropriate manner.

~~**2. Member States may raise the limit laid down in paragraph 1 to a maximum of 35 % where that proves to be justified by exceptional market conditions in particular in regulated markets where certain transferable securities or money market instruments are highly dominant. The investment up to that limit shall be permitted only for a single issuer.**~~

2. The limit laid down in paragraph 1 is raised to a maximum of 35 % where the index refers to regulated markets or MTFs where certain transferable securities or money market instruments are highly dominant. The investment up to that limit shall be permitted only for a single issuer. Such derogation should be included in the fund rules or instruments of incorporation of the UCITS and shall be approved by the competent authorities of the UCITS.

Article 55

1. A UCITS may acquire the units of UCITS or **the units or shares of open-ended AIFs** ~~**or other collective investment undertakings**~~ referred to in Article 50(1)(e), provided that no more than ~~**10**~~ **20** % of its assets are invested in units of a single UCITS or **AIF**. ~~**Member States may raise that limit to a maximum of 20 %.**~~

2. Investments made in units **or shares** of ~~**collective investment undertakings other than UCITS**~~ **open-ended AIFs** shall not exceed, in aggregate, 30 % of the assets of the UCITS.

~~**Member States may, w**~~ **W**here a UCITS has acquired units of another UCITS **or units or shares of open-ended AIFs,** ~~**collective investment undertakings,**~~ the assets of the respective UCITS or **open-ended AIFs** ~~**other collective investment undertakings**~~ are not required to be combined for the purposes of the limits laid down in Article 52.

3. Where a UCITS invests in the units of other UCITS **or units or shares of open-ended AIFs** ~~**collective investment undertakings**~~ that are managed, directly or by delegation, by the same management company or by any other company with which the management company is linked by common management or control, or by a substantial direct or indirect holding, that management company or other company shall not charge subscription or redemption fees on account of the UCITS' investment in the units **or shares** of such other UCITS or **open-ended AIFs** ~~**collective investment undertakings**~~.

A UCITS that invests a substantial proportion of its assets in other UCITS or **open-ended AIFs** ~~**collective investment undertakings**~~ shall disclose in its prospectus the maximum level of the management fees that may be charged both to the UCITS itself and to the other UCITS or **open-ended AIFs** ~~collective investment undertakings~~ in which it intends to invest. It shall indicate in its annual report the maximum proportion of management fees charged both to the UCITS itself and to the other UCITS or **open-ended AIFs** ~~collective investment undertaking~~ in which it invests.

Article 88

1. Without prejudice to the application of Articles 50**, 50a,** and 51, the following shall not grant loans or act as a guarantor on behalf of third parties:

(a) an investment company;

(b) a management company or depositary acting on behalf of a common fund.

2. Paragraph 1 shall not prevent the undertakings referred to therein from acquiring transferable securities, money market instruments or other financial instruments referred to in points (e), (g) and (h) of Article 50(1) which are not fully paid.

Article 114

1. Investment firms, as defined in Article 4(1)(1) of Directive **2014/65/EU** ~~2004/39/EC~~, authorised to carry out only the services provided for in Section A(4) and (5) of the Annex **I** to that Directive, may obtain authorisation under this Directive to manage UCITS as management companies. In that case, such investment firms shall give up the authorisation obtained under Directive **2014/65/EU** ~~2004/39/EC~~.

COMMISSION DIRECTIVE 2007/16/EC

of 19 March 2007

Article 1

Subject matter

This Directive lays down rules clarifying, for the purposes of their uniform application, the following terms:

1. transferable securities, as defined in Article **2(1) of the Directive 2009/65/EC;** ~~1(8) of Directive 85/611/EEC~~;

2. money market instruments, as defined in Article **2(1)(o) of the Directive 2009/65/EC** ~~**1(9) of Directive 85/611/EEC**~~;

3. liquid financial assets, as referred to in the definition of UCITS laid down in Article 1(2) of Directive **2009/65/EC** ~~**85/611/EEC**~~, with respect to financial derivative instruments;

4. transferable securities and money market instruments embedding derivatives, as referred to in the fourth sub- paragraph of Article **51(3) of the Directive 2009/65/EC** ~~**21(3) of Directive 85/611/EEC**~~;

5. techniques and instruments for the purpose of efficient portfolio management, as referred to in Article **51(2) of the Directive 2009/65/EC** ~~**21(2) of Directive 85/611/EEC**~~;

6. index-replicating UCITS, as referred to in Article **53(1)(a) of the Directive 2009/65/EC** ~~**22a(1) of Directive 85/611/EEC**~~.

7. Units or shares of 'AIFs', as referred to in Article 2(u) of the Directive 2009/65/EC.

Article 2

Article **2(1)(n) of Directive 2009/65/EC** ~~**1(8) of Directive 85/611/EEC**~~

Transferable securities

1. The reference in Article **2(1)(n) of Directive 2009/65/EC** ~~**1(8) of Directive 85/611/EEC**~~ to transferable securities shall be understood as a reference to financial instruments which fulfil the following criteria:

(a) the potential loss which the UCITS may incur with respect to holding those instruments is limited to the amount paid for them;

(b) ~~**their liquidity does not compromise the ability of the UCITS to comply with Article 37 of Directive 85/611/EEC**~~ **they are liquid. Their liquidity shall be assessed, both under normal and stressed market conditions, taking into account, among others, and as the case may be, the following:**

(i) the transferable security is admitted or dealt in on a regulated market or MTF in accordance with points (a), (b) or (c) of Article 50(1) of Directive 2009/65/EC or it has been recently issued under the conditions set out in point (d) of Article 50(1) of the Directive 2009/65/EC;

(ii) the volume and turnover in the transferable security as well as the number of trades per day;

(iii) the bid and offer prices, and the relative size and spread;

(iv) the issuance size, including the portion that the management company intends to buy, also relative to the size of the UCITS, and the opportunity and timeframe to buy or sell;

(v) for the secondary market, the quality and number of intermediaries and market makers dealing in the transferable security;

(vi) the characteristics of the issue and the issuer, such as the rating, the sector, or the country of the issuing, the time since issuance and the time to maturity, where relevant the currency of the issue, and the issuer size;

(vii) the transaction costs;

(viii) the operational features of the transaction, to measure the legal or procedural barriers to the buy or sell of the transferable security;

(ix) where relevant, the collateral arrangements;

(x) the volatility of the transferable security over time.

The asset-level criteria above shall be assessed taking into account the liquidity risk management system in place, the overall portfolio liquidity and ability to comply with Article 84 of the Directive 2009/65/EC.

(c) reliable valuation is available for them **at same frequency of the subscriptions and redemptions of the UCITS,** as follows:

(i) in the case of securities admitted to or dealt in on a regulated market **or an MTF** as referred to in points (a) to (d) of Article **50(1) of Directive 2009/65/EC** ~~19(1) of Directive 85/611/EEC~~, in the form of accurate, reliable and regular prices which are either market prices or prices made available by valuation systems independent from issuers; **the prices shall be backed by adequate liquidity in such markets as well as adequate sources and number of pricing information;**

(ii) in the case of other securities as referred to in Article **50(2) of Directive 2009/65/EC** ~~19(2) of Directive 85/611/EEC~~, in the form of a valuation on a periodic basis, which is derived from adequate information from the issuer of the security or from competent investment research **to ensure that such security is fairly and appropriately valued**.

Prices shall be obtained from independent sources whenever possible and appropriate;

(d) appropriate information is available for them as follows:

(i) in the case of securities admitted to or dealt in on a regulated market **or MTF** as referred to in points (a) to (d) of Article **50(1) of Directive 2009/65/EC 19(1)** ~~**of Directive 85/611/EEC**~~, in the form of regular, accurate and comprehensive information to the market on the security or, where relevant, on the portfolio of the security;

(ii) in the case of other securities as referred to in Article **50(2) of Directive 2009/65/EC** ~~**19(2) of Directive 85/611/EEC**~~, in the form of regular and accurate information to the UCITS on the security or, where relevant, on the portfolio of the security;

(e) they are negotiable;

(f) their acquisition is consistent with the investment objectives or the investment policy, or both, of the UCITS pursuant to **Directive 2009/65/EC;** ~~**Directive 85/611/EEC**~~

(g) their risks are adequately captured by the risk management process of the UCITS**, in accordance with the due diligence requirements set out in Article 23 of the Commission Directive 2010/43/EU**;

(h) they are not backed by, or linked to the performance of assets other than those referred to in Article 50(1) of Directive 2009/65/EC.

~~**For the purposes of points (b) and (e) of the first subparagraph, and unless there is information available to the UCITS that would lead to a different determination, financial instruments which are admitted or dealt in on a regulated market in accordance with points (a), (b) or (c) of Article 19(1) of Directive 85/611/EEC shall be presumed not to compromise the ability of the UCITS to comply with Article 37 of Directive 85/611/EEC and shall also be presumed to be negotiable.**~~

~~**2. Transferable securities as referred to in Article 1(8) of Directive 85/611/EEC shall be taken to include the following:**~~

~~**(a) units in closed end funds constituted as investment companies or as unit trusts which fulfil the following criteria:**~~

~~**(i) they fulfil the criteria set out in paragraph 1;**~~

~~**(ii) they are subject to corporate governance mechanisms applied to companies;**~~

~~(iii) where asset management activity is carried out by another entity on behalf of the closed end fund, that entity is subject to national regulation for the purpose of investor protection;~~

~~(b) units in closed end funds constituted under the law of contract which fulfil the following criteria:~~

~~(i) they fulfil the criteria set out in paragraph 1;~~

~~(ii) they are subject to corporate governance mechanisms equivalent to those applied to companies as referred to in point (a)(ii);~~

~~(iii) they are managed by an entity which is subject to national regulation for the purpose of investor protection;~~

2. Transferable securities as referred to in Article 2(1)(n) of the Directive 2009/65/EC shall be taken to include units or shares of closed-ended AIFs, as referred to in Article 1(3) of Commission Delegated Regulation (EU) No. 694/2014, provided that:

(a) the units or shares fulfil the criteria set out in Article 2(1) of this Directive;

(b) the closed-ended AIFs invest only in transferable securities or other liquid financial instruments which are not backed by, or linked to, the performance of assets other than those referred to in Article 50(1) of the Directive 2009/65/EC;

(c) the closed-ended AIFs are authorised or registered under laws which provide that they are subject to supervision considered by the competent authorities of the UCITS home Member State to be equivalent to that laid down in Union law, and cooperation between authorities is sufficiently ensured. Unless there is information available to the UCITS that would lead to a different determination, closed-ended AIFs established in a Member State and managed by authorised EU AIFMs shall be presumed to meet this requirement;

(d) no more than 10% of the assets of the AIFs, whose acquisition is contemplated, can, according to their fund rules or instruments of incorporation, be invested in aggregate in units of other UCITS or AIFs.

2a. For the sole purpose of the 10% limit set out in Article 50(2)(a) of Directive 2009/65/EC, transferable securities are financial instruments which ~~fulfil the following criteria~~:

~~(i) they~~ fulfil the criteria set out in paragraph 1**, with the exception of point (h).**

~~(ii) they are backed by, or linked to the performance of, other assets, which may differ from those referred to in Article 50(1) of Directive 2009/65/EC 19(1) of Directive 85/611/EEC.]~~

3. Where a financial instrument contains an embedded derivative component as referred to in Article 10 of this Directive, the requirements of Article **51 of Directive 2009/65/EC** shall apply to that component**.**

Article 2a

Article 50(1)(e) and Article 50(2)(a) of Directive 2009/65/EC

Units of UCITS and units or shares of open-ended AIFs

1. Financial instruments which are units of UCITS or units or shares of open-ended AIFs shall not be understood as transferable securities under Article 2(1)(n) of the Directive 2009/65/EC and Article 2 of this Directive. These financial instruments shall meet the requirements set out in Article 50(1)(e) of Directive 2009/65/EC.

2. Open-ended AIFs pursuant to Article 50(1)(e) of Directive 2009/65/EC shall be understood as AIFs meeting the requirements set out in Article 1(2)(a) and (b) of Directive 2009/65/EC and investing only in transferable securities or other liquid financial instruments which are not backed by, or linked to, the performance of assets other than those referred to in Article 50(1) of the Directive 2009/65/EC.

3. Unless there is information available to the UCITS that would lead to a different determination, open-ended AIFs established in a Member State that are managed by authorised EU AIFMs shall be presumed to meet the requirement set out in Article 50(1)(e)(i) of the Directive 2009/65/EC.

4. The investment in units or shares of open-ended AIFs shall not compromise the ability of the UCITS to comply with the requirements set out in the Directive 2009/65/EC, in this Directive, or in other laws, regulations and administrative provisions applicable to the UCITS.

5. For the sole purpose of the 10% limit set out in Article 50(2)(a) of Directive 2009/65/EC, units or shares of open-ended AIFs shall be understood as units or shares of open-ended AIFs which meet the requirements set out in Article 1(2)(a) and (b) and Article 50(1)(e)(i)-(ii) of Directive 2009/65/EC as well as Article 2(2a) of this Directive, and thus may also invest in assets other than those referred to in Article 50(1) of that Directive

Article 3

Article ~~1(9)~~ **2(1)(o)** of Directive **2009/65/EC** ~~**85/611/EEC**~~

Instruments normally dealt in on the money market

1. The reference in Article ~~1(9)~~ **2(1)(o)** of Directive **2009/65/EC** ~~**85/611/EEC**~~ to money market instruments as instruments shall be understood as a reference to the following:

(a) financial instruments which are admitted to trading or dealt in on a regulated market **or a MTF** in accordance with points (a), (b) and (c) of Article ~~19~~**50(1)** of Directive **2009/65/EC** ~~**85/611/EEC**~~;

(b) financial instruments which are not admitted to trading.

2. The reference in Article ~~1(9)~~ **2(1)(o)** of Directive **2009/65/EC** ~~**85/611/EEC**~~ to money market instruments as instruments normally dealt in on the money market shall be understood as a reference to financial instruments which fulfil ~~one of~~ the following criteria:

(a) it displays one of the following alternative characteristics:

~~(a)~~ **(i)** they have a maturity at issuance of up to and including 397 days;

~~(b)~~ **(ii)** they have a residual maturity of up to and including 397 days;

~~(c)~~ **(iii)** they undergo regular yield adjustments in line with money market conditions at least every 397 days;

~~**(d) (iv) their risk profile, including credit and interest rate risks, corresponds to that of financial instruments which have a maturity as referred to in points (a) or (b), or are subject to a yield adjustment as referred to in point (c).**~~

(b) their risk profile, including credit and interest rate risks, corresponds to that of financial instruments which have a maturity as referred to in point (a)(i) or (ii), or are subject to a yield adjustment as referred to in point (a)(iii).

2a. Financial instruments which do not fulfil the criteria set out in the previous paragraph at the time of the investment cannot subsequently be reclassified by the UCITS as money market instruments.

3. For the sole purpose of the 10% limit set out in Article 50(2)(a) of Directive 2009/65/EC, the reference to money market instruments includes money market

instruments which are backed by, or linked to the performance of other assets, which may differ from those referred to in Article 50(1) of Directive 2009/65/EC.

Article 4

Article **2(1)(o) of Directive 2009/65/EC** ~~1(9) of Directive 85/611/EEC~~

Liquid instruments with a value which can be accurately determined at any time

1. The reference in Article **2(1)(o) of Directive 2009/65/EC** ~~1(9) of Directive 85/611/EEC~~ to money market instruments as instruments which are liquid shall be understood as a reference to financial instruments which can be sold at limited cost in an adequately short time frame, taking into account the obligation of the UCITS to repurchase or redeem its units at the request of any unit holder.

1a. In order to comply with paragraph 1, the liquidity assessment of the money market instrument shall take into account at least the following criteria:

(a) frequency of trades and quotes for the instrument in question;

(b) number of dealers willing to purchase and sell the instrument, willingness of the dealers to make a market in the instrument in question, nature of market place trades (times needed to sell the instrument, method for soliciting offers and mechanics of transfer);

(c) size of issuance/program;

(d) possibility to repurchase, redeem or sell the instrument in a short period, at limited cost, in terms of low fees and bid/offer prices and with very short settlement delay.

2. The reference in Article **2(1)(o) of Directive 2009/65/EC** ~~1(9) of Directive 85/611/EEC~~ to money market instruments as instruments which have a value which can be accurately determined at any time shall be understood as a reference to financial instruments for which accurate and reliable valuations systems, which fulfil the following criteria, are available:

(a) they enable the UCITS to calculate a net asset value in accordance with the value at which the financial instrument held in the portfolio could be exchanged between knowledgeable willing parties in an arm's length transaction;

(b) they are based either on market data or on valuation models including systems based on amortised costs.

~~3. The criteria referred to in paragraphs 1 and 2 shall be presumed to be fulfilled in the case of financial instruments which are normally dealt in on the money market for the purposes of Article 1(9) of Directive 85/611/EEC and which are admitted to, or dealt in on, a regulated market in accordance with points (a), (b) or (c) of Article 19(1) thereof, unless there is information available to the UCITS that would lead to a different determination.~~

Article 5

Article **50(1)(h) of Directive 2009/65/EC** ~~19(1)(h) of Directive 85/611/EEC~~

Instruments of which the issue or issuer is regulated for the purpose of protecting investors and savings

1. The reference in Article **50(1)(h) of Directive 2009/65/EC** ~~19(1)(h) of Directive 85/611/EEC~~ to money market instruments, other than those dealt in on a regulated market **or a MTF**, of which the issue or the issuer is itself regulated for the purpose of protecting investors and savings, shall be understood as a reference to financial instruments which fulfil the following criteria:

(a) they fulfil ~~one of~~ the criteria set out in Article 3(2) and all the criteria set out in Article 4(1) and (2);

(b) appropriate information is available for them, including information which allows ~~an appropriate~~ **the risk** assessment ~~of the credit risks~~ related to the investment in such instruments, taking into account paragraphs 2, 3 and 4 of this Article;

(c) they are freely transferable.

2. For money market instruments covered by the second and the fourth indents of Article **50(1)(h) of Directive 2009/65/EC** ~~19(1)(h) of Directive 85/611/EEC~~, or for those which are issued by a local or regional authority of a Member State or by a public international body but are not guaranteed by a Member State or, in the case of a federal State which is a Member State, by one of the members making up the federation, appropriate information as referred to in point (b) of paragraph 1 of this Article shall consist in the following:

(a) information on both the issue or the issuance programme and the legal and financial situation of the issuer prior to the issue of the money market instrument;

(b) updates of the information referred to in point (a) on a regular basis and whenever a significant event occurs;

(c) the information referred to in point (a), verified by appropriately qualified third parties not subject to instructions from the issuer;

(d) available and reliable statistics on the issue or the issuance programme.

3. For money market instruments covered by the third indent of Article **50(1)(h) of Directive 2009/65/EC** ~~19(1)(h) of Directive 85/611/EEC~~, appropriate information as referred to in point (b) of paragraph 1 of this Article shall consist in the following:

(a) information on the issue or the issuance programme or on the legal and financial situation of the issuer prior to the issue of the money market instrument;

(b) updates of the information referred to in point (a) on a regular basis and whenever a significant event occurs;

(c) available and reliable statistics on the issue or the issuance programme or other data enabling an appropriate assessment of the credit risks related to the investment in such instruments.

4. For all money market instruments covered by the first indent of Article **50(1)(h) of Directive 2009/65/EC** ~~19(1)(h) of Directive 85/611/EEC~~ except those referred to in paragraph 2 of this Article and those issued by the European Central Bank or by a central bank from a Member State, appropriate information as referred to in point (b) of paragraph 1 of this Article shall consist in information on the issue or the issuance programme or on the legal and financial situation of the issuer prior to the issue of the money market instrument.

Article 6

Article **50(1)(h) of Directive 2009/65/EC** ~~19(1)(h) of Directive 85/611/EEC~~

Establishment which is subject to and complies with prudential rules considered by the competent authorities to be at least as stringent as those laid down by ~~Community~~ **Union** law

The reference in the third indent of Article **50(1)(h) of Directive 2009/65/EC** ~~19(1)(h) of Directive 85/611/EEC~~ to an establishment which is subject to and complies with prudential rules considered by the competent authorities to be at least as stringent as those laid down by ~~Community~~ **Union** law shall be understood as a reference to an issuer which is subject to and complies with prudential rules and fulfils one of the following criteria:

1. it is located in the European Economic Area;

2. it is located in the OECD countries belonging to the Group of Ten;

3. it has at least investment grade rating;

4. it can be demonstrated on the basis of an in-depth analysis of the issuer that the prudential rules applicable to that issuer are at least as stringent as those laid down by **Union** ~~**Community**~~ law.

Article 7

Article **50(1)(h) of Directive 2009/65/EC** ~~**19(1)(h) of Directive 85/611/EEC**~~

Securitisation vehicles which benefit from a banking liquidity line

1. The reference in the fourth indent of Article **50(1)(h) of Directive 2009/65/EC** ~~**19(1)(h) of Directive 85/611/EEC**~~ to securitisation vehicles shall be understood as a reference to structures, whether in corporate, trust or contractual form, set up for the purpose of securitisation operations.

2. The reference in the fourth indent of Article **50(1)(h) of Directive 2009/65/EC** ~~**19(1)(h) of Directive 85/611/EEC**~~ to banking liquidity lines shall be understood as a reference to banking facilities secured by a financial institution which itself complies with the third indent of Article **50(1)(h) of Directive 2009/65/EC** ~~**19(1)(h) of Directive 85/611/EEC**~~.

Article 8

Articles 1(2) and **50(1)(g) of Directive 2009/65/EC** ~~**19(1)(g) of Directive 85/611/EEC**~~

Liquid financial assets with respect to financial derivative instruments

1. The reference in Article 1(2) of **Directive 2009/65/EC** ~~**Directive 85/611/EEC**~~ to liquid financial assets shall be understood, with respect to financial derivative instruments, as a reference to financial derivative instruments which fulfil the following criteria:

(a) their underlyings consist in one or more of the following:

(i) assets as listed in Article **50(1) of Directive 2009/65/EC** ~~**19(1) of Directive 85/611/EEC**~~ including financial instruments having one or several characteristics of those assets. **For the sole purpose of the 10% limit set out in Article 50(2)(a) of Directive 2009/65/EC,**

underlyings of financial derivative instruments can be assets which may differ from those referred to in Article 50(1) of Directive 2009/65/CE.

(ii) interest rates;

(iii) foreign exchange rates or currencies;

(iv) financial indices;

(b) in the case of OTC derivatives, they comply with the conditions set out in the second and third indents of Article **50(1)(g) of Directive 2009/65/EC** ~~**19(1)(g) of Directive 85/611/EEC**~~.

2. Financial derivative instruments as referred to in Article **50(1)(g) of Directive 2009/65/EC** ~~**19(1)(g) of Directive 85/611/EEC**~~ shall be taken to include instruments which fulfil the following criteria:

(a) they allow the transfer of the credit risk of an asset as referred to in point (a) of paragraph 1 of this Article independently from the other risks associated with that asset;

(b) they do not result in the delivery or in the transfer, including in the form of cash, of assets other than those referred to in Article **50(1) of Directive 2009/65/EC** ~~**19(1) and (2) of Directive 85/611/EEC**~~;

(c) they comply with the criteria for OTC-derivatives laid down in the second and third indents of Article **50(1)(g) of Directive 2009/65/EC** ~~**19(1)(g) of Directive 85/611/EEC**~~ and in paragraphs 3 and 4 of this Article;

(d) their risks are adequately captured by the risk management process of the UCITS, and by its internal control mechanisms in the case of risks of asymmetry of information between the UCITS and the counterparty to the credit derivative resulting from potential access of the counterparty to non-public information on firms the assets of which are used as underlyings by credit derivatives.

3. For the purposes of the third indent of Article **50(1)(g) of Directive 2009/65/EC** ~~**19(1)(g) of Directive 85/611/EEC**~~, the reference to fair value shall be understood as a reference to the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

4. For the purposes of the third indent of Article **50(1)(g) of Directive 2009/65/EC** ~~**19(1)(g) of Directive 85/611/EEC**~~, the reference to reliable and verifiable valuation shall be understood as a reference to a valuation, by the UCITS, corresponding to the fair value as

referred to in paragraph 3 of this Article, which does not rely only on market quotations by the counterparty and which fulfils the following criteria:

(a) the basis for the valuation is either a reliable up-to-date market value of the instrument, or, if such a value is not available, a pricing model using an adequate recognised methodology;

(b) verification of the valuation is carried out by one of the following:

(i) an appropriate third party which is independent from the counterparty of the OTC-derivative, at an adequate frequency and in such a way that the UCITS is able to check it;

(ii) a unit within the UCITS which is independent from the department in charge of managing the assets and which is adequately equipped for such purpose.

5. The reference in Articles 1(2) and **50(1)(g) of Directive 2009/65/EC** ~~**19(1)(g) of Directive 85/611/EEC**~~ to liquid financial assets shall be understood as excluding derivatives on commodities.

Article 9

Article ~~**19**~~ **50**(1)(g) of Directive **2009/65/CE** ~~**85/611/EEC**~~

Financial indices

1. The reference in point (g) of Article ~~**19**~~ **50**(1)(g) of Directive **2009/65/EC** ~~**85/611/EEC**~~ to financial indices shall be understood as a reference to indices which fulfil the following criteria:

(a) they are sufficiently diversified, in that the following criteria are fulfilled:

(i) the index is composed in such a way that price movements or trading activities regarding one component do not unduly influence the performance of the whole index;

(ii) where the index is composed of assets referred to in Article ~~**19**~~ **50**(1) of Directive **2009/65/CE** ~~**85/611/EEC**~~, its composition is at least diversified in accordance with Article ~~**22a**~~ **53** of that Directive;

(iii) it is diversified in a way which is equivalent to that provided for in Article ~~**22a**~~ **53** of that Directive, **where the index is composed of assets other than those referred to in Article 50(1) of Directive 2009/65/EC and investments in those assets are made within the 10% limit set out in Article 50(2)(a) of the UCITS Directive**;

(b) they represent an adequate benchmark for the market to which they refer, in that the following criteria are fulfilled:

(i) the index **seeks to** measure the performance of a representative group of underlyings in a relevant and appropriate way;

(ii) the index is revised or rebalanced periodically to ensure that it continues to reflect the markets to which it **seeks to** refer following criteria which are publicly available;

(iii) the underlying **assets** are sufficiently liquid, which allows users to replicate the index, if necessary;

The criteria set out in point (b)(i) and (ii) are fulfilled where the index providers and the indices are included in the ESMA register under the Regulation (EU) 2016/1011.

(c) they are published in an appropriate manner in that the following criteria are fulfilled:

(i) their publication process relies on sound procedures to collect prices and to calculate and to subsequently publish the index value, including pricing procedures for components where a market price is not available;

(ii) material information on matters such as index calculation, rebalancing methodologies, index changes or any operational difficulties in providing timely or accurate information is provided on a wide and timely basis.

The criteria set out in point (c) are fulfilled where the index providers and the indices are included in the ESMA register under the Regulation (EU) 2016/1011.

2. Where the composition of assets which are used as underlyings by financial derivatives in accordance with Article **50(1) of Directive 2009/65/EC** ~~**19(1) of Directive 85/611/EEC**~~ does not fulfil the criteria set out in paragraph 1 of this Article, those financial derivatives shall, where they comply with the criteria set out in Article 8(1) of this Directive, be regarded as financial derivatives on a combination of the assets referred to in points (i), (ii) and (iii) of Article 8(1)(a).

Article 10

Article **51(3) of Directive 2009/65/EC 21(3)** ~~**of Directive 85/611/EEC**~~, fourth subparagraph Transferable securities and money market instruments embedding derivatives

1. The reference in the fourth subparagraph of Article **51(3) of Directive 2009/65/EC** ~~**21(3) of Directive 85/611/EEC**~~ to transferable securities embedding a derivative shall be

understood as a reference to financial instruments which fulfil the criteria set out in Article 2(1) of this Directive and which contain a component which fulfils the following criteria:

(a) by virtue of that component some or all of the cash flows that otherwise would be required by the transferable security which functions as host contract can be modified according to a specified interest rate, financial instrument price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, and therefore vary in a way similar to a stand-alone derivative;

(b) its economic characteristics and risks are not closely related to the economic characteristics and risks of the host contract;

(c) it has a significant impact on the risk profile and pricing of the transferable security;

(d) it fulfils the criteria for being a financial derivative instrument eligible under Article 50(1) of Directive 2009/65/EC and this Directive.

2. Money market instruments which fulfil ~~one of~~ the criteria set out in Article 3(2) and all the criteria set out in Article 4(1) and (2) thereof and which contain a component which fulfils the criteria set out in paragraph 1 of this Article shall be regarded as money market instruments embedding a derivative.

3. A transferable security or a money market instrument shall not be regarded as embedding a derivative where it contains a component which is contractually transferable independently of the transferable security or the money market instrument. Such a component shall be deemed to be a separate financial instrument. **The assessment whether a derivative component is a separate financial instrument shall take into account, at least, the following:**

(a) the derivative component is a separate contract from the transferable security or the money market instrument;

(b) the separation of the transferable security or the money market instrument from the derivative is contractually permitted or possible so that the derivative can be transferred, traded, or settled independently from the transferable security or the money market instrument;

(c) the derivative component does not modify the cash flows, the risk profile or the price of the transferable security or the money market instrument;

(d) the derivative component has a price or a valuation which is distinct and independent to the transferable security or the money market instrument;

Article 11

Article **51(2) of Directive 2009/65/EC** ~~**21(2) of Directive 85/611/EEC**~~

Techniques and instruments for the purpose of efficient portfolio management

1. The reference in Article **51(2) of Directive 2009/65/EC** ~~**21(2) of Directive 85/611/EEC**~~ to techniques and instruments which relate to transferable securities and which are used for the purpose of efficient portfolio management shall be understood as a reference to techniques and instruments which fulfil the following criteria:

(a) they are economically appropriate in that they are realised in a cost-effective way;

(b) they are entered into for one or more of the following specific aims:

(i) reduction of risk;

(ii) reduction of cost;

(iii) generation of additional capital or income for the UCITS with a level of risk which is consistent with the risk profile of the UCITS and the risk diversification rules laid down in Article **52 of Directive 2009/65/EC** ~~**22 of Directive 85/611/EEC**~~**;**

(iv) their risks are adequately captured by the risk management process of the UCITS**, in accordance with the due diligence requirements set out in Article 23 of the Commission Directive 2010/43/EU**.

(c) They do not cause the UCITS to diverge from its investment objectives as laid down in the UCITS' fund rules, instruments of incorporation or prospectus.

2. Techniques and instruments which comply with the criteria set out in paragraph 1 and which relate to money market instruments shall be regarded as techniques and instruments relating to money market instruments for the purpose of efficient portfolio management as referred to in Article **51(2) of Directive 2009/65/EC** ~~**21(2) of Directive 85/611/EEC**~~.

3. The techniques and instruments referred to in this Article shall comply with the requirements set out in the Directive 2009/65/EC.

Article 12

Article **53(1) of Directive 2009/65/EC** ~~**22a(1) of Directive 85/611/EEC**~~

Index replicating UCITS

1. The reference in Article **53(1) of Directive 2009/65/EC** ~~**22a(1) of Directive 85/611/EEC**~~ to replicating the composition of a stock or debt securities index shall be understood as a

reference to replication of the composition of the underlying assets of the index, including the use of derivatives or other techniques and instruments as referred to in Article **51(2) of Directive 2009/65/EC** ~~21(2) of Directive 85/611/EEC~~ and Article 11 of this Directive.

2. The reference in the first indent of Article **53(1) of Directive 2009/65/EC** ~~22a(1) of Directive 85/611/EEC~~ to an index whose composition is sufficiently diversified shall be understood as a reference to an index which complies with the risk diversification rules of Article **53** ~~22a~~ of that Directive.

3. The reference in the second indent of Article **53(1) of Directive 2009/65/EC** ~~22a(1) of Directive 85/611/EEC~~ to an index which represents an adequate benchmark shall be understood as a reference to an index whose provider uses a recognised methodology which generally does not result in the exclusion of a major issuer of the market to which it refers. **This criterion is fulfilled where the index providers and the indices are included in the ESMA register under the Regulation (EU) 2016/1011.**

4. ~~T~~he reference in the third indent of Article **53 of Directive 2009/65/EC** ~~22a(1) of Directive 85/611/EEC~~ to an index which is published in an appropriate manner shall be understood as a reference to an index which fulfils the following criteria:

(a) it is ~~accessible~~ **made available** to the public;

(b) the index provider is independent from the index-replicating UCITS.

Point (b) shall not preclude index providers and the UCITS forming part of the same economic group, provided that effective arrangements for the management of conflicts of interest are in place.

The criteria set out in this paragraph are fulfilled where the index providers and the indices are included in the ESMA register under the Regulation (EU) 2016/1011.

5. The replicated index shall not be composed of assets other than those referred to Article 50(1) or assets that are backed by, or linked to the performance of, other assets which differ from those referred to in Article 50(1) of the Directive 2009/65/EC. For the sole purpose of the 10% limit set out in Article 50(2)(a) of that Directive, the replicated index may also be composed of assets other than the ones listed in Article 50(1) of Directive 2009/65/EC.