



European Securities and
Markets Authority

Final Report

Report on highly liquid financial instruments for CCP investment policies



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1 Executive Summary

Reasons for publication

ESMA was originally mandated to submit a report to the European Commission (EC) by 18 May 2020 on whether the list of financial instruments that are considered highly liquid with minimal market and credit risk for CCP investments, in accordance with Article 47 of EMIR, could be extended and whether that list could include one or more money market funds authorised in accordance with Regulation (EU) 2017/1131 of the European Parliament and of the Council¹ (hereafter referred to as the 'MMFR').

Following the market turmoil in March and April 2020 due to the COVID-19 pandemic, ESMA had decided to pause its work in order to better analyse the sources of the liquidity strains observed in the short-term funding market.

Based on the lessons learned from the crisis, ESMA decided to resume its work and issued a consultation paper on 19 November 2021 in order to receive additional feedback on the implications of potential changes to investment policies for CCPs and the broader market. The consultation ended on 24 January and ESMA received 8 responses.

The Final Report takes into account the feedback provided by the respondents to the consultation and notes the view of the Securities and Markets Stakeholder Group (SMSG).

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Section 3 reviews the existing international and EU requirements on CCP investment policies and provides background on the legal mandate and the scope of the Report. Section 4 provides a brief overview of CCP investment trade-offs, requirements and practices across the globe. Section 5 covers the feedback received to the consultation and ESMA's views on a potential extension of the list of financial instruments deemed highly liquid for CCP investments, including on MMFs. Section 6 outlines further feedback received by stakeholders on CCP cash holdings.

Next Steps

ESMA is submitting the Final Report to the European Commission. ESMA reserves itself the right to propose potential changes to the relevant Regulatory Technical Standards (RTS) or additional implementing guidance such as Q&As or Opinions, if and when necessary.

¹ Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds (known as 'MMFR') (OJ L 169, 30.6.2017, p.8)



2 Legislative references, abbreviations and definitions

Legislative references

<i>EMIR</i>	European Market Infrastructures Regulation – Regulation (EU) No 648/2012 of the European Parliament and Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (OJ L 201, 27.7.2012, p. 1)
<i>EMIR Refit</i>	Regulation (EU) 2019/834 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 648/2012 as regards the clearing obligation, the suspension of the clearing obligation, the reporting requirements, the risk-mitigation techniques for OTC derivative contracts not cleared by a central counterparty, the registration and supervision of trade repositories and the requirements for trade repositories (OJ L 141, 28.5.2019, p. 42–63)
<i>EMIR Delegated Regulation</i>	153/2013 Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 supplementing Regulation (EU) 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards for central counterparties (OJ L 52, 23.2.2013, p.41)

Abbreviations

<i>CCP</i>	Central Counterparty
<i>CPMI</i>	Committee on Payments and Market Infrastructures
<i>EBA</i>	European Banking Authority
<i>ECB</i>	European Central Bank
<i>ESMA</i>	European Securities and Markets Authority
<i>ESRB</i>	European Systemic Risk Board
<i>FSB</i>	Financial Stability Board
<i>IOSCO</i>	International Organisation of Securities Commissions
<i>MMF</i>	Money Market Fund
<i>RTS</i>	Regulatory Technical Standards

3 Background and scope of the mandate

3.1 International standards

1. The CPMI-IOSCO Principles for Financial Market Infrastructures² (PFMIs) are the international standards for FMIs, including CCPs, issued to strengthen and preserve financial stability.
2. Principle 16 on custody and investment risks states that *“an FMI should safeguard its own and its participants’ assets and minimise the risk of loss on and delay in access to these assets. An FMI’s investments should be in instruments with minimal credit, market, and liquidity risks.”* It further adds that *“an FMI’s investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors.”*
3. The level of stringency for CCP investments is deliberate, as the PFMI establishes distinct and slightly less stringent standards for the collateral collected by the CCP from its members in accordance with Principle 5. While it requires that *“the FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks”*, FMIs can accept a broader range of collateral as long as the FMI applies adequate haircut and concentration limits. Most importantly, Principle 5 does not limit investments secured by or claims on high-quality obligors.
4. Similarly, Principle 16 on investment risk requires that *“these investments should allow for quick liquidation with little, if any, adverse price effect”*, while Principle 5 on collateral states that FMIs should avoid assets which cannot be liquidated *“without significant adverse price effects.”*
5. In effect, the PFMI establish a hierarchy by which the investments of CCPs have to follow the most stringent rules to avoid reintroducing market or credit risk into the CCP.

3.2 EMIR requirements for CCP investments

6. EMIR is in line with the PFMI as Article 47 of EMIR, which deals with the investment policy of CCPs, closely follows Principle 16 and states that *“a CCP shall invest its financial resources only in cash or in highly liquid financial instruments with minimal market and credit risk. A CCP’s investments shall be capable of being liquidated rapidly with minimal adverse price effect.”*
7. With respect to the definition and scope of highly liquid financial instruments, ESMA was mandated to develop draft RTS specifying the conditions applicable to financial instruments for them to be considered highly liquid and bearing minimal credit and market risk as referred to in paragraph 1 of Article 47, after consulting the EBA and the

² CPMI-IOSCO, [Principles for financial market infrastructures](#), 2012

ESCB. The EMIR Delegated Regulation, based on ESMA's RTS, was endorsed and then entered into force in 2013.

8. Article 43 of the EMIR Delegated Regulation requires that financial instruments in which the CCP invests to be *“debt instruments meeting each of the conditions set out in Annex II.”*

The Annex II lists the conditions applicable to highly liquid financial instruments:

- “(a) they are issued or explicitly guaranteed by:*
- (i) a government;*
 - (ii) a central bank;*
 - (iii) a multilateral development bank as listed under Section 4.2 of Part 1 of Annex VI to Directive 2006/48/EC;*
 - (iv) the European Financial Stability Facility or the European Stability Mechanism where applicable.*
- (b) the CCP can demonstrate that they have low credit and market risk based upon an internal assessment by the CCP. In performing such assessment the CCP shall employ a defined and objective methodology that shall not fully rely on external opinions and that takes into consideration the risk arising from the establishment of the issuer in a particular country;*
- (c) the average time-to-maturity of the CCP's portfolio does not exceed two years;*
- (d) they are denominated in one of the following currencies:*
- (i) a currency the risks of which the CCP can demonstrate that it is able to manage; or*
 - (ii) a currency in which the CCP clears transactions, in the limit of the collateral received in that currency;*
- (e) they are freely transferable and without any regulatory constraint or third party claims that impair liquidation;*
- (f) they have an active outright sale or repurchase agreement market, with a diverse group of buyers and sellers, including in stressed conditions and to which the CCP has reliable access;*
- (g) reliable price data on these instruments are published on a regular basis.”*

9. Furthermore, Annex II states that derivative contracts can also be considered invested in if they are entered into for the purpose of:

- “(a) hedging the portfolio of a defaulted clearing member as part of the CCP's default management procedure; or*

(b) *hedging currency risk arising from its liquidity management framework established in accordance with Chapter VIII.*

Where derivative contracts are used in such circumstances, their use shall be limited to derivative contracts in respect of which reliable price data is published on a regular basis and to the period of time necessary to reduce the credit and market risk to which the CCP is exposed.”

3.3 Legal basis for the Report

10. Under Article 85(3a(e)) of EMIR Refit, ESMA has been mandated to provide a Report to the European Commission on whether the list of financial instruments that are considered highly liquid with minimal market and credit risk, in accordance with Article 47 of EMIR, could be extended and whether that list could include one or more money market funds (MMFs) authorised in accordance with EU Regulation 2017/1131³ on money market funds (or ‘MMFR’).
11. While initially due by 18 May 2020, ESMA had decided to temporarily pause its work following the market turmoil in March and April 2020 due to the COVID-19 pandemic, in order to better analyse the sources of the liquidity strains observed in the short-term funding market and understand their implications for CCPs and their investment policies.

3.4 Scope of the mandate

12. The main objectives of the Report are firstly to generally assess whether the scope of financial instruments which are considered highly liquid with minimal market and credit risk should be extended and secondly to assess more specifically whether MMFs authorised under MMFR (or a sub-set of them) should be included in this list.
13. In line with the feedback received in the consultation, ESMA decided to frame the discussion to financial instruments for CCP investments in line with the Principles for Financial Market Infrastructure (PFMI) to ensure consistency with international standards. The Report outlines the expected benefits and downsides of potentially extending the list of investment possibilities for EU CCPs and the type of financial instruments which could be considered.
14. A specific focus is brought to MMFs, as well as on the timeliness of such changes given the potential impact of ongoing policy discussions on their liquidity profile.
15. Finally, the Report also covers the feedback received by stakeholders on cash holdings, while the mandate in EMIR Refit focuses on the list of financial instruments eligible for CCP cash reinvestments, ESMA finds these policy choices are linked with the available

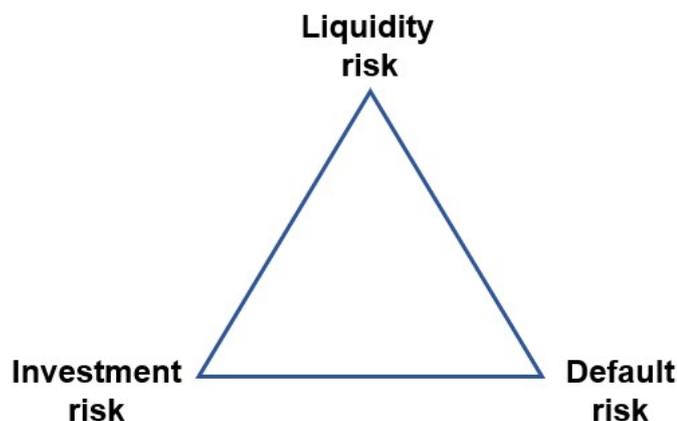
³ Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds (Text with EEA relevance, [EU OJ](#))

options to CCPs to secure, hold, or deposit cash and has therefore included this feedback in this Report.

4 CCP investment policies

4.1 CCP investment policy trade-offs

16. Different factors play into CCP investment strategies which are subject to trade-offs to address different risks, including liquidity, default and investment risks, all this within the limits of the applicable regulatory requirements.
17. While CCPs have a strong interest in holding their financial resources in the most liquid form possible (i.e. cash) to absorb potential losses, this interest is tempered by the default risk of the entity where the cash is deposited, with possibilities ranging from central bank accounts to commercial bank accounts with or without secured lending arrangements, with an increasing risk of potential default.
18. However, not all CCPs may have access to central bank facilities, either for regulatory reasons (due to the added cost of obtaining a banking license or to the fact that the local central bank does not wish to take on CCP risk) or because the financial instruments cleared by the CCP are not denominated in the currency of the local central bank. While Variation Margin (VM) is generally paid in the currency of the financial instruments to avoid adding FX risk, CCPs typically accept Initial Margin (IM) payments in other currencies so that they can keep on clearing after their FX domestic market closes.
19. In addition, the CCP needs to consider the costs linked to the service provided (interest rates in central bank accounts, costs of commercial bank accounts and most often costs of secured lending arrangements). While these costs are often passed on to Clearing Members by charging interest on the cash margins, there is always a risk that the realized rate from the investment is lower than expected creating losses for the CCP. On the other hand, reinvesting cash in certain financial instruments often provide a more profitable option potentially creating a potential conflict for the CCP as it exposes itself and its members to higher liquidity and market risks.



20. Finally, ESMA notes that the diversification of investments possibilities can reduce risks, via the mitigation of collateral concentration and a reduction of the counterparty credit risk.
21. These complex trade-offs are considered when setting regulatory requirements for CCP investments which in effect frame CCP investment possibilities to a set list of financial instruments deemed sufficient liquid with low market and credit risks.

4.2 CCP investment requirements

22. As outlined in Section 3, EMIR requires EU CCPs to invest their financial resources only in cash or in highly liquid financial instruments with minimal market and credit risk. Under Annex II of the EMIR Delegated Regulation, highly liquid instruments for CCP investments are currently restricted to debt instruments respecting a list of cumulative conditions on the issuer or guarantor, the CCP's credit and market risk assessment, their average time-to-maturity, the denomination, transferability, marketability or reliability of price data.
23. While the PFMI standards have strived to deliver common minimum standards for CCPs across the globe, ESMA had identified different regulatory practices across jurisdictions, in part due to the principle-based vs. rule-based nature of their requirements, in part to address local market structures, supervisory practices and domestic preferences.
24. Indeed, most jurisdictions reviewed require that CCPs invest their financial resources solely in cash or in liquid financial instruments with a low market and credit risk. However, a number of them (such as Hongkong⁴ and Switzerland⁵) do not further specify which financial instruments are covered.
25. Certain jurisdictions are however more precise regarding the applicable requirements limiting these as per the PFMI to investments "*secured by, or be claims on, high-quality obligors*" (Australia⁶), while others list the type of financial instruments accepted including cash and government bonds, and in the case of Singapore⁷, certificates of deposits and money market funds.
26. One jurisdiction explicitly supports an undifferentiated approach for the investments of the CCP's financial resources and the collateral posted by its members. The list of acceptable requirements by the US Commodity Futures Trading Commission (CFTC)⁸ cover government bonds, certificate of deposits, commercial paper, certain corporate notes temporarily guaranteed by the US and money market funds, while that of the US Securities and Exchange Commission (SEC) is not as detailed.

⁴ [Securities and Futures Ordinance](#) (cap 571)

⁵ [FMIO SR 958.11 - Ordinance of 25 November 2015 on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading \(Financial Market Infrastructure Ordinance, FMIO\) \(admin.ch\)](#)

⁶ [Financial Stability Standards for Central Counterparties](#) (standard 15)

⁷ [Securities and Futures \(Clearing Facilities\) Regulations 2013 - Singapore Statutes Online \(agc.gov.sg\)](#) (Para 25)

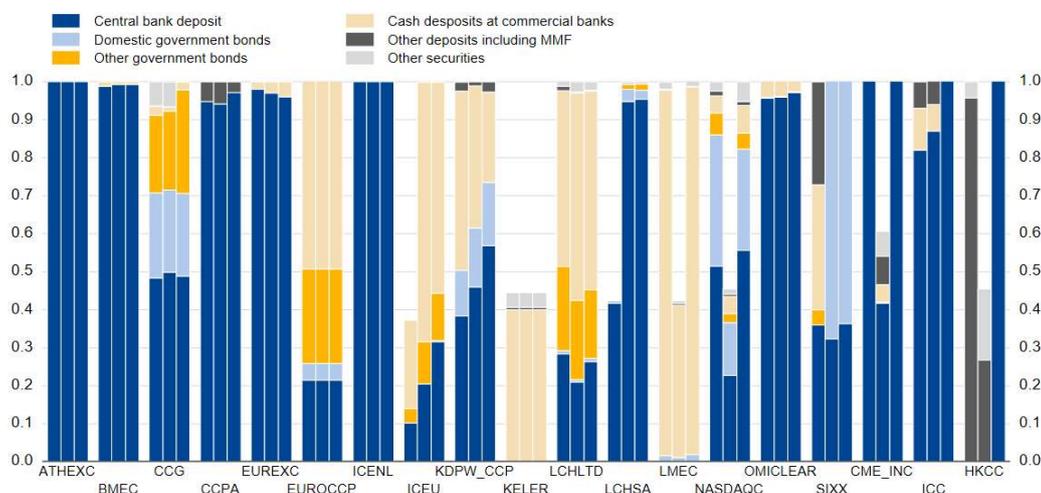
⁸ [17 CFR § 1.25 - Investment of customer funds](#)

27. However, ESMA notes that following a review of the regulatory framework for MMFs by the SEC, the CFTC issued clarifying guidance under the form of the No-Action Relief Letter No. 16-68⁹ stating that investment in MMFs will not be allowed in Prime MMFs, and in Government MMFs which chose to be subject to liquidity fees or redemption restrictions.
28. Stakeholders responding the consultation shared this understanding and agreed that the spectrum of jurisdictions covered was sufficiently diverse and representative of CCP requirements across the globe.

4.3 CCP practices

29. As part of its analysis, ESMA also found that while regulatory requirements could limit the investment choices for CCPs, a broader spectrum of CCP investment options does not necessarily imply a divergence of CCP practices, as CCPs across the world appear to have a preference for central bank deposits as the safest mean to deposit cash.
30. Given the time lapse between the drafting of the consultation and that of this Report, ESMA has decided to review the available data to identify any significant changes in terms of CCP practices regarding cash reinvestment choices.

8.10 Cash reinvestment policies
Breakdown info (last observation: Q2 2021)



Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.
Note: This indicator shows the investment strategies applied by a CCP. In line with EMIR requirements, a CCP could either deposit the cash received from clearing members in a central bank or other financial institution, or reinvest it in securities, including domestic or foreign government bonds. 'Other deposits' include unsecured deposits at commercial banks, deposits in MMF and in other forms. 'Other securities' include agency bonds, state/municipal bonds and other instruments. ECC's values are not available.

Source: ESRB Risk Dashboard, 8.10 Cash reinvestment policies, December 2021

31. ESMA notes that CCP cash reinvestment preferences have remained stable over time, with 7 out of 12 EU CCPs, investing more than 90% of their financial resources in central bank deposits, while 3 EU CCPs have these levels set at around half of their investments and 2 EU CCPs below 30%. Two EU CCPs use secured cash deposits at commercial

⁹ <https://www.cftc.gov/csl/16-68/download>

banks as their main way of investing cash, while three EU CCPs also have recourse to domestic and other government bonds. No EU CCP invests more than 10% of its financial resources in other securities or other deposits.

32. With respect to other jurisdictions, the UK CCPs present the most diversified investment choices with the two Tier 2 CCPs investing more half of their resources in secured cash held at commercial banks and one Tier 1 CCP investing all its resources into secured cash deposits held at commercial banks.
33. While US CCPs continue massively investing their financial resources in central bank deposits, the Swiss and Hong Kong CCPs appear to have diversified somewhat their investment policies by having a greater recourse to central bank deposits and government bonds.
34. The broad majority of respondents agreed with ESMA's findings and also pointed that some differences in preferences across jurisdictions could be linked to different monetary policy cycles impacting the costs of using certain types of deposits. Another respondent highlighted the unequal access to central bank deposits, in particular in currencies which are not the one of the home central bank.

5 Extension of the list of highly liquid financial instruments for CCP investments

5.1 Framing ESMA's policy approach

5.1.1 Background and proposed approach

35. The regulatory requirements on the type of financial instruments in which CCPs can reinvest their cash has important implications on their investment strategies, as it limits and frames the investment options of CCPs.
36. Expanding the list of financial instruments for CCP investments – or loosening the conditions attached to their qualification as highly liquid – requires careful assessment as it may increase the market and credit risk of the CCP, thereby weakening its robustness and potentially the resilience of EU financial markets. In addition, the higher profitability prospects of the investments in riskier and less liquid products may conflict with the CCP's interest in maintaining a conservative approach to its cash reinvestment policy in line with its risk management strategy.
37. However, in some cases, the diversification of investments can reduce risks, via the mitigation of collateral concentration and counterparty credit risk. For example, diversifying the pool of accepted financial instruments for CCP cash reinvestments may provide safe investment alternatives from a risk management perspective compared to the safe keeping of cash on commercial bank accounts via unsecured or secured arrangements, notably when access to central bank accounts is not possible.

38. The mandate provided under EMIR Refit potentially opens a vast review as ESMA is asked to consider an extension of all types of financial instruments which could be considered highly liquid with minimal market and credit risk and suitable for CCP investments. Therefore, ESMA proposed two key pillars in its consultation to frame the policy discussion.
39. First, ESMA proposed to limit the review of potentially suitable financial instruments for CCP investments in line with the Principles for Financial Market Infrastructure (PFMI) to ensure consistency with international standards and avoid excessive cross-border regulatory divergence. In this context, ESMA suggested limiting its review to *“investments secured by or claims on high-quality obligators”* in line with Principle 16 of the PFMI.
40. On this basis, ESMA proposed to restrict its analysis in this section to debt instruments and focus on the suitability of the conditions defining highly liquid financial instruments with minimal credit and market risk currently outlined in Annex II of the EMIR Delegated Regulation.
41. Second, ESMA proposed that any expansion of the list or loosening of its conditions defining *“highly liquid with limit credit and investment risk”* can only be justified from a policy perspective if the benefits outweigh the identified risks.

5.1.2 Feedback from respondents and ESMA’s approach

42. A large majority of respondents agreed with ESMA’s proposals to frame the policy discussion on a possible extension of the list of highly liquid financial instruments within the CPMI-IOSCO PFMI. Respondents welcomed ESMA’s aim to avoid unnecessary divergence from the international standards and positively viewed potential further alignments with other definitions of highly liquid instruments in the EU financial legislation.
43. Respondents also agreed with ESMA’s approach to enact policy changes where benefits outweigh risks. However, one respondent expressed concerns that ESMA’s approach would limit the ability of CCPs of investing in MMF shares.
44. Based on the feedback received, ESMA decided to maintain its double approach to focus on the review of the conditions defining highly liquid financial instruments with minimal credit and market risk as currently outlined in Annex II of the EMIR Delegated Regulation.

5.2 Public entities

5.2.1 Background and proposed approach

45. Annex II of the EMIR Delegated Regulation lists a first condition (a) requesting that the financial instrument be issued or explicitly guaranteed by:
 - (i) a government;

- (ii) a central bank;
 - (iii) a multilateral development bank as listed under Section 4.2 of Part 1 of Annex VI to Directive 2006/48/EC;
 - (iv) the European Financial Stability Facility or the European Stability Mechanism where applicable.
46. ESMA noted that since the EMIR Delegated Regulation entered into force in 2013, the list of public entities covered in Annex II had not been modified and therefore may need to be updated to reflect the latest developments on the debt market, and the related credit and liquidity risks.
47. ESMA therefore requested feedback from stakeholders on whether the list of public entities issuing or guaranteeing debt instruments should be extended.
48. ESMA specifically requested feedback as to whether the list of international organisations should be expanded to explicitly include the EU, in addition to the EFSF and the ESM, in light of the ongoing issuance of EUR 800 billion of EU debt in current prices on capital markets by end 2026 as part of NextGenerationEU¹⁰ to finance emergency and recovery measures following the COVID-19 pandemic.
49. ESMA had noted that the EU bond issuance already completed had benefitted from a high degree of market demand and confidence in its credit quality, as confirmed by the credit ratings of the EU and the oversubscription of the debt issuance, and of high levels of market depth and liquidity, as the borrowing amount for EU NextGen will amount to 5% of the EU GDP, indicating that these instruments would bear minimal credit and market risk in line with other sovereign issuances in the EU.
50. ESMA also enquired whether the list of accepted public entities should also include international organisations like the International Monetary Fund (IMF) and Bank for International Settlements (BIS), which are already explicitly included in the Capital Requirements Regulation¹¹ (CRR) definitions.
51. Based on its analysis, ESMA found that the term “government” was sufficiently broad to cover the issuance of regional or local public debt, as long as the debt instruments are explicitly backed by the central government. ESMA however noted that the conditions attached to such backing under the CRR are more explicit and required further feedback from stakeholders as to whether similar clarification around the absence of difference in terms of risks regarding the revenue-raising powers and the existence of specific institutional arrangements to limit the risk of default would be beneficial.
52. Similarly, ESMA requested feedback from stakeholders as to whether the EMIR Annex II should add the condition that government issued or backed debt be only accepted from

¹⁰ https://ec.europa.eu/info/strategy/eu-budget/eu-borrower-investor-relations/nextgenerationeu_en

¹¹ Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, [Consolidated version](#)

third-countries deemed to have equivalent regulatory and supervisory arrangements by the European Commission.

53. Finally, ESMA enquired whether the list of multilateral development banks listed under Article 177(2) of CRR and referred to in the EMIR Annex was suitable.

5.2.2 Feedback from respondents

54. With regards to the extension of the list of public entities to the EU, all respondents concurred that such an addition would be helpful. Similar support was expressed for the inclusion of the IMF and the BIS.
55. With regards to the inclusion of regional governments and local authorities, respondents generally concurred with ESMA's analysis that the wording should already be broad and general enough to include financial instruments issued or guaranteed by these entities. However, three respondents believed that an explicit inclusion of regional government would nonetheless be helpful so as to give a clear signal that regional governments backed by central governments are covered.
56. Two respondents suggested aligning condition a(i) of Annex II of the EMIR Delegated Regulation on Article 10 of the Liquidity Coverage Ratio (LCR) Delegated Regulation, in order to ensure that *“exposures to regional governments or local authorities shall be treated as exposures to the central government in whose jurisdiction they are established where there is no difference in risk between such exposures because of the specific revenue-raising powers of the former, and the existence of specific institutional arrangements the effect of which is to reduce their risk of default”* per Article 115(2) of the CRR.
57. Regarding further conditions which would require third countries to have equivalent regulatory and supervisory arrangements, most respondents deemed these additions unnecessary as CCPs are already requested to demonstrate that the eligible financial instruments *“have low credit and market risk based upon an internal assessment by the CCP”* under condition (b) of Annex II.
58. One respondent pointed out that Art. 114(7) of CRR rather enabled exposures against certain governments and central banks of a qualifying third country to benefit from a lower capital treatment, if: (i) the third party supervisory and regulatory arrangements at least equivalent to those applied in the Union, (ii) the competent authorities of the third country assign a risk weight to exposures to their government and central bank lower than those indicated in Art. 114 (1) and (2) of CRR, and (iii) the exposure is funded in the domestic currency.
59. On this basis, the respondent proposed to introduce an optionality within Annex II for CCPs to invest in financial instruments of governments and central banks of EU Member States and the ECB or of a third country which applies supervisory and regulatory arrangements at least equivalent to those applied in the Union as determined by the European Commission and where the competent authorities assign a 0 % risk weight to

exposures to their government and central bank denominated and funded in the domestic currency.

60. All respondents believed that the current list of multilateral developments banks cross-referred in the CRR to be sufficiently up-to-date.
61. Based on its analysis and the above feedback, ESMA considers it appropriate to pursue further work to review the RTS to explicitly include the EU, the IMF and the BIS as part of the list of qualifying public issuers or guarantors.
62. ESMA will also consider how to appropriately frame the inclusion of regional and third country debt instruments, including the relevant cross-references to the CRR in the RTS.
63. ESMA notes that while references to the list and conditions laid out in CRR may seem appropriate to address credit risk, it should be noted that the liquidity horizon of a CCP (a few days) is much shorter than in the bank LCR (30 days). Therefore, ESMA will further assess whether additional conditions would be necessary to ensure that these assets can be liquidated, from a market and operational standpoint, in a matter of a few days.
64. Finally, ESMA believes the list of multilateral banks under CRR to be adequate though it notes that the reference to Directive 2006/48/EC would need to be updated for clarity.

5.3 Private entities

5.3.1 Background and ESMA approach

65. As part of its consultation, ESMA had noted that condition (a) in Annex II does not include debt issued or guaranteed by private entities, unlike the definition of highly liquid assets under CRR which also includes covered bonds that satisfy certain conditions as Level 1 assets and certain corporate debt securities (including Commercial Paper) as Level 2A assets which are subject to a minimum mandatory 15% haircut under CRR.
66. However, ESMA also noted that the Basel III framework considers both corporate debt securities and covered bonds as Level 2A assets, as they typically do not have the same credit quality, market depth and liquidity as other debt instruments issued or backed by public entities, making them more subject to volatility and changes in liquidity conditions.

5.3.2 Feedback from respondents and ESMA approach

67. Respondents expressed mixed views as to a potential extension of the list of highly liquid financial instruments to private entities.
68. Two respondents supported that the conditions defining highly liquid financial instruments be extended to include covered bonds, on the basis that these are eligible as part of the CCP's eligible collateral under Annex I and recognised as High-Quality Liquid Assets (HQLA) in the Liquidity Coverage Ratio (LCR) in CRR. The respondents

noted that expanding highly liquid financial instruments to include covered bonds would increase the investment space for CCPs as well as facilitate diversification among investments, especially for certain regions which have a more limited market of sovereign debt available for CCP investments.

69. The majority of respondents agreed that such an extension should in any case be accompanied by appropriate concentration limits and haircuts such as those used for the calculations of CCP's liquid resources (as per Articles 32-34 of the EMIR Delegated Regulation).
70. ESMA finds that further research in cooperation with the EBA and the ESRB on the potential benefits and risks of an extension of the list of eligible instruments to covered bonds would be beneficial.
71. ESMA also notes that the EU framework for the issuance and public supervision of covered bonds has recently been reviewed in 2019. Such revisions could add further assurances as the Directive now provides a common definition of covered bonds, including their structural features, and helps identify high-quality assets that can be considered eligible in the pool backing the debt obligations.
72. This research should also consider whether certain minimum haircuts or concentration limits would be necessary, which maturities would be most appropriate and whether certain additional requirements would need to be met to avoid potential conflicts of interest (for example, regarding covered bonds issued by Clearing Members of the CCP or related entities).
73. ESMA however notes that an extension to other types of money-market instruments or corporate debt securities (including Commercial Paper) did not receive support and would therefore discard them from further research.

5.4 CCP Best practices

5.4.1 Background and proposed approach

74. Condition (b) in Annex II requires that *“the CCP can demonstrate that they have low credit and market risk based upon an internal assessment by the CCP.”*
75. EMIR Q&A¹² 22 provides some additional guidance on the adequacy of collateral policies and procedures to monitor on an on-going basis liquidity, credit risk, and market risk. The Q&A recommends that CCPs develop risk indicators, ensure sufficient data coverage, develop and maintain governance processes on accepted collateral and review these policies regularly.

¹² ESMA, [EMIR Q&A](#), September 2021

76. These appear to be in line with certain best practices in the industry¹³ for CCP credit risk management which provide additional insights regarding the development of counterparty rating systems (usually 'scorecard models') and suitable early warning indicators (EWIs) to monitor credit risk including against external rating agency downgrades.
77. ESMA notes however that the Q&A focuses mainly on collateral management policies and does not provide specific guidance for CCP investment policies, nor does it provide common rules or guidelines under EMIR as to how to evaluate or address reliance on external opinions.
78. ESMA therefore asked for additional feedback from stakeholders, notably as to whether further guidance on how NCAs should assess these provisions was necessary, notably with regards to the "*methodology that shall not fully rely on external opinions.*"

5.4.2 Feedback from respondents and ESMA approach

79. ESMA received overall limited responses to this question. Two respondents indicated they believe that the current requirements and guidance are adequate.
80. A responding CCP explained the risk mitigants introduced as part of its investment policy. To address credit risk, the respondent applies placement limits as well as strict admission criteria on treasury counterparties. A credit rating is based on an internal assessment developed by the CCP, while external ratings are used to benchmark the internal methodology and to validate the individual rating as mentioned above. The respondent noted that CCPs had limited exposures to market risks given strict investment policies.
81. ESMA had noted in its consultation, that while most EU CCPs have developed collateral management systems which include internal checks to manage the market and credit risks of the accepted collateral and the CCP's reinvestments, some CCPs appear to have outsourced these functions within the same group or to third-party providers (in addition to external credit ratings) to avoid overreliance and potentially procyclical effects of rating corrections. This section triggered no reactions or comments from stakeholders.
82. ESMA would nonetheless like to better understand what practices currently exist across CCPs to manage investments risks beyond those outlined in the 2018 Peer Review on collateral and funding arrangements and how dependent some CCPs may be on external ratings or external service providers. ESMA will propose further work within the CCP Supervisory Committee to ensure a harmonised supervisory approach among NCAs supervising EU CCPs.

¹³ EACH, [Best practices in CCP credit risk](#), May 2021

5.5 Maturity

5.5.1 Background and ESMA proposed approach

83. Condition (c) limits the average time to maturity of the CCP's portfolio to two years.
84. ESMA understands the average time-to-maturity to be generally calculated as the average remaining time to maturity for each financial debt instrument weighted by their percentage value in the CCP's portfolio.
85. In effect, rather than limiting the average time to maturity per debt instruments, the condition applies at CCP portfolio level, providing added flexibility to the CCP whilst overall limiting credit risk.
86. ESMA requested feedback from respondents as to whether the two-year time period was appropriate and whether the calculation methodology should be specified.

5.5.2 Feedback from respondents and ESMA proposed approach

87. Two respondents considered the average time-to-maturity of two years for the CCP's investment portfolio to be too strict, especially in the current monetary policy environment, with one respondent proposing to extend the accepted maturity from 2 to 5 years.
88. Another respondent proposed that, with regard to the calculation of the average time-to-maturity on the CCP portfolio level, non-invested funds that could have been invested under the existing limits for the investment portfolio but are instead deposited on cash accounts be considered in the calculation, since they also contribute to the aim of limiting the interest sensitivity of the CCP portfolio and in this regard are similar to debt instruments with a remaining maturity of one day. The respondent argued that not considering uninvested cash (and especially cash on central bank accounts) sets the wrong incentive to convert cash into debt instruments solely for the purpose of bringing down the average time-to-maturity of the CCP's debt instruments portfolio.
89. ESMA considers that an outright extension from 2 to 5 years to be a considerable departure from the current position to ensure that financial instruments are highly liquid, as longer maturities are subject to higher credit and liquidity risk.
90. It is ESMA's understanding that the maturity limits had been introduced to cover specifically financial instruments portfolio. If cash is introduced as part of this maturity calculation, ESMA is concerned that investments in very long maturities may then be possible within the 2-year average maturity requirement and therefore provide a false sense of security, whilst reintroducing credit and liquidity risk in the CCP.
91. Based on the feedback received by respondents, ESMA would advise keeping the 2-year average maturity as it is currently defined in the RTS, as it may otherwise reduce the liquidity of the CCP's portfolio.

92. However, ESMA notes that it did not receive comments as to the calculation methodology of the average time-to-maturity of portfolio investments and will tackle these aspects within the CCP Supervisory Committee's future work on how NCAs address CCP investment risks.

5.6 Other conditions

93. ESMA required feedback from respondents on whether other conditions (d), (e), (f) and (g) in Annex II should be amended. ESMA noted these were similar to the conditions outlined in Annex I on accepted collateral.
94. Two respondents indicated that a clarification of the term "liquidation" under condition (e) relates to the liquidation of collateral, and not the winding-down of company, would be helpful. One of the respondents also indicated a numbering issue with the articles in the RTS.
95. ESMA will consider addressing these issues as part of a potential review of the RTS on CCP investment policies.

5.7 Inclusion of MMFs

96. Money market funds (MMFs) are key intermediaries in the financial system. They provide two main economic functions to the financial system and real economy: they (i) provide short-term funding to issuers, mainly banks, corporations, and governments; and (ii) are primarily used as cash management vehicles by investors.
97. However, the market events following the COVID-19 lockdowns, and notably the liquidity strains observed on short-term funding markets, have again raised the issue of possible outstanding vulnerabilities in money market funds, despite the regulatory reforms following the global financial crisis, which may need to be addressed by a review of their regulatory framework.
98. ESMA launched in March 2021 a Consultation Report discussing the potential reforms of the EU MMF regulatory framework that could be envisaged, in light of the lessons learnt during the COVID-19 crisis in March 2020, and issued on 14 February 2022 an Opinion¹⁴ containing proposals to improve the resilience of MMFs by addressing in particular liquidity issues and the threshold effects for constant net asset value (CNAV) MMFs.
99. Since then, the European Commission has launched a targeted consultation¹⁵ on the functioning of the Money Market Fund Regulation running until 13 May 2022 to help

¹⁴ [ESMA34-49-437 Final Report](#), ESMA opinion on the review of the Money Market Fund Regulation, 14 February 2022

¹⁵ https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/2022-money-market-funds-consultation-document_en.pdf

prepare its Report to the co-legislators assessing the adequacy of this Regulation from a prudential and economic point of view.

100. The section of this Report however focuses solely on the suitability of MMFs for cash investments from the CCP perspective. While it considers the impact of potential regulatory changes on the appropriateness of MMFs for CCP investments, it does not cover the impact of the said potential reforms on MMFs, their investors or the broader financial system.

5.7.1 Background and proposed approach

101. Under Article 85(3a(e)) of EMIR¹⁶, ESMA is specifically requested to consider whether the list of highly liquid financial instruments could include one or more money market funds (MMFs) authorised in accordance with EU Regulation 2017/1131¹⁷ on money market funds (or 'MMFR').
102. Based on this mandate, ESMA could potentially identify a specific category of MMFs suitable for CCP investments which would respect the conditions in EMIR defining highly liquid CCP investments with minimal credit and market risk.
103. The MMFR establishes three categories of short-term MMFs: 1) the Constant Net Asset Value (CNAV) funds which are required to invest 99.5% of their assets in public debt, reverse repo backed by public debt and cash, and are permitted to maintain a constant dealing NAV; 2) the Variable NAV (VNAV) funds which are allowed to let their NAV fluctuate and invest in less liquid assets (such as commercial paper and certificates of deposit); and 3) the Low Volatility NAV funds which act as a hybrid between both models as it allows funds to offer a stable NAV (as long as the market NAV does not deviate from the dealing NAV by more than 20 bp), while investing in a broader range of instruments.
104. However, as part of its analysis, ESMA found it challenging to identify a category of MMFs meeting all the conditions defining highly liquid financial instruments as outlined under Annex II of the EMIR Delegated Regulation, especially as these conditions are cumulative.
105. For example, while Public Debt CNAVs with their requirement to invest 99.5% of their assets in public debt could potentially be considered as meeting condition (a) on debt instruments issued or backed by public entities, the possibility for Public Debt CNAVs to use liquidity management tools to maintain stable NAVs does not appear to meet condition (e) on transferability of financial instruments.
106. ESMA views the condition on transferability to be an essential condition to ensure that the financial instruments be easily liquidated, both from a CCP cash reinvestments and

¹⁶ Regulation (EU) 2019/834 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 648/2012, [EU OJ](#)

¹⁷ Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds (Text with EEA relevance, [EU OJ](#))

CCP collateral management perspective. In practice, any rule impacting the liquidity profile of the funds (gates, fees, suspensions) would be seen as a regulatory constraint on the ability to redeem cash and therefore necessarily have an impact on the suitability of these assets for CCPs. In this context, only MMFs without rules potentially constraining the ability to redeem cash could be deemed eligible from a CCP perspective.

107. Conversely, VNAV funds which are allowed to let their NAV fluctuate and therefore do not use redemption gates or fees, are not required to invest only in financial instruments issued or backed by public entities, and therefore do not meet condition (a).
108. Similarly, ESMA views condition (a) on public entities issuing or backing the accepted financial instruments as an essential criterion regarding the credit quality of the issuer and the liquidity of the instrument, even in times of crisis, to limit the possibility for the CCP's financial resources to lose in value, potentially exposing the CCP and its Clearing Members.
109. ESMA concluded that there is currently no category of MMFs under the EU MMFR which respects simultaneously all conditions on highly liquid financial instruments under EMIR, and in particular condition (a) on public entities acting as a guarantor and issuer to those financial instruments and (e) on the free transferability of the financial instruments.
110. ESMA also noted that the ongoing policy discussions on MMF reforms both at the internal and EU-level touch very broad and fundamental dimensions of MMFs (such as their composition, redemption gates, fees, buffers and others), as well as the way requirements are tailored to one type of MMF or applied across the sector, indicating that the regulatory framework could change in the future.

5.7.2 Feedback from respondents

111. The majority of respondents supported the premise that the assets held by eligible MMFs for CCP investment should at least meet the same criteria as other financial instruments and would welcome future work by ESMA to consider whether certain types of MMFs fulfilling these conditions be eligible for CCP investments, in particular for Public Debt Constant Net Asset Value (PDCNAV) MMFs.
112. However, two respondents disagreed with the necessity of condition (e) highlighting that PDCNAV MMFs allowed to hold 99.5% of their assets in public debt in the form of short-dated government securities or short dated reverse repo collateralised by government securities, did not have recourse to gates or redemption fees during the COVID-19 related market disruption in March and April 2020.
113. While ESMA agrees this was not the case in the past crisis, there is no reason to believe that such tools would not be used in the future as these are permissible within the current regulatory framework.
114. Given the central function of CCPs in the clearing ecosystem, ESMA believes it is therefore premature to allow CCP investments in PDCNAV, especially given the ongoing



discussions at policy level, which may modify the regulatory framework attached to this category of MMFs.

115. In addition, ESMA notes that the mandate under EMIR does not allow it at this stage to consider MMFs which are not authorised under the MMFR (such as third-country MMFs), limiting the number of available options.
116. ESMA may reconsider at a later whether changes are introduced in the EU MMF regulatory framework following the MMFR Review which would make them adequate for CCP investments.

6 Cash holdings

117. While ESMA's mandate for this Report focuses on reviewing the list of highly liquid instruments eligible for CCP investments, ESMA notes that several respondents propose to review certain EMIR requirements on cash holdings.
118. In accordance with EMIR Article 47, ESMA had developed RTS specifying the highly secured arrangements for cash deposits and believes it is suitable to outline the views of the respondents on whether such arrangements require improvements, as these impact the trade-off faced by CCPs when considering cash reinvestments in highly liquid financial instruments.

6.1 Collateralisation requirements for cash

6.1.1 Eligible counterparties

119. One CCP responding indicated that it would welcome clarifications with regards to eligible counterparties and the requirement for the collateralisation of 95% of cash deposits.
120. Article 47(4) of EMIR states that cash deposits of a CCP shall be performed through highly secure arrangements with authorised financial institutions or, alternatively, through the use of the standing deposit facilities of central banks or other comparable means provided for by central banks.
121. Article 45(1)(b) of the related EMIR Delegated Regulation requires that cash deposited elsewhere than in a central bank account shall be placed with (i) an authorised credit institution as defined under Directive 2006/48/EC (since then repealed and replaced by CRR) or (ii) a third country financial institution which is subject to and complies with prudential rules considered by the competent authorities to be at least as stringent.
122. First, the respondent noted that the EMIR Q&A created some uncertainty as ESMA states under Answer 11 (b), that the counterparty to the collateralisation agreement does not need to meet the criteria under Art. 45(1) of the EMIR Delegated Regulation (i.e. does not need to be an EU credit institution or comparable third country institution), but

it “*should be [...] an authorised financial institution pursuant to Art. 47(4) EMIR*”, thereby contradicting the requirements set out in the RTS.

123. The respondent proposed to clarify that financial institutions should be understood as authorised or equivalent: credit institutions, as defined in Regulation (EU) 575/2013 (CRR); investment firms, as defined in Regulation (EU) 2019/2033, institutions for occupational retirement provision, as defined in Directive 2016/234/EC, and insurance undertakings and reinsurance undertakings, as defined in Directive 2009/138/EC.
124. ESMA agrees that the identified lack of consistency needs to be addressed and will consider future work to amend as necessary the relevant RTS and/or the Q&A.

6.1.2 95% collateralisation requirement

125. Article 45(2) of the EMIR Delegated Regulation further stipulates that where cash is maintained overnight on non-central bank accounts “*not less than 95 % of such cash, calculated over an average period of one calendar month, shall be deposited through arrangements that ensure the collateralization of the cash with highly liquid financial instruments*”.
126. The CCP responding highlighted that, in their view, funds, cash invested with a central bank should be included as part of the ratio calculation, across currencies. The CCP notes that for currencies where the CCP does not have access to central bank the 95% threshold is difficult to reach and that explicitly including all currencies in which the CCP holds cash would alleviate the requirement, whilst keeping overall stringent standards. The respondent further argues that if cash deposited with the central banks is not taken into account in the calculation of the ratio of collateralized cash deposits against unsecured cash deposits, this would provide a wrong incentive for a CCP to artificially inflate the notional of its collateralization arrangements by investing cash maintained on central bank accounts into reverse repo transactions.
127. ESMA notes however that for CCPs which hold an overwhelming majority of cash holdings in the currency where it has access central bank account, the 95% threshold could be reached overall, but with a much lower ratio of cash held in secured arrangements in currencies where it does not have access to central bank accounts, though payments may need to be done and be easily available in that given currency.
128. ESMA supports the current requirements in the RTS demanding that deposits in commercial banks be backed at 95% with highly liquid financial instruments.

6.2 Central bank accounts

129. Several CCP respondents, as well as a trade association representing CCPs, have argued in favour of a broader access by CCPs to central bank accounts. While deciding which entities have access to central bank accounts and under which conditions remains in the hands of the respective Central Bank of Issue (CBI), ESMA still notes the impact these decisions have on the broader CCP investment possibilities.

130. ESMA agrees with a certain number of advantages outlined linked to the possibility of depositing cash in central bank accounts. Respondents have mainly highlighted that access to central bank deposit facilities limit the CCP's exposure to the counterparty credit risks of default of a commercial bank, as well as reduce settlement risks, thereby reducing the overall CCP's investment risks.
131. Certain respondents have highlighted the lack of level playing field for EU CCPs regarding their possibilities to access central bank accounts and deposit cash. It is however ESMA's understanding that all EU CCPs (for which the euro is considered a relevant currency) have a TARGET-2 account which allows them to hold overnight cash balances in EUR with the Eurosystem and is not aware of similar concerns for other Union currencies.
132. ESMA understands that there are nonetheless different practices across Member States with certain imposing additional requirements, which may be duplicative and costly without these being necessarily risk reducing.
133. ESMA will continue closely liaising with central banks to follow how central bank access policies impact EU CCP's investment practices and opportunities, as well as their resilience.

6.3 Cash in vaults

134. Another option brought forward by a responding CCP is the ability to hold cash physically in vaults. Whilst the CCP acknowledges that the most preferable option to invest cash remains with central banks, the respondent believes that the current monetary policy environment makes this option economically less favourable, reducing the available amount of cash given the negative interest rates paid to the Central Banks of Issue, in particular for the euro.
135. While CCPs may reflect this by adjusting their cash handling fees or by passing on interest rates onto Clearing Members, the respondent argues that the current monetary environment should not disincentivize holding cash, which remains the most liquid option, compared to holding highly liquid securities. The responding CCP also highlighted their concern that this would put EU CCPs at a disadvantage compared to other third-country CCPs benefitting from more favorable monetary policies.
136. Under the proposed option, some of the cash available would be held physically in vaults and could be transferred back to the Central Bank at anytime to return to its electronic form. However, ESMA understands that this process may not be instantaneous, which raises questions as to the timeliness and effectiveness availability of physically held cash.
137. To address these concerns, the respondent outlines a number of safeguards including that the days needed to bring the cash back to the central bank would have to be included in the CCP's liquidity risk model, that conservative mismatch limits might apply, and to only allow the excess cover-2 liquidity to qualify for storage in the vault. In addition, the



vault would have to fulfil a certain number of security concerns, be provided by an external provider and be subject to a specific insurance.

138. Given the current evolution of the monetary policy and digitization trends, ESMA does not view this proposal as a priority area for the time being.



7 Annexes

7.1 Annex I – Legislative mandate to develop Report

Article 85 of EMIR states:

“3a. By 18 May 2020, ESMA shall submit a report to the Commission. That report shall assess:

[...]

*(e) whether the list of financial instruments that are considered highly liquid with minimal market and credit risk, in accordance with Article 47, could be extended and whether that list could include one or more money market funds authorised in accordance with Regulation (EU) 2017/1131 of the European Parliament and of the Council (*8).*

*(*8) Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds (OJ L 169, 30.6.2017, p. 8).’;”*



7.2 Annex II – Cost-benefit analysis

ESMA has not received any quantitative feedback regarding the cost-benefit analysis of extending the list of highly liquid financial instruments with limited market and credit risk. ESMA will consider providing a more detailed CBA for specific instruments as outlined in the Report.



7.3 Annex III – Securities and Markets Stakeholder Group

In accordance with Article 16 of the ESMA Regulation, ESMA has requested the advice of the Securities and Markets Stakeholder Group (SMSG). The SMSG has not provided any comment.