

## ADDRESSING FUND LIQUIDITY RISKS



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### Vulnerabilities for MMFs and other OEFs

The covid-19 crisis severely hit the real economy and this put the financial system under acute stress. In March 2020, stock prices plummeted, interest rates spiked driving bond valuations down, margin calls increased and the short term funding market (STFM) froze completely. Unprecedented government support was (and still is) provided to households and private companies, while central bank interventions restored liquidity on the fixed income markets by the beginning of April.

In the asset management industry, concerns arose about open-ended funds (OEFs), and in particular with money market funds (MMFs), corporate bond funds and real estate funds, which had to withstand significant redemption pressures. While we must acknowledge that in general, they coped with the crisis reasonably well, much work is undertaken at the international level to improve their resilience.

MMFs are key intermediaries in the STFM, as they collect investors' excess

cash to purchase short-term debt instruments issued by banks, corporates and public administrations. In the decade following the 2008 Global Financial Crisis, their regulatory framework was substantially strengthened, first in the US with the 2014 SEC reform and then in the EU with the 2017 MMF Regulation. Yet the March 2020 turmoil still put some segments of the market under severe pressure: broadly speaking, private-debt MMFs faced a massive wave of redemption, while public-debt funds accumulated inflows. Despite this general pattern, the various jurisdictions dealt with very different situations, due to national specificities in terms of regulatory regimes (stable vs. floating NAV, sponsor support), currencies (EUR, USD, GBP), or composition of the investor base.

The crisis highlighted several vulnerabilities of the STFM ecosystem: First and foremost, the market for short-term debt paper is opaque (OTC essentially) and segmented (NEU-CP, Euro-CP, with the overlapping STEP label). Investors are typically buy-and-hold, and the secondary market is thus extremely thin.

#### The March 2020 turmoil revealed structural vulnerabilities in the short-term funding markets.

Paper issues are poorly covered by commercial data providers, scarcely rated by large CRAs, usually not targeted by central bank interventions and it is difficult to get an accurate picture of prices or outstanding. Eventually, the STFM is not regulated by market authorities, no fully fledged market-making mechanism has been designed, and no last-resort liquidity provision is embedded. During the March turmoil, central banks had to intervene to re-open the STFM (i.e. provide short-term funding to banks and corporates) which eased the redemption pressure on MMFs. Improving the functioning of the STFM should be the primary objective of any ambitious policy reform.

Second, beyond investors' actual need for cash, it seems that some redemption behaviors were motivated by first

mover advantages (FMA) introduced by regulatory features, such as amortized cost valuation which creates an artificial discrepancy between the funds' NAV and its actual market value, or automatic imposition of fees and gates when ratios reach predefined limits. Removing so-called "stable NAV" funds to allow them to reflect the actual value of the portfolio, as well as avoiding as much as possible automatic cliff-effects should help mitigate FMA in the future.

Last, assuming we have a fully operational STFM which allows to efficiently value funds and price them at their actual market value, we should encourage the adoption of liquidity management tools (LMTs) such as swing pricing to ensure that redeeming investors bear the cost of the low liquidity encountered in stressed situations. Activating such tools should remain the sole responsibility of fund managers. Indeed, supervisory action within a macroprudential framework might feed moral hazard or even have unintended effects on investors' incentives.

Other open-ended funds (bond and real-estate funds) faced acute redemption pressures together with a drying-up of the liquidity (with associated valuation uncertainties) on the underlying market. We have to insist on the need to align the dealing/NAV frequency with asset side liquidity and introduce liquidity management tools (such as swing pricing or gates) more broadly: these elements seem to have been very efficient in helping funds withstand the crisis (only a very limited number had to resort to suspension).

Yet, the crisis put to the forefront three issues: First, the consequences of vertical slicing vs. waterfall in terms of equal treatment of investors must be assessed. LMTs should avoid that redeeming investors be paid with the most liquid assets, leaving remaining holders with a distorted portfolio. More data on effective portfolio management must be gathered. Second, we heard that a wider implementation of some LMTs could be compromised by technical constraints (e.g. for custodians): this remains to be investigated. Eventually, a clearer regulatory framework for those LMTs currently only governed by professional guidelines might be needed to ensure proper calibration.



## FRANCESCO MAZZAFERRO

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### Investment fund risk – The macroprudential perspective

**Investment funds play an important role in the EU financial system.** Their investments in equity and corporate debt help firms to raise financing and to grow. And the ability to spread investments across a range of assets enables households to participate in the gains from economic growth while diversifying the risk any investment entails.

**But investment funds can also pose risks to the financial system.** Although the European Systemic Risk Board (ESRB) is mindful of the benefits of investment funds, its mandate is to look at risks to financial stability. In this vein, the ESRB issued a recommendation in December 2017 to address vulnerabilities stemming from investment funds that have short redemption periods and invest in less liquid assets and those that use excessive leverage. During times of stress, liquidity mismatches increase the risk of further pressures on asset valuations. This can happen if investment funds seek to sell assets that are inherently illiquid, or that turn illiquid during stressed periods, over a short period of time to meet redemptions. Such fire sales could lead to higher mark-to-market losses for other financial institutions with

exposures to the same or correlated assets, or to an abrupt tightening in financial conditions. Excessive leverage in investment funds can further amplify this transmission mechanism.

**The market turmoil at the onset of the coronavirus (COVID-19) pandemic showed that the regulatory reforms implemented after the global financial crisis did not address all sources of systemic risks in the investment fund sector.** The ESRB identified money market funds (MMFs) and open-ended investment funds with large exposures to real estate and/or corporate debt as particularly vulnerable. The ESRB issued a recommendation in May 2020 to address risks in real estate/corporate debt funds and in January 2021 provided input to the forthcoming review of the Alternative Investment Fund Manager Directive (AIFMD). Therefore, this article primarily covers MMFs, which are the focus of the policy proposals currently being developed.

#### The March 2020 turmoil showed reforms are needed to address vulnerabilities in investment funds.

**There is an underlying tension between the economic functions performed by MMFs.** MMFs perform two primary economic functions for the financial system and the real economy: (i) providing short-term funding to issuers, mainly banks; and (ii) being used as cash management vehicles by investors. Tension arises because MMFs offer on-demand liquidity to investors and are often assumed to be cash-like instruments, but the instruments in which they invest are not reliably liquid, especially during periods of stress. The tension can be exacerbated in funds that offer a quasi-stable net asset value (low-volatility net asset value – LVNAV), as such funds face an additional valuation constraint.

**This underlying tension can become of systemic concern during market stress and require policy intervention.** Under normal market conditions, MMFs are largely able to meet investor redemption requests from the liquidity within their portfolio. But the onset of the pandemic brought this underlying tension to the fore: some MMFs investing in private sector debt securities experienced acute liquidity strains when faced with a high level of redemptions by investors combined with a lack of liquidity in private debt money markets. This led

to concerns that liquidity strains in those MMFs could amplify the effects of the COVID-19 shock in other parts of the financial system. The situation was particularly serious in the United States and the EU and improved only after exceptional measures were taken by the Federal Reserve System and the European Central Bank under their respective monetary policy mandates.

**The ESRB will refine policy options for reforming the MMF Regulation in the second half of 2021.** The ESRB set out policy options to reform MMFs in an Issues Note published in July 2021. Some of these options consider the functioning and structure of the underlying markets in which MMFs operate, the investors holding MMF shares/units, and the regulatory framework for MMFs. In view of the forthcoming review of the MMF Regulation in 2022, the ESRB will focus on those policy options that would address vulnerabilities within MMFs themselves. This policy work will be guided by three key desired outcomes: (i) removing first-mover advantages for investors, which was also a key consideration in the previous ESRB recommendation on MMFs of December 2012; (ii) not limiting the proposals to LVNAV funds but considering the vulnerabilities of the entire sector; and (iii) ensuring the resilience and functioning of MMFs without the need for central banks to step in during crises.

**To summarise, the March 2020 turmoil showed reforms are needed to address vulnerabilities in investment funds.** The ESRB issued a recommendation to address risks in open-ended investment funds with large exposures to real estate and/or corporate debt. It also provided input into the review of the AIFMD and will make proposals to address risks within MMFs.

*This article has been co-written with Olaf Weeken, Adviser, ESRB Secretariat.*



## GERRY CROSS

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### Responding to liquidity risks in investment funds

Since the global financial crisis of 2008, regulators have focused on mitigating liquidity risks in investment funds. The COVID-induced shock of March 2020 has demonstrated that more work needs to be done to ensure investors are protected, and risks to the financial system are minimised.

We know that during periods of financial stress, a flight to safety and heightened demand for cash can suddenly increase redemption requests received by investment funds, making it challenging to maintain adequate liquidity. Last year, this unanticipated increase in redemptions was not seen universally across the asset management sector. However, it was most pronounced in funds that were exposed to illiquid assets, or assets that had become temporarily illiquid.

From a regulatory perspective, the inherent first mover advantage of open-ended funds, which incentivises investors to redeem early to get ahead of other redeeming investors, must be addressed. Redemptions of this kind contributed to the strain on investment funds in March 2020, and measures to address first mover advantage, such as swing pricing, feature in the recent FSB consultation on Money Market Funds (MMFs).

Pre-emptive redemptions occur for a range of reasons, including because investors fear that transaction costs (which can be abnormally high during periods of stress) will be borne by those who remain in the fund. To address this, we must consider how the costs of liquidity can be passed on to redeeming investors. The use of anti-dilution mechanisms, like swing pricing, has important potential in this regard and there is some evidence of increased usage in recent years. However, this is not universal with some asset managers still reluctant to deploy such tools. Moreover, there are important calibration challenges to be addressed if such tools are to contribute to addressing financial stability risks arising from the funds sector.

If carried out effectively, swing pricing can improve liquidity management during market stress in two ways. Firstly, it internalises the cost of liquidity so that redeeming investors pay the associated costs and remaining investors are not left worse off. Secondly, there is a behavioural impact – when swing pricing is in operation the incentive to pre-emptively redeem from the fund is minimised. This helps to limit the total redemptions experienced by the fund and helps to avoid a fire sale whereby the fund must immediately sell assets to meet its liabilities.

Considering the role of regulatory thresholds in MMFs is also important. During the Covid-19 shock, MMF managers were reluctant to dip below the 30% weekly liquid asset requirement set out in the EU Money Market Fund Regulation. This was partly due to the fact that this threshold created a first mover advantage, whereby investors, conscious that the fund would have to consider using fees or gates, would seek to redeem from the fund before such liquidity management tools were applied.

It is worth noting that as policymakers we do not face a binary choice, and must consider how the eventual MMF reform package can retain both funding and cash management functions to the greatest extent possible, while reducing the sector's contribution to systemic risk.

It is true that the vast majority of investment funds were resilient to the Covid-19 shock, but this was in the context of significant central bank interventions which supported the return of normal market functioning. Enhancing the liquidity risk management framework for investment funds is needed to ensure that funds can continue to operate in the best interest of investors during periods of stress, as well as during normal times.

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**Funds' liquidity  
management should be  
strengthened,  
particularly for MMFs.**

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Strengthening the liquidity management framework is particularly relevant for Money Market Funds (MMFs), given the acute liquidity strains experienced by some MMFs in March 2020. Underpinning the work on MMF reform is a consideration of the extent to which resilience can be increased, while retaining both the sector's cash management function and its provision of funding to the real economy. In normal times, there is no conflict between these two roles, as MMFs provide daily liquidity to investors and hold short-dated commercial paper without any adverse liquidity challenges. However, during periods of stress, MMFs simultaneously encounter an increase in redemptions and a reduction in market liquidity for the securities they hold. In these situations, there appears to be a misalignment between the liquidity expected by investors, and the liquidity of the securities held by the fund.





## SIMON JANIN

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### Money Market Funds: a precious asset of the European financial sector

As their name rightly suggests, Money Market Funds (MMFs) are collective schemes invested in money markets. Should the latter face a serious liquidity crisis, it would be unrealistic to expect zero impact on the former. Which is exactly what happened in March 2020 at the time of the COVID-19 pandemic outburst. As lock-down measures spreading across the world, especially in the currency-areas where MMFs are present, a significant number of real economy actors faced either a sudden drop in their revenues (mainly corporates), or a sudden rise in their immediate or near term spending (mainly Institutions and public agencies). This exogenous, unprecedented shock led to a rapid “dash for cash” behavior where big clients of banks massively drew down their credit facilities with a consequential sizable outflows for MMFs.

That said, while it is certainly essential to try to achieve further resilience of MMFs, it's also of paramount importance not to overemphasize the role of MMFs during the crisis and thus avoid trying to fix something that is not broken. In a context where MMFs are under greater regulators' scrutiny,

it's then important to recall that these funds are rather the “canary in the coal mine”, than the source or an amplifying element of the crisis.

COVID-19 pandemic triggered a liquidity crisis, not a credit crisis. This makes a huge difference when compared with the Great Financial Crisis of 2007-2008. Such fundamental point should have to be kept in mind when reflecting on what should be reviewed in existing legislations (MMFR in the EU). And in this respect, we can only subscribe to the Financial Stability Board (FSB) assertion that “MMF reforms by themselves will not likely solve the structural fragilities of STFM [short-term funding markets][1]”.

In addition, it should be reminded the various benefits that these investment vehicles bring to the real economy thanks to their key role in the financial sector. By purchasing and, most of the time, rolling, a significant part of money market instruments (including financial and non-financial Commercial Papers), MMFs represent an efficient, stable and reliable source of funding for great part of real economy actors, in both public and private sectors. By providing their holders with diversified, low volatile, competitive, strongly-regulated collective schemes, MMFs are one of the most efficient means to invest excess liquidity, and represent a valuable alternative to bank deposits. In other words, by smartly and regularly linking borrowers and investors within the short-term markets, MMFs play their role to favor financial stability.

**MMFs are rather the “canary in the coal mine” than the source or an amplifying element of the crisis.**

This being said, we do not believe that we should remain complacent and do nothing. In our opinion the regulatory responses to COVID-19 crisis should pursue two objectives: (i) improve money markets liquidity and (ii) enhance MMFs' resilience by providing targeted additional rules or targeted adjustments to existing regulations that have proven to be resilient during the crisis.

As regards the first objective, underlying markets should benefit from more transparency and smoother functioning. And a lot can be achieved: standardization of instruments, market transparency (with the Banque de

France - sponsored NeuCP market as an example to follow), incentivisation of dealers, and facilitation of processes granting CPs' eligibility to refinancing operations. While we fully understand Central Banks' reluctance to intervene, we also believe that ensuring the good functioning of markets is in their remit.

With respect to the regulatory options, we do not believe that reopening MMFR should be a path to follow. However, targeted amendments could definitely be made and they should mostly focus on liability management of MMFs.

First, Article 27 of MMFR, on Know Your Customer (KYC) could be clarified and enriched through level 2 or 3 additional guidance, as it is already the case for Credit Quality Assessment.

Second, and consequently to the above proposal, asset management companies would assess their own need for an additional bucket of liquid assets. The level of this additional liquidity buffer would derive from each MMF's stressed liability structure and the assets to be considered as “liquid” (thus eligible to the composition of the liquidity buffer) would have to be defined. These evolutions could be specified through levels 2 or 3 guidance as well.

Third, adjustable exit fees could be made mandatorily available for all MMFs, as a Liquidity Management Tool (LMT), taking the shape of an anti-dilution levy (ADL), used in times of exceptionally stressed market conditions.

Given the specific features of MMFs, like “same-day settlement”, we consider that adjustable exit fees represent the only workable ADL on an operational standpoint.

[1] FSB, *Policy Proposals to Enhance Money Market Fund Resilience*, June 2021



## DENNIS GEPP

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### Money Market Funds have passed the “mother-of-all” stress tests

When addressing the perceived vulnerabilities of money market funds (MMFs), policymakers should follow the data, adopt a holistic approach and watch for the survivor bias. If policymakers consider the wealth of data available, and a broad view of the short-term funding markets (STFMs), they should realise that the March 2020 stresses were not due to the vulnerability of MMFs.

The dislocation in March was caused by a global economic shock to the system, resulting from the decisions of governments around the world to shut down their economies to prevent the spread of Covid-19.

If policymakers watch for the survivor bias, they should look at the MMFs that did not pass the real-life stress test in March to figure out the vulnerabilities to address. Hold on! “All redemptions have been honoured, no MMFs have suspended redemptions, imposed fees and/or gates, or converted from LVNAV to VNAV” IOSCO reminds us.

So, what are the vulnerabilities that March 2020 events highlighted? There are two:

- An artificial regulatory incentive for MMF investors to redeem. This is because in the US and the EU certain MMFs have to consider the imposition of liquidity fees and gates if weekly liquid assets (WLA) fall below a 30% threshold. This proved to be an accelerant for redemptions and was an unfortunate unintended consequence of policy reforms.
- Vulnerability in the STFM structure and functioning. “The lack of a market-maker of last-resort makes this market very vulnerable to liquidity crises” rightly observes the French Autorité des marchés financiers (AMF) in its 2021 Markets and Risk Outlook. The way in which short-term finance markets operate remains very opaque and characterised by an extremely limited secondary market.

#### The March 2020 stresses were not due to the vulnerability of MMFs.

Let’s address these two policy priorities, by adopting a two-pronged approach:

1. Delinking the liquidity requirements and potential imposition of a fee or gate. Data supports that delinking the 30% WLA threshold from the consideration of fees and gates would have greatly alleviated the liquidity stress in the EU money markets and would have removed an artificial regulatory incentive for MMF investors to redeem; and
2. Enhancing the resiliency of STFMs with considering, among others, reforms to the secondary market structure, standardisation of issuances, improving transparency, reviewing regulations that affect market-making, and the creation of a permanent standing repo facility. Economic analysis shows that any policy that increases the STFM depth and liquidity will have a very large influence on the ability for MMFs to face larger redemptions. In its Report on Trends, Risks and Vulnerabilities 1/2021, ESMA concludes that “increasing the liquidity of the underlying markets has, in that simulation, a very large effect on the resilience of MMFs”. Improving the functioning and liquidity of money markets, would encompass a range of reforms related to market structure and transparency, as well as reforms related to incentives for dealers to provide liquidity in time of stress. [...] In our model, improving the liquidity

of money markets has a very large effect on MMF resilience.

The other policy options the Financial Stability Board (FSB) advances are either unnecessary or inappropriate. A couple of examples:

- Swing pricing would not only eliminate a critical element of MMFs (same day and intra-day settlement), effectively regulating MMFs out of existence, but swing pricing is entirely unnecessary for MMFs as they already not only have the ability to apply liquidity fees generally, but are also required to price securities in their portfolio at the more conservative of the bid/ask spread.
- A minimum balance at risk (MBR) would eliminate the very liquidity of MMFs that has been central to their widespread use in a variety of applications.
- A capital buffer does not prevent large scale redemptions or stop them once they have begun. Capital buffers do not serve a purpose in an investment product such as MMFs where the investor bears the risk of loss of a portion of its investment.

There is a tremendous value to having a market in short-term securities – for companies to fund their operations and manage their cash, for savers to have investments with market returns and for capital formation in the intersection of this supply and demand.

Questioning or limiting the role of MMFs, or worse, regulating them out of existence, would prevent millions of investors from benefiting from them and would be a very bad outcome for issuers and markets.



## OMAR CHANAN

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### Drawing the right conclusions from last year's market turmoil is necessary ahead of the next regulatory steps

With the peak of the Covid-19 pandemic's impact on capital markets being a year past, the international regulatory community is working on drawing the appropriate lessons and obtaining insight to address future liquidity crisis. Understanding what went wrong and working together on the kinds of failures that can and should be prevented in the future is critical both from a financial stability and an investor protection perspective.

Amid the heightened market volatility and with much of the world rushing into lockdown in spring of last year, open-ended funds were faced with significant deterioration in market liquidity. In addition, segments of the funds industry were faced either with valuation constraints or large-scale redemption requests and investor outflows. These key market dislocations that occurred had effectively been a "real-life liquidity stress test" for open-ended funds.

In this setting, only a limited number of funds suspended subscriptions and redemptions while the vast majority

were able to meet redemption requests and maintain their portfolio structure (ESMA, Nov 2020). One important conclusion to draw from this real-life stress test is that this can be seen as a confirmation of the sector's overall resilience to such market pressures and of the liquidity risk management processes and tools available in Europe as a key line of defence.

We saw successful liquidity risk management processes focused on the portfolio composition and underlying securities' liquidity characteristics, market conditions, asset eligibility and the funds' liquidity demands. During both normative and stressed environments, the redemption process is typically designed to maintain the investment profile of the fund. A pro-rata approach may be applied when certain redemption size thresholds are met with the focus on keeping the portfolio risk positioning and investment profile consistent with the investment strategy. To this end, a range of liquidity management tools are available for risk management functions to address different scenarios of stressed market conditions.

**This real-life stress test can be seen as a confirmation of the liquidity risk management processes and tools available in Europe as a key line of defence.**

Based on these available processes and toolkit, UCITS funds were largely able to effectively address the recent crisis. Even after the recent turmoil fund management companies are remaining vigilant against any further liquidity crisis, which also includes refining the documentation and processes related to contingency plans to ensure any identified issues are well understood internally and externally.

If we consider the liquidity tools utilised during the recent crisis, the regulatory focus has shifted towards the use of swing pricing. What is important from a regulatory perspective is not prescribing the cases in which swing pricing can or should be called to address liquidity risks, but ensuring its availability and possibility to be operational in every jurisdiction, leaving it to the manager to assess its usefulness under certain conditions. It is ultimately at the risk

management team's discretion to assess whether in a given scenario it can help achieve the goal of protecting the interests of remaining investors in the fund, against the costs of facilitating subscriptions and redemptions.

While we believe the recent turmoil demonstrated the ability of open-ended funds to monitor and respond to external risks and the appropriateness of the existing liquidity risk management tools, there is merit in further investigating the reasons for specific pressures in some market segments and preventing potential wider market disruptions and spill over effects.

For those market segments that were faced with increased liquidity pressures it is important to further assess the specific conditions that led to the recent challenges and understand whether these are connected to funds' own structure and characteristics or if they are linked to market-wide dislocations and volatility aspects not inherent to funds. In this context, regulatory changes for particular segments of open-ended funds can be useful to the extent they address identified flaws linked to their design and operation.

However, trying to impose a one size fits all approach and additional layers of regulation for all open ended-funds, as a way to address the specific conditions and root causes of those actors which faced increased liquidity pressures, could lead to ineffectiveness and entail unintended pro-cyclical risks, as it would incentivize an identical approach for all funds in view of similar market dislocations.

We believe there is room to use the very useful findings of the recent market turmoil to address any remaining gaps while at the same time acknowledging the need for measures that best apply to the specificities of the sector. Post this COVID-driven period of stress, it remains crucial to balance further regulatory steps with the need to maintain the industry's ability to contribute towards the economic recovery and future growth.