International Organisation of Securities Commissions
Calle Oquendo 12
28006 Madrid
Spain

28th May 2012

Dear Mr Ben Salem,

We are writing to you with HSBC Global Asset Management's public comment on IOSCO's "Money Market Fund Systemic Risk Analysis and Reform Options" consultation report. Our letter begins with a detailed description of our proposals for MMF reform and concludes with our answers to the questions raised in your consultation report.

We look forward to receiving the conclusions of your review of the money market fund industry and we hope you find our submission informative. Please contact us if you have any questions regarding our submission.

Yours sincerely,

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HSBC Global Asset Management's Money Market Fund ("MMF") business

HSBC Global Asset Management manages over USD 75bn in money market funds ("MMFs") and segregated money market mandates. We manage MMFs in 16 different jurisdictions and in 12 different currencies.

We have a unique perspective on the MMF industry due to the breadth of markets we offer MMFs and the fact that we are the only manager who has meaningful scale in the three largest markets for MMFs (US 2a-7 market, "international" market Dublin / Luxembourg and the French domestic market). We manage both Constant Net Asset Value ("CNAV") funds and Variable Net Asset Value ("VNAV"), adopting the same investment policies and investment process across our range of MMFs.

In summary, we recommend:

- MMFs should be required to maintain 10%/30% of their assets in instruments maturing overnight/within one week;
- MMFs should be required to manage shareholder concentration within a target range of [5-10%];
- MMFs should be able to limit repurchases on any trading day to 10% of the shares in issue;
- MMFs should be permitted to meet an investor's redemption request by distributing a pro-rata share of the assets of the fund rather than by returning cash to the investor i.e. an in-specie redemption;
- MMFs should be empowered to impose a liquidity fee on redeeming shareholders, if deemed necessary to ensure fair treatment of redeeming and remaining investors;
- Sponsors should be prohibited from supporting their MMFs; and
- MMFs should be prohibited from being rated.

HSBC Global Asset Management's principles when considering the need for further MMF reform

We fully support the enhancements made to regulation 2a-7 in the US and the creation of a short-term MMF definition in Europe. Both sets of regulation have reduced the risk that investors in MMFs "run" and made them better able to operate during a period of market stress. The new MMF definitions in Europe also provide clarity for investors and therefore enhance investor protection.

In our opinion there are additional reforms to MMFs that should be made to further enhance their ability to operate normally during a period of market stress. Our reform proposals are based on achieving the following objectives:

1. Provide MMFs with a greater ability to meet redemptions
2. Create a disincentive for investors to redeem
3. Remove any existing ambiguity of risk ownership
4. Reduce systemic risk created by MMF ratings

It is important that any MMF reform adopted is proportional to the issue being addressed. It must be remembered that whilst the challenges that the MMF industry has had to meet over the last 5 years have been very significant, the fact remains that there has only been one systemic liquidity event in the MMF industry since they were created over 40 years ago.

Any reform mechanisms adopted to address regulators concern of systemic liquidity risk in MMFs must also maintain MMFs in a form that remains attractive to investors to buy and for providers of MMFs to produce. If these objectives are not met then investors will no longer have access to a product that provides them with a solution to manage credit risk through

diversification in an efficient manner. Investors in MMFs have a legitimate need for this product and continue to require access to it.

HSBC Global Asset Management's MMF reform proposals

Based on the objectives set out above, we propose the following reforms that will further improve MMFs ability to meet redemptions, create a disincentive to redeem to manage "run" risk, remove any ambiguity of risk ownership and remove systemic risk associated with MMF ratings. We believe these improvements meet regulators objectives whilst maintaining the viability of MMFs both for investors and producers of MMFs.

Greater ability for funds to meet redemptions

There are a number of mechanisms that would improve the ability of MMFs to meet redemptions. Some of the mechanisms we propose are already included in regulation in some jurisdictions or are at least common practice in the industry.

- **Minimum liquidity requirements** – All MMF regulation should state the minimum amount of liquidity funds are required to maintain overnight and within one week. Both US 2a-7 regulation and IMMFAs Code of Practice were updated post the credit crisis to state these minimums. In addition, many MMF providers' internal investment guidelines stipulate minimum liquidity requirements that a fund is required to maintain. We believe requiring funds to hold minimum levels of natural liquidity (i.e. minimise the probability that asset sales are required to meet liquidity needs) will heighten MMFs ability to meet redemptions whilst minimising the impact of significant emergency asset sales on the broader financial system. We recommend that IOSCO follows the liquidity requirements stipulated in the SEC's rule 2a-7 of a minimum 10% of liquid assets maturing overnight and 30% of liquid assets within five business days.

- **A client concentration policy** – Current MMF regulation, MMF industry self regulation and most MMF providers internal investment guidelines focus on the liquidity of the assets in a fund with insufficient focus on a funds "liability" to its investors. Prudent liquidity risk management should also place controls on individual client and industry concentrations in a fund. This is to avoid a small number of individual investors, and investors from one, or a small number of industries, dominating the ownership of a fund. High client and/or industry concentration can place liquidity pressure on a fund if these investors were to redeem within a short timeframe. Designing prescriptive regulation in this area is challenging and therefore we propose that regulation requires the Board of Directors of a fund (or its equivalent) to have a client concentration policy. The policy should set limits on individual client and industry concentrations. The policy must be more prescriptive than a simple "know your client" type policy. For example, the policy should set a target client concentration of 5%. The policy would need to set out how the MMF handles issues such as omnibus accounts and internal assets when calculating client concentrations.

- **Limit the total number of shares repurchased on any trading day** – Regulation should allow MMFs to limit the total number of shares that a fund is required to repurchase on any trading day to 10% of the shares in issue. If enacted, the limitation will be applied pro-rata so that all shareholders redeeming on a particular business day realise the same proportion of their shares. The balance of shares not repurchased will be carried over to the next business until all redemption requests have been met. This mechanism provides an extended period in which a fund can manage the redemption requests. In some jurisdictions this type of mechanism is allowed by regulation and many MMFs in those jurisdictions have language in their prospectus allowing the Board of Directors (or its equivalent) to enact this mechanism.

- **In-specie redemptions** – MMF regulation should allow a MMF to meet an investor's redemption request by distributing a pro-rata share of the assets of the fund rather than by returning cash to the investor i.e. a in-specie redemption. The benefit for the fund is that it is not required to use its immediate access liquidity, or to sell its more liquid assets, to meet a large redemption request. Due to the potential difficulty for some investors in MMFs to receive a share of the assets in the fund a minimum redemption size should be set so that redemptions are only provided in-specie for "large" redemptions. However, a MMF should have the ability to process any redemption request in-specie if the fund and the shareholder both agree to it and it is in the interest of all shareholders. Due to the complexity of operating this mechanism in practice, the Board of Directors of the fund (or its equivalent) should be required to maintain a policy on the handling of in-specie redemptions.

Create a disincentive to redeem to manage "run" risk

We believe a trigger-based liquidity fee would be a powerful mechanism for strengthening MMFs during a financial crisis. In particular, a liquidity fee would:

- Ensure the fair treatment of redeeming and remaining investors;
- Disincentivise redemptions; and
- Reinforce the 'investment fund'-like nature of MMFs.

What should 'trigger' the imposition of a liquidity fee?

We believe the 'acid test' for imposing a liquidity fee depends on whether redeeming investors are causing a disadvantage to remaining investors. After all, a MMF - like any other investment fund - is supposed to mutualise risk-taking amongst its investors; if redeeming investors are causing a disadvantage to remaining investors then, to that extent, risk-taking has been de-mutualised; imposing a liquidity fee in those circumstances would re-mutualise risk-taking; that would be appropriate, because it would be consistent with the prospectus investors had signed-up to.

Since investment fund boards have a fiduciary obligation to treat investors fairly, we believe it should be left to the board of MMF to decide when to trigger the imposition of a liquidity fee[1]. This would be consistent with the power many European boards already have to impose a dilution levy (which is economically equivalent to a liquidity fee) if they believe an investor is market-timing a fund.

However, some commentators have suggested that a fund board may be too commercially conflicted to decide whether to impose a liquidity fee. They have therefore argued that a liquidity fee should be triggered by a 'rules-based' event.

In that case, we believe the most appropriate rules-based trigger event would be if the 'shadow price' of a CNAV fund fell to 0.9975, or the price of a VNAV fell by 25bps in one week (see our paper "Liquidity fees; a proposal to reform money market funds" for further information).

We acknowledge other possible rules-based trigger events, but are concerned they might result in liquidity fees being inappropriately imposed. For example;

- If a liquidity fee was triggered when a fund's overnight/one week liquidity fell below [5%/15%], but there was no substantial lack of liquidity in secondary markets or material deviation in mid-value of the MMF, then redeeming shareholders would not be causing

[1] The classic account of bank runs ("Bank Runs, Deposit Insurance, and Liquidity", Diamond and Dybvig, Journal of Political Economy, June 1983) notes that: "…the demand deposit contract satisfies a *sequential service constraint*, which specifies that a bank's payoff to any agent can depend only on the agent's place in line and not on future information about agents later in line." This compares starkly with the fiduciary obligation of the board of an investment fund to treat all investors fairly. *In extremis*, the board of an investment fund might enforce that obligation by gating the fund, or by imposing a liquidity fee, as described above.

any particular disadvantage to remaining shareholders and it would not be appropriate to impose a liquidity fee; or

- If a fee was triggered when a fund experienced net redemptions of more than [25%] in one week, but there was no substantial lack of liquidity in secondary markets or material deviation in mid-value of the MMF, then redeeming shareholders would not be causing any particular disadvantage to remaining shareholders and it would not be appropriate to impose a liquidity fee; or
- If a fee was triggered when *another* fund in the industry broke the buck, but that was an isolated incident which did not cause contagion to other funds or issuers (a la Community Bankers in 1994), then it would not be appropriate to impose a liquidity fee.

Some commentators have objected that a trigger-based liquidity fee would cause investors to seek to redeem prior to the imposition of the fee. We disagree with this argument, which misunderstands the cause of investor redemptions. As noted by IMMFA:

> *"…in September 2008 a series of headline events (e.g. relating to Fannie Mae and Freddie Mac, Merrill Lynch, American International Group, Washington Mutual Group, Bank of Ireland, Allied Irish Bank, Lloyds etc) caused investors to lose confidence in the solvency of the financial system as a whole, and the banking system in particular. 'Prime' MMFs invest substantially all of their assets in deposits and securities issued by banks and other short-term issuers. US institutional investors therefore redeemed because they were worried about losses that prime MMFs might be exposed to, i.e. they redeemed from US prime MMFs because they no longer believed a diversified investment in the financial system was an effective way of managing credit risk. The majority of their redemption proceeds were used to subscribe to US Treasury MMFs (which invest in US Treasury bills). In other words, and contrary to much commentary, there wasn't a 'run' from US MMFs per se: rather investors sought to avoid losses by 'switching' their exposure from the banking system to the US government; there was a classic 'flight to quality'. The flight came to an end when the Federal Reserve's Temporary Guarantee Programme effectively made prime MMFs 'as good as' treasury MMFs and made further switching unnecessary*

In other words: a loss of confidence in the banking system may cause a 'flight to quality' by some investors, including switching between prime and Treasury MMFs. A liquidity fee would be imposed *as a consequence of* investors' loss of confidence/flight to quality. It could not, therefore, be the cause of investors loss of confidence/flight to quality.

How should a liquidity fee be calculated?

If the test for imposing a liquidity fee depends on whether redeeming investors are causing a material disadvantage to remaining investors, then it follows the fee should be calculated as that amount required re-mutualise risk taking. Therefore:

- In the case of a CNAV fund, the fee would be the amount required to equalise the mid-value ('shadow price') of a MMF's portfolio before and after any redemption, assuming the sale of a 'horizontal slice' of the fund's portfolio to meet the redemption payment.
- In the case of a VNAV fund, the fee would be the difference between an investor's actual redemption proceeds and the proceeds that would have arisen if the fund had been bid-priced, and assuming the sale of a horizontal slice of the fund's portfolio.

A liquidity fee so calculated should also be acceptable to investors, because it can be rationalized in terms of investor protection[2]. (When we've presented the case for a liquidity fee in these terms to our investors, they have generally been receptive.)

How would a liquidity fee disincentivise redemptions?

We believe a liquidity fee imposed in these circumstances and calculated in this manner would disincentivise redemptions. This is helpful because redemptions can otherwise, in a

[2] By contrast, a 'punitive' liquidity fee (i.e. that imposed a cost on a redeeming investor in excess of the amount required to equalise remaining investors) would represent a transfer of capital from redeeming to remaining investors. This would be inequitable, and we do believe investors would be prepared to invest in a MMF on that basis.

self-fulfilling fashion, end up causing redeeming investors to disadvantage remaining investors. Consider the 'decision pair' facing an investor in a prime MMF which, during a financial crisis, had decided to impose a liquidity fee on redeeming investors in order to protect remaining investors. An investor could either:

- Remain in the prime MMF, in which case the investor would bear the remote chance of a loss if one of the fund's assets defaults; or
- Redeem from the prime MMF, in which case the investor would bear the irrecoverable cost of the liquidity fee, and subscribe the net proceeds into a Treasury MMF.

Faced with these options, we believe a risk averse investor would be more likely to remain in the prime MMF than to redeem. Our belief is supported by research in behavioural finance which observes that, when having to decide between with two negative choices ('bad choices') people tend to prefer *possible losses* over *sure losses*, even when the amount of the possible loss is significantly higher than the sure loss, i.e. an investor would tend to prefer the loss in the event of a default (a possible loss/a gamble) over a liquidity fee (a sure loss).

Consistent with this, and as noted in our earlier paper, there is anecdotal evidence in support of the disincentivising effect of a liquidity fee:

- In November 2007 redemptions were suspended from Florida's Local Government Investment Pool following redemptions from the MMF and a fall in assets from USD27b to USD15b. Subsequently the MMF was restructured with the fund split into two with a fixed liquidity fee of 2% charged on the fund that was created to hold the less liquid assets.
- In 2008, liquidity fees were applied to a suite of international enhanced cash funds. The funds in question were variably priced enhanced cash money market funds. But, accounting differences aside, we understand the funds applied a variable charge based on the estimated bid price of the assets.

Prohibition of sponsor support of MMFs

MMFs are an investment product where the risks and rewards belong to its investors. The investor's risks of ownership of a MMF are clearly stated in its prospectus and in its marketing materials. There is no legal basis for an investor in a MMF to transfer the downside risk of ownership to a fund's sponsor (unless it can be proved the sponsor has been negligent in its responsibilities).

However, a level of ambiguity about who owns the risk when investing in a MMF has developed amongst some investors. This ambiguity has developed due to the sponsor support of MMFs that has taken place prior to, and during, the credit crisis. Some investors have been encouraged to *expect* sponsors to support their MMFs. Such expectations cannot be enforced, since managers are under no obligation to support their funds, and consequently leads some investors to misunderstand and misprice the risks they are subject to. The mispricing of risk created by sponsor support should be addressed. The ambiguity of risk ownership is also exacerbated by Fitch Ratings decision to bake an assumption of a fund sponsor's willingness and ability to support their MMFs into their rating methodology for MMFs.

There is an incentive for both fund sponsors and, arguably, regulators to maintain a level of ambiguity of risk ownership in a MMF. We believe any ambiguity of risk ownership must be removed so risk is correctly priced. We therefore propose a prohibition on MMF sponsors providing support to their MMFs. This will make clear to all investors that they are buying an investment product and own the risks and rewards of that investment. A prohibition on sponsor support would also address the comments that have been made that MMF sponsors must have "skin in the game" to ensure they are encouraged to manage risk and not to focus on higher returns. Prohibiting support of MMFs will remove any risk to the sponsor / parent that the provision of support can create.

Prohibition of the use of MMF ratings

The use of MMF ratings has grown significantly over the last 15 years as fund sponsors and CRAs have promoted the benefits of a MMF rating. The level of adoption has been most significant in markets where a regulatory definition of a MMF did not exist. For example, MMF ratings have been of particular benefit to investors in the EU where, until recently, there was no pan-European regulatory definition of a MMF, and investors had to rely on national definitions which often imposed relatively weak constraints on credit, market or liquidity risk.

Investors value MMF ratings as they provide additional risk constraints and oversight by the CRAs. This is understandable in an environment where any regulatory oversight is deemed insufficient and/or there is limited transparency to investors of the assets held by MMFs. Both these issues have been addressed post the crisis and, arguably, the need for a MMF rating has been significantly reduced. We have had discussions on this subject with a number of investors in our MMFs who have confirmed that robust regulation and heightened transparency create a credible alternative to a MMF rating.

Whilst there are some benefits to MMFs being rated, there are also significant systemic risks:

Firstly, with the banking sector long-term ratings predominately in the single-A rating category, the probability of a MMF rating being placed on review for downgrade or downgraded has increased significantly. As many investors' treasury policies stipulate a MMF must be triple-A rated, we are concerned that downgrade action by a CRA will lead to significant redemption activity. Indeed, a UK domiciled MMF complex whose MMF ratings were recently placed on review for downgrade by Fitch Ratings experienced redemptions of almost 50% of the assets under management of its sterling MMF within the space of one week. In this instance the fund manager was able to meet the redemptions. If this had not been possible, or the downgrade had impacted a larger number of funds, or one of the larger fund complexes, the impact on the money markets could have been systemic.

Secondly, and as a consequence of the above, there is enormous pressure on MMFs to maintain their ratings. Those ratings depend on MMFs satisfying CRAs' ratings criteria, which manage credit risk with reference to the ratings of the funds' underlying issuers. If an issuer is put on ratings watch or downgraded, then it may not longer be an eligible investment for a rated MMF, notwithstanding the fund's own assessment of credit worthiness. This is significant: issuer ratings are supposed to be mere opinions; but if CRAs rate both funds and issuers, then they change from being opinions to being soft forms of regulation. Indeed, as pressure is brought to bear on CRAs to behave 'consistently', they have less latitude even to permit rated downgraded assets from rolling-off, and instead require MMFs to make forced sales in order to maintain the fund rating.

Thirdly, there is a lack of understanding amongst investors on MMF ratings. Investors appear to assume that the ratings of different CRAs are interchangeable, whereas in fact they are increasingly diverse. Broadly speaking, Standard & Poor's rating relates to credit risk; Moody's to credit and liquidity risk; and Fitch's to credit and liquidity risk, and to an assessment of the likelihood of sponsor support. Investors also appear to assume the highest MMF ratings can be 'read across' to a long-term triple-A rating. That is understandable given the symbology the CRAs have used: AAAm in the case of Standard & Poor's; Aaa-mf in the case of Moody's; and AAAmmf in the case of Fitch. The suffix (m, mf, mmf) is intended to distinguish the rating as a MMF rating, and not a long term rating, but that subtlety seems to be lost of most investors who instead prefer to focus on the prefix (AAA). This lack of knowledge creates a systemic risk as MMF investors may not understand the risk of the investment they are making.

The broadening and strengthening of regulation of MMFs and increased transparency to investors on the investments made by MMFs reduces the need for a fund rating. Coupled with the significant risks created by MMFs being rated, we propose that MMFs are prohibited from

being rated. This will require a period of time before implementation to allow investors in MMFs to update their treasury policies and for fund sponsors to provide additional transparency to investors to provide a credible alternative to a MMF rating.

HSBC Global Asset Management's position on the other prominent reform proposals

We have assessed all the other prominent reform proposals against our objectives of providing MMFs with a greater ability to meet redemptions, creating a disincentive for investors to redeem, removing any existing ambiguity of risk ownership, any reform to be proportional to the probability of a systemic liquidity event occurring in the MMF industry and for it to be practical to implement.

The table below summarises whether each reform proposal meets our objectives:

	Redemption criteria	**Risk ownership criteria**	**Viability / Practicality**
Capital	No	Potentially	No
NAV buffer	No	Potentially	Yes
Hold-back	No	Yes	No

We will now provide our reasoning for the conclusions above for each of the reform proposals.

Capital
It has been argued that investors redeem from MMFs in order to avoid losses; therefore it is proposed redemptions will be mitigated to the extent MMFs hold sufficient capital to offset losses. In that case, a significant amount of capital would be required, perhaps as much as 3-5% of the NAV of the fund.

We disagree with this proposal.

If the cost of capital was borne by the MMF manager, it would eliminate the profit margin – particularly in a low interest rate environment. If the cost of capital was borne by the MMF investor, it would eliminate the yield – particularly in a low interest rate environment. Either way, the proposal would fail to meet the viability criteria.

We note that well capitalized banks can still suffer runs, and so are doubtful that this proposal would meet the redemptions criteria. Incentives to remain do not work when investors have lost confidence in an investment.

Imposing capital on sponsors would send a strong signal to investors that MMFs should be regarded as 'bank like' products, whose sponsors are expected to back-stop losses. In a sense, this would remove ambiguity around risk ownership; however, it would do so by fundamentally changing the economic nature of what was hitherto an investment product. And ambiguity would still remain to the extent MMFs remained regulated by the SEC as investment products.

Finally, this proposal raises an important practical question: in the current economic climate, does sufficient capital exist to capitalize a USD 5tn industry?

NAV buffer
Unlike capital, a NAV buffer is not intended to offset losses due to a credit event; rather, a NAV buffer is merely intended to offset the relatively small mark-to-market losses that arise during a financial crisis. In a future 2008-event, a NAV buffer would not prevent the Reserve from breaking-the-buck due to its losses on Lehman, but it would enable the rest of the MMF industry to absorb losses arising in the ensuing crisis, including losses arising as a consequence of selling assets to raise liquidity to meet redemption payments. Proponents of

a NAV buffer have argued that it meets the redemptions criteria by, in effect, over collateralising MMFs and therefore incentivising investors to remain in the fund for fear they would lose the benefit of that over collateralization relative to any alternative investment option. To the extent that investors did redeem, the buffer would increase relative to the NAV to the benefit of remaining investors, and so the incentive to remain would grow still greater.

It is proposed that the NAV buffer should either be accumulated through the partially-retained earnings of a MMF, or contributed to a fund by its sponsor, or a combination of the above. It is further proposed that the buffer should be a relatively modest amount, representing perhaps 40-50bps of the NAV, and could be reduced further to the extent a MMF holds overnight paper (including Treasuries). By allowing the NAV buffer to scale in proportion to overnight paper, sponsors with insufficient resources to contribute to the buffer would not be excluded from operating MMFs, but would be required to manage them with more liquid assets.

We have a number of reservations about this proposal.

Regarding the redemption criteria, we do not think the NAV buffer would meaningfully incentivise investors to remain. In a 2008-event, we suspect the attractiveness of the NAV buffer would pale in comparison with the comfort provided to risk-averse investors by Treasuries. (Most redemptions in 2008 were made by institutional investors. If one considers the position of decision makers in those firms, it is hard to imagine they would be criticized for forfeiting the advantages of an over-collateralised prime MMF, and switching to Treasuries, particularly since the switch from the MMF would remain a free option.)

Regarding the risk ownership criteria, to the extent the NAV buffer is funded from retained earnings of the MMF then it would clearly meet the criteria, i.e. because the cost of accumulating the buffer would be attributed to investors and so reinforce MMFs as an investment product. However, to the extent it is funded by contributions from the sponsor then it would clearly fail to meet the criteria. Indeed, sponsor contributions to the NAV buffer are likely to be read by investors as evidence that sponsors will 'stand behind' their funds; and yet at 40-50bps the sponsor commitment would actually be very modest, i.e. a sponsor contributed NAV buffer would actually **deepen** the existing ambiguity of risk ownership.

Some commentators have suggested that sponsor contributions to a NAV buffer would cause them to have 'skin in the game', i.e. would cause greater financial alignment of interests of sponsors and investors, and cause sponsors to take less risk with investors' subscriptions.

We are uneasy with this argument. First, sponsors already have skin in the game, insofar as they receive fees from their MMFs, and would suffer reputational damage if they mismanaged those funds. Second, it seems possible that this proposal would result in a two-tier MMF industry, i.e. a top-tier comprising sponsors who have access to capital, and a bottom-tier comprising sponsors who do not have access to capital and whose funds therefore run with more liquidity and lower yields. In that case, the sponsors of bottom-tier MMFs seem likely to complain about the competitive consequences of a regulatory reform which causes them to lose market share to sponsors of top-tier MMFs.

Finally, and very importantly, we do not believe the mechanism is equitable as an "early" investor contributes and a "later" investor benefits thus compromising the key principle of an investment fund.

Hold-back

The 'hold back' or 'retention' reform proposal is designed to disincentivise investors from redeeming from MMFs during a period of market stress or heightened idiosyncratic risk on a specific fund. It is proposed that investors should be 'calmed' by holding-back, say, 3% of redemption proceeds within the fund for a period of 30 days. Once the 30 days have elapsed, the held-back amount should be paid to the redeeming investor, less any losses due to credit events that may have occurred during the period. This is intended to have two consequences:

We have a number of reservations about this proposal.

Regarding the redemption criteria, we do not think hold-back would meaningfully disincentivise redemptions. Consider the position of an investor who has concerns about the portfolio of a MMF:

- If he redeems from the fund, then 3% of his redemption remains invested in the portfolio, whereas 97% can be invested in liquid treasuries;
- If he remains in the fund, then 100% of his investment remains invested in the portfolio, all of which may become illiquid in the event the fund suffers mass redemptions following a credit event.

Faced with these options, we suspect the investor would choose to redeem.

Regarding the risk ownership criteria, we acknowledge that hold-back clearly assigns downside risk to the investor. (One could conceive of hold-back as a form of capital provided by redeeming shareholders.)

Regarding the viability criteria, we believe hold-back would fundamentally compromise the utility of MMFs to institutional investors. Specifically, hold-back would significantly complicate cash-flow forecasting, which is an essential requirement of corporate treasury. We have not surveyed our investors on this point, but could do so if required.

Constant Net Asset Value ("CNAV") and Variable Net Asset Value ("VNAV") debate

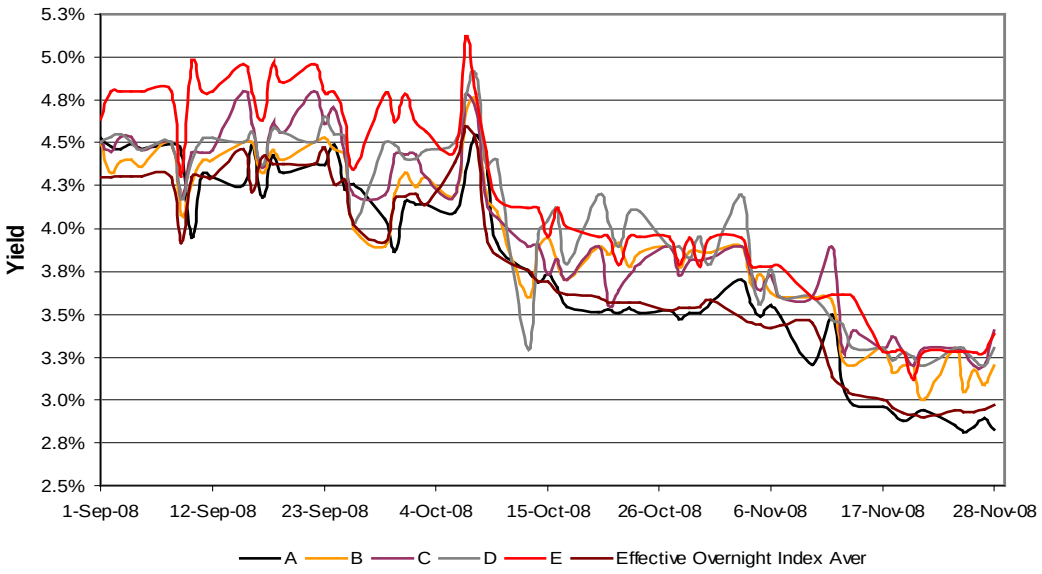
Since the start of the debate on MMF reform, it has regularly been punctuated by opinions being expressed on the relative risk to the financial system of CNAV and VNAV MMFs. In your consultation report alone this issue is referenced in four different sections of the report. It has also been discussed in the President's Working Group's report on MMF reform and in public comment by the Autorite des Marches Financiers. For this reason we are addressing this issue before outlining our position on other aspects of MMF reform.

A number of senior figures in the regulatory world have commented that CNAV MMFs pose greater systemic risk than VNAV MMFs. They therefore recommend that CNAV funds should be required to adopt a variable net asset value. Their opinion is based on a theory that CNAV funds foster investors' expectations that the funds are risk free as they "promise" to preserve investors' capital and liquidity. The theory continues that switching to a variable net asset value would make gains and losses a regular occurrence which would alter investor expectations and make clear that MMFs are not risk free. In turn, investors would become less prone to "run" in the face of even modest losses.

Whilst an interesting theory, it does not appear stack up in practice when the behaviour of investors in CNAV and VNAV funds during the credit crisis is analysed.

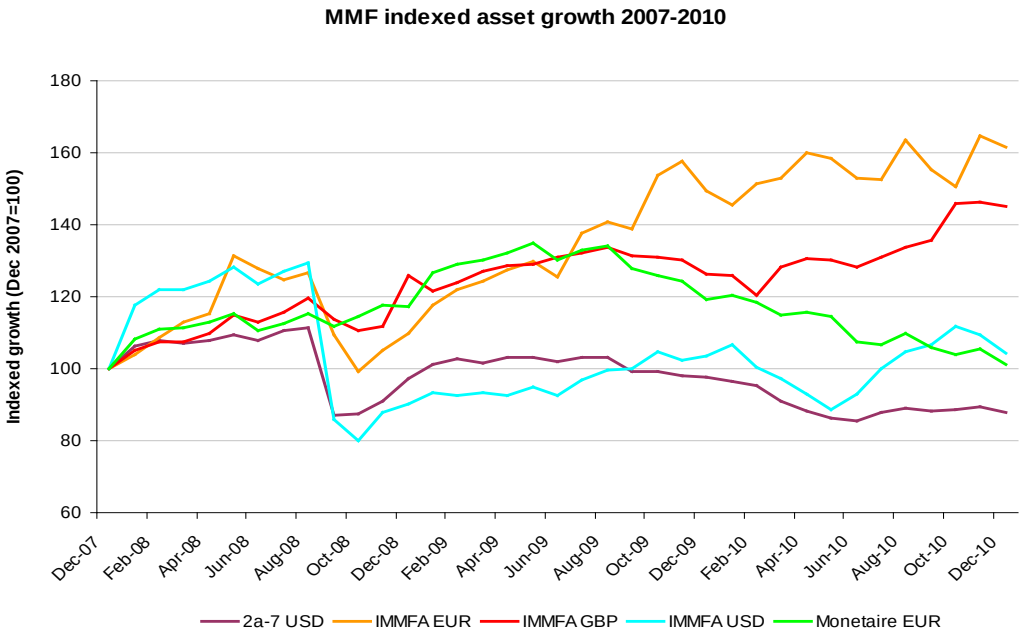
Since the most developed market for VNAV funds is in France, we have looked at the share prices of six of the largest French VNAV 'monétaire' funds (as at June 2007) over a ten year period (from January 1999 to September 2009). Since these funds only offer accumulating shares, we assessed the variability of their share price by looking at the daily yield of the fund; a negative yield implies that the day's accumulation of income was more than offset by a mark-to-market loss.

In the case of five of those six funds, at *no point* during the ten year period did they post a negative yield, i.e. daily mark-to-market losses were never substantial enough to cause the price of the funds to fall. This includes the period between September and November 2008 illustrated below, when markets were significantly dislocated. In other words, from an investor's perspective, these funds behaved much the same as if they were CNAV.



Source: Bloomberg

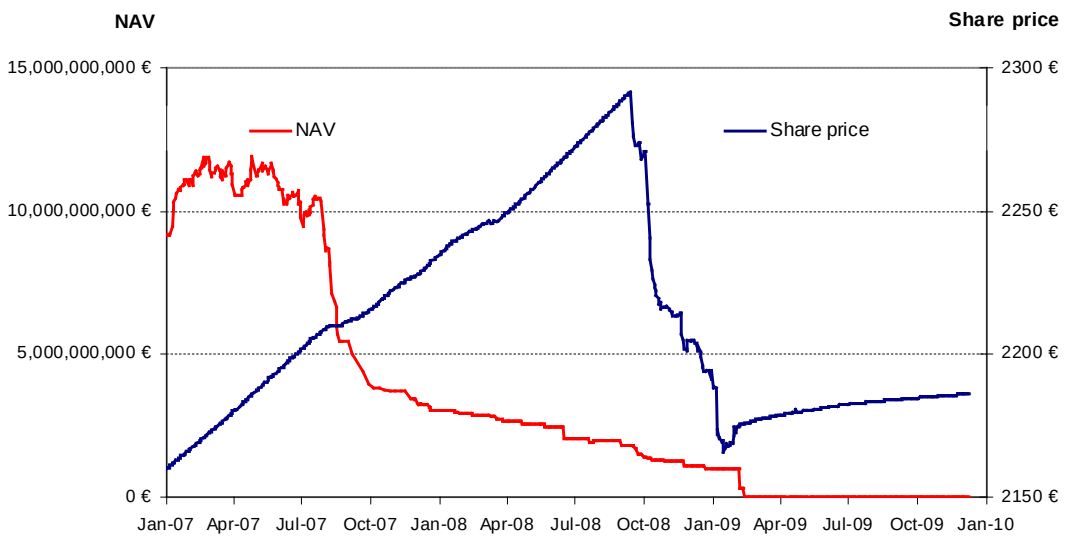
We also compared MMF flows between 2008 and 2010 to assess whether CNAV funds demonstrated larger and more sudden redemptions than VNAV funds. For the purpose of our analysis, CNAV funds comprised: 2a-7 prime funds; IMMFA USD funds; IMMFA EUR funds; and IMMFA GBP funds. VNAV funds comprised French monétaire funds. We found that in 2008, run risk appears to be correlated by currency rather than by pricing mechanism: USD denominated MMFs suffered runs, whereas EUR and GBP denominated MMFs funds did not.



Source: iMoneynet, Europerformance

Furthermore, neither did we find that investors are more sanguine to losses in VNAV than CNAV MMFs.

Of the six French VNAV monétaire funds we surveyed, one did post a negative yield in September 2008. Investors largely redeemed from that fund in the year before the decline in its share price, and what few shareholders remained in the fund redeemed after the decline in its share price. Either way, this fund clearly experienced a run notwithstanding that it was a VNAV fund.



Source: Bloomberg

In conclusion, we cannot find any evidence for the argument that there are substantial differences between CNAV and VNAV funds, which cause CNAV funds to be more prone to run risk than VNAV funds.

If one ignores the evidence that the accounting methodology a fund follows has no influence on the probability of an investor redeeming during a period of market stress, requiring CNAV MMFs to switch to VNAV is likely to significantly shrinking the buyer base for these funds. This will remove a valuable outsourcing option for providers of liquidity to manage credit risk.

***Question 1**: Do you agree with the proposed definition of money market funds? Does this definition delimit an appropriate scope of funds to be potentially subject to the regulatory reform that the FSB could require to put in place, with an objective to avoid circumvention and regulatory arbitrage?*

We concur with the Institutional Money Market Fund Association's ("IMMFA") response to this question.

***Question 2**: Do you agree with the description of money market funds' susceptibility to runs? What do you see as the main reasons for this susceptibility?*

We concur with IMMFA's response to this question.

***Question 3**: Do you agree with the description of the role of money market funds in short-term money markets? To what extent this role may create risks for short-term funding markets and their participants? Are there changes to be taken into account since the 2007-2008 experience? What are the interdependencies between banks and MMFs and the risks that are associated?*

We concur with IMMFA's response to this question.

We emphasise the comments made in relation to the behaviour of money market investors during and since the credit crisis. We believe that MMFs have been unfairly criticised for withdrawing funding from banks during periods of market stress. All institutional investors withdrew funding from banks, or at a minimum reduced the tenor of their funding, during the credit crisis and in the second half of 2011 during the height of the Eurozone sovereign crisis. Unfortunately for MMFs the transparency they provide on their investments to MMF investors, CRAs and regulators is not matched by other money market investors making it easy to finger point at MMFs for their withdrawal of funding.

The irony of the bank regulators efforts to corral all liquidity into the banks they regulate is that the withdrawal of funding to banks during the recent periods of stress would have occurred quicker without MMFs. We have spent a lot of time with our investors over the last 5 years explaining why we remain comfortable with certain bank credits that have been in the headlines. These discussions have typically led to the investors remaining in our MMFs allowing us to continue to fund the banks in question. Without MMFs, who are simply an investment option for the true owners of the liquidity, these investors would have withdrawn their funding from the banks in the headlines and invested in "too big to fail" banks. Bank regulators should be careful what they wish for.

***Question 4**: What is the importance of sponsor support for MMFs? What is the respective percentage of bank versus non-bank sponsors in the MMF industry? Are there differences among MMFs depending on their sponsors? What are the potential systemic risks of support or protection against losses provided by sponsors?*

MMFs are an investment product where the risks and rewards belong to its investors. The investor's risks of ownership of a MMF are clearly stated in its prospectus and in its marketing materials. There is no legal basis for an investor in a MMF to transfer the downside risk of ownership to a fund's sponsor (unless it can be proved the sponsor has been negligent in its responsibilities).

However, a level of ambiguity about who owns the risk when investing in a MMF has developed amongst some investors. This ambiguity has developed due to the sponsor support of MMFs that has taken place prior to, and during, the credit crisis. Some investors have been encouraged to *expect* sponsors to support their MMFs. Such expectations cannot be enforced, since managers are under no obligation to support their funds, and consequently leads some investors to misunderstand and misprice the risks they are subject to. The mispricing of risk created by sponsor support should be addressed. The ambiguity of risk ownership is also exacerbated by Fitch Ratings decision to bake an assumption of a fund

sponsor's willingness and ability to support their MMFs into their rating methodology for MMFs.

There is an incentive for both fund sponsors and, arguably, regulators to maintain a level of ambiguity of risk ownership in a MMF. We believe any ambiguity of risk ownership must be removed so risk is correctly priced. We therefore propose a prohibition on MMF sponsors providing support to their MMFs. This will make clear to all investors that they are buying an investment product and own the risks and rewards of that investment. A prohibition on sponsor support would also address the comments that have been made that MMF sponsors must have "skin in the game" to ensure they are encouraged to manage risk and not to focus on higher returns. Prohibiting support of MMFs will remove any risk to the sponsor / parent that the provision of support can create.

Question 5*: Do you agree with the description of MMF benefits? Are there other benefits of MMFs for investors than those outlined in this presentation? What are the alternatives to MMFs for investors? How has investor demand for MMFs recently evolved? What would lead investors to move away from MMFs to other financial products?*

We concur with IMMFA's response to the question

Question 6*: Do you agree with the proposed framework comparing money market funds and bank deposits? Are there other aspects to consider?*

We concur with IMMFA's response to the question.

Question 7*: Are there other similarities or differences between CNAV and VNAV funds which would be useful for the analysis? Is there evidence (based on representative samples) showing differences in the fluctuation of the funds' NAV depending on their model? What is the extent of the use of amortized cost accounting by VNAV funds? Has this practice evolved over time?*

Since the start of the debate on MMF reform, it has regularly been punctuated by opinions being expressed on the relative risk to the financial system of CNAV and VNAV MMFs. In your consultation report alone this issue is referenced in four different sections of the report. It has also been discussed in the President's Working Group's report on MMF reform and in public comment by the Autorite des Marches Financiers. For this reason we are addressing this issue before outlining our position on other aspects of MMF reform.

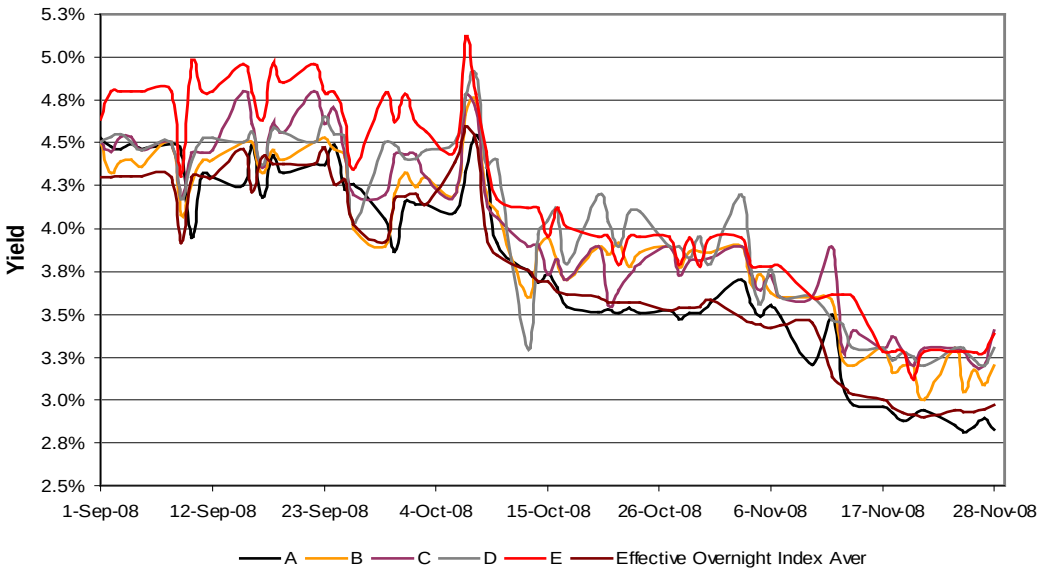
A number of senior figures in the regulatory world have commented that CNAV MMFs pose greater systemic risk than VNAV MMFs. They therefore recommend that CNAV funds should be required to adopt a variable net asset value. Their opinion is based on a theory that CNAV funds foster investors' expectations that the funds are risk free as they "promise" to preserve investors' capital and liquidity. The theory continues that switching to a variable net asset value would make gains and losses a regular occurrence which would alter investor expectations and make clear that MMFs are not risk free. In turn, investors would become less prone to "run" in the face of even modest losses.

Whilst an interesting theory, it does not appear stack up in practice when the behaviour of investors in CNAV and VNAV funds during the credit crisis is analysed.

Since the most developed market for VNAV funds is in France, we have looked at the share prices of six of the largest French VNAV 'monétaire' funds (as at June 2007) over a ten year period (from January 1999 to September 2009). Since these funds only offer accumulating shares, we assessed the variability of their share price by looking at the daily yield of the fund; a negative yield implies that the day's accumulation of income was more than offset by a mark-to-market loss.

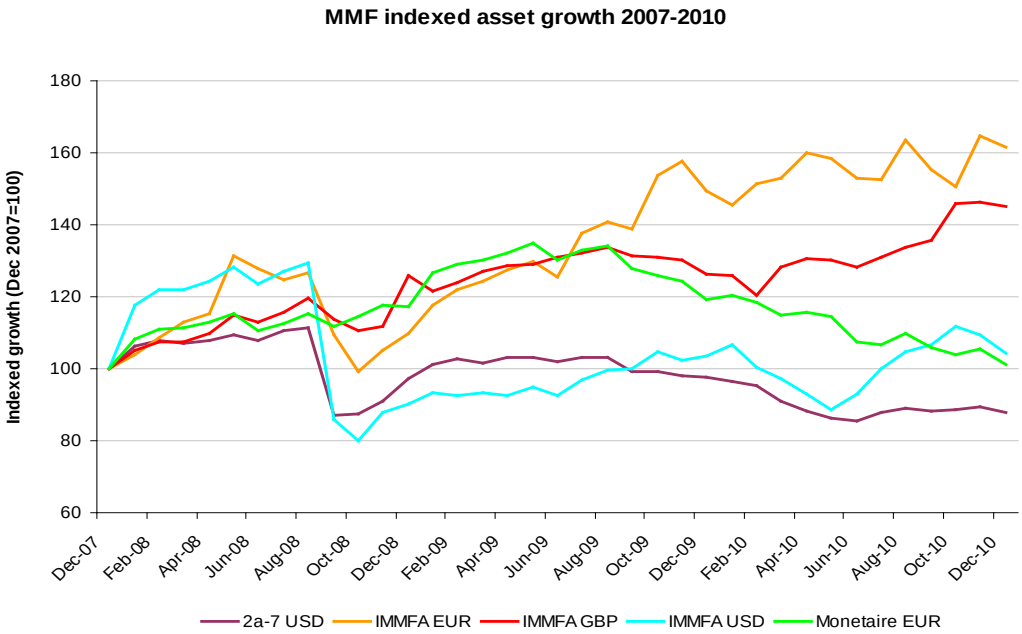
In the case of five of those six funds, at *no point* during the ten year period did they post a negative yield, i.e. daily mark-to-market losses were never substantial enough to cause the price of the funds to fall. This includes the period between September and November 2008

illustrated below, when markets were significantly dislocated. In other words, from an investor's perspective, these funds behaved much the same as if they were CNAV.



Source: Bloomberg

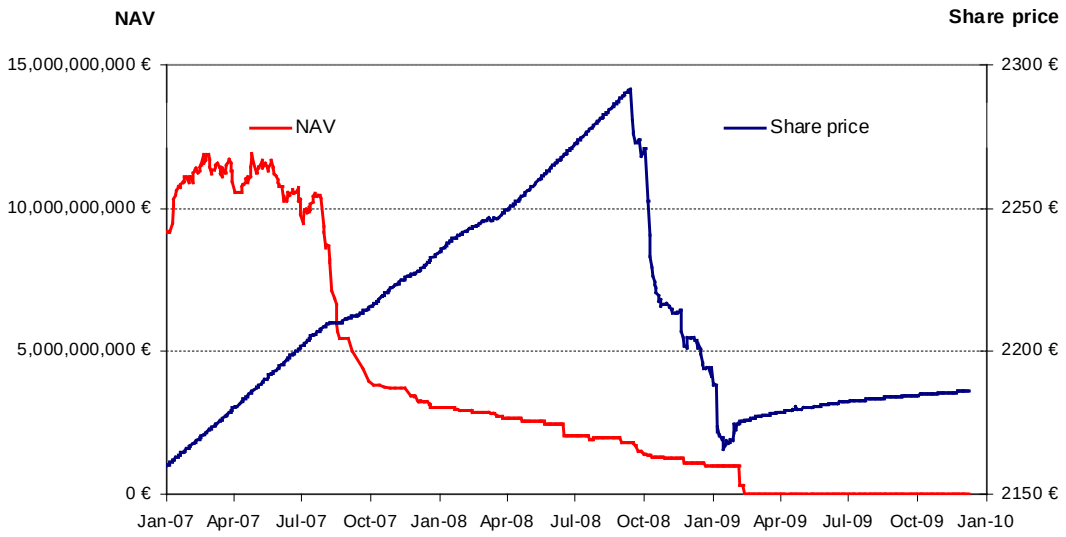
We also compared MMF flows between 2008 and 2010 to assess whether CNAV funds demonstrated larger and more sudden redemptions than VNAV funds. For the purpose of our analysis, CNAV funds comprised: 2a-7 prime funds; IMMFA USD funds; IMMFA EUR funds; and IMMFA GBP funds. VNAV funds comprised French monétaire funds. We found that in 2008, run risk appears to be correlated by currency rather than by pricing mechanism: USD denominated MMFs suffered runs, whereas EUR and GBP denominated MMFs funds did not.



Source: iMoneynet, Europerformance

Furthermore, neither did we find that investors are more sanguine to losses in VNAV than CNAV MMFs.

Of the six French VNAV monétaire funds we surveyed, one did post a negative yield in September 2008. Investors largely redeemed from that fund in the year before the decline in its share price, and what few shareholders remained in the fund redeemed after the decline in its share price. Either way, this fund clearly experienced a run notwithstanding that it was a VNAV fund.



Source: Bloomberg

In conclusion, we cannot find any evidence for the argument that there are substantial differences between CNAV and VNAV funds, which cause CNAV funds to be more prone to run risk than VNAV funds.

Question 8*: What is the importance of ratings in the MMF industry? What is the impact of the monitoring function of credit rating agencies for MMFs? What are the potential systemic risks associated with ratings in the MMF industry?*

The use of MMF ratings has grown significantly over the last 15 years as fund sponsors and CRAs have promoted the benefits of a MMF rating. The level of adoption has been most significant in markets where a regulatory definition of a MMF did not exist. For example, MMF ratings have been of particular benefit to investors in the EU where, until recently, there was no pan-European regulatory definition of a MMF, and investors had to rely on national definitions which often imposed relatively weak constraints on credit, market or liquidity risk. That's why, when IMMFA was founded in 1990, its Code of Practice required Member funds to be rated, i.e. in an effort to build investor confidence in the product. (France is an exception to this rule: its MMF sector has long been carefully defined by the AMF, and the product widely used. It never required fund ratings to establish investor confidence.)

Investors value MMF ratings as they provide additional risk constraints and oversight by the CRAs. This is understandable in an environment where any regulatory oversight is deemed insufficient and/or there is limited transparency to investors of the assets held by MMFs. Both these issues have been addressed post the crisis and, arguably, the need for a MMF rating has been significantly reduced. We have had discussions on this subject with a number of investors in our MMFs who have confirmed that robust regulation and heightened transparency create a credible alternative to a MMF rating.

Whilst there are some benefits to MMFs being rated, there are also significant systemic risks:

Firstly, with the banking sector long-term ratings predominately in the single-A rating category, the probability of a MMF rating being placed on review for downgrade or downgraded has increased significantly. As many investors' treasury policies stipulate a MMF

must be triple-A rated, we are concerned that downgrade action by a CRA will lead to significant redemption activity. Indeed, a UK domiciled MMF complex whose MMF ratings were recently placed on review for downgrade by Fitch Ratings experienced redemptions of almost 50% of the assets under management of its sterling MMF within the space of one week. In this instance the fund manager was able to meet the redemptions. If this had not been possible, or the downgrade had impacted a larger number of funds, or one of the larger fund complexes, the impact on the money markets could have been systemic.

Secondly, and as a consequence of the above, there is enormous pressure on MMFs to maintain their ratings. Those ratings depend on MMFs satisfying CRAs' ratings criteria, which manage credit risk with reference to the ratings of the funds' underlying issuers. If an issuer is put on ratings watch or downgraded, then it may not longer be an eligible investment for a rated MMF, notwithstanding the fund's own assessment of credit worthiness. This is significant: issuer ratings are supposed to be mere opinions; but if CRAs rate both funds and issuers, then they change from being opinions to being soft forms of regulation. Indeed, as pressure is brought to bear on CRAs to behave 'consistently', they have less latitude even to permit rated downgraded assets from rolling-off, and instead require MMFs to make forced sales in order to maintain the fund rating.

Thirdly, there is a lack of understanding amongst investors on MMF ratings. Investors appear to assume that the ratings of different CRAs are interchangeable, whereas in fact they are increasingly diverse. Broadly speaking, Standard & Poor's rating relates to credit risk; Moody's to credit and liquidity risk; and Fitch's to credit and liquidity risk, and to an assessment of the likelihood of sponsor support. Investors also appear to assume the highest MMF ratings can be 'read across' to a long-term triple-A rating. That is understandable given the symbology the CRAs have used: AAAm in the case of Standard & Poor's; Aaa-mf in the case of Moody's; and AAAmmf in the case of Fitch. The suffix (m, mf, mmf) is intended to distinguish the rating as a MMF rating, and not a long term rating, but that subtlety seems to be lost of most investors who instead prefer to focus on the prefix (AAA). This lack of knowledge creates a systemic risk as MMF investors may not understand the risk of the investment they are making.

The broadening and strengthening of regulation of MMFs and increased transparency to investors on the investments made by MMFs reduces the need for a fund rating. Coupled with the significant risks created by MMFs being rated, we propose that MMFs are prohibited from being rated. This will require a period of time before implementation to allow investors in MMFs to update their treasury policies and for fund sponsors to provide additional transparency to investors to provide a credible alternative to a MMF rating.

***Question 9**: Are existing rules adequately addressing risks regarding the management of collateral from money market funds? What are the risk management processes currently in place with regard to repo and securities lending transactions? Do MMFs present unique issues with regard to their use of repo markets or would general policy recommendations that the FSB may issue regarding repo markets be applicable?*

We concur with IMMFA's response to the question.

***Question 10:** Are the above-mentioned changes in the environment of MMFs relevant factors to take into consideration? What are some of the implications for regulatory options? Are there other aspects to consider?*

We concur with IMMFA's response to the question.

***Question 11:** Do you agree with the systemic risk analysis and the rationale for reform presented in this section? Are there other factors to consider?*

We concur with IMMFA's response to the question.

***Question 12:** Do you agree with the benefits of imposing a mandatory move from CNAV to VNAV, which would amount to prohibiting the use of amortized cost valuation for any*

securities held by a MMF? Are the challenges identified in the US context valid in other jurisdictions currently authorizing CNAV funds? How could these challenges be overcome?

Please refer to our response to question two and six.

Question 13: *What would be the main effects of establishing a NAV-buffer? What would be the most practical ways to implement such buffers? Should various forms of NAV-buffers be allowed or should regulators favor a single option? What would be a realistic size of the NAV-buffer and what would be the impact in terms of costs for running MMFs? In the case of subordinated shares, could the option be seen as creating a securitization position, with associated requirements in terms of retention?*

Unlike capital, a NAV buffer is not intended to offset losses due to a credit event; rather, a NAV buffer is merely intended to offset the relatively small mark-to-market losses that arise during a financial crisis. In a future 2008-event, a NAV buffer would not prevent the Reserve from breaking-the-buck due to its losses on Lehman, but it would enable the rest of the MMF industry to absorb losses arising in the ensuing crisis, including losses arising as a consequence of selling assets to raise liquidity to meet redemption payments. Proponents of a NAV buffer have argued that it meets the redemptions criteria by, in effect, over collateralising MMFs and therefore incentivising investors to remain in the fund for fear they would lose the benefit of that over collateralization relative to any alternative investment option. To the extent that investors did redeem, the buffer would increase relative to the NAV to the benefit of remaining investors, and so the incentive to remain would grow still greater.

It is proposed that the NAV buffer should either be accumulated through the partially-retained earnings of a MMF, or contributed to a fund by its sponsor, or a combination of the above. It is further proposed that the buffer should be a relatively modest amount, representing perhaps 40-50bps of the NAV, and could be reduced further to the extent a MMF holds overnight paper (including Treasuries). By allowing the NAV buffer to scale in proportion to overnight paper, sponsors with insufficient resources to contribute to the buffer would not be excluded from operating MMFs, but would be required to manage them with more liquid assets.

We have a number of reservations about this proposal.

Regarding the redemption criteria, we do not think the NAV buffer would meaningfully incentivise investors to remain. In a 2008-event, we suspect the attractiveness of the NAV buffer would pale in comparison with the comfort provided to risk-averse investors by Treasuries. (Most redemptions in 2008 were made by institutional investors. If one considers the position of decision makers in those firms, it is hard to imagine they would be criticized for forfeiting the advantages of an over-collateralised prime MMF, and switching to Treasuries, particularly since the switch from the MMF would remain a free option.)

Regarding the risk ownership criteria, to the extent the NAV buffer is funded from retained earnings of the MMF then it would clearly meet the criteria, i.e. because the cost of accumulating the buffer would be attributed to investors and so reinforce MMFs as an investment product. However, to the extent it is funded by contributions from the sponsor then it would clearly fail to meet the criteria. Indeed, sponsor contributions to the NAV buffer are likely to be read by investors as evidence that sponsors will 'stand behind' their funds; and yet at 40-50bps the sponsor commitment would actually be very modest, i.e. a sponsor contributed NAV buffer would actually **deepen** the existing ambiguity of risk ownership.

Some commentators have suggested that sponsor contributions to a NAV buffer would cause them to have 'skin in the game', i.e. would cause greater financial alignment of interests of sponsors and investors, and cause sponsors to take less risk with investors' subscriptions.

We are uneasy with this argument. First, sponsors already have skin in the game, insofar as they receive fees from their MMFs, and would suffer reputational damage if they mismanaged those funds. Second, it seems possible that this proposal would result in a two-tier MMF industry, i.e. a top-tier comprising sponsors who have access to capital, and a bottom-tier comprising sponsors who do not have access to capital and whose funds therefore run with

more liquidity and lower yields. In that case, the sponsors of bottom-tier MMFs seem likely to complain about the competitive consequences of a regulatory reform which causes them to lose market share to sponsors of top-tier MMFs.

Question 14: *Do you agree with the description of the challenges associated with the establishment of a private insurance? Are there ways to address them?*

We concur with IMMFA's response to the question.

Question 15: *Do you agree with the description of the challenges and potential second-round effects of a conversion of MMFs into special purpose banks? Are there ways to circumvent those effects?*

We concur with IMMFA's response to the question.

Question 16: *What are the main advantages and drawbacks of two-tier system(s)? Would it be sufficient to address the risks identified? What could be the conditions applicable to CNAV funds? What could be the potential impact on investor demand? Should certain funds be exempted from certain risk limiting conditions due to their holdings?*

We concur with IMMFA's response to the question.

Question 17: *Do you agree with the suggestion that reserving CNAV funds for only certain investors (i.e. retail or institutional investors) would face practical challenges and would not be sufficient to address the risks identified?*

We concur with IMMFA's response to the question.

Question 18: *Regarding the different structural alternatives described in Section 1, what are the benefits and drawbacks of the different options described above? How could they be prioritized? What are the necessary conditions for their implementation?*

We concur with IMMFA's response to the question.

Question 19: *What are the main benefits and drawbacks of imposing the use of marked-to-market accounting for all the instruments held by MMFs? What is the availability of market prices for securities commonly held by money market funds? Are there situations where this general principle could not be applied?*

We concur with IMMFA's response to the question.

Question 20: *Should the use of amortized cost accounting be limited, and, if so, how? Are general restrictions on funds' WAM or WAL preferable? Are there practical impediments (e.g. availability of prices) to imposing stricter requirements on the use of amortized cost accounting than current existing regimes? What would be the potential effects on MMFs' investment allocation and short-term funding markets? What monitoring should be implemented? What conditions are advisable? In particular, please describe the rationale, feasibility and effects of limiting the residual maturity of instruments to [30-60-90-other] days. What materiality threshold could be proposed?*

We concur with IMMFA's response to the question.

Question 21: *What are the main benefits and drawbacks of imposing global liquidity restrictions? Should there be restrictions regarding (daily/weekly) liquid assets as well as regarding illiquid assets? Are global definitions of (daily, weekly) liquid and illiquid assets practical? Are there other conditions to consider (e.g. regarding the concentration of assets)?*

All MMF regulation should state the minimum amount of liquidity funds are required to maintain overnight and within one week. Both US 2a-7 regulation and IMMFAs Code of Practice were updated post the credit crisis to state these minimums. In addition, many MMF

providers' internal investment guidelines stipulate minimum liquidity requirements that a fund is required to maintain. We believe requiring funds to hold minimum levels of natural liquidity (i.e. minimise the probability that asset sales are required to meet liquidity needs) will heighten MMFs ability to meet redemptions whilst minimising the impact of significant emergency asset sales on the broader financial system.

Question 22: *To what extent are managers able to "know their customers" and anticipate redemptions? Are there practical obstacles for managers to "know their customers" (e.g., in the case of platforms, omnibus accounts) and how could they be addressed? What are the main features of the funds' investor base to take into consideration from a liquidity risk management point of view? Should conditions, e.g., regarding the concentration of the investor base be considered? Would this requirement allow fund managers to better understand and manage the risks to which the fund is exposed?*

Current MMF regulation, MMF industry self regulation and most MMF providers internal investment guidelines focus on the liquidity of the assets in a fund with insufficient focus on a funds "liability" to its investors. Prudent liquidity risk management should also place controls on individual client and industry concentrations in a fund. This is to avoid a small number of individual investors, and investors from one, or a small number of industries, dominating the ownership of a fund. High client and/or industry concentration can place liquidity pressure on a fund if these investors were to redeem within a short timeframe. Designing prescriptive regulation in this area is challenging and therefore we propose that regulation requires the Board of Directors of a fund (or its equivalent) to have a client concentration policy. The policy should set limits on individual client and industry concentrations. The policy must be more prescriptive than a simple "know your client" type policy.

Assuming there is a reasonable transition period for MMFs to implement their client policy we do not believe the use of platforms and omnibus accounts should be an obstacle.

Question 23: *Would such a liquidity fee generate a pre-emptive run? If so, when and are there ways that pre-emptive run risk could be reduced? How would shareholders react to the liquidity fee? Would it cause shareholders to transfer their MMF investments to alternative investment products? If so, which types of shareholders are most likely to make such transfers and to which products and will such a shift in investment create new systemic risks or economic, competitive, or efficiency benefits or harm? Would MMF board directors be able to impose a liquidity restriction despite potential unpopularity with investors and competitive disadvantage imposed on the fund? At what level such a liquidity trigger should be set?*

We believe a trigger-based liquidity fee would be a powerful mechanism for strengthening MMFs during a financial crisis. In particular, a liquidity fee would:

- Ensure the fair treatment of redeeming and remaining investors;
- Disincentivise redemptions; and
- Reinforce the 'investment fund'-like nature of MMFs.

What should 'trigger' the imposition of a liquidity fee?

We believe the 'acid test' for imposing a liquidity fee depends on whether redeeming investors are causing a disadvantage to remaining investors. After all, a MMF - like any other investment fund - is supposed to mutualise risk-taking amongst its investors; if redeeming investors are causing a disadvantage to remaining investors then, to that extent, risk-taking has been de-mutualised; imposing a liquidity fee in those circumstances would re-mutualise risk-taking; that would be appropriate, because it would be consistent with the prospectus investors had signed-up to.

Since investment fund boards have a fiduciary obligation to treat investors fairly, we believe it should be left to the board of MMF to decide when to trigger the imposition of a liquidity fee[3].

[3] The classic account of bank runs ("Bank Runs, Deposit Insurance, and Liquidity", Diamond and Dybvig, Journal of Political Economy, June 1983) notes that: "…the demand deposit contract satisfies a *sequential service constraint*, which specifies that a bank's payoff to any agent can depend only on the agent's place in line and not on future information about agents later in line." This compares starkly with the fiduciary obligation of the board of an investment fund to treat all investors fairly. *In extremis*,

This would be consistent with the power many European boards already have to impose a dilution levy (which is economically equivalent to a liquidity fee) if they believe an investor is market-timing a fund.

However, some commentators have suggested that a fund board may be too commercially conflicted to decide whether to impose a liquidity fee. They have therefore argued that a liquidity fee should be triggered by a 'rules-based' event.

In that case, we believe the most appropriate rules-based trigger event would be if the 'shadow price' of a CNAV fund fell to 0.9975, or the price of a VNAV fell by 25bps in one week (see our paper "Liquidity fees; a proposal to reform money market funds" for further information).

We acknowledge other possible rules-based trigger events, but are concerned they might result in liquidity fees being inappropriately imposed. For example;

- Reinforce the 'investment fund'-like nature of MMFs.
- If a liquidity fee was triggered when a fund's overnight/one week liquidity fell below [5%/15%], but there was no substantial lack of liquidity in secondary markets or material deviation in mid-value of the MMF, then redeeming shareholders would not be causing any particular disadvantage to remaining shareholders and it would not be appropriate to impose a liquidity fee; or
- If a fee was triggered when a fund experienced net redemptions of more than [25%] in one week, but there was no substantial lack of liquidity in secondary markets or material deviation in mid-value of the MMF, then redeeming shareholders would not be causing any particular disadvantage to remaining shareholders and it would not be appropriate to impose a liquidity fee; or
- If a fee was triggered when *another* fund in the industry broke the buck, but that was an isolated incident which did not cause contagion to other funds or issuers (a la Community Bankers in 1994), then it would not be appropriate to impose a liquidity fee.

Some commentators have objected that a trigger-based liquidity fee would cause investors to seek to redeem prior to the imposition of the fee. We disagree with this argument, which misunderstands the cause of investor redemptions. As noted by IMMFA:

> *"…in September 2008 a series of headline events (e.g. relating to Fannie Mae and Freddie Mac, Merrill Lynch, American International Group, Washington Mutual Group, Bank of Ireland, Allied Irish Bank, Lloyds etc) caused investors to lose confidence in the solvency of the financial system as a whole, and the banking system in particular. 'Prime' MMFs invest substantially all of their assets in deposits and securities issued by banks and other short-term issuers. US institutional investors therefore redeemed because they were worried about losses that prime MMFs might be exposed to, i.e. they redeemed from US prime MMFs because they no longer believed a diversified investment in the financial system was an effective way of managing credit risk. The majority of their redemption proceeds were used to subscribe to US Treasury MMFs (which invest in US Treasury bills). In other words, and contrary to much commentary, there wasn't a 'run' from US MMFs per se: rather investors sought to avoid losses by 'switching' their exposure from the banking system to the US government; there was a classic 'flight to quality'. The flight came to an end when the Federal Reserve's Temporary Guarantee Programme effectively made prime MMFs 'as good as' treasury MMFs and made further switching unnecessary".*

In other words: a loss of confidence in the banking system may cause a 'flight to quality' by some investors, including switching between prime and Treasury MMFs. A liquidity fee would be imposed *as a consequence of* investors' loss of confidence/flight to quality. It could not, therefore, be the cause of investors loss of confidence/flight to quality.

How should a liquidity fee be calculated?

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the board of an investment fund might enforce that obligation by gating the fund, or by imposing a liquidity fee, as described above.

If the test for imposing a liquidity fee depends on whether redeeming investors are causing a material disadvantage to remaining investors, then it follows the fee should be calculated as that amount required re-mutualise risk taking. Therefore:

- In the case of a CNAV fund, the fee would be the amount required to equalise the mid-value ('shadow price') of a MMF's portfolio before and after any redemption, assuming the sale of a 'horizontal slice' of the fund's portfolio to meet the redemption payment.
- In the case of a VNAV fund, the fee would be the difference between an investor's actual redemption proceeds and the proceeds that would have arisen if the fund had been bid-priced, and assuming the sale of a horizontal slice of the fund's portfolio.

A liquidity fee so calculated should also be acceptable to investors, because it can be rationalized in terms of investor protection[4]. (When we've presented the case for a liquidity fee in these terms to our investors, they have generally been receptive.)

How would a liquidity fee disincentivise redemptions?

We believe a liquidity fee imposed in these circumstances and calculated in this manner would disincentivise redemptions. This is helpful because redemptions can otherwise, in a self-fulfilling fashion, end up causing redeeming investors to disadvantage remaining investors. Consider the 'decision pair' facing an investor in a prime MMF which, during a financial crisis, had decided to impose a liquidity fee on redeeming investors in order to protect remaining investors. An investor could either:

- Remain in the prime MMF, in which case the investor would bear the remote chance of a loss if one of the fund's assets defaults; or
- Redeem from the prime MMF, in which case the investor would bear the irrecoverable cost of the liquidity fee, and subscribe the net proceeds into a Treasury MMF.

Faced with these options, we believe a risk averse investor would be more likely to remain in the prime MMF than to redeem. Our belief is supported by research in behavioural finance which observes that, when having to decide between with two negative choices ('bad choices') people tend to prefer *possible losses* over *sure losses*, even when the amount of the possible loss is significantly higher than the sure loss, i.e. an investor would tend to prefer the loss in the event of a default (a possible loss/a gamble) over a liquidity fee (a sure loss).

Consistent with this, and as noted in our earlier paper, there is anecdotal evidence in support of the disincentivising effect of a liquidity fee:

- In November 2007 redemptions were suspended from Florida's Local Government Investment Pool following redemptions from the MMF and a fall in assets from USD27b to USD15b. Subsequently the MMF was restructured with the fund split into two with a fixed liquidity fee of 2% charged on the fund that was created to hold the less liquid assets.
- In 2008, liquidity fees were applied to a suite of international enhanced cash funds. The funds in question were variably priced enhanced cash money market funds. But, accounting differences aside, we understand the funds applied a variable charge based on the estimated bid price of the assets.

Question 24: *How would shareholders react to a minimum balance requirement? Would it cause shareholders to transfer their MMF investments to alternative investment products? If so, which types of shareholders are most likely to make such transfers and to which products*

[4] By contrast, a 'punitive' liquidity fee (i.e. that imposed a cost on a redeeming investor in excess of the amount required to equalise remaining investors) would represent a transfer of capital from redeeming to remaining investors. This would be inequitable, and we do believe investors would be prepared to invest in a MMF on that basis.

and will such a shift in investment create new systemic risks or economic, competitive, or efficiency benefits or harm?

The 'hold back' or 'retention' reform proposal is designed to disincentivise investors from redeeming from MMFs during a period of market stress or heightened idiosyncratic risk on a specific fund. It is proposed that investors should be 'calmed' by holding-back, say, 3% of redemption proceeds within the fund for a period of 30 days. Once the 30 days have elapsed, the held-back amount should be paid to the redeeming investor, less any losses due to credit events that may have occurred during the period. This is intended to have two consequences:

We have a number of reservations about this proposal.

Regarding the redemption criteria, we do not think hold-back would meaningfully disincentivise redemptions. Consider the position of an investor who has concerns about the portfolio of a MMF:

- If he redeems from the fund, then 3% of his redemption remains invested in the portfolio, whereas 97% can be invested in liquid treasuries;
- If he remains in the fund, then 100% of his investment remains invested in the portfolio, all of which may become illiquid in the event the fund suffers mass redemptions following a credit event.

Faced with these options, we suspect the investor would choose to redeem.

Regarding the risk ownership criteria, we acknowledge that hold-back clearly assigns downside risk to the investor. (One could conceive of hold-back as a form of capital provided by redeeming shareholders.)

Regarding the viability criteria, we believe hold-back would fundamentally compromise the utility of MMFs to institutional investors. Specifically, hold-back would significantly complicate cash-flow forecasting, which is an essential requirement of corporate treasury. We have not surveyed our investors on this point, but could do so if required.

Question 25: *What are the benefits of using bid price for valuing the funds? Are there other options (such as anti-dilution levy) which could be explored to reduce shareholders' incentive to redeem?*

We concur with IMMFA's response to the question.

Question 26*: What are the benefits and drawbacks of allowing redemptions-in-kind? Are there practical impediments to implementing this option (e.g. some portfolio securities cannot easily be divided)?*

MMF regulation should allow a MMF to meet an investor's redemption request by distributing a pro-rata share of the assets of the fund rather than by returning cash to the investor i.e. a in-specie redemption. The benefit for the fund is that it is not required to use its immediate access liquidity, or to sell its more liquid assets, to meet a large redemption request. Due to the potential difficulty for some investors in MMFs to receive a share of the assets in the fund a minimum redemption size should be set so that redemptions are only provided in-specie for "large" redemptions. However, a MMF should have the ability to process any redemption request in-specie if the fund and the shareholder both agree to it and it is in the interest of all shareholders. Due to the complexity of operating this mechanism in practice, the Board of Directors of the fund (or its equivalent) should be required to maintain a policy on the handling of in-specie redemptions.

Question 27: *What are the benefits and drawbacks of requiring gates in some circumstances? Which situations should trigger gates to be imposed to redeeming investors? Would it be enough to permit gates in some jurisdictions? Would there be a risk of regulatory arbitrage?*

Regulation should allow MMFs to limit the total number of shares that a fund is required to repurchase on any trading day to 10% of the shares in issue. If enacted, the limitation will be applied pro-rata so that all shareholders redeeming on a particular business day realise the same proportion of their shares. The balance of shares not repurchased will be carried over to the next business until all redemption requests have been met. This mechanism provides an extended period in which a fund can manage the redemption requests. In some jurisdictions this type of mechanism is allowed by regulation and many MMFs in those jurisdictions have language in their prospectus allowing the Board of Directors (or its equivalent) to enact this mechanism.

Question 28: *Do you agree with the suggestion that the establishment of a private liquidity facility faces challenges that make the option unworkable or do you see ways to circumvent these challenges?*

We concur with IMMFA's response to the question.

Question 29: *What are the main benefits and drawbacks of the provisions included in current regimes referring to external CRA ratings? Are there alternatives to credit ratings that reasonably can be substituted?*

We concur with IMMFA's response to the question.

Question 30: *What are the benefits of MMF ratings? Should a greater differentiation between MMF ratings be encouraged? To what extent are investors restricted in their investments to 'Triple-A' rated funds? What alternatives could there be (e.g. from other third parties)? What initiatives could be proposed to educate investors about MMF ratings?*

The use of MMF ratings has grown significantly over the last 15 years as fund sponsors and CRAs have promoted the benefits of a MMF rating. The level of adoption has been most significant in markets where a regulatory definition of a MMF did not exist. For example, MMF ratings have been of particular benefit to investors in the EU where, until recently, there was no pan-European regulatory definition of a MMF, and investors had to rely on national definitions which often imposed relatively weak constraints on credit, market or liquidity risk. That's why, when IMMFA was founded in 1990, its Code of Practice required Member funds to be rated, i.e. in an effort to build investor confidence in the product. (France is an exception to this rule: its MMF sector has long been carefully defined by the AMF, and the product widely used. It never required fund ratings to establish investor confidence.)

Investors value MMF ratings as they provide additional risk constraints and oversight by the CRAs. This is understandable in an environment where any regulatory oversight is deemed insufficient and/or there is limited transparency to investors of the assets held by MMFs. Both these issues have been addressed post the crisis and, arguably, the need for a MMF rating has been significantly reduced. We have had discussions on this subject with a number of investors in our MMFs who have confirmed that robust regulation and heightened transparency create a credible alternative to a MMF rating.

Whilst there are some benefits to MMFs being rated, there are also significant systemic risks:

Firstly, with the banking sector long-term ratings predominately in the single-A rating category, the probability of a MMF rating being placed on review for downgrade or downgraded has increased significantly. As many investors' treasury policies stipulate a MMF must be triple-A rated, we are concerned that downgrade action by a CRA will lead to significant redemption activity. Indeed, a UK domiciled MMF complex whose MMF ratings were recently placed on review for downgrade by Fitch Ratings experienced redemptions of almost 50% of the assets under management of its sterling MMF within the space of one week. In this instance the fund manager was able to meet the redemptions. If this had not been possible, or the downgrade had impacted a larger number of funds, or one of the larger fund complexes, the impact on the money markets could have been systemic.

Secondly, and as a consequence of the above, there is enormous pressure on MMFs to maintain their ratings. Those ratings depend on MMFs satisfying CRAs' ratings criteria, which manage credit risk with reference to the ratings of the funds' underlying issuers. If an issuer is put on ratings watch or downgraded, then it may not longer be an eligible investment for a rated MMF, notwithstanding the fund's own assessment of credit worthiness. This is significant: issuer ratings are supposed to be mere opinions; but if CRAs rate both funds and issuers, then they change from being opinions to being soft forms of regulation. Indeed, as pressure is brought to bear on CRAs to behave 'consistently', they have less latitude even to permit rated downgraded assets from rolling-off, and instead require MMFs to make forced sales in order to maintain the fund rating.

Thirdly, there is a lack of understanding amongst investors on MMF ratings. Investors appear to assume that the ratings of different CRAs are interchangeable, whereas in fact they are increasingly diverse. Broadly speaking, Standard & Poor's rating relates to credit risk; Moody's to credit and liquidity risk; and Fitch's to credit and liquidity risk, and to an assessment of the likelihood of sponsor support. Investors also appear to assume the highest MMF ratings can be 'read across' to a long-term triple-A rating. That is understandable given the symbology the CRAs have used: AAAm in the case of Standard & Poor's; Aaa-mf in the case of Moody's; and AAAmmf in the case of Fitch. The suffix (m, mf, mmf) is intended to distinguish the rating as a MMF rating, and not a long term rating, but that subtlety seems to be lost of most investors who instead prefer to focus on the prefix (AAA). This lack of knowledge creates a systemic risk as MMF investors may not understand the risk of the investment they are making.

The broadening and strengthening of regulation of MMFs and increased transparency to investors on the investments made by MMFs reduces the need for a fund rating. Coupled with the significant risks created by MMFs being rated, we propose that MMFs are prohibited from being rated. This will require a period of time before implementation to allow investors in MMFs to update their treasury policies and for fund sponsors to provide additional transparency to investors to provide a credible alternative to a MMF rating.

Question 31: *In addition to the options explored in the four sections above, do you see other areas to consider which could contribute to reinforcing the robustness of MMFs?*

We concur with IMMFA's response to the question.

Question 32: *Do differences between jurisdictions require different policy approaches or would a global solution be preferable, notably to ensure a global level playing field?*

We concur with IMMFA's response to the question.