BlackRock

Financial Conduct Authority (FCA)
Bank of England (BoE)
HM Treasury

22 July 2022

Re: DP22/1: Resilience of Money Market Funds

BlackRock[1] appreciates the opportunity to respond to the questions raised by the UK authorities in their discussion paper (DP) on the resilience of Money Market Funds (MMFs).

MMFs play an extremely important role for a wide range of investors, including many UK corporates, local authorities, charities, pension funds and insurance companies. In recent years, regulatory reform has heightened the importance of intra-day cash movement, and capital and interest rate pressures have reduced the willingness and capacity of banks to have this cash move through their balance sheets. Combined, these factors have meant that short-term markets (and MMFs more specifically) have played a more important role in liquidity management for a wide range of companies and market participants.

The short-term markets experienced sharp stresses in March of 2020 because of COVID 19 and an overall flight to liquidity. This highlighted vulnerabilities in the short-term market ecosystem, and also showed areas where MMFs resilience could be further improved. Such an unprecedented market-wide event affords regulators and market participants the opportunity to draw conclusions from a live 'stress test' that can help improve the resilience of MMFs and the short-term markets.

We are supportive of efforts to ensure that the regulatory regime for MMFs remains robust. However, we believe that any policies which seek to remedy identified vulnerabilities should be considered within the use case for MMFs generally and within the specific fund structures and operational models. If regulatory measures remove the specific features that investors rely on, there is no guarantee that those investors will simply migrate to other MMF structures. Equally, it is unlikely that the banking system would be able to absorb this additional cash in overnight deposits as bank balance sheets are not infinitely elastic nodes. This may force clients into less liquid, higher risk or more opaque money market products with same day access or term products with breakage clauses if liquidity is needed.

[1] BlackRock is one of the world's leading asset management firms. We manage assets on behalf of institutional and individual clients worldwide, across equity, fixed income, liquidity, real estate, alternatives, and multi-asset strategies. Our client base includes pension plans, endowments, foundations, charities, official institutions, insurers and other financial institutions, as well as individuals around the world. We are a global leader in cash and liquidity management; in Europe we manage Public Debt Constant NAV (CNAV) MMFs, Low-Volatility NAV (LVNAV) MMFs, short-term Variable NAV (VNAV) MMFs, and Standard VNAV MMFs (which we market as Ultra-Short Duration Bond Funds) in all three main currencies (EUR, USD, GBP).

To that effect, we believe the most important focus for policymakers should be MMFs' liquidity buffers – these are the fundamental features that underpin MMFs' resilience and ability to meet redemptions, and an understanding of their importance is also critical to assessing the range of reforms currently under discussion:

- Unlike other types of mutual funds, MMFs do not sell assets to fund redemptions. Any net outflows are funded with cash on hand (or Daily Liquid Assets in the regulatory framework).
- Weekly Liquid Assets (WLA) are primarily a metric of an MMF portfolio's ability to organically generate cash in the short-term; MMFs do not sell or otherwise 'use' WLA to meet redemptions.
- The value of cash does not fluctuate, and most importantly, there are no costs associated with funding a redemption from cash because no underlying transaction is necessary.
- This means that, so long as an MMF has sufficient cash on hand to meet redemptions, there is no risk of dilution, and hence no potential first mover advantage.
- The application of liquidity management tools (LMTs) is only necessary in the instance that the MMF does not have sufficient cash on hand to fund redemptions and needs to sell assets. Most MMF managers and investors agree that the application of a liquidity fee in such a circumstance would be the most appropriate LMT.

This unique feature of MMFs is also the basis for why investors value the constant NAV feature in public debt CNAV MMFs, and the ability to deal at a 2 decimal place-rounded price (which is not a constant NAV but can approximate the investor utility of one) in LVNAV MMFs. In a VNAV MMF, investors crystallise capital gains or losses when redeeming from a fund, despite the fact that the fund itself does not realise those gains or losses, because they do not sell assets to pay redemptions in normal circumstances.

Considering the above, we believe that the calibration and functionality of MMFs liquidity buffers should be the primary focus of potential reforms:

- Looking at outflows, even during the stressed period of March 2020, the minimum 10% Daily Liquid Assets (DLA) requirements in the current regulatory framework was sufficient to cover the outflows we observed in GBP MMFs.
- It may be possible to raise this requirement to 15%, which would further increase MMFs' resiliency, but raising minimums significantly creates new risks, specifically that MMFs would not be able to place that level of cash with counterparties in all market conditions.

- The procyclical incentive created by formally linking breaches of WLA minimums with the need for Boards to consider gates or fees should be removed.

Beyond these, we also see merits in further enhancements to the types of information that MMFs disclose to their investors, as well as the frequency of those disclosures.

Further, we believe strongly that both the public debt CNAV and LVNAV fund structures are important for many investors; there are few other products available in the liquidity space that provide similar levels of transparency, liquidity, and overall utility. As such, and with no evidence of specific risks associated with either type of MMF, we believe it is important that these fund structures remain in place. However, we believe that investors and the market overall would be better served by LVNAV MMFs providing detailed information about how (and how often) they would continue to fund redemptions if they did indeed breach the 20bps 'collar'.

We appreciate the opportunity to raise these and other issues contained in our responses to the questions set out in the DP. We would be delighted to work with the UK authorities to provide any insight or data that could aid the process of analysing the effects of March 2020 and developing an appropriate and effective regulatory and policy response.

We remain at your disposal should you require any further input.

Sincerely,

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Q1: **At what point might higher minimum liquid asset requirements start to affect the operation of and demand for MMFs? What impacts might you anticipate? How would you quantify that effect for different levels of DLA and WLA? For example, at an additional 20 to 40 percentage points for minimum WLA (as applied to both LVNAV and VNAV funds).**

Liquidity buffers are an important feature of Money Market Funds (MMFs). Unlike most mutual funds, which generally sell a representative selection of assets from their portfolio to pay redemptions, MMFs are designed to meet redemptions using cash on hand. Appropriately calibrated and functional liquidity buffers ensure that MMFs have sufficient cash on hand on a given day to meet potential redemptions (Daily Liquid Assets), and the portfolio is able to organically replenish cash on hand over the short term (Weekly Liquid Assets).

We are supportive of the focus on the calibration and functionality of these liquidity buffers. The resilience of MMFs in the face of outflow pressures – whether specific to a particular fund, or as a result of a broader, market-wide pressure as was seen in March 2020 – will be, first and foremost, a function of the adequacy of these buffers to deal with redemptions.

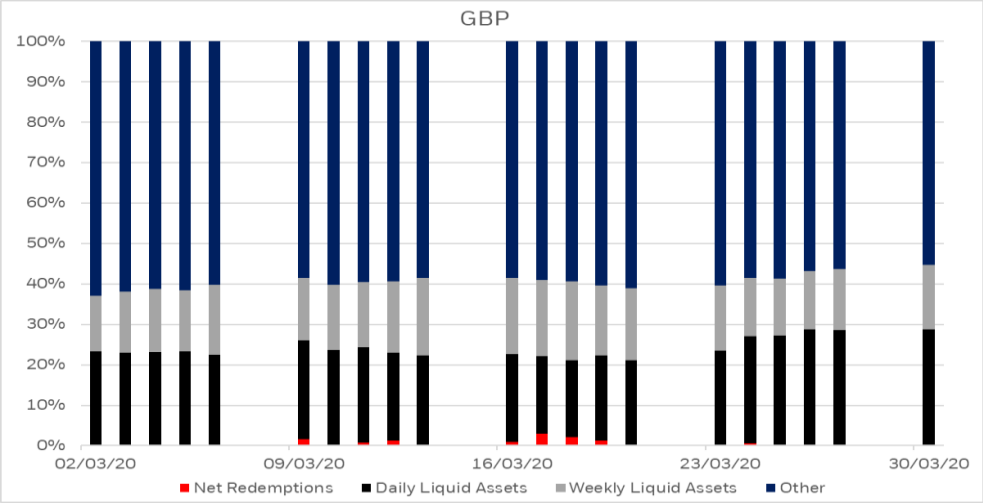
Levels of liquid assets should reflect a real expectation of what a significant outflow pressure might look like. DLA and WLA levels are calibrated well above what might be needed in even extreme circumstances, will constrain funds' ability to withstand different types of market strain. An MMF's ability to hold cash during the day (DLA) is contingent on its ability to place that cash on an overnight basis (either on an unsecured basis via an overnight deposit, or on a secured basis via an overnight Reverse Repo). The market experiences regular constraints around quarter- and (especially) year-end, when bank counterparties shrink the size of their balance sheet, and MMFs and other market participants are limited in their ability to place cash overnight on these dates.

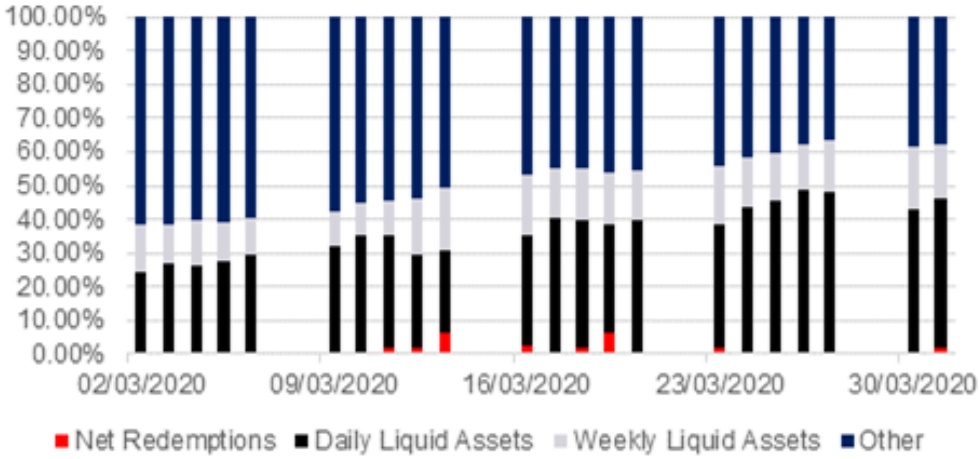
This means that calibration of DLA in particular must ensure that MMFs have enough cash on hand to meet outflows in times of stress, but at the same time, not so onerous that MMFs cannot place that cash overnight in all market conditions and at all times.

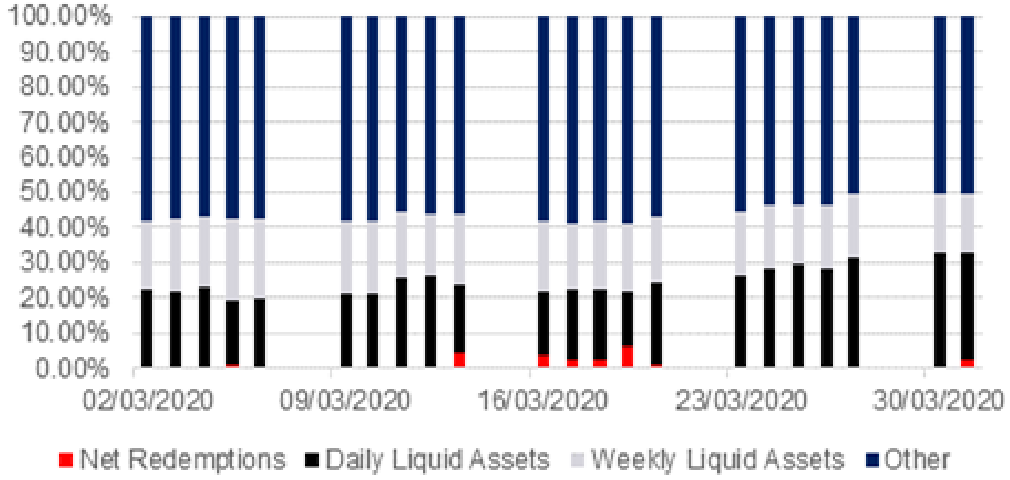
March 2020 was the most acute liquidity strain that MMFs have experienced under the regulatory regimes put in place after the 2008-09 financial crisis and provides a useful benchmark of what outflows look like in such a scenario.

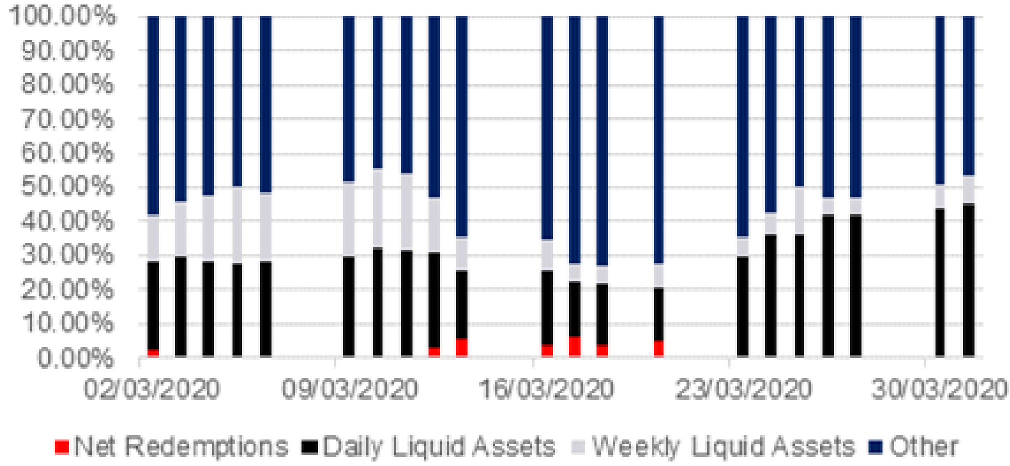
In the following exhibits, we set out the liquidity provisioning (DLA and WLA) for BlackRock's GBP LVNAV MMF, along with four funds from our peer group (other large-sized GBP LVNAV MMFs) for each day of March 2020. Set against this, we have noted the days in which these funds

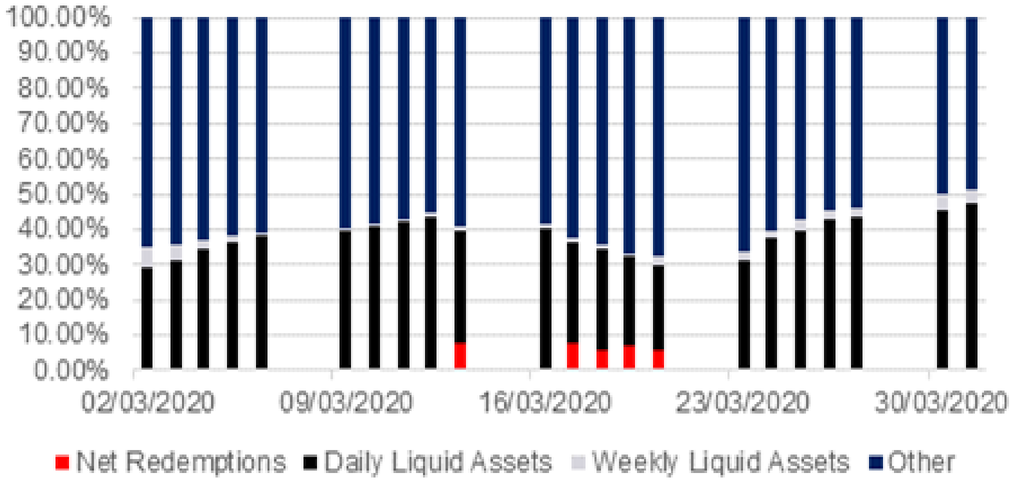
experienced net outflows (note, we do not show data for days when the funds experienced flat or positive net flows, only days with net redemptions). **This analysis shows these funds were strongly positioned with cash on hand to meet the scale of redemptions experienced, and further were in a strong short-term liquidity position to ensure the replenishment of cash positions.**











Redemption levels in March 2020 show that the existing minimum DLA requirement of 10% was sufficient to meet outflow pressures during the strain. While some GBP funds saw instances of daily redemptions as high as 7-8%, the highest daily outflow across the whole GBP LVNAV segment of the market was only 3%[2]. However, given that available cash is the first

[2] Source: iMoneyNet, Morningstar

test of an MMF's ability to withstand a sudden demand for liquidity we do think that minimum DLA could be raised to 15%. We also believe this level of cash provisioning would be manageable for MMFs to place overnight in most circumstances.

Requiring MMFs to hold cash above and beyond this level might require deeper intervention in Repo markets, for example, a facility similar to the US Federal Reserve's Reverse Repurchase Program (RRP). In the US, the Fed acts as the 'cash taker' of last resort by allowing eligible non-banks to place cash with the Fed through a Reverse Repo. This has traditionally been a 'safety valve' for MMFs and other cash holders enabling them to place cash overnight when bank balance sheets are constrained.

Without a similar market structural adaptation in Sterling markets, requiring MMFs to hold levels of cash that they would routinely struggle to place around quarter-ends and year-end would introduce vulnerabilities at regular intervals in exchange for theoretical resilience to a redemption scenario even greater than that experienced in March 2020.

Calibrating WLA levels may be less straightforward than looking solely at redemption patterns. Weekly liquid assets are an effective measure of an MMF portfolio's ability to organically replenish liquidity over the coming 5-day period. Significant increases in WLA may be less effective in underpinning an MMFs' resilience than even a modest increase in the minimum DLA levels (as we suggest above).

We believe the most important improvement to the WLA buffer would be in enhancing its functionality by reducing the procyclical incentives created by the linkage of escalation procedures around redemption fees and gates with breaches of the WLA buffer.

In March 2020, we saw many MMFs seeking to raise their levels of WLA through asset sales in an effort to ensure that WLA remained well above minimum levels to reassure investors that there was no risk of funds needing to impose redemption gates or fees.

We believe that the current calibration of WLA is likely sufficient to ensure that portfolios are designed to have evolving liquidity through maturity roll down, but that the functionality of the WLA buffer should be further improved by de-linking the trigger for the MMF to consider imposing redemption gates or fees.

Q2: **What is your view on the feasibility of a requirement for UK MMFs to only invest in public debt? Do you think such an option would need to permit reverse repurchase agreements secured on public debt to be feasible? How should requirements take into account differences in the liquidity between different types of public sector debt?**

Government debt undoubtedly provides utility from a diversification and liquidity perspective, and many MMFs (even those that invest primarily in private sector assets) invest a small portion of their portfolios in these assets today for that reason. However, as the requirement for UK MMFs to invest solely in public debt is most likely not feasible from a market capacity standpoint.

Unlike the US Dollar market, Sterling and Euro markets suffer from lower levels of supply in short term public debt. At the time of writing, there are £42.3bn UK Treasury Bills (T Bills) outstanding. There are currently no notable, secondary UK Treasury Bill offers and the weekly auctions (primary issuance), despite having increased somewhat in size compared to Dec-21, remain relatively small with £3.5bn issued at last week's auction.

In comparison, the GBP Short Term MMF universe is approximately £208bn LVNAV and £9bn STVNAV as reported by iMoneyNet as of 30 June 2022. This means that the entirety of T Bills outstanding currently equates to slightly less than 20% of the current sterling MMF AUM (it should also be stressed that MMF are not the only buyers of T Bills).

As a contemporary example and to further exemplify the shortfall in supply of sterling public debt, the next Gilt maturity (of approximately £30bn) takes place on the 22nd of July and is therefore, at the time of writing, out of scope from a trading perspective[3]. Following that, the next Gilt maturity is on the 7th of September (of approximately £30bn). However, this has offered limited liquidity as demonstrated by an average trading size of ~£25m (although a larger size may be accessed if required). Of these issuances, approximately 10% of July maturities and 25-30% of September maturities are owned by the Bank of England (QE) - again contributing to the constrained supply of sterling public debt.

Reverse Repo arrangements are primarily used by MMF to place cash overnight, secured against government debt and to provide daily liquidity. Whilst this security is beneficial, they are not primarily used by MMFs as a tool to obtain investment exposure to the underlying collateral. As highlighted in the FCA's 'Resilience of Money Market Funds' Discussion Paper, c.20% of GBP MMF assets were held in Reverse Repo. Based on these figures, MMF would need to greatly increase their use of Reverse Repo which is unlikely to be viable given the aforementioned shortfall of public debt collateral.

[3] If purchased at the time of writing, this GILT maturity would take place during the 'ex dividend' period. Therefore, whilst it would trade at a lower price to account for this, there would be no value in adding this instrument into an MMF portfolio – again highlighting the lack of feasibility of an MMF investing solely in public debt.

With such a significant shortfall in the availability of short-term public debt in Sterling, a requirement for UK MMFs to invest only in public debt or in Reverse Repo collateralised with underlying public debt would put tremendous pressure on Reverse Repo in portfolios (assuming there were no other investors besides MMFs in either T Bills or Gilts with 1-year residual maturity, Sterling MMFs would need to place close to 40% of their current AUM in Reverse Repo arrangements -far more than they do today). The market would be unlikely to be able to absorb this demand, especially over dates where bank balance sheets are put under significant capacity pressures around quarter- and especially year-ends (as Reverse Repo, while providing secured collateral for the MMF, still must use a counterparty – most often a bank).

This means that, for such a requirement to be feasible, the UK Government would need to change its issuance patterns for government debt, or the Bank of England would need to allow some MMFs to place cash with them in Reverse Repo (or even potentially both).

Q3: **What is your view on the impact of a maximum limit on holdings of private sector assets? For example, a maximum of 40%? How might issuers respond if there was a change in demand for those assets from MMFs?**

As we have outlined in our response the Q2, there is a fundamental capacity constraint in UK public debt that makes a meaningful 'cap' of private sector holdings in an MMF a relatively moot point. For example, a maximum of 40% private sector assets would require MMFs to be the nearly-sole holders of UK T Bills and Gilts with 1 year residual maturity, or force a significant shrinkage of the AUM of Sterling MMFs today, meaning a wide range of MMF users would need to find new cash and liquidity management solutions.

It could also reduce access for borrowers to a diverse source of funding as well as requiring managers to purchase securities which may not have the best capital preservation or liquidity profile at particular points in time as a result of forced purchase or redemption of particular security types. We expand on this further in our response to Q4.

Q4: **What is your view on the relative benefits and costs of the different types of asset requirements, such as increasing minimum DLA or WLA, requiring minimum public sector debt holdings, or imposing a maximum limit on holdings of CD/CP (or a combination of those measures)? Please consider increased resilience for MMFs in times of financial markets stress as part of your answer. If possible please provide data to support your views.**

We believe that the flexibility to build portfolios of the most liquid and viable short-term holdings should remain with MMF managers, dictated by end-user preference as to the types of counterparty risk they are comfortable taking.

Many regulatory-enshrined maximum or minimum portfolio allocations could be just as likely to increase MMFs' susceptibility to shocks as they are to increase resilience. Prescriptive portfolio allocation rules create the risk of MMFs becoming forced buyers or sellers of certain types of debt exactly at points in the cycle when allocation to these holdings may make the least sense. Data (outlined in Q1) shows this additional buffer would have been unnecessary even in March 2020, given redemptions were well within MMFs' DLA levels at the time, meaning a concept like a government debt buffer likely introduces additional unnecessary risks to end investors without significant resilience benefit.

For example, while the concept of minimum public debt holdings might mean that an MMF has assets to sell that remain largely liquid even in stressed markets, it may also mean that the MMF could be vulnerable to price volatility risks pertaining to circumstances that an MMF manager would be easily able to predict and avoid were they not forced to hold a minimum allocation to these assets.

Due to the underlying supply constraints that we outline in our response to Q2, MMFs would likely be forced to buy longer-dated public debt in the secondary market to fulfil minimum holding requirements. This would create significant price fluctuation risks for all kinds of MMFs, especially around quarter- and year-end when government debt trades at a heavy premium.

At year-end and quarter-ends, MMFs already see pressures in the market due to bank balance sheet capacity constraints that limit our ability to place cash with counterparties. The same structural issues in the market at these dates drives increased demand for 'HQLA' (public debt) which create notable price volatility over these dates.

Using Sterling as an example to illustrate the issue the impact a mandatory minimum might have as we navigate periods such as year-end in 2021.

To maintain a minimum government allocation, we would have had to win paper in the weekly T Bill auction as we came into year end. With limited T Bills on offer at auction and high demand, we would have needed to be very aggressive in our bids. For example, on the 10th of December, the 1-month auction was 13 times covered, with approximately £6.5bn bids for £500mm of supply (with the average yield being -1.06%). On the 3rd of December, the 1-month auction was 16 times covered, with £8bn bids for £500mm supply (with the average yield being -0.35%).

Oversubscriptions such as this are commonplace, especially in the run up to year end.

A likely outcome is that we would need to look beyond the ultra-short end, buying the longer dated Gilts at higher prices than we deem to be fair value as they are impacted by year end pressures. Once past year end, or other similar periods, demand typically eases, which would likely leave MMF holding a position that is worth less than par. Around the 2021 year-end in particular, the pricing impact would have been amplified as markets have reflected BOE interest rate increases hikes, leading to asset price falls.

In such market conditions, we typically prefer to hold more cash at hand to avoid buying bonds at high prices we predict (with reasonable conviction) will fall below the purchases price for a large proportion of their life. Mandated public debt would have had the counterintuitive impact of making the MMF less liquid as we would carry loss making instruments for relatively long periods of time (as selling would crystallise losses) and would make mark to market NAV fluctuation much more likely.

The idea that the liquidity profile of MMF portfolios would be 'improved' by prescribing specific allocations (whether maximum or minimum) to different types of assets seems to assume that MMFs routinely sell assets to fund redemptions (as other open-ended mutual funds do). As stressed in Q1, MMFs fund redemptions using cash on hand, not by selling assets. Given the risk that maximum or minimum allocation rules could introduce new risks, without necessarily improving MMF resilience, we believe that the calibration and functionality of liquidity buffers should be the most important focus in underpinning the resilience of MMFs.

Q5: Do you agree that the regulatory links discussed in the 'Threshold effects related to liquidity levels' section exacerbate first mover advantage and can drive additional unnecessary investor redemptions in a stress? If so, how much of a problem does it cause and how would you quantify it? Would you support a proposal to remove such links? If possible, please provide data to support your views.

We agree with the DP's assessment that the regulatory links in many MMFs between the WLA minimum thresholds (it should be noted, in Europe, with the added 'trigger' of significant daily outflows) and the possibility of the imposition of redemption gates and/ or liquidity fees was an exacerbator of stress in March 2020. However, we feel it is important to distinguish between the concept of first mover advantage and the incentive to redeem created by regulatory provisions if a fund breaches its WLA thresholds.

A first mover advantage can be mitigated by Liquidity Management Tools (LMTs): anti-dilution mechanisms such as liquidity fees are generally accepted by investors as tools to remove first mover advantage in funds. In contrast, breaching the 30% WLA threshold could have created a regulatory induced incentive to redeem. The perceived risk that MMF investors might have been unable to redeem (it is important to emphasise that investors' biggest concern in this regard would have been the use of redemption gates) could have led to a strong incentive for investors for investors to do so should an MMF be seen to be at risk of breaching that threshold

This in turn created a powerful – and largely procyclical – incentive for MMF managers to shorten the duration and increase the short-term liquidity in their portfolios to well above the 30% WLA minimums to avoid the risk of triggering heightened outflow pressures above and beyond those that managers were already experiencing as part of the general market turbulence.

We firmly believe that eliminating this regulatory incentive – either by explicitly removing the regulatory linkage between WLA levels and the requirement for the Board to consider imposing redemption gates and/or liquidity fees, or supplementing the current framework with clear supervisory guidance that make it clear that a breach would not necessitate the use of either Liquidity Management tool (LMT) – would allow MMF managers to focus solely on how best to position the portfolio to meet redemptions in times of stress without the added consideration of buttressing WLA levels beyond what the circumstances warrant in an effort to stave off unnecessary redemptions.

Q6: What is your view on whether authorities should approve the activation of liquidity fees or the imposition of gates?

We agree with UK authorities that the fund Board should remain in charge of the use of liquidity fees or redemptions gates. Fund Boards should always have the ability to use its discretion to impose redemption fees or gates where it is in the best interests of investors (regardless of the outcome of the discussion around the linkage in Regulation between WLA minimum breaches and the requirement that the Board consider imposing gates and/or fees).

In our view, requiring MMFs to ask permission from regulatory authorities prior to implementing redemption gates could mean these tools would be less responsive to immediate and urgent circumstances, where they may be most needed.

Simultaneously however, this would be unlikely to prevent investor aversion to their use. The issue is not that investors lack trust in fund

boards to make appropriate decisions; rather the issue is fundamentally the risk of the redemption gates themselves regardless of who authorises them.

Q7: Do you agree that the usability of liquidity resources could be improved by changes to how they are defined, such as defining requirements as an average over a period, or allowing authorities to change aspects of the requirements in a stress? What other changes should be considered that might make liquidity resources more usable? Which changes might be most effective at making buffers more usable? If possible please provide data to support your views.

As stated in our response to Q1, we believe that the most important barometer of an MMF's liquidity resources is their DLA, from which liquidity for redemptions are met. WLA is an important additional metric of an MMF's ability to replenish this 'cash at hand'.

As we outline in our response to Q5, the linkage between WLA levels and the requirement for Boards to consider redemption fees or gates created a strongly procyclical incentive on European MMFs to increase WLA levels beyond what may have otherwise been necessary, during market conditions when the cost of doing so (generally by selling longer-dated assets) was high. However, we should be clear that this procyclical incentive did not necessary mean that WLA were unable to serve their primary purpose to organically replenish the cash the fund hand on hand.

In our view, as long as these buffers are realistically calibrated and constructed in a way that gives MMF managers the appropriate flexibility to hold liquidity in a way that reflects the changing market conditions at any given time, they should serve their intended purposes effectively.

Q8: Under what circumstances do MMF managers consider selling assets to meet redemptions? How might that change as a result of policy options aimed at making liquidity buffers more usable (including policies that aim to reduce threshold effects, and policies that change how liquidity requirements are defined)?

We believe that, in some of the reports to date assessing potential MMF vulnerabilities, there is an over-emphasis on issues arising from scenarios where MMFs are forced sellers of assets to meet redemptions. If MMFs are holding the appropriate levels of meaningful liquidity, and these liquidity buffers are constructed in such a way so as to be useable for their intended purposes of meeting redemptions, MMFs should not need to sell assets to meet outflows.

It is true that many European MMFs sold assets in March 2020, but in our experience, these sales were primarily to reposition the funds with shorter maturities and more liquidity well in excess of minimum WLA levels; they were not done to meet redemptions.

Appropriate levels of DLA (and levels of WLA sufficient to ensure that DLA levels are replenished) are therefore vital. We maintain, however, that LMTs are important or MMFs to have at their disposal (with liquidity fees widely considered by both managers and investors to be the most effective and appropriate tools), should they encounter a scenario where they experience redemptions beyond the fund's levels of cash on hand, or where funding redemptions fully from cash might leave the fund in a liquidity position the following dealing day which could not be fully replenished.

Q9: Are you aware of any cases in which a sterling MMF uses or has used liquidity fees or swing pricing? If yes, please provide details if possible.

As far as we are aware, no European 'Short-Term MMF' (this is the part of the MMF ecosystem for which we have robust data), regardless of currency, has ever needed to use a liquidity fee or impose a redemption gate.

Prior to the adoption of the EU MMFR, in the 2007/8 financial crisis, a number of MMFs more akin to short duration fixed income products, may have used liquidity fees and redemption gates. It is important to note that such Funds are materially different in construction than would be permitted today. Industry reform and, most importantly, the MMFR itself have made both the asset and liability side of MMFs far more robust.

We are also unaware of any MMF that has used swing pricing; we generally consider swing pricing to be an inappropriate LMT for MMFs as it is designed for funds that meet redemptions by selling assets from their portfolios.

Q10: Do you agree that UK MMF rules should be clear on the need for the manager to avoid material dilution? Please explain your response.

We do agree that avoidance of material dilution in MMFs is important and we further agree that the MMF rules should be clear to this effect.

Q11: Do you think UK rules should be specific on how MMF managers should avoid material dilution in the way their funds are run, for example, with rules and guidance relating to LMTs? Please explain your answer.

We are supportive of robust anti-dilution and LMT rules, but too much prescription risks inflexibility to market conditions that predicates their use and risks new 'bright lines' which could have similar negative impacts to those that we observed in March 2020 around the perception of the risk of MMFs needing to suspend redemptions or impose liquidity fees if WLA levels dipped below 30%.

We believe supervisory guidance that sets out a clear expectation that managers would need to apply appropriate LMTs in the event that there was a material dilution would suffice to ensure investors are duly protected.

Q12: Do you have any comments on the current MMFR valuation rules in relation to this issue?

We do not believe that any of the current MMFR valuation rules contribute to a risk of material dilution in MMF.

As we outline further in our response to Q14, it is important to distinguish between unrealised mark-to-market volatility in an MMF portfolio and dilution, which is a separate concept relating to a fund being unable to pass along realised capital losses to investors.

Q13: Do you have any comments on the macro-prudential swing pricing option?

We have strong reservations about the macroprudential swing pricing proposal.

Firstly, we do not consider swing pricing an appropriate LMT for MMFs; despite the clear use case in other types of open-ended mutual funds, the unique features of MMFs mean that swing pricing would be extremely challenging to operationalise while maintaining the features that investors value most. Furthermore, swing pricing would be a more complex way to deliver the same outcome as a liquidity fee framework.

Most open-ended mutual funds (except for MMFs and ETFs) tend to be fully invested in the underlying securities specific to the asset class(es) the fund's investment strategy focuses on; these funds carry low cash positions which are generally used for potential investment opportunities, not for meeting redemptions. Mutual funds meet redemptions by liquidating a representative sample of assets of different maturity and liquidity profiles within the portfolio. In certain market conditions or to meet certain redemption profiles, a mechanism is needed to reflect any material differences between the price at which an asset is valued when the NAV is struck, and the price at which the manager is able to sell it.

Properly constructed, this ensures that the cost of liquidity is borne by the redeeming investor(s), not by those who remain invested in the fund.

MMFs by contrast, are specifically designed to hold significant amounts of their portfolio in cash and daily liquid assets for the specific purpose of using these buffers to meet redemptions. The value of cash does not fluctuate, and most importantly, there are no costs associated with funding a redemption from cash because no underlying transaction is necessary. This makes swing pricing redundant as there are no liquidity costs to internalise when an MMF funds redemptions. As we have outlined elsewhere in our response, an MMF should not be forced to sell assets to meet redemptions unless the redemptions exceed the available cash and daily liquid assets the fund is holding. It is only in this extreme circumstance in which the use of an anti-dilution mechanism becomes necessary for an MMF, and liquidity fees are better suited to these circumstances

In relation to the element of this concept that relates to public authorities having the power to impose specific swing factors on MMFs during times of stress, we believe that this would risk creating a significant first mover incentive in times of stress which would be highly procyclical.

If applied across MMFs, this proposal would, in effect, impose pre-emptive financial penalties on any investor who needed to redeem from an MMF for any reason (regardless of whether or not the fund itself had realised any losses as a result of market conditions or would realise any losses in the process of funding the redemption). As a result, and as the DP rightly points out, the circumstances under which this tool would be activated, and how the swing factors would work in practice would need to be incredibly clearly articulated. This would mean that the 'trigger point(s)' for this tool would be apparent to all in the market.

Not only would such a proposal risk creating a similar regulatory incentive for investors to redeem as we observed in March 2020 but, given the loss-allocating nature of how this tool would function in practice, it would also create a clear advantage for those investors who redeemed before they were imposed or triggered.

Given the tools would be designed to be activated during periods of 'market stress', we think it is likely that investors could respond with heightened outflow pressures as such periods developed, creating highly procyclical pressures on MMFs.

Q14: Do you think the investor protection and possible financial stability harms set out for LVNAVs are, or could be material? Please explain and provide evidence, including any relevant data, to support your conclusion on this.

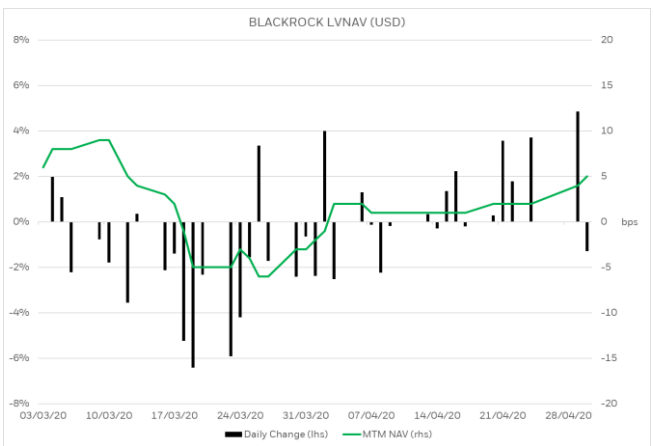
We should first note that we do not like the term 'stable NAV' in the context of an LVNAV – while the ability to round the price to a 2 decimal place price within the collar *approximates the utility* of a stable NAV to the MMF investor, the LVNAV does not have a stable NAV in the same way as a CNAV MMF does. This has important operational and control and oversight implications, which makes an LVNAV closer to a VNAV than CNAV MMF from those perspectives.

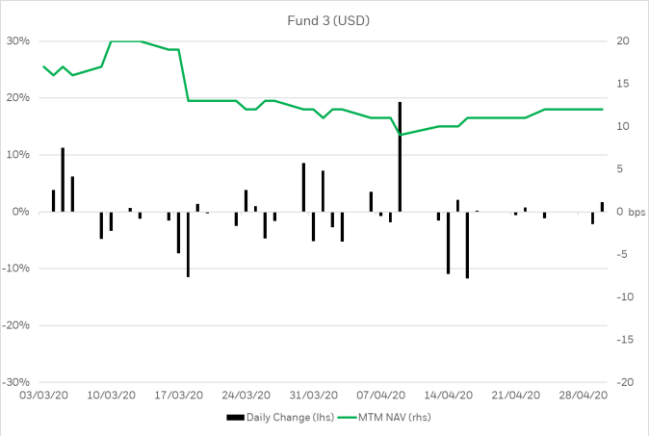
That said, we also disagree with the DP's characterisation of 'stable NAVs' as inherently allowing dilution by dealing at a par price. Unrealised mark-to-market fluctuations on assets in the portfolio and dilution are entirely different concepts.

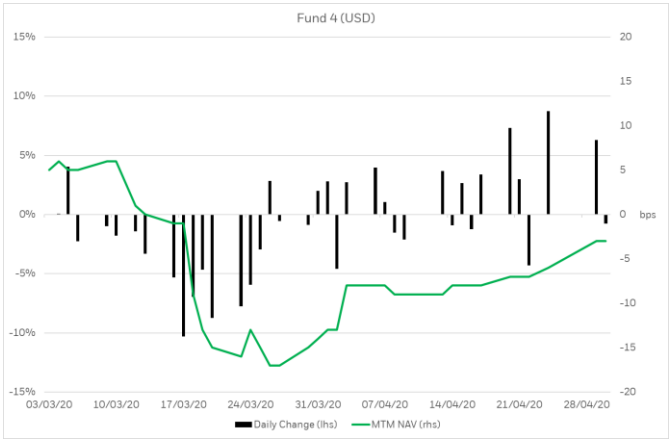
Dilution occurs when the cost of funding a redemption is not fully borne by the redeeming investor, but rather, incurred by the fund, and hence the remaining investors. As we have underlined throughout our response, MMFs fund redemptions from cash on hand. The value of cash does not fluctuate, and most importantly, there are no costs associated with funding a redemption from cash because no underlying transaction is necessary. Dilution risks are only present in MMFs when outflows exceed cash on hand, and the fund would need to sell assets to meet redemptions – this is when LMTs should be used by managers to avoid dilution.

The DP also outlines the potential for a 'cliff edge' whereby if investors feel like there is a risk that the dealing price might move from par to outside the LVNAV's collar, implying a capital loss of ≥20bps, they would redeem in order to avoid realising such a loss (we should also note that, as constructed in the regulatory framework, it is entirely possible for an LVNAV collar to be breached on the upside, presenting an investor with the opportunity to realise a gain).

We observed no such concern by investors in March of 2020. It should be noted that mark-to-market (MTM) valuations of GBP LVNAV funds were, for the most part, slightly *above par* throughout the period of market stress. However, in other currencies, where we did see more significant deviations during that period, there is no observable link between investor outflows and MTM deviations below par value. Were there to have been notable concerns with the risk of an LVNAV needing to move outside the collar and lose the ability to round the share price to 2 decimals, we would expect to see redemption patterns increasing the greater the MTM deviation.







Above, we present the daily flows (either net subscriptions or redemptions; left hand axis, as a % of AUM), set against the MTM NAV (expressed vis-à-vis the +/- 20bps collar; right hand axis) for four USD LVNAV funds in March and April 2020. We have selected our own USD LVNAV (Fund 1), and the three USD LVNAV funds which had the most significant MTM deviations across that time period (anonymised, Funds 2-4).

We have also performed a more detailed analysis of LVNAV funds across a longer time period – looking at MTM deviations and net flows – we similarly found no evidence of a correlation between these variables, suggesting that the potential of an LVNAV moving to deal at a full 4 decimal place price is unlikely a meaningful driver of investor behaviour.

In March 2020, our experience was that investors were most concerned with the risk that an MMF might be unable to deal at all and that they would thus be unable to access their cash. This leads us to the conclusion that any potential 'cliff edge risk' lies not in the move from an LVNAV dealing at a rounded NAV to a 4 decimal place NAV, but whether or not the MMF could make that transition seamlessly without interrupting their ability to provide investors with intraday liquidity.

While the DP references the need for an LVNAV to 'convert' from dealing at a 'stable NAV' (a rounded share price) to dealing at a 'floating NAV' (which rounds to 4 decimal places instead of 2) should it breach the collar, in reality, this transition may not be seamless. Dealing processes and controls may be different for a fund which is assumed to be able to deal at a 'stable' share price versus one that must deal at a tighter MTM tolerance, and in that case, an MMF may not be able to continue dealing interrupted between the two share prices. We see merit in providing guidance that LVNAV MMFs must be able to explain how, and with what frequency, they would be able to continue dealing should they breach the collar. This, in

our mind, would most likely address any 'cliff edge' risk present in an LVNAV.

Q15: Do different types of investor (e.g. retail, corporate or financial) value stable NAV offerings differently? What would be the implications for those investors if the stable NAV features of the LVNAV funds were removed?

LVNAV funds are used by a variety of investor types, though the majority of investors are Institutional and there are a number of different reasons that the ability to round to 1.00 appeals.

The value of the 'stable NAV' (either the true stable NAV of the LVNAV's reasonable approximation) to investors is that they do not need to book a capital gain or loss that *the MMF itself has not realised*. While the MTM value of a particular security can deviate from par at any given point, it will mature at par value (unless there is a default). The ability of the LVNAV to round off some of the unrealised volatility, or for CNAV funds to not pass any MTM volatility at all into the share price, means that investors have a far easier time treating these types of funds as Cash and Cash Equivalent for accounting purposes which is particularly important for corporate investors.

Another reason that LVNAV MMFs are the dominant type of MMF in Europe is the operational utility they offer, for example same day or intraday liquidity, 'sweep' options without need for realising and accounting for de minimis gains and losses and associated delays in settlement. This is particularly important for investors such as pension funds who may use the LVNAV funds to place cash pools that are drawn on during the day for investing or to meet margin calls.

It is not immediately clear what alternatives investors may readily have if the ability for the LVNAV structure to round to 1.00 were to be eliminated. Many European banks are not willing to accept short-term cash deposits at scale, and so investors may have to consider a variety of options such as direct investment in underlying money market instruments, which are likely to be less liquid and less transparent to the market and to regulators.

As we expand in our response to Q16, one very strong possibility is that the elimination of fund structures which investors find of critical importance from a utility perspective would be a short-term market that is more disintermediated, less transparent, and even more prone to shocks.

Q16: What alternatives are there for MMF users who specifically need capital value preservation? How do the costs and risks of those alternatives compare with MMFs?

If no viable or attractive MMF option was available, investors would need to find cash and liquidity management solutions in other parts of the Short-Term Funding Markets (STFMs).

In our view, investors other options for accessing the STFMs are most likely to break down along the following:

- **Bank deposits:** It is unlikely that the banking system would be able to absorb the amount of additional cash that currently resides in prime or credit MMFs through overnight deposits as bank balance sheets are not infinitely "elastic nodes".
    - Banks in many jurisdictions have discouraged investors from placing sizeable deposits because of the impact on banks' capital and liquidity ratios and profitability, particularly if short-term rates are negative, or close to zero. These capital and profitability constraints reduce banks' ability to comfortably increase balances, especially given already high levels of excess liquidity and non-operating deposits for many banks. Investor deposits would likely be placed with lower credit quality banks, reducing both investors' cash management utility and overall STFM resilience. Additionally, deposits offer less diversification for large investors than MMFs.
- **Direct investment in CP:** If viable MMF options are limited, institutional investors with appropriate capabilities will likely turn to direct investment in CP. If this occurs without addressing the vulnerabilities in the CP market discussed below in Q33, the result will be a less transparent market for regulators and further fragmentation of CP secondary market liquidity during stress events.
    - Many pension plans, insurance companies, and non-financial corporates who are active investors in STFMs today rely on MMFs for material portions of their short-term investment liquidity. Many invest both directly in STFMs and MMFs, and others wholly in MMFs. Eliminating MMFs could lead to these investors increasing their direct participation in the CP market, either themselves or through unregulated entities or separately managed accounts. As a result, these investors would likely hold less liquid (and possibly less diverse) portfolios, which could increase concentration risk and result in a more opaque market. This could increase market risk during a stress event if the underlying market vulnerabilities in the STFMs are not addressed.
- **Reverse Repurchase agreements**: Investors could seek exposure to banks via reverse repurchase agreements ("Reverse Repo") for short-

term liquidity investments but will face market access constraints: Reverse Repo is generally only available to large institutional investors, requires complex and costly infrastructure and oversight, and is subject in some jurisdictions to strict regulatory requirements. MMFs provide investors easy, diversified and convenient access to this segment of the STFMs.

- **Short-term bond funds /fixed income funds:** Short-term bond funds and longer duration fixed income funds are not a substitute for MMFs as they provide a different investment proposition with longer dated maturity profiles, different dealing, and settlement characteristics, among other features.

Non-financial corporations and bank issuers would not look to such funds to place short-dated CP and CD and, therefore, may struggle with short-term issuance without MMFs as a ready buyer.

- **Emergence of new substitutes:** New alternatives that are already being reviewed, and in some cases used by investors, as substitutes for MMFs include supply chain finance special purpose vehicles, alternative note structures, and Stablecoins. Increased use of these alternatives could shift risk into currently unregulated areas of the financial markets and present unknown market vulnerabilities.

Further, we believe that a review of the potential impact of investors moving away from prime or credit MMFs due to fundamental reforms should more thoroughly consider the implications for borrowers in STFMs. The effect of much wider adoption of MMF substitutes on borrowers could have notable implications that require robust analysis. If prime or credit MMFs were to disappear, non-public sector borrowers' funding costs in the STFMs would likely increase and the efficiency of their funding would likely diminish.

Q17: For investors in sterling government MMFs, what was the impact of moving from distributing to accumulating share classes and the associated end of the stable NAV offering? Were there any implications for the accounting treatment of those MMFs? Were there any other costs associated with the change? If possible please provide data to support your views.

Sterling Government MMFs adopted Accumulating share classes in order to be able to handle a negative yield. This prompted some investors to move to GBP LVNAV funds, in part due to operational reasons and the challenges handling an accumulating share class.

As far as we are aware, investors were largely able to continue to classify their investments in the Accumulating share classes as cash and cash equivalents, given that the primary change they experienced was to the income distribution policy. The underlying utility of the product largely

remained the same because of the ability to apply fund level rounding in the portfolio rather than move to a fully floating mark-to-market NAV. This meant that the funds were able to retain much, though not all, of the utility of the product from an operational perspective. This meant that the negative return on the funds was overwhelmingly able to be viewed as negative income, as distinct from a capital loss, from an accounting perspective. This has also been the case for both EUR Government CNAV MMFs as well as EUR LVNAV MMFs, both of which moved from distributing to accumulating share classes when the MMFR came into force.

No investor bore explicit costs from the move from Distributing to Accumulating, though some may have needed to undertake small internal system changes.

Q18: If stable NAV was no longer permitted for UK LVNAV MMFs, and assuming no other changes (e.g. to liquidity requirements), what do you expect to happen to demand for LVNAV funds relative to VNAV funds? What value would there be in retaining LVNAV as a UK MMF type?

While we are aware that the MMFR refers to the ability to round a share price to 2 decimal places as a 'constant NAV', as noted in our response to Q14, we do not believe that an LVNAV should be understood to have a 'stable/constant NAV' which can only truly be attained by amortising the MMF's full portfolio. The 2dp rounding feature of the LVNAV only approximates the investor utility of the stable/constant NAV.

We believe that removing an LVNAV MMF's ability to use a 2dp rounded share price while within the 'collar' would reduce investor utility significantly. The new fund would effectively be a VNAV fund, and while this might be acceptable to some investors, it is likely that some users might seek other alternatives. Even for those investors who would accept the change, the potentially diminished scale of the fund would have knock-on disadvantages for those who remain (e.g. potentially diminished liquidity, increased concentration risk, etc.).

Finally, removing this feature from the LVNAV would create incoherence in the regulatory regime as it would mean there are, in effect, three different kinds of VNAV funds (the LVNAV without the ability to deal at the rounded price, a short-term VNAV, and the Standard VNAV), each with different asset side rules (DLA, WLA, overall portfolio duration, maturity of permissible instruments), but with the same liability-side features (full MTM, 4dp rounded share price, same-day liquidity provision to investors).

Q19: Should UK public debt CNAV MMFs continue to be permitted to operate with a stable NAV?

We believe that it remains entirely appropriate for public debt MMFs to continue to be able to use amortised cost accounting throughout their portfolio, and as a result, for these funds to continue using a stable NAV. Public debt CNAV funds are a feature in both the US and EU regulatory regimes.

It is worth noting that investors, were they to hold the underlying government debt securities directly on their own balance sheets, would be able to value them at amortised cost.

Many users are seeking exposure to short-dated government debt for collateral and reserve management purposes, and many choose to use MMFs because direct investment may be a more costly alternative due to operational ease of MMFs and a lack of 'in-house' trading capabilities and custodial infrastructure to gain public debt exposure directly. By removing the utility that a public debt MMF brings, we may see some of these investors choosing to reduce their exposure to public debt instruments across their investments.

Q20: In what way might these three types of liability side policy options (reducing dealing frequency, imposing notice periods, and imposing minimum settlement periods) impact MMFs' ability to meet MMF investor needs? How might investors respond to these options? How might it affect investor liquidity management? What alternative cash management options do investors have, and what costs and risks are associated with the alternatives?

Most investors have some need for daily access to liquidity or cash on hand. Whilst there may be some ability to forecast future liquidity need and more predictable cycles such as payroll or tax payments, many investors rely on having some cash readily available for payments or margin calls that cannot be easily foreseen. Reducing dealing frequency, imposing notice periods or minimum settlement periods would mean MMF would be unable to meet daily cash needs.

The impact of Basel III banking regulations means that many investors have limited alternatives available as cash placed on an overnight basis will ultimately be treated as non-operating deposits and typically penalised as these balances are costly for a bank to hold. Other options for clients include overnight repurchase agreements or direct securities. The former are costly to set up and will be restricted to those investors that have the size and scale to warrant the operational set up and the latter will not replicate daily liquidity (e.g. even the most liquid of securities, Government Bills settle T+2). Other alternatives cited more recently include stablecoins which currently lack regulatory oversight and scrutiny of their underlying collateral.

Q21: Which investors value intra-day settlement vs end of day settlement (T+0), T+1 or T+2 day settlement?

Of the investors mentioned in Q20 that require daily access to cash (T+0), many value the ability to obtain intraday access to their cash. A prime example is an investor that has a bond repayment or acquisition where settlement is needed by a certain time of the day per legal agreements or movement of cash between entities is required. If an investor only has access to cash on a T+1 or T+2 settlement basis they often report the same struggles to place this overnight with a bank as referenced in Q20 leaving them with limited options.

Similarly, the need to post cash margin and collateral, settlement and ongoing payments form a variety of requirements for intraday and T+0 movement, of which investments in MMFs can be the most liquid and transparent source for institutional investors such as pension schemes, insurers and corporates.

Q22: The UK authorities are not aware of any MMFs in non-UK jurisdictions imposing limits on dealing frequency, or having non-zero notice periods, as a matter of general practice. Do you have any information to the contrary?

We do not.

Q23: Do you agree with our assessment that policy options to increase the liquidity of MMFs' assets could achieve the outcome of reducing MMF liquidity mismatch such that these liability side options may not become necessary?

Generally speaking, we agree that policymakers' focus should be on the asset side, not the liability-related features of MMFs. However, we do not agree with the framing of the policy objective as a reduction in the 'liquidity mismatch' of MMFs.

Liquidity mismatches arise in banking due to the nature of bank liabilities – essentially callable debt obligations that must be funded by the bank's assets. The nature of investment funds is quite different; 'liabilities' in an investment fund are equity-like in that they result in ownership of a share of the fund's assets, and hence ownership of the risks tied to those assets. The focus, therefore, should rightly be on liquidity risk management tools that give funds the ability to manage the impact of funding redemptions and ensure that the fund (and hence, remaining investors) does not the bear the cost of funding those redemptions.

In the context specifically of MMFs which, as we have pointed out, fund redemptions from cash on hand, means that the focus needs to be on ensuring redeeming investors continue to be paid from cash, which is non-dilutive. As a result, we believe that focusing on liquidity provisioning should be the primary focus.

Turning to 'liability side' reforms that have been discussed in the MMF debate, the experience of March 2020 provides no clear evidence that the pricing and/ or settlement profile played a part in driving outflows from MMFs. Looking at the types of MMFs that it is generally accepted experienced the most significant outflow pressures in March 2020 (US Floating NAV prime funds, EU-domiciled USD LVNAVs and EU-domiciled EUR Standard VNAV funds), we see different pricing structures (two floating NAV structures, and one that deals at a 2dp rounded price) and different settlement profiles (two whose dealing profile is best described as providing intraday liquidity to investors, and one – EUR Standard VNAV – who provide at end of day or even T+1).

Q24: Would liquidity-based redemption deferrals introduce the sort of regulatory threshold problems covered in the 'Threshold effects related to liquidity levels' section?

We agree with the UK authorities that this would likely create new threshold effects.

Furthermore, it would likely severely undermine investor utility, risking the viability of the product. The ability to offer same day liquidity is key to the utility of a MMF for investors. Changing the terms for redemptions by introducing liquidity-based redemption deferrals would also likely impact the 'cash equivalence' accounting treatment that many investors and some regulators give to MMFs. This is an important factor for many MMF investors, especially corporates.

Finally, as we have outlined in elsewhere in our response, unlike other fund types, short-term MMFs are specifically designed to meet redemptions from DLA and not from the sale of a slice of portfolio assets, meaning liquidity-based deferrals are unlikely to be an effective LMT for most MMFs.

Q25: Is there a way to design liquidity-based redemption deferrals which avoids threshold effects? Would such a design be useful for MMF managers or investors or both?

We do not believe this would be possible.

Q26: On what occasions has redemption-in-kind been used for MMFs in the past? Under what kind of circumstances or conditions might it be used in the future? What benefits does it provide to investors?

We are not aware of redemptions-in-kind being used in any MMFs in the past.

Redemptions-in-kind mean that assets are transferred to a redeeming investor instead of being liquidations and the investor's redemption paid with the proceeds. As we have stressed in our answers to previous questions, MMFs fund redemptions from cash on hand, not by selling assets to begin with; they would only need to sell assets in extreme circumstances.

Transfer of assets in this manner can be subject to regulatory notification, and valuation from an independent third party – such as the fund auditor, depositary, or trustee.

However, they are not suited to many investors. Typically, only large institutional investors with their own dedicated custody accounts would use redemptions-in-kind, which will only be made if the investor in question it is willing to accept it. This is more likely to be the case if the investor has a similar portfolio on their own account to the one held in the fund.

One area of improvement we would recommend is wider adoption of MMF shares being approved as collateral for margin purposes, which we expand further in our response to Q27.

Q27: What are the current barriers to offering redemption-in-kind to investors, either in normal or in stressed market conditions? How might those barriers be reduced or overcome?

In-kind redemption is difficult in MMF portfolios due to the specifics of portfolio construction, and the high levels of cash on hand (DLA) that MMFs carry (which would also need to be paid in an in-kind redemption) limit the need for such a tool.

Equally, many MMF investors might find it difficult to take custody of some of the underlying assets in MMFs; indeed many investors use MMFs to manage cash positions because they lack the infrastructure or market expertise to invest directly in short-term credit markets.

One area that would be worth further reflection by policymakers, and which could have a similar effect as facilitating redemptions-in-kind, would be to increase the fungibility and transferability of MMF shares themselves. For

example, today the posting and taking of cash margins in certain types of transactions can create undue frictions on MMFs. If the margin poster holds cash positions in an MMF (as many do), they would redeem from the MMF and post the cash to the transaction counterparty. In some instances, that counterparty may also hold cash in an MMF, and hence, then need to place the cash they have received in an MMF (potentially even the same one that the margin poster had redeemed the cash from).

Given that margin calls often increase in market stress events (indeed, in Europe they played a role in the outflow pressures of March 2020), finding ways to reduce frictions in these types of transactions by facilitating the use of MMF shares as collateral could improve overall MMF resilience.

Q28: Do you have any other comments on the use of redemption in kind for MMFs?

We have no further comments.

Q29: Do MMF managers effectively manage investor concentration? If you are a manager, how do you monitor investor concentration in practice?

Yes, MMF managers closely monitor and effectively manage investor concentration. MMF managers under the existing regulations (Article 27 of the MMFR) are required to establish, implement, and apply procedures and exercise all due diligence with a view to anticipating the effect of concurrent redemptions by several investors, considering at least the type of investors, the ownership of a fund by a single investor and the historic flows. The current requirement also extends to intermediaries where information and data on beneficial owners is regularly shared with MMF managers.

Investor concentration is also an important consideration in maintaining an external fund rating on an MMF, with liquidity coverage of large investors exceeding the minimum regulatory requirements described above.

Equally, many investors themselves are interested in ensuring that there are no material concentration issues in MMF, giving managers an added incentive, above and beyond regulatory requirements and ratings criteria, to manage any concentration risks.

Q30: What is your view on hard limits, or a maximum percentage any one investor (or several investors or investor types) could invest in any one MMF?

For the reason outlined in our response to question 29, we believe that MMF managers should be well sighted on the investor concentration within the MMFs they manage and can adjust the liquidity profile of the MMF to address any risks. Therefore, we do not think that hard limits, or a maximum percentage any one investor (or several investors or investor types) will provide any further resilience to the MMF.

Hard limits would likely be more difficult to manage for smaller MMFs (by AUM) where single investors (or types of investors) can naturally make up a bigger portion of the MMF. In this instance, rather than a hard cap, the manager should be managing the fund more prudently from a liquidity perspective to reflect the increased concentration risk.

It should also be noted that many investors (in particular, corporates) will include an ownership concentration restriction in their investment policy.

Q31: What is your view on disclosing to investors in general the degree of investor concentration? For example, the percentage held by the top 10 shareholders of an MMF?

As described in our response to questions 29 and 30, the requirement for a MMF to monitor and respond to investor concentration levels in a portfolio is well established. We are of the view that investors, in particular corporates, have well established monitoring processes on MMFs against their own investment guidelines. We support increased transparency in MMFs and believe that a regular disclosure aligned to the funds financial reporting framework could be additive.

Q32: Do you have any views on the additional 'policies to absorb losses'?

We agree with the view expressed in the DP that other policies to address MMF resilience are preferable to the additional 'policies to absorb losses'. MMFs do not need to 'absorb' losses, as they should be properly passed onto the investors in the event they are incurred.

Q33: Do you have any views on underlying money market issues?

The breakdown of liquidity in the short-term funding markets (STFMs) was a large part of the story of March 2020, and we believe that looking at MMFs in isolation whilst ignoring the structural issues in this segment of credit markets risks a repeat of the same issues in future.

STFMs generally rely on dealer bank balance sheets for secondary market liquidity. During periods of acute stress, banks conserve liquidity, which means these do not function properly. This breakdown in functioning can

have procyclical effects, something which has already been identified as an area for further focus by policymakers.

We believe that STFMs would benefit from a broader modernisation of the overall market structure, and that industry and policymakers should take a closer look at how best to improve their functioning, with a focus on promoting greater liquidity and price transparency.

Some areas that merit further consideration would be examining whether market structure adaptations that could more easily match buyers and sellers (for example, all-to-all electronic venues that have become more popular in longer-maturity fixed income markets in recent years), how to provide greater price transparency, and how to reduce the market's reliance on bank balance sheet capacity for secondary market liquidity.

In addition, quality market data about STFMs is difficult to source. This is an impediment for both market participants and for public authorities. The latter arguably have an even greater need for comprehensive data: to more clearly assess the resilience of banks who raise considerable funding in these markets and who, in normal times, provide liquidity to a range of market participants. Equally, a better, data-driven understanding of short-term markets can help monetary policymakers better understand how short-term markets transmit monetary policy.

Q34: Are there other threshold effects that may act to exacerbate MMF redemptions in a stress that have not been covered in this DP?

The 20bps collar is the defining feature of the LVNAV MMF. As we have outlined, we believe that it is a highly valued fund structure by investors in no small part because it preserves their ability to come in and out of the fund at a share price which, in normal conditions, mutes some of the volatility caused by unrealised gains and losses in the fund's portfolio.

From a financial stability perspective, the structure is a significant improvement on the pre MMFR CNAV model permitted for credit ("Prime") MMF because, in the event of a credit issue in the fund, the fund would need to move to a fully Variable NAV well before it 'broke the buck', which would result in a broader financial stability event.

However, the MMFR sets the 20bps collar in absolute terms, which means that an LVNAV must move to a fully Variable NAV if the price deviates by 20bps either below or above the 2dp rounded share price. While the financial stability merits of this move are clear when a fund deviates by 20bps below the rounded NAV, there is no clear reason for a similar move if the unrealised gains of the portfolio move 20bps above that price. This risks incentivising investors to redeem in order to realise a gain that the fund itself has not realised.

This is an important consideration given some of the most material price deviations in LVNAV MMFs in March 2020 were actually deviations on the upside, and we see clear merit in clarifying that the collar can only be breached by 20bps deviations below the 2dp rounded share price.

Q35: Are there any other potential rules changes to address MMF vulnerabilities that could have net benefits? If possible please provide data to support your views.

We have no further comments; as outlined, we believe the most important focus for policymakers in underpinning MMF resilience is to ensure that MMFs have sufficient DLA to meet redemptions, and that MMF managers are given the appropriate toolkit, and the flexibility to use the tools at their disposal, to manage around the changing liquidity landscape in markets.

Q36: What are the advantages and disadvantages of MMFs as cash management type products for different types of users compared to other solutions, such as bank deposits? Are there any barriers to persons who need cash management services from using bank deposits, instead of MMFs? Do MMFs provide unique benefits to certain kinds of end users, and if so what are these? Would any of the possible reform options in the DP significantly impact MMFs' ability to provide these specific benefits?

Users of MMFs do so for a range of different reasons.

Since the Basel reforms, banks' ability to provide balance sheet capacity for many different types of counterparties to place cash with them in the form of deposits has been greatly diminished. This has meant that MMFs are an important option for a wide range of users, as a robust, liquid, transparent, and highly-regulated liquidity management tool precisely because bank deposits are not a viable option.

Even before the reduction in the capacity of the banking system to take deposits, many different types of companies used MMFs as a way to diversify their counterparty credit risk. Public deposit insurance in most countries does not cover corporate or financial deposits – meaning a bank deposit carries single-name counterparty risk for the depositor – one of the most important features is the ability to diversify counterparty risk through a well-diversified, professionally managed portfolio.

We have outlined in a number of places in this response the policy options which we feel would remove important features that would diminish the utility of MMFs (e.g. changes to the dealing or settlement features, excessive changes to the asset composition of funds that could introduce

new risks, or macroprudential tools that could introduce the ability of public authorities to allocate losses to MMF investors where those losses are not borne by other investors in the same underlying assets) and potentially displace many users. We do not believe that the banking system would be able to absorb this full stop; more likely, users would still require market-based cash and liquidity solutions but may turn to other more opaque or less regulated options.

Q37: Should the UK authorities consider rule changes to the information MMFs are required to disclose to investors?

We would emphasise the role that the transparency provisions in the MMFR (and the US 2a-7 reforms for US MMFs) have played in ensuring the resilience of MMFs. We observed many investor concerns in 2007/8 that stemmed from a lack of clarity as to whether or not the MMFs they were invested in were exposed to the particular issuers most affected by the broader credit issues in the market. This lack of transparency certainly heightened investor redemptions in 2007/8 and it should be noted that the greatly improved transparency in the current regulatory regime played a strong role in making MMFs more resilient in March 2020 by giving investors a clear picture of MMFs overall portfolio health.

The MMFR requires disclosure of important metrics to investors at least weekly:

(a) the maturity breakdown of the portfolio of the MMF;
(b) the credit profile of the MMF;
(c) the WAM and WAL of the MMF;
(d) details of the 10 largest holdings in the MMF, including the name, country, maturity and asset type, and the counterparty in the case of repurchase and reverse repurchase agreements;
(e) the total value of the assets of the MMF;
(f) the net yield of the MMF.

We would think it would be appropriate to require these to be disclosed on a daily, not weekly basis; furthermore, it would also provide value to investors to disclosure levels of DLA and WLA in addition to the above metrics.