

## VULNERABILITIES FROM NON-BANK FINANCIAL INTERMEDIATION



### MARTIN MOLONEY

Secretary General -  
International Organization of  
Securities Commissions (IOSCO)

### Making open ended funds less vulnerable

Open-ended funds are vehicles for investors to join together to share the costs of investment management, administration and transactions costs. Once a number invest together, the mutual differences in the timing of their liquidity needs creates an odd, positive effect: the fund is more liquid than any one of them would be alone. This is good.

This fact has been the basis for one of the longest standing marketing devices for collective investment: daily redemption. This feature attracts additional investors so that a fund becomes a mixture not just of long-term investors with differing liquidity demands, but also mixed in with other more short term investors attracted by the daily liquidity.

It helps to manage all this if the instruments invested in are traded on liquid. The primary reason why daily redemption could be offered might originally have been the multitude of

timing preferences for investment and withdrawal; but if that doesn't prove enough to facilitate the promise of daily redemption, then assets that can be sold quickly on liquid markets are an additional defence to ensure that the redemption demand can still be met.

Some public markets are almost as liquid as the daily redemption promise, which means there is no liquidity mismatch. But some markets are not that liquid. Then there are some markets that seem robustly liquid but suddenly become significantly less liquid.

Daily redemption is not an absolute promise, but it is a widespread expectation. That expectation combined with variable liquidity in assets makes daily redemption a vulnerability built into the structure of markets. Regulation rightly requires fund managers to manage the situation so that they can expect to meet the redemption demand under reasonably foreseeable circumstances.

Trying to understand if the vulnerability is getting worse or better, the main problem is bond markets. Even the most liquid bond markets are significantly less robustly liquid than most equity markets. When markets get stressed-- especially when the leveraged traders withdraw-- we don't want the open-ended funds also selling assets because of that daily redemption promise. That will make the stress even worse.

**Better manage liquidity mismatch, allocate redemption costs, improve bond trading and better data.**

But they do; not only do they sell assets when redemption demand is high, but when stresses emerge, they also sell assets in the expectation that redemption demand (and other liquidity requirements) might get high. Like regulators, market participants never exactly know as to when a dash for cash is coming. They plan for it at the last minute and that makes it more likely.

Every period of stress provides additional evidence as to whether more needs to be done by regulators. We have seen two

recent exogenous shocks to markets that help inform us as to how this vulnerability works out. March-April 2020 (COVID) saw significant OEF asset sales as part of a chain of effects that became part of a destabilising dash for cash. February-March 2022 (Ukraine Invasion) saw some OEF asset sales, but no dash for cash. The difference in outcome seems easy to understand; the exogenous shocks were very different. But the detailed facts across multiple asset markets in different jurisdictions are hard to map. There is no global database. We do risk focusing policy excessively on the most transparent, regulated sector. But the alternatives are even more unpalatable given the damage financial instability can do.

What more should regulators do to help? There are some assets whose liquidity is very hard to manage if combined with daily redemption. The most dangerous are those that seem liquid, but prove vulnerable.

It will also probably help if we impose the costs of redemption on the redeeming investors. This would create would be some additional incentive for them to remain invested a little longer. But if this is going to be required, there should be strong guidance as to how.

In addition, it's worth asking what we can do with bond market structures to make them more robustly liquid. It doesn't work to expect broker- dealers to act as shock absorbers. That is risky in itself. But can we ensure that everyone with the capital to trade in periods of high volatility or falling prices has the chance to do so?

We certainly need better information to analyse such periods of market stress. In this regard it is notable that European UCITS don't have an informative common regulatory reporting mechanism. This is the biggest gap in IOSCO's database for OEF leverage, for example. The ESRB recommended better UCITS reporting in 2018; it would be a great help to see it happen.

Reduce or better manage the liquidity mismatch, impose redemption costs on early redeemers, improve bond market structures and get better data on what is really happening. These are all things we can do at proportionate impacts that will help. In the struggle to deal with the liquidity risk in OEFs, there is no silver bullet. But there doesn't need to be. This is about managing the liquidity risk in OEFs, not eliminating it.



## JÉRÔME REBOULL

Head of the Regulatory Policy and International Affairs Directorate, Autorité des Marchés Financiers (AMF)

### Tackling the vulnerabilities that stem from NBFIs: one size does not fit all

The NBFIs sector, in particular investment funds, plays an increasing role in financing economies while the banking sectors shrank relatively since the post-GFC reforms. The banking and NBFIs sectors provide to some extent a similar economic function but with a key difference: banks systematically perform transformation, while NBFIs balance sheets mainly involve investors who bear the economic risks of the assets. As a consequence, they do not raise the same risks: typically, the risks involved in the banking sector are related to the fact that potential losses have to be absorbed to fulfil the promise made to deposit holders or other creditors, while losses are simply passed on to investors the NBFIs sector. For that reason, they are not equally subject to liquidity risks; provided that losses can be passed on to investors, illiquidity is only a problem in NBFIs to the extent that it would not be physically possible to sell the assets.

The main procyclical effect that stems from investment funds is an excessive use of leverage. In stressed market conditions, highly leveraged funds, as is the case for any leveraged entities, may be obliged to sell assets at a steep discount, e.g. for deleveraging purpose or to meet margin calls at last resort. The pressure on asset prices due to “fire sales” might, in turn, ignite fire sales from other leveraged funds. The contagion risk may be acute if the overall investors’ confidence is affected.

The banking and NBFIs sectors provide to some extent a similar economic function but with a key difference: banks systematically perform transformation, while NBFIs balance sheets mainly involve investors who bear the economic risks of the assets.

Liquidity mismatch in funds is sometimes (mis-)perceived as a systemic risk the same way as leverage because of the first mover advantage (“FMA”) it could create and ensuing preemptive runs that would accelerate the stress. Apart for MMFs that offer a stable NAV feature, the so-called “FMA” should not have a significant impact on investors’ redemptions in times of stress provided that the price of liquidity is adequately reflected in redemption terms. To recall, an FMA occurs when investors who redeem their shares first do so on more favorable terms than investors in the same fund who redeem late (which excludes the case where investors redeem in anticipation of further market deterioration). Typically, there is an FMA if investors can redeem their shares at a NAV above the market value of the fund’s portfolio or if they do not bear the cost of liquidity when assets are disposed to meet their redemption. In times of high volatility, it is hardly plausible that investors can expect that the gains or avoidance of losses due to the FMA as defined above might surpass the opportunity cost of remaining invested.

Contrary to depositors whose funds are guaranteed by banks’ balance sheets, all funds’ investors share indistinctly all the risks. Investors shall ensure they are in capacity to absorb losses when they occur so that

they won’t need to redeem their shares in stressed market conditions; i.e. they should carefully invest depending on their risk appetite and time horizon. Fund managers have fiduciary duties toward their investors that include equity of treatment: no investor shall be able to redeem their shares at more favorable conditions than others, which implies that the NAV shall reflect the market value of the portfolio and that the cost of redemptions shall not be borne by investors who remain passively invested. To ensure equity of treatment, it is necessary that funds include (and use appropriately) liquidity management tools, such as swing pricing, that permit to pass on the cost of liquidity to redeeming investors.

Markets regulators are conscious that their mandate includes the prevention of the build-up of systemic risks, but we shall keep in mind that crisis is inherent to financial markets and it is also up to economic agents to be resilient when they occur. A systemic crisis is a financial crisis that has triggered a self-amplifying mechanism that prevents the market to find a new equilibrium price. In our view, funds may raise systemic concerns primarily because of an excessive use of leverage rather than liquidity mismatch. Recent economic history shows us that the difficulties of one or a small number of entities using excessive leverage may have an outsized impact on the broader markets (e.g. LTCM, Archegos). To tackle this issue, European markets regulators already have a toolkit, derived from Article 25 of AIFMD, which (i) requires NCAs to identify funds that use excessive leverage and (ii) allows NCAs to remediate it by capping the leverage at fund level if deemed necessary. Liquidity mismatch may not be a major concern in this regard, but it remains our duty to tackle the issue from an investor protection perspective.

The AIFMD review is an opportunity to encourage a range of tools in funds, but additional guidance could also prove helpful in order to harmonize their use at EU level.



## SARAH PRITCHARD

Executive Director, Wholesale Markets - Financial Conduct Authority (FCA)

### The main vulnerabilities of MMFs and the UK approach

In March 2020, the effect of the COVID pandemic and public health measures on economic activity exposed underlying vulnerabilities in the financial system. While the shock itself did not originate in the financial system, evidence suggests that certain structural features of Money Market Funds (MMFs) amplified and reinforced the initial liquidity shock. While central bank actions helped reduce the liquidity strains on MMFs, the underlying vulnerabilities in MMFs remain and could crystallise again in the future, including under less extreme circumstances than those in March 2020.

The UK has sought to play an active role at the Financial Stability Board (FSB) and the International Organization of Securities Commissions (IOSCO) on strengthening the resilience of MMFs. The FCA has been working closely with the Bank of England (BoE) and HM Treasury (HMT). We are committed to assessing and addressing MMF vulnerabilities in the UK. In May, we published a joint Discussion Paper (DP) on MMF reform with the BoE,

endorsed by HMT. This was based on the framework set out by the FSB MMF reports and discussed the various policy options. The DP's 'discussion period' has recently closed. We are considering the responses, as well as the input from discussions with European and international counterparts.

MMFs are subject to two broad vulnerabilities. They can be susceptible to sudden and disruptive redemptions and they may face challenges in selling assets, particularly under stressed conditions. This is mainly because: a) liquidity transformation can contribute to a first-mover advantage for redeeming investors, especially in stress, whether the stress is driven by credit or liquidity concerns or both; b) MMF investors' cash needs may be hard to predict, and c) for some MMFs regulatory thresholds may incentivise investors to pre-emptively redeem to avoid the consequences of a fund crossing those thresholds. These features can cause investor detriment and potentially financial stability risks if they drive escalating redemptions and exacerbate negative market moves in underlying money markets. Large scale outflows from a single MMF could raise fears that it and other MMFs might need to suspend dealing, triggering further large outflows from MMFs.

---

**We are committed to addressing MMF vulnerabilities [...] and strongly support international engagement.**

---

If multiple MMFs used by UK investors had suspended in March 2020, there could have been a significant threat to wider UK financial stability and ultimately to the real economy. MMFs are used as a cash management product by both financial and non-financial institutions such as corporates and local authorities, who readily need access to their cash for their own financial commitments. MMF suspension might impact users' ability to access liquid assets to meet margin calls, pay creditors and wages.

The UK authorities are seeking to strengthen the resilience of MMFs and the financial system, by reducing the need for future extraordinary central bank interventions of the kind that occurred in March 2020. UK authorities support the provision of sustainable and robust cash management financial

services that meet users' needs including at times of financial stress.

Our DP discusses the full range of options at the disposal of regulators and policy makers and asks open questions on those options. While no policy decisions have yet been made, the DP indicates we are considering whether to consult on increasing minimum liquid asset requirements, removing ties between liquidity thresholds and decisions on gates and fees (and other changes to make MMFs' liquid buffers more usable), rules related to MMF managers passing material costs of liquidity on redeeming investors, and removing stable NAV for LVNAV funds. It also states that while we are still considering liability side options, other options may be preferable, and we are unlikely to pursue policies 'to absorb losses' such as capital buffers and sponsor support. Together with the BoE and HMT we are considering the feedback received to determine whether to consult formally on one or more reform proposals.

The work on addressing risks from MMF vulnerabilities is an international priority. We believe continuous close collaboration between securities regulators and central banks is crucial and we strongly support continued international engagement given the nature of cross-border activity. In our approach, we are not only mindful of the specifics of sterling markets and UK investor needs but also of the approach being taken in other jurisdictions, particularly in the EU, where most sterling MMFs are domiciled.

The UK will continue to welcome funds domiciled in other jurisdictions to market to UK investors, in line with the UK regulatory framework. HMT will assess whether the law and practice of the relevant country or territory for MMFs have equivalent effect to the requirements of UK regulations. This underscores the need to work closely with our international counterparts to ensure that our reform programmes achieve high common standards of resilience.





## DERVILLE ROWLAND

Deputy Governor Consumer and Investor Protection - Central Bank of Ireland

### Money Market Funds – The need for reform

Money Market Funds are an important part of the financial system acting as a source of short-term funding for issuers and a cash management tool for investors. Ireland is the largest European domicile for Money Market Funds, accounting for approximately 40% of total European domiciled assets.

Since its entry into force in 2018, the Money Market Funds Regulation, through the creation of a product-specific regime, has helped to improve overall liquidity in the sector and led to greater transparency for supervisors and investors in Europe and beyond.

The onset of the Covid-19 pandemic in early 2020 marked a period of acute stress across global financial markets. For Money Market Funds, this took the form of large redemption flows from investors on the liability side and liquidity shortages on the asset side that combined to place particular fund types under pressure, namely private debt Money Market Funds across a number of currencies and both variable and constant NAV products, with LVNAV US Dollar and VNAV Euro funds experiencing significant stresses. Conversely, European and US public

debt funds saw substantial inflows during the same period.

Since the pandemic, there has been a particular focus on liquidity mismatches across open-ended funds and implementing appropriate measures to ensure that funds have the necessary tools in place to manage their liquidity.

While acknowledging that Money Market Funds were able to meet redemption requests throughout the period, this was in large part down to the significant market interventions of central banks. The stressed market conditions did expose vulnerabilities in the sector resulting from the ‘dash for cash’ which have since formed the basis for a substantial body of work by the FSB, ESMA and ESRB to better understand the structural vulnerabilities evidenced during this period and to suggest enhancements to the regulatory framework.

For those reasons, the Central Bank of Ireland has actively supported the development of targeted amendments to the MMF Regulation that we believe will improve overall Money Market Fund resilience while ensuring the continued provision of the economic functions they provide, minimising the need for future central bank interventions.

**The CBI has actively supported the development of targeted amendments to the MMF Regulation.**

We are particularly supportive of those measures aimed at reducing the likelihood of large redemptions having a destabilising effect, such as mandatory minimum public debt holdings and increased liquidity requirements, as well as moves to improve the availability and encourage the timely use of liquidity management tools that impose on redeeming (and subscribing) investors the cost of their redemptions.

We further support the consensus view to decouple thresholds for daily and weekly liquidity from any rigid imposition of gates and fees, which may have acted, contrary to expectations, to exacerbate rather than mitigate stress.

We also believe that enhanced reporting requirements and disclosures will further improve funds’ crisis

preparedness. Whilst we are open to assessing the role that the stable NAV may have played in exacerbating certain crisis dynamics, we do not think it was central to the events of March 2020 and therefore should not be a priority area for action in any reform of the MMF Regulation.

At the same time, market conditions in early 2020 also highlighted potential issues with the functioning of short-term funding markets under stress. This raises questions about the overall resilience of the market and its ability to withstand exogenous shocks. Whilst further research to better understand wider market dynamics under stressed conditions may be warranted, it is crucial given the important role played by Money Market Funds that the framework within which they operate remains robust and Money Market Funds are in a position to be as resilient as possible to future shocks.

We look forward to the Commission’s publication of the feedback statement to the consultation it carried out earlier this year and its proposed next steps with respect to the MMF Regulation, which we believe should happen as a matter of urgency.

We believe this will be an important step in building upon the important work completed to date and ensuring the continued growth and future resilience of this important sector in supporting European capital markets. We are keen to see the funds sector fulfil its potential as a means of investment and funding in the European economy. This means ensuring that sector remains resilient; that it functions strongly in line with the principles of fairness and primacy of investors’ interests, and that overall it is in line with the effective and sustainable functioning of the European economy.



## ANDY BLOCKER

Global Head of Public Policy -  
Invesco

### Money market fund reform: a broader perspective is needed

Money market funds (MMFs) are first and foremost investment products that seek to provide investors with an income or return on principal, as well as preservation of principal, with many MMFs offering daily liquidity. They are highly transparent and provide investors with cost-effective, diversified and risk managed exposure to short-term money markets by investing in high quality, short-maturity debt securities issued by governments, banks and non-financial institutions.

MMFs therefore play an important role in the functioning of the wider economy, representing a valuable source of non-bank funding to both public and private stakeholders. According to the ECB, at the end of Q1 2022, MMFs in the euro area were managing approximately €1.37 trillion on behalf of investors worldwide.

The utility of MMFs, both as an investment proposition and as a source of funding to the wider economy, is clear and it is important that MMFs, as well as short-term money markets more broadly, function effectively, in

particular during periods of economic or underlying market stress.

It is therefore appropriate to consider the resilience of the sector in the context of COVID-related market events in early 2020.

It is our strong view that MMFs proved to be resilient despite deteriorating economic and underlying market conditions and continued to carry out their core economic functions. No MMFs had to suspend dealing, use redemption gates, apply liquidity fees nor utilise any other liquidity management tools that could impact investors' ability to redeem. Moreover, we note that no stable NAV MMFs breached their respective regulatory thresholds.

The broad resilience of the MMF sector can be attributed in part to the prudent liquidity management of fund managers, as well as the broadly robust regulatory and supervisory framework governing MMFs in Europe which has been in application since 2018.

Notwithstanding the above, it is important that, where shortcomings in the MMF framework are identified, action is taken to further enhance the resilience of the MMF structure. For example, regarding low volatility NAV MMFs, policymakers' various analyses have concluded that regulatory provisions linking weekly maturing assets and net daily redemption thresholds to the potential application of liquidity fees or redemption gates should be removed.

---

#### Policymakers must enhance the transparency and functioning of underlying short-term money markets.

---

We strongly support this conclusion as de-linking these provisions will reduce structural procyclicality by removing the incentive for investors to redeem their shares as MMFs' weekly maturing assets trend towards the 30% threshold. Enhancing the resilience of the LVNAV MMF structure in this way should be the absolute priority of policymakers given approx. 46% of total euro area MMF assets are managed via LVNAV MMFs, according to ESMA.

We do not support some of the other reform options being considered in respect of LVNAV MMFs, such

as removing the ability to provide a stable share price or introducing new minimum or maximum thresholds for public or private assets, respectively.

Pursuing reforms that would remove one of the key product features that investors value, or that would reintroduce an incentive for investors to redeem their shares as a specific asset class trends towards a given threshold, is simply not justified by the evidence presented in policymakers' various analyses.

Neither are reforms such as requiring all MMFs to implement a swing pricing mechanism, given MMFs can already apply targeted liquidity fees to reflect the cost of liquidity, or to establish minimum balance at risk policies which would effectively undermine the MMF investment proposition and serve only to push investors away from MMFs.

Indeed, in considering the resilience of the sector in the context of COVID-related market events in early 2020, policymakers must take a broader perspective.

It is imperative to consider wider reforms that would enhance the transparency and functioning of underlying short-term money markets and that would accompany, not lag, targeted amendments to certain MMF structures. Such wider reforms could include:

- enhancing transparency requirements applying to issuers of qualifying money market instruments
- recalibrating prudential rules for credit institutions intermediating in short-term money markets in order to allow them to carry out that core function more effectively during periods of underlying market stress
- permitting CCPs to invest in certain qualifying MMF shares
- establishing a European sovereign reverse repo program, akin to the US Federal Reserve Overnight Reverse Repo Facility, with which a broad range of money market participants could engage

In considering such wider reforms, policymakers can more effectively ensure that short-term money markets and participants therein, including MMFs, are more resilient to and function more effectively during periods of economic or underlying market stress, and we stand ready to further contribute to policymakers' work in this regard as such initiatives are taken forward.



## DENNIS GEPPE

SVP, Managing Director and  
Chief Investment Officer - Cash -  
Federated Hermes (UK) LLP

### The European money market funds regulatory framework is fit for purpose

EU money market funds (MMFs) are one of the most regulated investment products in existence. They are completely transparent and invest in high quality, short-term, liquid assets which are critical to funding the EU real economy and serve as a foundation for the CMU. EU MMFs provide a market-based yield for all investors, in a transparent, liquid, and highly diversified investment product, even more critical as we enter a period of rising interest rates. The EU MMF Regulation (MMFR) of 14 June 2017 has proven to be highly successful and ensured that MMFs were in the best position possible entering the March 2020 Liquidity Crisis.

It is imperative to remember that despite certain bank-centric creative narratives proffered, the Liquidity Crisis was neither caused nor exacerbated by MMFs. The Liquidity Crisis was the result of 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. These events were extraordinary, served as a real-life stress test, and highlighted key areas for improvements across the short-term funding markets (STFMs), and a few areas for enhancements to EU MMFs.

March 2020 illustrated that active portfolio management of MMFs, combined with minimum daily and weekly liquidity requirements with an overlying Know Your Customer obligation set forth in the EU MMFR, ensured that entering the Liquidity Crisis, MMFs were well positioned to manoeuvre through an incredibly stressful period of illiquidity. While each of VNAV, LVNAV and Public-Debt CNAV MMFs were subject to stress – something which should be expected when the entire financial market is frozen, each successfully operated throughout the Liquidity Crisis.

Notwithstanding the lack of any direct ECB support for EU MMFs and Bank of England support for UK MMFs, as IOSCO emphasises in its Thematic Note “Money Market Funds during the March-April Episode” published in November 2020, “Despite the strains faced by non-public debt MMFs in March and based on the responses to the IOSCO Financial Stability Engagement Group (FSEG) survey, it appears that all redemptions have been honoured, no MMFs have suspended redemptions, imposed fees and/or gates, or converted from LVNAV to VNAV.” In short, EU MMFs proved resilient and performed as intended throughout the Liquidity Crisis.

#### There is simply no evidence-based analysis to support the removal of LVNAV MMFs in the EU.

There is no evidence to suggest that any single form of EU MMF product performed better or worse than others. All performed admirably given the circumstances and met all of their obligations to investors. Certain of the recent regulatory papers have questioned whether LVNAV MMFs should continue to exist. We believe, and EU investors and issuers believe, that LVNAV MMFs are incredibly important investment products. LVNAV MMFs are a regulatory success story, a demonstrated compromise between the historical use of CNAV Prime products and VNAV Prime products. There is simply no evidence-based analysis to support the removal of LVNAV MMFs in the EU.

While EU MMFs have benefitted from the adoption of the EU MMFR, there remain a few areas where improvements can be made to enhance the safety and stability of EU MMFs moving forward. Firstly, the current linking of potential liquidity fees and gate imposition to liquidity levels serves as an improper regulatory incentive to redeem in times of stress and should be removed. This delinking has been identified by EU policymakers as a top priority.

Additionally, while we support the use of liquidity management tools, the determination to apply such tools must be made subject to election by a MMF's board, in exercising its fiduciary duty. We believe the most appropriate liquidity management tool is the use of a targeted liquidity fee, guided by enhanced policies and appropriate escalation procedures, ensuring timely MMF board's consideration of the potential imposition in times of stress.

While certain enhancements to EU MMFs are appropriate, our focus, if we want to prevent a repeat of the Liquidity Crisis, must be on improving the functioning of the short-term funding markets. In March 2020, as investors worldwide searched for liquidity to avoid the unknown, STFMs froze when they were most needed. This must be addressed, and should be addressed alongside, not after, any reform of MMFs.

The existing regulatory framework of MMFR, including the use of LVNAV, Public Debt constant NAV (CNAV), and variable NAV (VNAV) remains appropriate and critical for the continued development of CMU and the funding of the real economy in a post-Covid environment. Having a successful MMF market is the first steps in CMU as MMFs put short-term capital to work to benefit EU investors and issuers.