General remarks

The Eurosystem welcomes the ESMA consultation on the framework for money market funds. The March 2020 market turmoil, following the onset of the coronavirus (COVID-19) pandemic, highlighted key vulnerabilities in the money market fund (MMF) sector, raising questions about the effectiveness of the MMF Regulation\(^1\) introduced in 2017. Given the large footprint of MMFs in short-term funding markets, their interconnectedness with the broader financial system and their use as a cash management vehicle, regulatory reforms are needed to increase resilience in this sector. In particular, reforms should seek to strengthen the regulatory framework for MMFs from a macroprudential perspective.

Instabilities in MMFs can cause disruptions in the financial system and impair the provision of financing to the banking system and the real economy. Widespread instability in the MMF sector can severely impair market functioning and liquidity, with implications for the asset and liability management of banks and other corporations relying on short-term funding provided by MMFs. Moreover, if MMFs were to suspend redemptions during a period of increased cash needs, this could cause liquidity risks to investors relying on MMFs for cash management purposes. Therefore, it is important to ensure that MMFs remain resilient during periods of stress and do not amplify liquidity shocks in short-term funding markets. Instead, they should be resilient enough to continue to provide funding to corporates and cash management services to investors in periods of stress.

MMFs with investments in private sector debt proved particularly vulnerable during the COVID-19 shock owing to the liquidity mismatch between assets and liabilities. These funds offer claims that are redeemable at short notice (typically daily or intraday) and are invested in instruments with residual maturities of several months, such as commercial paper (CP), for which there is relatively thin secondary market trading, even in normal times. During the 2020 crisis, these MMFs proved vulnerable and lost their ability to simultaneously provide cash management

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services to investors and short-term funding to banks and non-financial corporations (NFCs).², ³

**Decisive action by central banks calmed the turmoil in financial markets in March 2020.** Dislocations in money markets posed risks to the smooth transmission of monetary policy and necessitated exceptional central bank interventions. For example, the Eurosystem increased private sector purchases and expanded the eligibility of non-financial CP to securities with shorter remaining maturity. The Eurosystem also increased the concentration limit for unsecured bank debt in collateral pools. In various ways, these interventions helped restore the functioning of key market segments such as financial and non-financial CP, thereby preventing a procyclical tightening of financing conditions and helping to ease liquidity tensions for MMFs.⁴

The sufficient resilience of the MMF sector should be the first line of defence to avoid costly crises and limit moral hazard from central bank interventions. The expectation of extraordinary central bank interventions, even though they might not necessarily materialise, may distort incentives of market participants in managing their liquidity and credit risk positions. As a result, market participants may be subject to moral hazard and take on excessive risk. This also raises questions around the degree of the MMF sector’s reliance on public sector support, including the longer-term effects on market functioning⁵, the economic viability of MMF business models benefiting from implicit public subsidies, and the potential ex post costs related to crisis interventions. Strengthening resilience in the MMF sector – and in the non-bank financial sector more broadly – would mitigate moral hazard, foster the efficient transmission of monetary policy and reduce both the need for central bank interventions in future periods of stress and the associated risk to public funds.

The current regulatory framework for MMFs does not sufficiently consider risks stemming from the collective behaviour of these institutions and their impact on financial markets and the economy. In particular, the regulatory framework is designed largely from an investor protection perspective and does not sufficiently ensure the system’s resilience. Public authorities do not generally have liquidity management tools at their disposal to prevent the build-up of vulnerabilities and mitigate risks from a system-wide perspective. Existing ex post tools, such as


³ In contrast, public debt MMFs saw net inflows during the turmoil of March 2020, also benefiting from flight-to-quality effects. While certain public debt may also become illiquid in rare situations, public debt is generally more liquid than private debt.


⁵ See, for example, “Large central bank balance sheets and market functioning”, Markets Committee Papers, No 11, BIS Markets Committee, October 2019.
the suspension of redemptions, may have adverse side effects if applied in a stress scenario. For example, they could limit the ability of fund investors to raise liquidity in times of high demand and could undermine market confidence more broadly. Therefore, addressing these structural vulnerabilities from a macroprudential perspective, thereby achieving greater resilience in the MMF sector, also poses benefits for investors.

The Eurosystem therefore considers it indispensable to significantly enhance the resilience of MMFs from an ex ante perspective, which should be a key objective of MMF regulatory reforms. The focus of reforms should be on MMFs with investments in private sector debt. In particular, the Eurosystem supports reforms that will result in an appropriate reduction in the liquidity mismatch across fund types and jurisdictions. This could be achieved by making the assets of MMFs more liquid, reflecting their use by investors as a cash management vehicle. This could be facilitated through a requirement on the holdings of liquid public assets. A reduction of the liquidity mismatch would reduce the need of funds to raise cash during stress periods and thereby mitigate spillovers to short-term debt markets and corporate funding. Such policies would also help close the gap between investors’ use of MMFs as cash management vehicles and the liquidity of MMF portfolios in crisis situations. Policies aimed at reducing the asset liquidity mismatch in MMFs should be complemented (but not replaced) by measures to help improve the usability of liquidity buffers, mitigate possible cliff effects and reduce the first-mover advantage. These could include removing the link between the breaching of weekly liquidity requirements and the possibility of suspending redemptions, and making part of the liquidity buffers releasable. The additional buffer could be released by macroprudential authorities in periods of system-wide stress, mitigating the risk of fire-sales and suspensions. Such a release should be coordinated at European level to avoid market disruptions and unintended spillover effects across the MMF sector.

The potential costs and benefits of regulatory reforms should be assessed from a system-wide perspective. The proposed policies would – all else being equal – likely result in an increase in the cost and a reduction in the availability of short-term funding for both financial and non-financial companies, and possibly lead to a reduction in the profitability of non-public debt MMFs. However, these costs need to be weighed against the benefits that these policies would bring. First, they would make funding provision by MMFs more stable and less likely to disappear in times of crisis. Second, they would reduce the likelihood of extraordinary central bank intervention and mitigate moral hazard. Third, in stress periods they would also reduce contagion to other financial entities that must find alternative methods of improving liquidity when MMF shares lose their cash-like properties, for example selling assets or raising liquidity from banks or in the repo market. Such actions can put banks’ balance sheets and market liquidity under further stress.

Counterfactual analysis suggests that reforms targeted at increasing the resilience of MMFs from an ex ante perspective would increase their shock

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absorption capacity and would have reduced outflows for MMFs during the March 2020 stress episode. Recital 56 of the MMF Regulation asks the Commission to report on the feasibility of an EU public debt quota. The counterfactual analysis finds that a modest public debt quota, appropriately calibrated for different types of private debt MMFs, could significantly strengthen the resilience of private debt MMFs. This would help to safeguard the cash management function of MMFs during stress episodes but could weigh on their provision of financing. A higher investment in public debt for private debt MMFs could have helped them to meet their outflows during the March 2020 market turmoil, assuming that public debt instruments would have been easier to draw down and sell at that time than investments in private sector debt such as CP, for which there is relatively thin secondary market trading, even in normal times. These outcomes also rest on the assumption that the new quota would apply in parallel to existing requirements, such that assets counting towards the new requirement should not be used to fulfil existing requirements, e.g. for weekly maturing asset holdings. The counterfactual analysis also suggests that, given the positive impact on investor confidence, such a policy could have reduced the outflows of non-public debt MMFs while not substantially reducing their returns.

7 This counterfactual analysis builds on and expands the fund-level analysis presented in Capotâ et al. (2021).
Specific remarks

On the need for reforms to address the liquidity mismatch

The market turmoil caused by COVID-19 exposed major vulnerabilities related to the liquidity mismatch in non-public debt MMFs. The inherent fragility in MMFs that invest in private sector debt stems from the fact that they offer claims that are redeemable at short notice, while at the same time holding investments in short-term financing instruments, such as CP, whose liquidity (which is already relatively thin in normal times) can easily evaporate in stress periods. The resulting liquidity mismatch gives rise to significant vulnerabilities in the financial system.

During the market turmoil of March 2020, non-public debt MMFs faced acute liquidity stress, owing to significant outflows and difficulties in selling assets in markets with little or no secondary market trading. Non-public debt MMFs experienced substantial outflows while constant net asset value (CNAV) funds invested in public debt received inflows. To meet redemption requests, non-public debt MMFs had to dispose of CP and certificates of deposit (CDs) that are normally held to maturity. The lack of secondary market activity affected the ability of MMFs to raise cash. Their large market footprint, which varies from 50% to 80% depending on the segment, made it even more difficult to dispose of assets.8

To address the structural vulnerabilities of MMFs, reforms must properly account for the use of MMFs as a cash management vehicle and their role in intermediating short-term private debt. As the March 2020 market turmoil demonstrated, MMFs with investments in private sector debt perform a significant liquidity transformation function, despite being treated as cash instruments, and may not be able to simultaneously provide cash-like services and maintain their funding to banks and the real economy. Since investors use MMFs first and foremost as a means to manage cash (rather than to gain market exposure), reforms must significantly enhance the resilience of the sector to safeguard their function as a cash management vehicle during stress periods. This should be achieved primarily by increasing the liquidity of MMF assets in order to reduce the liquidity mismatch ex ante.

Given that market participants typically use MMFs to store cash and expect MMF units to display cash-like properties, those funds invested in non-public debt should meet high standards as regards liquidity and stability of values. Investors and fund managers mainly consider MMFs as a means of preserving capital and managing liquidity rather than gaining market exposure. Imposing stricter limits on the proportion of illiquid assets that MMFs are permitted to hold would help align the liquidity features of their asset portfolios with their use by investors as cash management vehicles, but could also have consequences for the financing of the real economy by MMFs.

8 MMFs domiciled in the euro area held approximately 80% of CP securities issued by euro area banks, 50% of CPs issued by European NFCs and 74% of CDs issued by euro area banks and NFCs in the fourth quarter of 2020, according to Securities Holdings Statistics.
Stricter portfolio requirements, for instance higher quotas for investment in public debt, could reduce the liquidity risk of funds that predominantly invest in private debt and could mitigate the risk of large-scale redemptions in a liquidity shock. Given their heightened vulnerability to liquidity shocks, these funds (i.e. low-volatility net asset value (LVNAV) and variable net asset value (VNAV) funds) should be subject to requirements that enhance the overall liquidity risk profile of their portfolio assets. For instance, they could be required to invest a minimum percentage of their assets in highly liquid public debt that could be temporarily drawn down without triggering any fees or gates for investors at the direction of macroprudential authorities. Public debt markets are substantially more liquid and deeper than CP and CD markets, as has been demonstrated during the COVID-19-related market turmoil. The limited public debt holdings of euro area private debt MMFs are currently concentrated in the most liquid public debt. Increasing these holdings would ensure that they have sufficient liquid assets to meet large-scale redemptions during a liquidity shock. A minimum requirement for public debt could apply in parallel to existing requirements on weekly liquid assets. To achieve the desired reduction in the liquidity mismatch and alleviate concerns of risk shifting, assets counting towards the new requirement should not be used to meet other requirements. This new requirement could be partially fulfilled with short-term reverse repos against government securities (with appropriate safeguards, such as haircut requirements, to avoid an excessive build-up of leverage).

While a higher share of liquid assets could reduce the capacity of MMFs to provide funding to the real economy during normal times, the benefits for stability are expected to outweigh the costs overall. A range of factors would help in this regard. First, the proposed measures would increase the ability of MMFs to absorb shocks and thereby help ensure that they remain a more stable source of funding during stress periods, when this stability is most needed. Second, they would reduce the likelihood of extraordinary central bank intervention and mitigate the risk of moral hazard. They would also reduce the likelihood of MMFs needing to impose fees, gates or suspensions to mitigate outflows during periods of stress, thereby aggregating liquidity stress among MMF investors. Finally, the measures considered (e.g. a minimum of 20% investment in public debt for private debt MMFs) are relatively modest and would allow MMFs to remain primarily invested in private debt, while ensuring a diversity of funding sources for NFCs.

On potential reforms to complement measures targeting the liquidity mismatch

Removing the stable value for LVNAV funds may complement reforms for improving funds’ liquidity risk profiles. The March 2020 market turmoil highlighted that the asset liquidity of LVNAV funds was often not commensurate with the promise of stable value and daily liquidity that these funds offered. Their relatively narrow collar of 20 basis points around the stable value turned out to be a source of concern for investors and hence did not safeguard LVNAV funds from
liquidity stress as intended. A further narrowing of the collar would therefore not help remove the possible cliff effects triggered by these thresholds, and could possibly increase first-mover advantages instead of making these MMFs less vulnerable to runs. To the contrary, removing the stable value from LVNAV funds would have the benefit of fully removing unintended cliff effects related to possible transformations from CNAV to VNAV in stress periods. A variable share price would also reflect the underlying asset value more accurately and therefore reduce first-mover advantages associated with a decline in asset value. However, it would also eliminate an important property of LVNAV funds that is valued by market participants for their cash management. Under the preconditions that the fund’s liquidity risk profile is substantially improved, it might not be necessary to remove the stable value from LVNAV altogether. Indeed, it was MMFs holding investments in private sector debt with both variable and constant NAV that proved particularly vulnerable during the COVID-19-related market turmoil, suggesting that the removal of the stable value will not, in itself, sufficiently address the vulnerabilities seen during this period.

**Impediments to the use of daily and weekly liquidity assets should be removed and minimum requirements raised to increase the usability of liquidity buffers during periods of stress.** Fund managers should be encouraged to make active use of liquidity buffers during periods of stress. One way of doing this would be to remove the link between the breaching of weekly liquidity requirements and the possibility of suspending redemptions. This would allow MMFs to draw down on their liquidity buffers, as investors would not need to fear the imposition of extraordinary measures. However, this might not be sufficient: the experience of VNAV has shown that even without a link between liquidity requirements and liquidity management tools, fund managers are reluctant to use their buffers.

**Making part of the liquidity buffer of all MMFs releasable during periods of stress could further enhance their usability.** A releasable buffer component could allow macroprudential authorities to act more effectively in adverse market conditions. The additional buffer could be released in periods of system-wide stress, enabling managers to draw down on their liquidity buffers, thereby mitigating the risk of fire-sales and suspensions. The releasable buffer could be made part of the existing buffer (rather than added on top of existing buffers) under the precondition that the fund’s liquidity risk profile is substantially improved, for instance through higher investments in public debt.

**Swing pricing may be a useful complement to structural reforms, but it cannot replace them.** By shifting the allocation of liquidation costs to the redeeming investors, swing pricing may, in principle, reduce incentives for redeeming while still benefitting investors that choose to remain invested. By mitigating funding pressures on MMFs, swing pricing may also reduce funds’ need to sell their assets, thus lowering stress in short-term markets. If designed carefully, swing pricing could be a useful complement to structural reforms, by reducing first-mover advantages arising

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9 See, for example, Capotă et al. (2021), "How effective is the EU Money Market Fund Regulation? Lessons from the COVID-19 turmoil", *Macroprudential Bulletin*, Issue 12, ECB, April 2021, for evidence of the prospect of breaching the regulatory NAV limit having incentivised outflows among some LVNAV investors during the March 2020 market turmoil.
from mutualised liquidity and mitigating redemption pressures on MMFs during liquidity shocks. However, swing pricing in isolation is unlikely to significantly reduce the liquidity mismatch in MMFs and effectively address systemic risks, especially when investors expect large losses.10

While the introduction of swing pricing may be helpful in principle, there are concerns regarding the complexity of its calibration and effective implementation. While swing pricing theoretically reduces first-mover advantages, the complexity of its calibration, coordination and implementation may generate unintended consequences for MMFs and for wider financial stability. The calibration of such a measure could lead to new threshold effects in which there is uncertainty surrounding the point of implementation and whether this is initiated by the manager or by the competent authority. Swing pricing may also risk increasing redemption costs in times of stress and therefore incentivise investors to redeem before the swing factor is implemented, effectively exacerbating rather than removing the first-mover advantage for investors. To address these issues, a smooth, continuous adjustment of its parameters (e.g. swing factor and swing threshold) according to changes in market conditions should be ensured, so as to avoid threshold effects and fully pass on to redeeming investors the costs that they impose on the fund. If adopted, this tool should be consistently implemented across jurisdictions.

The focus of reforms should be firmly on MMFs, while the integrity of post-crisis reforms for the banking sector should be maintained. The resilience of the banking sector during the March 2020 market turmoil demonstrated the important role played by post-crisis regulatory reforms. The turmoil could conceivably have been worse without the stringent regulatory requirements on banks, which helped ensure their resilience during the spring of 2020 and allowed them to partially absorb the sale of assets by MMFs. The Eurosystem cautions against any suggestion that the prudential constraints on banks may have amplified stress in money markets, as the evidence indicates that, to the contrary, post-crisis reforms enabled banks to better absorb the shock. The liquidity stress of MMFs last year, and in the non-bank financial sector more broadly, arose from vulnerabilities inherent within this sector. Therefore, the focus should be firmly on assessing these vulnerabilities, with a view to strengthening regulation for MMFs and non-banks from a systemic perspective. The resilience of the MMF sector is the first line of defence during periods of stress and could mitigate possible contagion effects to the wider financial system.

On external support and a liquidity exchange facility (LEF)

The Eurosystem supports keeping Article 35 of the MMF Regulation unchanged as it appropriately prohibits external support. Article 35 rests on the notion that external support provided to an MMF increases the contagion risk between the MMF sector and the rest of the financial sector. For this reason, external

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support for MMFs should remain prohibited. Article 35 is sufficiently clear on what constitutes and does not constitute external support. Following the March 2020 market turmoil, ESMA issued a press statement reiterating and qualifying the provisions of this Article, against the background of buybacks of bank CP. Hence, there is no need to further clarify or amend Article 35 of the MMF Regulation.

A third-party liquidity exchange facility (LEF) could help to mitigate redemption pressure in times of crisis, but it must be designed to rely solely on market-based liquidity and avoid creating moral hazard. The LEF could serve as a centralised private source of liquidity and/or credit, pool idiosyncratic liquidity risks and alleviate some of the pressure on MMFs in stress episodes, including by supporting investor confidence. It should be funded by MMFs and/or asset managers and, to be ready to act as a backstop facility for MMFs, it would need to keep the liquidity in cash or in non-MMF, highly liquid and low-risk instruments.

However, to be an effective backstop for the MMF sector in times of crisis, an LEF would need to be of significant size and would require appropriate safeguards. Using the COVID-19-related market turmoil as an example, cumulated outflows in March 2020 from private debt funds amounted to approximately EUR 120 billion. Even if significant portions of these outflows would be met with other means, funding an effective LEF could still prove very costly for the MMF sector. Moreover, it would take time for the LEF to reach a sufficient size to be able to act as a proper backstop. Such an LEF must also be subject to appropriate supervision and operate on the basis that MMFs are subject to tighter limits on investments in relatively risky and illiquid assets. This would serve to limit risk-taking and moral hazard concerns arising from the presence of a backstop. Fund managers would need to be incentivised to contribute to the LEF, since contributions would be on a voluntary basis. Therefore, structural reforms to enhance ex ante resilience of the MMF sector are a prerequisite for the LEF.

On stress testing and data reporting and disclosure

Improvements to stress-testing requirements that would increase supervisors’ and market participants’ understanding of MMF exposures to common shocks could complement reforms that significantly enhance the structure and functioning of MMFs. The COVID-19-related market turmoil showed that MMFs are exposed to common liquidity shocks. Moreover, MMF shares are used as a cash management vehicle by many financial entities and NFCs that need liquidity precisely when MMF asset portfolios have tended to become illiquid. Enhancing stress-testing requirements to include features that facilitate a better understanding of the systemic vulnerabilities of MMFs could instil investor confidence in the sector but cannot be a substitute for the implementation of resilience-enhancing measures.

The Eurosystem supports additional reporting requirements for MMFs and the sharing of data with all relevant authorities in a timely manner. Especially in crisis scenarios, central banks and macroprudential authorities require up-to-date and high-frequency data to monitor risks to financial stability and monetary policy.
transmission and to inform policy decisions. In addition to the higher frequency of data reporting, new variables would be included: daily and weekly liquidity ratios, for which market data have very low coverage, would be essential. During normal times, additional reporting will be used to help calibrate tools. During the COVID-19-related market turmoil, some authorities relied heavily on market data and market intelligence to gain insights into developments in the MMF sector. While these are valuable sources of information, market data tend to have selective coverage, may lack full comparability and may be of lower quality than regulatory data. The importance of the MMF industry for monetary policy and financial stability therefore calls for enhanced data collection and sharing across relevant authorities. In particular, all relevant European institutions with responsibilities in the areas of price stability and financial stability should have prompt access to relevant MMF data, including the European Central Bank (ECB), the European Systemic Risk Board (ESRB) and national authorities with a macroprudential mandate.

Data reporting on holdings of commercial paper (CP) and certificates of deposit (CDs) would complement rather than substitute structural reforms. The quality of data on CP and CD markets, where MMFs are the main investors, remains poor and the coverage fragmented. More specifically, while certain market segments are well documented, such as those with Short-Term European Paper (STEP) or Negotiable European Commercial Paper (NEU CP) labels, the extent to which CPs are dual labelled and held by MMFs is largely unknown. Additional disclosure on MMF holdings, investors (including data on stocks and flows with granular information on maturity, geography, instrument types, sectors and ratings) and general fund information (fund type, regulatory ratios, ratings, etc.) would help to bridge the data gaps. Given the increasing MMF footprint in short-term funding markets, reliable figures on MMF activity in these markets would inform the assessment of monetary policy transmission and the analysis of the build-up of financial stability risk, as well as benefiting supervision and oversight.

The granularity of reported data should ensure that the reporting burden is proportional, while preserving the comparability, timeliness, accuracy, coverage and completeness of the data. The most useful and insightful reporting would have a higher frequency. The data collection would need to be structured according, to a pre-established reporting format, to allow comparability and ensure data quality. ISO 20022 would be the recommended reporting format. Realistic lead times of 2-3 years to allow the industry to prepare and adapt are necessary.

11 A fraction of NEU CP securities will also carry a STEP label. This gives rise to a partial overlap in the two datasets complicates data analysis.

12 ISO 20022 is a global standard for payments messaging allowing standardised exchange of electronic messages between financial institutions. In 2022 a number of critical payments systems such as TARGET2 and SWIFT will adopt ISO 20022. This standard has been used since 2016 for reporting money market statistical reporting (MMSR) data.