POLICY RECOMMENDATIONS FOR MONEY MARKET FUNDS

FINAL REPORT

OICU-IOSCO

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CONTENTS

1 Background

a- The FSB's mandate

The September 2008 run on some money market funds (MMFs) alerted regulators to the systemic relevance of MMFs. Although MMFs did not cause the crisis, their performance during the financial turmoil highlighted their potential to spread or even amplify a crisis. Despite the significant reforms already adopted by regulators to address some of the issues identified during the 2007-2008 crisis, concerns remain regarding the stability of the money market fund industry and the risks it may pose for the broader financial system. In this regard, the Financial Stability Board (FSB) asked the International Organization of Securities Commissions (IOSCO) to undertake a review of potential regulatory reforms of MMFs that would mitigate their susceptibility to runs and other systemic risks and to develop policy recommendations. This work is part of the efforts undertaken by the FSB to strengthen the oversight and regulation of the shadow banking system. It follows the endorsement by the G20 Leaders of the FSB's initial recommendations and work plan regarding Shadow Banking submitted at the November 2011 Cannes Summit.

The FSB's mandate indicated that a key issue to be considered was the Constant Net Asset Value (CNAV) feature of some money market funds. In developing its policy recommendations, IOSCO has considered this crucial question but also other aspects of MMF regulation where greater harmonization between jurisdictions and improvements to existing regulations were seen necessary.

b- IOSCO's consultation process

On 27 April 2012, IOSCO published a consultation report, *Money Market Fund Systemic Risk Analysis and Reform Options*, which provided a preliminary analysis of the possible risks that money market funds could pose to financial stability and proposed a broad range of possible policy options to address those risks as well as to address other potential issues identified with regard to money market funds. This report used the results of a mapping exercise conducted in June 2011 to assess and compare existing regulatory frameworks for MMFs among IOSCO members[1]. IOSCO's Committee 5 on Investment Management also held two high-level hearings with industry representatives at the beginning of 2012. In addition to presenting possible policy options, IOSCO's consultation paper included a background report that reviewed the historical development of MMFs, their market significance and investor base, their role in funding markets, the experience during the 2007-2008 financial crisis, the changes to MMF regulatory frameworks adopted since then, as well as a review of some of the recent literature on MMFs. This background report is provided in Appendix III.

The consultation period ended on 27 June 2012, after a one-month extension of the initial deadline. A total of forty-one contributions were received, from twelve countries (Canada, China, France, Ireland, India, Japan, Oman, South Africa, Spain, Switzerland, the United Kingdom and the United States), as well as from several international and regional

[1] A total of twenty-one answers were received and analyzed (see background report)

associations. The majority of answers came from the asset management industry, although IOSCO also received contributions from representatives of customers, one credit rating agency, and regulators. A feedback statement is provided in Appendix II highlighting the main opinions and elements for consideration provided in those answers, together with the list of respondents. Non-confidential answers are available on IOSCO's website.

c- Elements taken into consideration

When developing its policy recommendations, IOSCO has taken into consideration the inputs received in the course of the consultation. IOSCO has also considered recent academic research on money market funds, as well as insights from the discussions taking place in the United States regarding MMF reform, where the topic has been the focus of significant attention for the last few years. Recent developments regarding money market funds in Europe and in the United States in the face of the European debt crisis and in the context of the very low interest rate environment were also considered.

2 Systemic risk analysis and the need for additional reforms

a- Systemic importance of money market funds

The MMF industry is significant in size, since it represents approximately US$ 4.7 trillion in assets under management at first quarter 2012[2] and around one fifth of the assets of Collective Investment Schemes (CIS) worldwide. The United States and Europe represent around 90 percent of the global MMF industry.

Money market funds provide a significant source of credit and liquidity. Recent figures for US MMFs show that "These funds owned over 40 percent of U.S. dollar-denominated financial commercial paper outstanding at the end of 2011 and about one-third of dollar-denominated negotiable certificates of deposit."[3] Data for Europe show that money market funds play a significant role in money markets, with "short-term debt securities with an original maturity of less than one year representing around one half of total MMF assets", and are key providers of short-term funding for banks, which represent roughly three-quarters of the MMF total assets in the euro area.[4] MMFs are broadly used by retail and institutional investors (including non-financial corporations) as an efficient way to achieve diversified cash management.

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[2] See ICI data, available at http://www.ici.org/research/stats/worldwide/ww_03_12.

[3] See McCabe et al. (2012), available at http://www.newyorkfed.org/research/staff_reports/sr564.pdf.

[4] See ESRB (2012), available at http://www.esrb.europa.eu/pub/pdf/occasional/20120622_occasional_paper.pdf. Data are from the ECB for the euro area.

b- MMFs and the shadow banking system

In its <u>*Report with recommendations to strengthen oversight and regulation of shadow banking*</u> of 27 October 2011, the Financial Stability Board (FSB) defines shadow banking as "the system of credit intermediation that involves entities and activities outside the regular banking system" and recommends focusing on entities and activities implying maturity/liquidity transformation, imperfect credit risk transfer and/or leverage. This report set the basis for the creation of five workstreams in charge of assessing the need for further regulatory action, the second of which deals with the regulatory reform of MMFs.

Money market funds are investment products subject to securities markets regulation. They are considered part of the Shadow Banking System on the basis that they perform maturity and liquidity transformation and are important sources of short-term funding, particularly for banks. In contrast with bank deposits, MMFs do not have access to official support and backstop facilities[5], and, whereas they have little ability to absorb losses, they also do not have explicit support from sponsor companies.

c- The reforms of 2010 have already addressed important areas of risks

The 2007-2008 financial crisis highlighted the systemic dimension of MMFs and their crucial role with regard to financial stability, prompting various regulatory changes. In 2010, reforms on MMFs were undertaken both in the US (Changes to the Rule 2a-7 of the US Securities and Exchange Commission, SEC[6]) and in Europe (The guidelines of the European Securities and Markets Authority, ESMA[7]). Other reforms were also subsequently adopted in countries such as Canada, China, India and South Africa. Several countries are currently reviewing the regulatory framework for MMFs.

In the US, in February 2010, the Securities and Exchange Commission (SEC) adopted amendments to the Rule 2a-7 that aimed at making MMFs more resilient to short-term risks and limiting the risks for investors and the financial system that could result from a fund breaking the buck. These amendments posed conditions to limit some risks inherent to MMFs by "requiring funds to maintain a portion of their portfolios in instruments that can be readily converted to cash, reducing the maximum weighted average maturity of portfolio holdings, and improving the quality of portfolio securities". They also imposed a stronger reporting to the SEC and allowed a fund to suspend redemptions if it has "broken the buck" (e.g., re-priced its securities below $1.00 per share), or is at "imminent risk of breaking the buck" to enable the liquidation of the fund's assets. The reviewed Rule 2a-7 became effective in May, 2010.

In addition to the 2010 SEC amendments to the Rule 2a-7, the Dodd-Frank Act limited the ability of the US Treasury and the Fed to create facilities in the future in order to reduce the potential for moral hazard. While this change obviously reduces managers' incentives for

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5 While some MMF benefited from official sector support, the measures described in the present report aim to ensure the need for such support does not arise.

6 See US Securities and Exchange Commission (2010), *MMF Reform*, Final rule, available at http://www.sec.gov/rules/final/2010/ic-29132.pdf.

7 The guidelines were published in May 2010 by the Committee of European Securities Regulators (CESR), ESMA predecessor. The guidelines are available at http://www.esma.europa.eu/system/files/10_049.pdf

excessive risk taking, it also limits the ability of policymakers to contain crises once they have started.[8]

In Europe, in May 2010, the Committee of European Securities Regulators (CESR, ESMA's predecessor) published guidelines to create a harmonised definition of the term "MMF" in Europe and to establish new common standards addressing the failures identified during the financial crisis. The guidelines established a classification creating two types of MMFs: "short-term money market funds" (ST-MMFs) and "money market funds" (MMFs) and imposed strict standards in terms of portfolio quality and maturity, risk management and disclosure. The ESMA guidelines came into force in July 2011, with a six-month transitional period for existing funds.

In other jurisdictions, recent or upcoming changes to MMF regulation include the introduction of shorter maturity limits and the imposition of liquidity buffer requirements in Canada and China, a limitation of the use of amortization and a reduction of the maximal maturity allowed for instruments eligible to liquid funds in India.

d- Market trends since the 2010 reforms

The 2011 "slow-motion"[9] or "quiet"[10] run on U.S. MMFs that surfaced because of concerns about their exposure to European sovereign debt through their lending to European banks, illustrates the high and increasing responsiveness of money market funds' investors to potential risks and the overall systemic importance of the sector. This episode tends to indicate that post-crisis regulation did not fully mitigate the systemic risks MMFs represent for the broader economy and the possibility of runs.

In its 2011 annual report, the U.S. Financial Stability Oversight Council described MMFs as an important conduit through which "amplification of a [European sovereign debt] shock" could happen. Indeed, when concerns started to soar on European sovereign debt, the massive redemptions from money market funds harmed the functioning of money markets for other firms. It also led to significant pressures for European banks.

More recently, the reduction of the European Central Bank's interest rate as of July 2012 forced a number of constant NAV MMF managers to suspend subscriptions and switches in to their funds in order to protect the funds from yield dilution. This environment of extremely low interest rates has raised the question of the ability of the funds to maintain principal value and create specific challenges for constant-NAV triple-A funds.

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8 See Adrian and Ashcraft (2012), available at http://www.newyorkfed.org/research/staff_reports/sr559.pdf.

9 See Chest pains: Europe's sovereign-debt crisis is constricting the flow of money to its banks, The Economist, August 27, 2011.

10 See Chernenko and Sunderam (2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1991171 ICI data show that assets managed by prime money market funds reached $1.66 trillion on June 1, 2011 and declined by over $170 billion (10%) to $1.49 trillion on August 31, 2011

e- Further reforms are still needed

The 2010 reforms in the US were a very important step in reducing the risks of MMF portfolios and in making them more resilient in face of important redemption pressure. The changes introduced significantly contributed to the industry's resilience and largely explain that funds were able to successfully weather the important outflows of the summer of 2011. However, the amendments made to the Rule 2a-7 did not fully alter the systemic features of MMF. In particular, investors still have the incentive to redeem quickly when they fear that the fund will record a loss, which can lead the fund to burn the rest of its liquidity through fire sales and can lead to contagion effects to other funds. These reforms did not address either the "credit event" risk.

As for the reforms in Europe, they were a first step to clarify the criteria that must respect any Collective Investment Scheme that calls itself a MMF. After these reforms, many investment funds were re-named and moved to other categories of funds. However, the new categorization does not solve all the problems inherent to MMFs. Notably, STMMFs are still allowed to use a constant net asset value. Moreover, investment funds are allowed to use amortized cost accounting to value instruments with a residual maturity limit fixed at 397 days, which may create risks and reduce price transparency. Further, the guidelines do not contain any quantitative requirements regarding the liquidity management of the funds and discussions are continuing with regard to the reference to external ratings.

In addition to these two major reforms, several other countries have introduced regulatory changes to strengthen the applicable framework for MMFs. However, as outlined in the IOSCO Consultation Report, the rules are not always comparable or do not offer the same level or type of requirements. Furthermore, some jurisdictions do not have specific regimes for money market funds.

f- Remaining sources of concerns for financial stability

Hence, although some important measures have been taken to reform the MMF industry, these funds may still present vulnerabilities which could have broader consequences for the financial system. Notably:

- **the stable net asset value** (1$/share price) that gives an impression of safety even though MMFs are subject to credit, interest rate and liquidity risk. Furthermore, the 99.5 threshold which causes a fund to "break the buck" can place pressure on the ability of other funds to maintain a stable net asset value. A run on one fund can therefore trigger a run on other funds, with destabilizing effects on the broader financial system.
- **the first mover advantage** where investors have an incentive to redeem from a troubled MMF or at the first sign of market distress, since investors who redeem shares early will redeem on the basis of the stable NAV leaving the cost of any loss to be borne by the remaining shareholders. Such advantage is also present, albeit less prominent, in variable NAV funds, as managers may sell more liquid assets first, shifting the risks of selling less-liquid assets to remaining shareholders.
- **the discrepancy between the net asset value published and the value of the assets**, due to the use of amortized cost accounting and rounding methods. Even though money

market funds will generally exhibit strong price stability, the absence of reference to market prices creates uncertainty for investors and may increase run risks.

- **the implicit support**, as there is broad evidence that money market funds have had to rely on sponsor support on numerous occasions (including in the last couple of years), through cash contribution or in the form of an outright purchase of assets at above-market prices.[11] Such implicit support, usually for reputation reasons, cause investors to perceive money market funds as less risky than they actually are, since the sponsors rather than the investors bear the losses. Uncertainty about the availability of any sponsor support may also fuel runs, as was experienced during the crisis. Finally, implicit support also creates interconnectedness between the funds and their sponsors.

- **the importance of ratings** in MMF regulations and for investors. Reliance on ratings may reduce managers and investors' diligence in the selection of the instruments or of the funds and may create cliff effects or trigger a run.

3 Objectives of the recommendations and implementation

a- Objectives and scope of the recommendations

As described above, several regulators across the world have already taken important steps to reinforce the safety of money market funds in their respective jurisdiction. IOSCO's recommendations aim to provide common standards for the regulation and management of MMFs across jurisdictions, articulated around some key principles of maturity, liquidity and credit risk. In addition, as requested by the Financial Stability Board, the aim of the present recommendations is to supplement the existing frameworks where IOSCO considers there is still room for further reforms and improvements.

These recommendations recognize that market regulation varies by jurisdiction, and that money market funds operate differently in different markets. While this report offers up a series of recommendations designed to address the financial stability issues potentially raised by MMFs, regulators should first assess the role MMFs play in their markets and determine the appropriate policy responses. The following recommendations offer a range of policy measures that regulators should use to mitigate these concerns.

Compared to the reforms introduced in 2010 which mainly focused on the asset side of funds, the present recommendations also address vulnerabilities arising from the liability side, as well as the crucial issue of valuation and the display of a constant NAV.

The recommendations are generally addressed to the entity/entities responsible for the overall operation of the MMF and in particular its compliance with the legal/regulatory framework in the respective jurisdiction and thus for the implementation of the recommendations (the responsible entity). Some recommendations are also addressed to regulators as well as to other market participants.

b- Implementation

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11 See Brady, Anadu, Cooper (2012), available at http://www.bostonfed.org/bankinfo/qau/wp/2012/qau1203.pdf and McCabe et al., in addition to the other references provided in the IOSCO's Consultation Report.

The size, features and systemic relevance of money market funds differ significantly from country to country. Accordingly, the implementation of the recommendations may vary from jurisdiction to jurisdiction, depending on local conditions and circumstances, as well as according to the specificities of the existing domestic legal and regulatory structures.

All the recommendations are important for the safety and robustness of the MMF industry. However, the implementation of some recommendations may need to be phased in, in order to avoid disruptive impacts on the MMF industry and the functioning of the financial system at large.

Regulators are encouraged to review the implementation of these recommendations if the size, features or systemic relevance of their domestic money market funds industry change. In particular, regulators should review their regulatory framework when the industry is growing rapidly, possibly raising new investor protection challenges and financial stability concerns. At the same time, when considering these recommendations regulators may wish to take into consideration any likely effects that the implementation of these recommendations will have on matters such as the domestic commercial paper and sovereign debt markets. Likewise, regulators may wish to consider where investor funds might migrate and whether the migration of these funds into new asset types raises additional action points.

c- Cross border issues

One of the objectives of these recommendations is to promote the emergence of international standards for the regulation of money market funds. However, differences may remain among jurisdictions, possibly raising cross-border issues and regulatory arbitrage concerns. Regulators should assess the risks posed by the coexistence of different regulatory models and adapt their regulatory frameworks accordingly.

d- Review

IOSCO proposes to conduct a review of the application of these recommendations within two years with a view to assess whether the recommendations should be revised, complemented or strengthened. At this time, IOSCO will also consider other market or regulatory developments which may have impacted money market funds over this period

Among the developments which IOSCO will consider when reviewing the implementation of the recommendations, the following factors will be relevant: the impact of new banking regulations and the evolution in the structure of bank funding, potential upcoming regulatory reforms in relation to the "shadow banking system", the interest rate environment, changes in the industry of MMFs, changes in investor demand and the potential development of competing products.

e- Other relevant aspects outside the scope of IOSCO's recommendations

The aim of IOSCO's recommendations is to reinforce the safety of money market funds and to reduce their potential to create or amplify systemic risks. Other ongoing initiatives may also contribute to this objective. In particular, the 'Basel III' reform measures developed by the Basel Committee on Banking Supervision aim to improve the banking sector's ability to absorb shock and will drive firms towards longer term funding. At European level, supervisors and banks have taken steps to address US dollar funding risks.[12] Other initiatives include limits on investments in money market funds by banks, as recently decided in India, to limit the circular flow between banks and funds and the possible associated systemic risks.

Other regulators may have a role to play as regulated investors such as insurance companies and pension funds often also allocate a relevant part of their portfolios to money market funds. Applicable guidelines and practices may need to be reviewed to reinforce the investors' responsibility when selecting the funds. Reliance on ratings is one of the issues to consider, as explained below. These aspects are also relevant for other investors, especially large non-financial corporations which are important users of money market funds for the management of their cash.

In line with the FSB recommendations on monitoring the shadow banking system, monitoring of the money market fund industry may need to be expanded depending on the different reporting models and systems already in place in the various jurisdictions.

Lastly, the Financial Stability Board is currently working with IOSCO to design a methodology on non-bank SIFIs[13], which may also have implications for the regulation and supervision of money market funds.

[12] See http://www.esrb.europa.eu/pub/pdf/recommendations/2011/ESRB_2011_2.en.pdf

[13] Systemically Important Financial Institutions.

4 General recommendations

<u>Recommendation 1:</u> Money market funds should be explicitly defined in CIS regulation.

MMFs present several features which make them unique among the CIS universe. Accordingly, money market funds should be explicitly defined in the regulation. As a basis, and although definitions may slightly vary from jurisdiction to jurisdiction, money market funds may generally be defined as investment funds that seek to preserve capital and provide daily liquidity, while offering returns in line with money market rates.

The definition should ensure that all CIS which present the characteristics of a MMF or which are presented to investors or potential investors as having similar investment objectives are captured by the appropriate regulation even when they are not marketed as a "MMF" (e.g. "liquid" funds, "cash" funds).

<u>Recommendation 2:</u> Specific limitations should apply to the types of assets in which MMFs may invest and the risks they may take.

Requirements on MMFs should include restrictions on the type of assets that are permitted to be held, i.e. money market funds should invest mainly in high quality money market instruments and other low-duration fixed income instruments. Funds should not take direct or indirect exposures to equities or commodities and the use of derivatives should be in line with the investment strategy of the fund. Currency risk should also be appropriately managed. Concentration limits and/or diversification ratios should be imposed in order to reduce the funds' exposure to a single entity.

In order to limit asset-liability mismatches, limits should be imposed regarding the remaining maturity until the legal redemption date of the instruments held in the portfolios. In addition, MMF regulation should define limits on the average weighted term to maturity (WAM) and the weighted average life (WAL) of the portfolio[14].

Restrictions may be tailored to reflect the level of risk associated with the funds' investment objectives. As an illustration, for the more conservative money market funds, the WAM should generally not exceed 60 days and the WAL should generally not exceed 120 days.[15]

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[14] WAM is a measure of the average length of time to maturity of all of the underlying securities in the fund weighted to reflect the relative holdings in each instrument. It is used to measure the sensitivity of a money market fund to changing money market interest rates. WAL is the weighted average of the remaining life (maturity) of each security held in a fund. It is used to measure the credit risk, as well as the liquidity risk.

[15] Generally, the use of interest rate resets in variable- or variable-rate notes should not be permitted to shorten the maturity of a security for purposes of calculating WAL, but may be permitted for purposes of calculating WAM. Securities may have a shortened maturity due to unconditional put rights for purposes of both WAL and WAM, subject to conditions defined by the regulators.

<u>Recommendation 3:</u> Regulators should closely monitor the development and use of other vehicles similar to money market funds (collective investment schemes or other types of securities).

This is especially important to avoid confusion among investors as well as to limit the risk of regulatory arbitrage, in particular as the regulatory frameworks applicable to MMFs are being strengthened. Accordingly, when collective investment schemes are not subject to specific requirements as money market funds (such as those described in <u>Recommendation 2</u> above) and/or when describing these schemes as money market funds would be misleading, the reference in product documentation to terminology similar to "money markets" or "cash" should be avoided.

In the case of products similar to money market funds which are not collective investment schemes (e.g. structured vehicles, private funds or unregulated cash pools), regulators should assess the need to extend the perimeter of regulation to such products and to impose requirements which are consistent with the recommendations described herein taking into consideration the nature and risks of these products. If securities regulators lack the legal authority to impose such requirements, securities regulators should alert the macroprudential authority or systemic risk regulator, if applicable.

5. Recommendations regarding valuation

IOSCO has recently consulted on common *<u>Principles for the Valuation of Collective Investment Schemes</u>* and will soon issue its final report. These principles emphasize the importance of valuation practices for the fair treatment of investors. IOSCO is developing below specific recommendations for money market funds and their responsible entities in addition to these principles. These recommendations reflect the specific valuation issues in the case of money market funds and the specificities of their portfolios.

<u>Recommendation 4:</u> Money market funds should comply with the general principle of fair value when valuing the securities held in their portfolios. Amortized cost method should only be used in limited circumstances.

In accordance with the general valuation principles applicable to collective investment schemes, responsible entities should ensure that the assets of the CIS are valued according to current market prices, provided that those prices are available, reliable, and up-to-date. Where market prices are not available or reliable, funds may value the securities held in their portfolios using the fair value principle. In particular, in the case of many short term instruments held by MMFs, valuation models based on current yield curve and issuer spread, or other "arm's length" valuation method representing the price at which the instruments could be sold, may be used.

IOSCO acknowledges that amortized cost accounting may provide an accurate estimate of market price for certain short-term instruments, assuming that they will mature at par. However, sudden movements in interest rates or credit concerns may cause material deviations between the mark-to-market price and the price calculated using the amortization method. In addition to the risk of mispricing of individual instruments, the use of amortized cost accounting could create opacity for investors regarding the actual net asset value of the funds.

Accordingly, the use of amortized cost accounting should be subject to strict conditions and monitoring. IOSCO recommends imposing the following conditions:

- amortized cost accounting should only be used where it is deemed to allow for an appropriate approximation of the price of the instrument;
- as the risk of mispricing increases with longer term underlying assets, the use of amortization should be restricted to instruments with low residual maturity and in the absence of any particular sensitivity of the instruments to market factors; a residual maturity of 90 days should generally be considered as a maximum;
- materiality thresholds and escalation procedures should be in place to ensure that corrective actions are promptly taken when the amortized cost no longer provides a reliable approximation of the price of the instruments: at the level of the overall portfolio, thresholds of 10 basis points would generally be deemed appropriate.

Where applicable, regulators should allow for a transition period when introducing a new maturity limit for the use of amortized cost accounting.

<u>Recommendation 5:</u> MMF valuation practices should be reviewed by a third party as part of their periodic reviews of the funds accounts.

Third parties should review the overall appropriateness of the procedures in place and notably the sourcing of prices for valuing assets and, if the amortized cost accounting is used, the conditions for its use and the processes for calculating shadow-NAV[16]. Responsible entities should ensure that prompt remedial actions are taken when weaknesses in valuation practices are identified.

6 Recommendations regarding liquidity management

IOSCO has recently consulted on common *<u>Principles of Liquidity Risk Management for Collective Investment Schemes</u>* and will soon issue its final report. These principles highlight the global importance of the issue of liquidity management for CIS in general. In addition to these principles, IOSCO is developing below specific recommendations for money market funds and their responsible entities. These recommendations encompass liquidity management in normal times as well as liquidity management in stressed market conditions and when facing unusual shareholder redemption pressures.

<u>Recommendation 6:</u> Money market funds should establish sound policies and procedures to know their investors.

MMFs should ensure that appropriate efforts are undertaken to identify patterns in investors' cash needs, their sophistication, their risk aversion, as well as to assess the concentration of the investor base. Both the effect of a single or concurrent redemption(s) of several investors having a material effect on the fund's ability to satisfy redemptions should be considered.

Although IOSCO does not recommend imposing concentration limits, IOSCO recommends money market funds to establish specific safeguards in the case of large investors in order to

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16 "Shadow-NAV" refers to the NAV of the shares of the fund calculated using values for portfolio instruments based upon current market factors.

reduce the likelihood of significant and unexpected redemption requests. Such safeguards may include limiting further purchases from a single investor, requiring a minimum holding period, or imposing a longer notice period for a large redemption. As detailed in Recommendation 14 below, such safeguards should be clear for investors upon subscriptions.

IOSCO acknowledges that practical impediments may restrict the funds' ability to monitor its investors and the concentration of its investor base, especially in the case of omnibus accounts and MMF portals. Nevertheless, given that knowledge of the investor base is key to ensure that appropriate risk management and liquidity management policies and procedures are in place, IOSCO strongly encourages the industry to develop appropriate processes and protocols to increase the information available regarding the fund's underlying investor base to the responsible entity. Bearing in mind confidentiality issues, alert mechanisms could be considered.

Recommendation 7: Money market funds should hold a minimum amount of liquid assets to strengthen their ability to face redemptions and prevent fire sales.

Each jurisdiction should define a minimum level of liquid assets that the funds should hold (e.g., requirements in terms of daily liquid assets / weekly liquid assets).
Each jurisdiction should define the requested thresholds, depending on the specificities of the different markets.

Notwithstanding the regulatory requirements set in each jurisdiction, money market funds should adjust their holdings of liquid assets depending on market conditions, their profile and their investor base (see Recommendation 6 above).

Recommendation 8: Money market funds should periodically conduct appropriate stress testing.

As part of prudent liquidity risk management and in accordance with IOSCO's proposed Principles for liquidity, money market funds should periodically test their portfolios based upon certain hypothetical and/or historical events, such as a rise in short-term interest rate, an increase in shareholder redemptions, a downgrade or series of downgrades on portfolio securities, or a credit event. If the market conditions require so, MMF should conduct more frequent stress testing.

When stress tests reveal specific vulnerabilities, responsible entities should undertake actions to reinforce their robustness. Such actions may concern the assets or the liabilities of the funds.

<u>Recommendation 9:</u> Money market funds should have tools in place to deal with exceptional market conditions and substantial redemptions pressures.

Depending on the applicable legal and regulatory frameworks and on the specificities of their client base[17], MMFs should be able to use tools such as temporary suspensions, gates and/or redemptions-in-kind, in order to manage a run on the fund.

In order to prevent contagion effects, jurisdictions may also consider providing regulators with the power to require the use of such tools where the exceptional situations encountered by one or several MMF may have implications for the broader financial system.

As described in Recommendation 14 below and according to IOSCO's upcoming principles on liquidity management, appropriate information should be disclosed to investors pre-sale and ex-post regarding liquidity management in the case of exceptional circumstances.

7 Recommendations regarding MMFs that offer a stable Net Asset Value

The recommendations detailed throughout this paper aim to reinforce the stability of MMFs in general. However, there are a number of issues which affect stable NAV MMFs specifically.

<u>Recommendation 10:</u> MMFs that offer a stable NAV should be subject to measures designed to reduce the specific risks[18] associated with their stable NAV feature and to internalize the costs arising from these risks. Regulators should require, where workable, a conversion to floating/ variable NAV. Alternatively, safeguards should be introduced to reinforce stable NAV MMFs' resilience and ability to face significant redemptions.

To address the specific issues affecting stable NAV MMFs, IOSCO recommends that stable NAV MMFs convert to floating NAV MMFs where such a move is workable and where that is not the case, that they develop additional safeguards to reinforce their resilience to losses and their ability to satisfy significant redemption requests. Other measures that can be demonstrated to achieve the outcome of reducing run risk and addressing the first mover advantage also may be implemented to meet this recommendation.

A conversion to floating NAV MMFs will reduce the specific risks associated with CNAV MMFs and constrain the effects of a credit event impacting a money market fund. Importantly, among the benefits of this change, a floating NAV will reduce the likelihood of a run by removing the discontinuity in MMF pricing created by the ½% threshold and reducing the first-mover advantage created by valuing using amortized costs and NAV rounding. It will allow fluctuations in share prices as it is the case for any other collective investment scheme, improving investors' understanding of the risks inherent to these funds and the difference with bank deposits, and will reduce the need and importance of sponsor support.

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17 E.g., not all investors may be able to have the direct ownership of the securities in the case of redemptions in kind.

18 The run risk and first mover advantage

In some jurisdictions, such a move could be challenging, with possible disruptive effects for the financial system and the economy at large. IOSCO therefore recommends that due consideration be given to the potential consequences of a move to floating NAV and a transition period foreseen to allow for the necessary adjustments.

Such a transition period would allow for sponsors, distributors, clients and other market participants to adapt. The transition period may have to be longer where the conversion faces significant operational obstacles. In particular, IOSCO acknowledges that some investors may have investment restrictions or guidelines preventing them from investing in floating NAV funds. In that case, a gradual transition should allow a change of these guidelines over time. The transition may also need to foresee changes in the IT and back-office systems in place.

Alternatively, stable NAV MMF should have in place safeguards to address the first mover advantage and slow down outflows in the event of significant redemption pressures.

These safeguards should include a mechanism to compensate the day-to-day variations in the value of the portfolio's instruments, which are not reflected in the stable price of the fund. These safeguards should be designed to offset day-to-day deviations between the fixed NAV and the market value of the fund's units/shares, which can arise under normal market conditions, reflecting the aim of supporting the ability to maintain the fixed NAV and addressing the first mover advantage. Appropriate stress testing should be conducted to ensure the mechanism is sufficient and reflects the risk characteristics of the portfolio. Several mechanisms could be considered. For instance, safeguards may take the form of NAV buffers, be constituted by accumulating returns or by any other mechanism which would achieve the same outcome. An explicit commitment from the sponsor may also be considered, taking into account the prudential implications at the sponsor level and for the system at large. As an illustration, NAV buffers could amount to 50 basis points of the NAV with higher levels enabling the funds to absorb higher losses and reducing the risk of funds "breaking the buck".

Additionally, mechanisms should exist for MMFs displaying a stable NAV to slow down outflows in the event of significant redemption pressures. Such mechanism could take the form of a "liquidity fee" to be imposed on the investors who wish to redeem their shares. Such fee would help ensuring that the cost of the request is not borne by the remaining investors and would reduce the additional strains on funds created by heavy redemptions and the need to fire sale securities. Another example could be the possibility for the fund to holdback a small portion of the shareholder's investments to help contain the effects of a credit event and reduce the risk of a run. Other measures set out in Recommendation 9 could also be considered depending on the applicable framework, industry profile and funds' specific characteristics (including its stable NAV feature).

Regulators should be able to explain the rationale behind the policy measures they have decided to implement and should assess the individual and collective effectiveness of the proposed safeguards, taking into consideration the characteristics of the industry and of the funds (size, profile, investor base, etc.)

MMF should ensure proper disclosure towards investors with regard to all mechanisms in place. In particular, the procedures which may affect their redemption rights should be clearly explained to the investors.

8 Recommendations regarding the use of ratings

In accordance with the FSB's 2010 *Principles for Reducing Reliance on External Ratings*, the following recommendations aim at reducing the importance of ratings in the MMF industry, strengthening the responsibility of managers and investors and improving transparency regarding external ratings.

Recommendation 11: MMF regulation should strengthen the obligations of the responsible entities regarding internal credit risk assessment practices and avoid any mechanistic reliance on external ratings.

It should be clear in MMF regulation that the responsibility for the assessment of credit worthiness lies with the responsible entity and that external ratings are only one element to take into consideration when assessing the credit quality of an instrument.

Mechanistic reliance on external ratings should be avoided in order to reduce herding and "cliff effects" and the risks of fire sales.

Recommendation 12: CRA supervisors should seek to ensure credit rating agencies make more explicit their current rating methodologies for money market funds.

In general, credit rating agencies should step up their efforts to educate investors about their rating methodologies and the differences, if any, between those methodologies.

Even if MMF regulation does not refer to external ratings, CRAs impose strict criteria in terms of individual instruments' ratings in their methodologies for rated money market funds. In order to avoid unnecessary fire sale effects, it should be clear in CRA methodologies that in the case of downgrades of specific instruments held in the funds' portfolios, the funds have reasonable time for remedial actions to address potential deviations from the criteria set in CRA methodologies.

CRA methodologies should also be clear about the importance of sponsors in the attribution of ratings. The ability of the sponsors to support a fund should not be taken into consideration when assessing the risks of the funds and attributing a rating.

CRA supervisors should consider these issues during their controls.

Investors should be clear about the risks related to the funds and the meaning of the ratings employed. From that point of view, the reference to "Triple-A" ratings conveys an impression of safety and may weaken investors' diligence in the selection of the funds. It also exacerbates the risk of run and potential contagion effects in the case of a downgrade of one or a group of MMFs. Further study should be conducted on the advantages, drawbacks and potential risks of fund rating.

9 Recommendations regarding disclosure to investors

<u>Recommendation 13:</u> MMF documentation should include a specific disclosure drawing investors' attention to the absence of a capital guarantee and the possibility of principal loss.

Investors often use money market funds as an alternative to bank deposits and may not always understand the difference with a bank deposit, including the absence of deposit insurance and the fact that, like any other collective investment scheme, the value of the fund may decrease.

Accordingly, it is recommended that MMF documentation explicitly states the possibility of principal loss. To the extent that the funds present some deposit-like features (such as the ability to make payments or to draw cheques), the difference between investments in the money market funds and bank deposits should also be clear.

<u>Recommendation 14:</u> MMFs' disclosure to investors should include all necessary information regarding the funds' practices in relation to valuation and the applicable procedures in times of stress.

Because money market funds present some specificities compared to other collective investment schemes, product documentation should clearly explain to the investors the procedures in place regarding the valuation of the instruments held in the portfolios as well as the procedures which may be used by the responsible entities in case of significant market stress or heavy redemption pressures (including the mechanisms in place in accordance with recommendations 9 and 10).

10 Recommendations regarding MMFs' practices in relation to repos

<u>Recommendation 15:</u> When necessary, regulators should develop guidelines strengthening the framework applicable to the use of repos by money market funds, taking into account the outcome of current work on repo markets.

MMFs are important lenders in the repo markets and repo transactions constitute an important part of MMF portfolios. These markets are also currently under review by various international[19] and domestic bodies (including discussions regarding the reforms of the tri-party repo markets in the United States).

Because of the important role of money market funds in repo markets, regulators should consider the risks in relation to repo markets and when necessary develop guidelines governing the use of repos and other similar techniques by money market funds. Such guidelines should cover areas such as settlement, counterparty risks, and collateral management, including the nature of the collateral received.

[19] The FSB has a special work stream dedicated to Securities Lending and Repos under the FSB Shadow Banking Task Force.

APPENDIX I – LIST OF RECOMMENDATIONS

Recommendation 1: Money market funds should be explicitly defined in CIS regulation.

Recommendation 2: Specific limitations should apply to the types of assets in which MMFs may invest and the risks they may take.

Recommendation 3: Regulators should closely monitor the development and use of other vehicles similar to money market funds (collective investment schemes or other types of securities).

Recommendation 4: Money market funds should comply with the general principle of fair value when valuing the securities held in their portfolios. Amortized cost method should only be used in limited circumstances.

Recommendation 5: MMF valuation practices should be reviewed by a third party as part of their periodic reviews of the funds accounts.

Recommendation 6: Money market funds should establish sound policies and procedures to know their investors.

Recommendation 7: Money market funds should hold a minimum amount of liquid assets to strengthen their ability to face redemptions and prevent fire sales.

Recommendation 8: Money market funds should periodically conduct appropriate stress testing.

Recommendation 9: Money market funds should have tools in place to deal with exceptional market conditions and substantial redemptions pressures.

Recommendation 10: MMFs that offer a stable NAV should be subject to measures designed to reduce the specific risks associated with their stable NAV feature and to internalize the costs arising from these risks. Regulators should require, where workable, a conversion to floating/ variable NAV. Alternatively, safeguards should be introduced to reinforce stable NAV MMFs' resilience and ability to face significant redemptions.

Recommendation 11: MMF regulation should strengthen the obligations of the responsible entities regarding internal credit risk assessment practices and avoid any mechanistic reliance on external ratings.

Recommendation 12: CRA supervisors should seek to ensure credit rating agencies make more explicit their current rating methodologies for money market funds.

Recommendation 13: MMF documentation should include a specific disclosure drawing investors' attention to the absence of a capital guarantee and the possibility of principal loss.

Recommendation 14: MMFs' disclosure to investors should include all necessary information regarding the funds' practices in relation to valuation and the applicable procedures in times of stress.

Recommendation 15: When necessary, regulators should develop guidelines strengthening the framework applicable to the use of repos by money market funds, taking into account the outcome of current work on repo markets.

APPENDIX II – FEEDBACK STATEMENT ON THE PUBLIC COMMENTS RECEIVED BY IOSCO ON THE CONSULTATION REPORT – MONEY MARKET FUND SYSTEMETIC RISK ANALYSIS AND REFORM OPTIONS

Forty-one responses were received in relation to the Consultation Report, *Money Market Fund Systemic Risk Analysis and Reform Options*, published by the International Organization of Securities Commission on 27 April 2012. The consultation was closed on 27 June 2012. The majority of answers came from the asset management industry, as well as some representatives of investors, one credit rating agency, and regulators. Twelve countries were represented (Canada, China, France, Ireland, India, Japan, Oman, South Africa, Spain, Switzerland, the United Kingdom and the United States), as well as several international and regional associations.

Non-confidential comments were submitted by the following organizations:

1. Amundi
2. Asociación de Instituciones de Inversión Colectiva y Fondos de Pensiones (Inverco)
3. Association for Financial Professionals (AFP)
4. Association Française de la Gestion Financière (AFG)
5. Association of Mutual Funds in India (AMFI)
6. Associations of Corporate Treasurers (ACT)
7. Axa Investment Managers (Axa IM)
8. Barnard, Christoph
9. Blackrock
10. BNP Paribas Asset Management (BNPP)
11. Capital Market Authority – Sultanate of Oman (CMA)
12. Center for Capital Market Competitiveness (CCMC)
13. CFA Institute (CFA)
14. Charles Schwab
15. China Securities Regulatory Commission (CSRC)
16. Comisión Nacional del Mercado de Valores (CNMV)
17. EADS
18. European Fund and Asset Management association (EFAMA)
19. Federated
20. Fidelity Investments (Fidelity)
21. Financial Services Board – South Africa (FSB – SA)
22. Fitch Ratings (Fitch)
23. French Association of Institutional Investors (AF2I)
24. HSBC
25. Institutional Money Market Funds Association (IMMFA)
26. International Banking Federation (IbFed)
27. International Investment funds Association (IIFA)
28. INVESCO
29. Investment Company Institute (ICI)
30. Investment Fund Institute of Canada (IFIC)
31. Investment Trusts Association, Japan (JITA)
32. Irish Fund Industry Association (IFIA)
33. Legg Mason
34. Natixis
35. Scottish Widow Investment Partnership (SWIP)

36. State Street
37. Treasury Strategies (TS)
38. UBS
39. Vanguard

General comments and high-level summary of the responses received

Respondents concurred with IOSCO regarding the importance and benefits of money market funds. Most respondents highlighted that the reforms undertaken in Europe and in the US in 2010 contributed to significantly strengthen the resilience of MMFs. They stressed the importance of conducting a rigorous cost-benefit analysis that would take into account the full impact of further actions in the MMF industry and that MMF reform should ensure the continued viability of these investment products.

Respondents generally agreed with the definition given by IOSCO and suggested adding a few more features.

Respondents did not fully agree with the systemic risk analysis presented in this report since most of them did not see MMFs as systemic vehicles. Respondents also challenged the inclusion of money market funds in the shadow banking system.

Respondents provided divergent views and evidence regarding questions such as the variability of the money market funds' net asset value (NAV) and the differences between stable-NAV and variable-NAV funds, reflecting the different business models in place in the industry.

Some policy options, and especially a mandatory move from CNAV to VNAV, were criticized. Some propositions were considered not feasible and respondents agreed with the practical challenges highlighted by IOSCO for certain specific options, such as the establishment of a private insurance. However, respondents agreed with IOSCO that there were areas where the regulatory framework could be more harmonized across jurisdictions or strengthened.

Although respondents were in favor of some form of harmonization at international level and the establishment of some common principles for the regulation of MMFs, they generally stressed that the implementation on a national level should take into account the unique characteristics of a particular jurisdiction's money market fund industry, warning against a "one size fits all" approach.

Several respondents encouraged regulators to extend the scope of their analysis to examine investment products that offer cash investment without the rules under which MMFs operate.

Specific Comments

1. **<u>MMF definition (Q1)</u>**

Respondents generally agreed with the definition given by IOSCO on MMFs and discussed what elements could be added.

One respondent (CMA) stressed the differentiation from other investment funds, highlighting that an MMF "is an investment fund that holds the objective to earn interest for the holders while maintaining NAV and maintaining portfolios which are comprised of short-term securities." Another respondent (Federated) stated that the definition did not insist enough on the necessity of maintaining a constant value in an MMF. Several other respondents (Amundi, BNPP, AFG, Natixis, EFAMA, Axa IM) noted it was necessary to add that MMFs must offer "returns in line with money market rates".

Other respondents (IFIA, IMMFA, HSBC) highlighted the lack of reference to other wrappers than funds in the definition (including structured vehicles and unregulated cash pools), and the risk of regulatory arbitrage. One respondent (IFIA) also recommended distinguishing clearly the differences between a classic MMF and an "enhanced MMF". One respondent (IMMFA) suggested including risk ratios in the definition, as imposed by the US 2a-7 Rule and by the ESMA guidelines. Similarly, other respondents suggested clarifying the instruments that MMFs were allowed to invest in, as per the approach taken by CESR in its Guidelines on a common definition of European MMFs.

Finally, one respondent (ACT) pointed out that "more clarity" in nomenclature was desirable since this definition could be viewed as including "slightly longer term" MMFs that seek higher yield and that do not offer the same day liquidity. Other respondents (JITA, CSRC) noted that the proposed definition could be too large.

IOSCO agrees with the respondents that it is very important to have a clear definition of money market funds in the regulation (<u>Recommendation 1</u>). IOSCO included a reference to money market rates in the proposed definition of money market funds and integrated a specific recommendation to address the issue of regulatory arbitrage and competition from other (CIS or non-CIS) products (<u>Recommendation 3</u>). IOSCO acknowledges that the definition for money market funds may vary from jurisdiction to jurisdiction, reflecting the coexistence of different models worldwide, but should be articulated along the key criteria proposed by IOSCO. IOSCO also notes that some of its recommendations may be tailored to reflect the level of risk associated with the funds' characteristics and investment objectives.

2. **<u>Analysis of systemic risk (Q2-11)</u>**

2.1 <u>MMFs and their vulnerabilities</u>

Susceptibility to runs and importance of short term funding (Q2, Q3)
Several respondents (ACT, SWIP, Federated) did not fully agree with the description of MMFs' susceptibility to runs and considered the reasons given in the report (notably the "first-mover advantage issue) as not sufficient for banning the use of CNAV. One response (TS) detailed three types of financial runs (credit-driven runs, liquidity-driven runs and speculative runs), noting that according to their analysis the 2010 reforms have already adequately dealt with each of these three situations. Other respondents (BNPP, Axa IM, AFG) noted that variable-NAV MMFs were not "prone to the run risk".

All respondents stressed the importance of MMFs for investors and issuers, although some respondents (EFAMA, SWIP, BNPP, Natixis) stressed that the importance of MMFs in Europe's short-term financing markets was low and hence not systemic. One respondent (Inverco) pointed out that since European MMFs represent half the volume of MMFs in the US and since they are distributed among different countries in Europe, they are not big enough to create systemic risk.

Respondents (Fidelity, Blackrock, Federated, State Street) highlighted the fact that MMFs were "important providers of short-term funding" in the US. Another commentator noted that "businesses in particular rely on these funds for their investment, cash management and financing needs" (CCMC). Two respondents (Federated, Charles Schwab) stressed that MMFs did not trigger instability in the short-term funding market and another respondent (Blackrock) pointed out that banks' dependence on short-term funding was decreasing in the US. Finally, one (confidential) response noted that the withdrawal of funding by rational investors would be acute in stressed situations regardless of whether they are invested in funds or not.

One respondent (EADS) noted that MMFs "cannot be blamed for an inappropriate funding structure of banks" and that therefore "any regulation should be focused on tighter liquidity ratios for banks". Another response (SWIP) highlighted that "imposing increasing limits on MMFs means that bank funding and MMF investments increasingly diverge".

Although significant reforms have been implemented to strengthen the robustness of MMF in various jurisdictions, MMFs remain exposed to the risk of runs. In order to address that risk, IOSCO presented recommendations in the following areas: valuation practices and price transparency, liquidity management in normal times and in exceptional circumstances, ratings and measures tailored to the specific risks of constant NAV MMF. IOSCO also notes that actions have been taken by bank supervisors (and bank themselves) in order to address the risks resulting from over-reliance on MMFs for short term funding and that other relevant aspects in regard to the mitigation of risks associated with MMFs are outside IOSCO's scope (see the introduction to the recommendations).

Sponsors (Q4)

Most respondents stressed the necessity for the fund to be transparent about the risks investors were exposed to. Respondents agreed with IOSCO that it was an important area of risk as investors tended to believe that the sponsor would provide support under stressed market conditions. However, one respondent (SWIP) stressed that they had never relied on sponsor support for their CNAV funds. Another response (IMMFA) noted that they did not believe that "the instances of sponsor support that occurred in 2007/8 have caused investors to develop an expectation of sponsor support". Several respondents (Amundi, BNPP, Axa, AFG, Natixis) pointed out that variable NAV funds' investors had no expectation of sponsor support since the NAV fluctuates and therefore may drop and the potential systemic risk may only come from an implicit support to maintain a constant NAV.

Two other respondents (HSBC, SWIP) proposed to prohibit sponsor support in order to remove any risk ownership ambiguity, pointing out that there was no legal basis for investors to transfer the downside risk of ownership to a fund's sponsor. It was also stressed that this risk ambiguity has been exacerbated by CRAs who take into account the willingness/ability of a sponsor to support their MMFs into their rating methodology for MMFs. Another (confidential) response advocated "strict regulation of sponsor guarantees for MMFs and clear investor disclosure".

One other commentator (EADS) recalled that several banks had announced plans to sell their asset management activities. The response also stressed the need to consider the size of the funds, as the likelihood of a sponsorship may decrease in line with the amount of assets under management.

IOSCO considers that the expectation of a sponsor stepping in to maintain a stable NAV is a key issue for the money market fund industry. Although most funds do not benefit from an explicit guarantee from their sponsors, sponsors have intervened on numerous occasions to maintain the net asset value of the funds, including over the recent period. IOSCO does not recommend a prohibition of sponsor support as it could create additional risks. Sponsors may have the ability to support funds, but investors should be aware that sponsors may not always be in a position or willing to offer such support. Therefore, clear warnings should also be included in the funds' documentation. This should also be reflected in the risk assessment of the funds, including in CRAs' methodologies. More generally, by reinforcing the robustness of MMFs, IOSCO intends to limit the instances where sponsors may have to intervene.

Importance for investors (Q5)

Most respondents agreed with the description of MMFs' benefits given in the report. One respondent (Federated) stressed the contribution of MMFs in the growth of the global economy.

Most respondents agreed with IOSCO to say that a "sizeable reduction" in MMF offerings could cause greater concentration of liquidity in bank deposits or in unregulated or less-regulated substitute products. One respondent (SWIP) stressed that MMFs were not "correct for the retail environment" and that, as a consequence, they should be regulated separately. Some respondents (AFG, Axa, Natixis, BNPP) also highlighted the incentive for retail investors to reallocate their cash towards bank deposits following recent market evolutions.

One (confidential) response noted that one alternative to MMFs is the direct holding of short-term debt instruments, probably causing "an increase in concentration risk, a reduction in due diligence and a reduction in liquidity for the investor". One representative of investors (EADS) indicated that they would face significant size issues in the absence of MMFs, potentially increasing their allocation to short term sovereigns and agencies but to a lower extent in commercial papers, certificates of deposits and deposits with banks.

IOSCO agrees that money market funds offer a useful alternative for managing cash. IOSCO took into account the risk of transfer to unregulated or less-regulated substitute products and the risk of regulatory arbitrage and has developed a specific recommendation (<u>Recommendation 3</u>). However, it should be noted that MMFs present key benefits for investors compared to other alternatives for cash management. IOSCO therefore considers that the risk of investors moving away from MMFs is somewhat more limited than stated by some commentators.

2.2 MMFs as specific collective investment schemes

MMFs vs. bank deposits (Q6)

The vast majority of respondents agreed not to assimilate MMFs to bank deposits and set forth the differences between the two. For instance, one response highlighted the differences in terms of liquidity, transparency, portfolio composition, risk and return, customer expectations and alignment of interest (Fidelity). Another respondent also noted the differences in terms of leverage, WAM, WAL, and the absence of guarantee (Schwab).

The association of the two instruments has been qualified several times as a "fundamental misconception" mainly because, contrary to bank-deposits, MMFs are investment products that do not guarantee the principal invested. As a consequence, bank-like regulation should not be imposed upon investment funds (IIFA, IFIC). One respondent (AMFI) recalled that MMF investors were not lenders to the MMF; hence MMFs are "structurally" different from bank deposits. One respondent (CMA) stressed the difference in terms of liquidity, risk and return. One other respondent (EADS) indicated that bank deposits may be included in a general account pledge which is not the case for MMFs. One response (Fidelity) noted that, based on recent research conducted by the respondent, retail investors "use U.S. MMFs as a complement to bank deposit products and not as a replacement for these government-guaranteed vehicles".

*IOSCO agrees with the differences between bank deposits and money market funds outlined in responses. However, investors' perception may not fully reflect these differences. In addition, in some cases, MMFs present functionalities that are very similar to bank deposits (*e.g. *the ability to make payments), although their value is not guaranteed. IOSCO recommends including a specific warning drawing investors' attention to the absence of a capital guarantee and the possibility of principal loss. Differences with bank deposits should also be clear.*

Constant NAV (CNAV) vs. variable NAV (VNAV) (Q7)

Several respondents discussed the differences and similarities between VNAV and CNAV funds. Responses reflected the co-existence of two business models in the industry, the CNAV and VNAV models, although several managers offer both types of funds. Distributors of VNAV funds stressed the fundamental differences between VNAV funds and funds offering a constant net asset value, whereas other respondents (ICI, IFIA, IMMFA, HSBC) highlighted the lack of "variability" of VNAV funds and the fact that both react similarly in normal market conditions or in the case of a stress in the market. One respondent (IMMFA) indicated that only one of the six VNAV funds surveyed posted a negative yield over the period 1999-2009 (implying that the day's accumulation of income was more than offset by a mark-to-market loss), although this analysis was not conducted on a broader set of funds. Respondents also refer to research from ICI, showing that the average shadow price of US prime MMFs between 2000 and April 2010 was 0.999977 (i.e. an average variation from the CNAV of 0.23 bps), with the lowest average price 0.999980 and the highest average price 1.0020. ICI also provided data from December 2010 to February 2012, showing that virtually all funds fluctuated by less than 2 basis points. Finally, HSBC also illustrated the impact of accumulating and distributing shares.

In contrast, French asset managers presented charts highlighting the NAV variability of VNAV funds (including, in some cases, declines in NAV). French managers explained that this variability corresponded to the "look-through" that allow the use of marked to market valuation. One respondent (AXA IM) stressed that when market volatility is increasing, performance of VNAV funds tend to be more volatile and fund managers are strongly incentivized to adjust quickly the risk profile of the portfolios. It was also noted that the use of amortized cost accounting may be considered almost the same between CNAV and VNAV funds where the funds invest only in instruments below three months and are not authorized to amortize the loss incurred by the sale of a holding over several days.

Several respondents (Natixis, BNPP, AFG, Axa IM) did not agree with the argument saying that both CNAV and VNAV funds were susceptible to runs. One respondent (UBS) stressed that investors did not have the incentive to run in a VNAV model ("because the fund's NAV always reflects the value of its underlying investment"), while they might in a CNAV model since they could think that the fund "might be artificially kept at 100 and the (implicit) guarantee by the fund sponsor might break and therefore redeem shares as quickly as possible to get out at 100".

One representative of investors (EADS) noted that the selection of a VNAV or a CNAV fund is driven "by convenience reasons" rather than by material investment decisions.

A few respondents (Fidelity, ACT, IMMFA) stated that VNAV funds were "more similar to short-term bond funds" and hence were not liquidity funds.

MMFs are investment products that seek to preserve capital and provide daily liquidity, while offering returns in line with money market rates, which is achieved by investing in short-term high quality assets. Their price should therefore not vary much in general, but should reflect changes in market conditions, as was experienced at the summer of 2011. IOSCO considers that a move to VNAV would improve the robustness and transparency of money market funds and would contribute to reduce risks (see <u>Recommendation 10</u>).This move should be accompanied by other recommendations to reinforce the resilience of MMFs in general.

Ratings (Q8)

One representative of (large) investors (EADS) stressed that they had their own MMF rating processes but that other corporate treasuries, pension funds, insurers, etc. incorporated rating restrictions for MMFs in their guidelines. Accordingly, an association noted that "From the point of view of corporate investors, the credit rating of a MMF is vitally important". In Europe, several respondents (e.g. SWIP) highlighted that "rating agency involvement in MMF certainly has evolved from the lack of unifying 2a-7 rule to define the parameters on MMFs". One commentator (CMA) also mentioned the issue of the number of agencies attributing ratings.

We refer to Q29 to Q32 for additional inputs.

Repo (Q9)

Several respondents (Fidelity, Federated) pointed to ongoing work as well as to the reforms regarding the tri-party repo market in the US[20]. Respondents from Europe noted that repos are an integral part of MMF investments, representing about 5-15% on average of portfolios, more in Treasury MMFs (Axa IM, BNPP, see also EFAMA) and "offering very useful, flexible and safe financial instruments". In the European context, several respondents (Axa IM, BNPP, Natixis, AFG, IFIA, SWIP) noted that there was probably scope for policy recommendations strengthening the global regulatory framework with regard to repos. Areas for consideration include the legal framework for the execution of the repos, the physical delivery of collateral and the settlement systems, credit quality requirements for repo counterparties and requirements regarding collateral, the issue of correlation between counterparty and collateral. This view was also expressed by one respondent from South Africa (the Financial Services Board).

One respondent (AMFI) highlighted the lack of issue with the use of repos by MMFs in India since Indian mutual funds only participate in repo markets as lenders. Other responses (Fidelity) highlighted that MMFs are distinct from other lenders in the repo market, as "U.S. MMFs only enter in repos with counterparties that represent minimal credit risk, regardless of the collateral".

IOSCO included a policy recommendation (Recommendation 15) that encourages regulators to develop guidelines to strengthen the regulatory framework applicable to the use of repos by money market funds, taking into account the outcome of current work on repo markets conducted by the FSB.

Other factors to take into consideration ? (Q10-11)

Most respondents agreed with IOSCO that the different factors listed in the report[21] should be taken into consideration. Most of them stressed the importance of taking into account the reforms implemented in 2010 in the MMF industry, the different regulations that are being adopted in the banking sector and the current low interest rate environment. One respondent (AF2i) highlighted the importance of taking into account the future "changes in the bank activities of credit in relation with the Basel III regulation", as MMFs will likely capture "a great deal of the banks short term credit activities". It was also mentioned (Blackrock) a "reduction in the supply of some of the short-term instruments most used by MMFs"[22].

The US industry association (ICI) insisted that the new liquidity requirements have had a "transformative effect on U.S. money market funds", as funds exceed the minimum requirements by a considerable margin, holding (as of December 2011) more than twice the level of outflows they experienced during September 2008. ICI also indicated that the introduction of a limit on MMFs' WAL bolstered the resilience of funds, with most funds having WALs in the range of 30 to 90 days. Other respondents (e.g. Natixis) noted the increasing proportion of very short instruments in portfolios, reflecting the implementation of

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[20] Initiatives include a policy that delays the timing of daily unwind of cash and collateral on the tri-party repo platform, a process of auto-substitution, three-way confirmation and monthly reporting activity.

[21] The report listed the following factors: the current environment of low interest rates , the impact of recent regulatory reforms in Europe and in the United States, concentration trends in the industry of MMFs, changes in banks' and other issuers' short-term funding needs and the recent and on-going reforms in the tri-party repo market.

[22] "Between December, 31, 2007 and December, 31, 2011, financial commercial paper outstanding fell by 51%."

the new CESR/ESMA's guidelines and "in line with expectations of investors whose risk aversion stands at a high level". The European industry association (EFAMA) noted that the change in the definition brought by the CESR/ESMA guidelines had a significant impact on the size of the European MMF industry, in particular in Ireland and Luxembourg (respectively -28% and -22% in terms of the total NAV).

Several respondents from the U.S. (e.g. ICI) also highlighted that "the variability of prime money market funds' per share market values has declined significantly since the 2007-09 crisis" and that even the funds with the very lowest values had levels that "were comfortably above the $.9950 mark".

IOSCO agrees with commentators that the 2010 reforms have had a significant impact on the MMF industry and increased the resilience of these products. However, IOSCO considered that these reforms did not address sufficiently the risks relative to runs and decided to recommend further changes in that field. IOSCO's intent is also to foster the development of international standards with regard to the regulation of money market funds. When reviewing the implementation of these recommendations, IOSCO will consider various factors, including banking reform, the evolution of interest rates and other market factors.

3. Policy options (Q12-30)

Section 1:

Move from CNAV to VNAV (Q12)

The vast majority of respondents strongly opposed a mandatory move from CNAV to VNAV stressing that it would likely result in massive outflows from money market funds and not reduce the risks. Several respondents also highlighted the practical challenges associated with this move since CNAV funds represent approximately an 80% market share of global money market funds (Fidelity). Indeed, respondents put forward that such a move would require significant changes to operational and recordkeeping systems. It has also been pointed out that many corporate users "do not want and will not use a V-NAV MMF" (Federated), mainly because of the technical and practical changes that it would imply. Another respondent (CCMC) similarly feared an "exodus" of investments by corporate investors; this respondent also stressed the complexity and costs of implementing VNAV in corporate treasury and accounting systems. One response (ICI) listed the various entities that would need to effect changes in the U.S., namely mutual fund complexes (transfer agents, advisers, distributors), intermediaries, third-party systems and service providers, the DTCC and institutional and commercial investors.

Several US respondents (Fidelity, ICI, Legg Mason, Federated) recalled that under many U.S. state laws and regulations, municipalities, insurance companies and others were authorized to invest in MMFs only if the funds were maintaining a constant NAV. Respondents also stressed that sponsors of retirement plans could be reluctant to include VNAV MMFs as a cash investment option in group retirement plans if they were to be VNAV funds. They finally pointed out that a move to VNAV would be likely to provoke outflows from that product, and hence limit the availability of this source of short-term funding which would result in higher borrowing costs for users.

Some respondents (Vanguard, ICI, Fidelity) pointed out that a significant part of investors in the US reacted negatively to move to VNAV, commenting notably that it would "impede financing for critical infrastructure and public works projects, increase the cost of doing business for many states, municipalities and corporations, and disrupt cash management at both the municipal and corporate levels". ICI provided the results of a survey indicating that 66% of investors were "unfavourable" to floating NAV (however, among those 66%, 33% said they would decrease their balance, 29% said they would close their account and the rest (38%) said they either don't know (11%), or said it would have no change (16%) or transact less (10%)).

Respondents also thought both structures could co-exist so CNAV did not have to disappear. One respondent (SWIP) suggested that the creation of a strong framework that would ensure the accuracy of amortized costs would be a "far better solution".

In contrast with these views, a few respondents (AF2I, CMA, CNMV, EADS, Financial Services Board and one other respondent) were in favor of this policy option. One (confidential) response supported an obligation for CNAV funds "to provide a legal guarantee to investors and to hold sufficient capital to facilitate the guarantee in much the same way as a bank capital structure".

One respondent (AMFI) stressed that if such changes were to be introduced, regulators should give sufficient notice to markets and investors to digest their impacts.

One respondent (CSRC), presenting the views of the Chinese mutual fund industry, noted that while some industry participants in China preferred the CNAV model, others thought that both structures (CNAV and VNAV) could co-exist. Chinese market participants concurred to say that if VNAV was to be mandatory then efforts should be made to ensure a smooth transition.

Finally, one respondent stressed that if CNAV were to be maintained, then CNAV sponsors should be required to adopt procedures for stress testing their fund's ability to maintain a stable NAV. Also, if the difference between the shadow price and the amortized price is greater than ½%, the sponsor would be required to take action.

It was also noted (e.g. ICI) that "requiring the use of mark-to-market pricing in lieu of amortized cost pricing would not, under normal circumstances, cause a money market fund's share price to float. (…) To make the NAV float, using mark-to-market pricing share prices would need to be changed to $100.00 a share (e.g., through a reverse 1 for 100 share split)".

IOSCO considers that a move to VNAV is desirable as (i) it would lift the ambiguity around MMF by clarifying the fundamental difference with bank deposits reflected by the NAV fluctuations, (ii) bring MMF in line with other CIS and ensure they behave as any other investment product and (iii) solve a number of risks such as "cliff effects" of breaking the buck and confusion from investors as to a possible guarantee of the fund. Taking into consideration the practical obstacles described by the respondents, a reasonable transition period should been envisaged. Nevertheless, IOSCO acknowledges that the impact of a move to VNAV is likely to vary significantly among jurisdictions and that in some cases such a move could be challenging, with possible disruptive effects for the financial system and the economy at large. Accordingly, when a move to VNAV is not workable, funds may be allowed to continue displaying constant net asset values, but additional safeguards should be defined by regulators (Recommendation 10).

NAV-buffer (Q13)

There was strong opposition to the establishment of capital or NAV buffers, most of respondents declared that it was against the spirit of a CIS structure and that it would be too costly for funds. Several commentators noted that such buffer would cost more than the expected value of a loss. Many respondents also stressed that by imposing a capital buffer, IOSCO would convert MMFs into a banking product. Two respondents (SWIP, Federated) stressed that the NAV buffer solution was not the best way to prevent systemic risks. Others noted that requiring fund advisers to commit capital would force advisers to liquidate their funds or offer alternative less-regulated products (ICI).

Some respondents (e.g. Blackrock) were supportive of "retaining a portion of earnings as a reserve" but criticised the different options proposed in the report. Among those options (investor, sponsor or third-party funded), the proposition to create subordinated shares was the most criticized. One respondent (JITA) highlighted that since in some countries (including Japan) almost all of the funds were established as contractual type investment trusts, it seemed highly difficult to issue subordinated shares. In the case of a "within-fund" capital buffer, ICI indicated that in the best of circumstances, building a buffer of 0.5 percent likely would require at least five years.

IOSCO recommends that, when a conversion to floating NAV funds is not workable, funds displaying a stable Net Asset Value should develop additional safeguards to reinforce their resilience to losses and their ability to face significant redemptions. Particularly stable NAV funds should be required to design a mechanism to compensate for the day-to-day variations between the stable NAV and the market value of the units/shares and to adopt measures to ensure the fund has the ability to restrict redemptions and face significant redemption pressure.

Private insurance (Q14)

The broad majority of respondents agreed with the description of the challenges associated with the establishment of a private insurance and did not believe that private MMFs insurance was a feasible solution. They stressed it would "dramatically" change the nature of MMFs.

One respondent (CFA) supported the creation of a "voluntary" insurance fund as opposed to a "taxpayer-supported insurance fund", and another commentator suggested implementing this answer (CMA). Another respondent (AMFI) concurred to this opinion and highlighted the fact that a mandatory participation in liquidity insurance could "encourage higher risk taking by MMF managers and could defeat the purpose of the mandate". Similarly, several commentators raised the issue of moral hazard (CFA). It was mentioned (Blackrock) that "private insurance has been made available in the past, but has not been successful due to limited coverage, and the cost to MMFs and their sponsors". The same respondent also claimed that it would not be large enough to protect against systemic issues unless it is coupled with access to government liquidity (which has been ruled out for the US).

Given the challenges associated with the establishment of a private insurance, IOSCO did not draw up recommendations in relation with private insurance.

Conversion of MMFs into special purpose banks (SPBs) (Q15)

The respondents showed a strong opposition to this proposal as they believed MMFs would better support investors' interests if they remained collective investment schemes and were not subject to banking regulation. Several respondents pointed out that this option could cause greater systemic risk "by creating homogeneity in the financial regulatory scheme and reliance on the bank business model for all short-term cash investments" (Fidelity). Others noted that "the legal structure of SPBs would provide much less protection for investors" (CFA).

Only one respondent (CNMV) supported this option for CNAV funds. One respondent (Blackrock) suggested an alternative: that the sponsor or investment managers be regulated as a "Special Purpose Entity (SPE)"and hold capital.

IOSCO agrees with respondents that arguments against SPBs outweigh the potential benefits and decided not to pursue this option.

The establishment of a two-tier system with enhanced protection for CNAV funds (Q16)

Most respondents opposed the option establishing a two tier system which would permit both CNAV and VNAV funds with certain risk limiting conditions and enhanced protection for CNAV funds. Some respondents (Fidelity, IMMFA, HSBC) re-stated that they did not support "any form" of mandatory move to VNAV.

Some other respondents (CFA, EFAMA, UBS) supported a two-tier system stressing that it would allow investors to choose between CNAV and VNAV. One respondent (SWIP) qualified the option as "workable" if the tiering was to be based on the "underlying investor base", as opposed to the accounting methodology.

One respondent (Federated) pointed out that "we already have a two-tier system".

IOSCO considers that it is neither practical nor advisable to reserve CNAV funds to a certain category of investors. Where workable, IOSCO recommends a move to VNAV funds, as outlined in Recommendation 10, although there may be instances where both CNAV and VNAV funds coexist, with additional safeguards being imposed on CNAV funds.

Reserve CNAV MMFs for only certain investors (Q17)

The majority of American respondents did not agree with the option of offering CNAV only to certain investors since (in the US) CNAV funds are used by both institutional and retail investors. It was also argued that it would be difficult to differentiate among investors and that retail investors often invest in MMFs through institutional share classes. Only a few of respondents agreed with this option (e.g., EADS).

IOSCO agrees with the arguments put forward by respondents and decided to not reserve CNAV for only certain investors.

Assessment of the policy options suggested in this section (Q18)

Several options presented in Section 1 were seen as not realistic by respondents, notably, the mandatory move from CNAV to VNAV, the establishment of a NAV buffer, the establishment of a private insurance, the conversion to special purpose banks and reserving

CNAV for certain investors. Respondents highlighted the fact that most of these options were structured in a way incompatible with the general principles of collective investment schemes. Some respondents were in favor of a conversion to VNAV.

IOSCO took into account the remarks made by some respondents and decided to drop the policy options relative to the establishment of a private insurance, the conversion to special purpose banks and the establishment of a two-tier system reserving CNAV MMFs to certain investors. Also, acknowledging that there might be significant obstacles to a move to a VNAV model in some jurisdictions, IOSCO does not impose a mandatory move to variable NAV but recommends, where workable, a conversion to variable NAV and alternatively, the establishment of additional safeguards.

Section 2:

Marked-to-market valuation (Q19)

Many responses (CFA, Federated, IFIA, EFAMA, CCMC) highlighted the difficulties in accessing mark-to-market prices for the types of instruments MMFs invest in. Others argue that market quotation does not always reflect 'true' value. Amortized cost is therefore often seen as more accurate. Accordingly, one commentator noted that restricting the use of amortized cost accounting "may mean inaccurately priced funds and the type of investor behaviour (…) which would simply exacerbate risks" (SWIP). One commentator noted that large issues of instruments may be fully taken up by one MMF and issuers do not maintain daily price (Financial Services Board). It was also noted (CCMC) that "accurate prices are not always reflected during times of financial distress".

One respondent (CSRC) highlighted the fact that marked-to-market valuation could decrease the stability of MMF's NAV and hence deter investors from making long term investments.

One respondent (AMFI) suggested "allowing amortization as long as deviations from model-derived prices remain small".

One respondent (IMMFA) noted that fund administrators predominantly use evaluated prices (i.e. prices calculated from yield curves) vs. quoted prices, and did not use traded prices (because of the lack of such prices). Using evaluated prices was seen as not necessarily more accurate and potentially "pro-cyclical". Another response (ICI) recalled that mutual funds other than MMFs also routinely use amortized cost to value securities with a remaining maturity of 60 days or less.

Yet, several respondents (AF2i, Axa, Natixis, AFG, CMA) suggested imposing market valuation as the rule for MMFs assets. Another respondent (UBS) highlighted its own move to mark-to-market as a positive experience.

Requirements on the use of amortized cost accounting (Q20)

Respondents agreed with IOSCO to say that the use of amortized cost accounting should be subject to conditions and limited to MMFs that adhere to strict standards. When discussing additional limits, some respondents disagree with the need for limitation, notably one respondent (Fidelity) considered the application of amortized cost accounting to only a portion of the MMFs as "not consistent with the approach regulators have taken" and stressed that "limiting the use of amortized cost accounting to only a portion of the assets in a MMF would remove the benefits at the portfolio level".

Views from Europe were contrasted with regard to the extent of the use of amortized cost accounting Respondents from France (Natixis, Axa, BNPP, AFG, Amundi) were in favour of imposing a maximum maturity of 90 days for the instruments eligible to amortised cost accounting, as well as a materiality threshold (10bp) instrument by instrument; respondents also highlighted that it was possible to reduce the maximum maturity for which amortization could be used but with additional costs and no real value added. One respondent from India (AMFI) declared that since the maximal residual life allowed to be able to use amortized cost accounting was reduced to 90 days in 2009[23], source of systemic risk has been reduced. One respondent indicated (AF2I) that, for those assets that cannot meet market valuation, these assets should be isolated in a defined sub portfolio.

Several respondents (Amundi, AFG, BNPP) provided examples highlighting the risks when using amortised cost accounting for long maturities (up to 13 months, as currently authorized under European legislation), as the amortized cost may significantly deviate from the marked-to-market price, whereas amortized cost provides a reasonable approximate for short maturities (below three months). Respondents pointed out that the use of 3-month amortised cost helps not capture the "market noise" without diverging too much from the price derived from the yield curve.

This view was not shared by other respondents (EFAMA, IMMFA, HSBC) who considered the EU framework (397 days) as satisfactory. One respondent (SWIP) also noted that imposing restrictions to all funds could create bias, with funds all buying instruments within the new maturity frame to ensure continued use of amortised cost accounting, while being tempted to seek higher risks to offset the lower returns.

Several respondents (SWIP, EADS) noted that it was easier to obtain reliable market prices for government securities. Accordingly, a Treasury bill fund can more easily adapt to mark-to-market pricing (SWIP).

Several respondents (e.g. CFA) noted that the establishment of limits in terms of maximum deviation between amortized cost value and "shadow NAV" together with escalation procedures would be helpful.

IOSCO considers that money market funds should comply with the general principle of fair value when valuing the instruments held in their portfolios (Recommendation 4). IOSCO acknowledges that in some cases amortized cost accounting may provide appropriate estimates. However, IOSCO recommends imposing strict conditions (Recommendation 4).

IOSCO is aware that a change in the valuation processes may generate some additional costs for managers. However, managers already use market prices to monitor the shadow NAV and the reference to market prices will provide greater transparency and comfort to investors.

[23] The limit was reduced to 60 days in February 2012.

<u>Section 3:</u>

Portfolio liquidity (Q21)

There was large support to impose some liquidity ratios (already imposed by the US SEC and by the IMMFA Code of Conduct) by most respondents.

Several respondents (AFG, BNPP, Amundi, Axa IM, Natixis) answered that they would welcome an initiative from regulators to define common thresholds that would harmonise liquidity practices in MMFs. These same respondents also stressed the importance of linking the definition with the concept of maturity. Thus, they suggested that instruments should mature/have callable features within 1-7 days. Finally, it has been suggested that MMFs should be required to hold a minimum level of liquidity measured as a one month moving average of 10-15% with instruments maturing in less than 1/7 days. Daily monitoring should be in place. Some respondents (e.g. Inverco) offered a detailed description of the controls in place with regard to liquidity risk at the level of the CIS and at the level of the financial instrument.

Despite this broad agreement for greater liquidity constraints for MMFs, some drawbacks were highlighted:

- Buffers tend to increase a bias towards shortest funding (e.g. CFA)
- SEC ratios defined in Rule 2a-7 were supported in general but with some variations in the levels and definitions of assets, taking into consideration the differences between countries (e.g. size of the US Treasury markets)
- The exclusion or imposition of limits on "illiquid" assets (as included in the US 2a-7 Rule) was not seen as advisable

Finally, other respondent suggested imposing strong requirements regarding liquidity risk management instead of imposing restrictions on liquidity. One respondent (ACT) also mentioned the issue of a sectoral concentration in MMF portfolios, advocating that "a diversification by industry sector or geography could help reduce risk". However, that same respondent noted that specific sector allocations could change the "nature" of MMFs and remove investor choice. The respondent hinted to industry-agreed uniform definitions of sectors and "encouragement for funds to provide this sort of asset breakdown".

IOSCO is of the view that portfolio liquidity is crucial to MMF safety. <u>Recommendation 7</u> addresses this issue.

Know your shareholders/customers (Q22)

Respondents agreed with IOSCO on the importance for managers to know their investor base. However, most of them highlighted that even if the intentions of their investors was known, it might change under market stress and cause investors to all redeem at the same time. Respondents (UBS, Federated) suggested instead focusing on the availability of liquidity in the market place.

A few respondents (Blackrock, HSBC, ATC) proposed to impose limits on the concentration of shareholders (e.g., to 5%). Others noted that such thresholds could be breached passively. Federated described the efforts made to gather information on large shareholders, noting than shareholders, portals and intermediaries have generally been cooperative in this effort. Efforts include questionnaires, meetings with investors, and tracking and modelling actual purchases and redemption history.

The main challenges identified in this option were the practical obstacles to know your customers: omnibus accounts, MMF portals, etc… Several respondents (Fidelity, Federated, IMMFA) advocated for a specific obligation for omnibus accounts to disclose information about the underlying account holders.

One respondent (HSBC) also suggested requesting the Board of Directors of a fund to define a client concentration policy. This policy would set limits on individual client and industry concentrations. One respondent (EADS) suggested limiting the holding of a single investor at 5%. This same respondent also recommended improving the "appropriate information flow" by giving the possibility to put orders on MMFs up to one or two weeks ahead of the trading date (vs. 24h currently). Another response (Blackrock) suggested implementing "limitations on shareholder concentration for publicly offered products, whether directly by regulation or by requiring a MMF Board or Trustee to determine an appropriate level of such concentration". Furthermore, "Omnibus accounts and portals would have to provide sufficient information about the underlying investors to verify that the rule is not violated or otherwise be subject to the same concentration rule themselves".

IOSCO acknowledges that responsible entities may have difficulties anticipating the behaviour of MMFs' investors. Nevertheless, MMFs' responsible entities should establish sound policies and procedures to know their shareholders. Market participants should also make progress to increase the amount of information available regarding funds' investor base (Recommendation 6).

IOSCO is not of the view that imposing concentration limits on the investor base is desirable or feasible (although it should be part of the good and prudent management of the fund), notably because such limits could be breached passively; investor concentrations may also vary according to the funds' profiles.

Liquidity Fee (Q23)

Respondents showed a strong opposition to the establishment of a permanent liquidity fee. One respondent (Fidelity) highlighted that the ability of redeeming all shares on a daily basis was one of the "primary features" that attracted investors to MMFs. Another respondent (JITA) stressed that if such fees were to be imposed, then the conditions under which MMFs charge redemption fees should be fully disclosed; this same respondent also noted that this mechanism may encourage shareholders to engage in a pre-emptive run if they fear that the situation may require the fee to be imposed. Some respondents (e.g. Fidelity) noted that "the operational challenges and costs of implementing redemption restrictions are extensive and extend beyond the control of MMFs and into the realm of service providers and intermediaries". One commentator (Blackrock) noted that, based on inputs from clients in the U.S., clients would prefer a floating NAV to permanent redemption restrictions, but most would abandon the product if such restrictions were imposed.

However there was overall support for triggering such liquidity fee in exceptional circumstances to ensure the fair treatment of investors (Blackrock refers to "standby liquidity fees"), with some discussions regarding the triggers and the role of Boards. On this point, one respondent (HSBC) concurred to say that a trigger-based liquidity fee would be a powerful mechanism to strengthen MMFs during a financial crisis and to ensure a fair treatment of investors. One commentator noted that the use of liquidity fees should be limited to distressed markets and not "as a solution to fund-specific liquidity problems" (CFA). Another response (SWIP) noted that regulators should set certain conditions and criteria where the levy must be applied.

One respondent (HSBC) suggested limiting the total number of shares that a fund is required to repurchase on any trading day to 10% of the shares in issue. The respondent explained that this limitation would be applied pro-rata so that all shareholders redeeming on a particular business day realise the same proportion of their shares, pointing out that such a mechanism would provide an extended period in which a fund can manage the redemption requests.

Minimum balance requirements (Q24)

The vast majority of respondents did not agree with the imposition of a minimum balance requirement stressing that it would turn investors away from MMFs, increase the probability of a run and that it would cause "enormous operational challenges "(Blackrock). Another respondent (CCMC) added that it would also "substantially "increase the company's borrowing costs.

Other respondents (Natixis, Axa, AFG, BNPP) stressed that this option was only applicable in the case of a CNAV MMF and that the investor should pay the current market price every time he redeems.

The risk of run is a key financial stability concern. Mechanisms such as liquidity fees or minimum balance requirements would help funds deal with significant redemption pressures, for instance in the case of a credit event. Liquidity fees or holdback mechanisms also ensure the cost of redemptions is not borne by the remaining investors in the funds. IOSCO recommends establishing such mechanisms as additional safeguards to be developed if a move to VNAV funds is not workable (see Recommendation 10).

Bid price (Q25)

Respondents were divided on this option. Respondents in favour (CFA, EFAMA, Axa, Natixis, BNPP, AFG, Amundi) highlighted that it was a good option especially when market is under stress. This valuation method is already used by some French managers to value MMFs. One (confidential) response also suggested the introduction of single swinging pricing, to be disclosed in the prospectuses, with swing factors being adjusted quarterly and thresholds annually.

Other respondents (IMMFA, IFIA, HSBC, Federated, UBS) disagreed with this option stressing that it would cause a reduction in the published price and impose a liquidity fee.

IOSCO considers that this option may be worth considering but raises specific questions which would need to be addressed in the implementation.

Redemption-in-kind (Q26)

The majority of respondents disapproved the redemption-in-kind option stressing operational challenges, fiduciary responsibility issues and a restrain from investors to invest in MMFs. Some respondents (Axa, Natixis, BNPP, AFG) also recalled that redemption-in-kind was not allowed for UCITS funds and investors were not always allowed to receive redemption in kind. Another respondent (EADS) highlighted that "since not all securities are transferable and fully divisible it may create arbitrage opportunities". Other respondents added that if redeeming investors would receive securities, they would seek to sell them which will lead to a decline in the market price of the securities.

A few respondents (CFA, CMA, State Street) agreed with this option, highlighting that it could be an option to explore. One respondent (CMA) also suggested allowing "partial acceptance in kind"; another respondent (HSBC) suggested allowing a "pro-rata share of the assets of the funds". One respondent (SWIP) pointed out that redemptions in assets or in-specie were only feasible for large scale redemptions. Inverco noted that redemptions-in-kind in exceptional cases may be allowed in Spain, subject to the regulator's approval.

IOSCO acknowledges the practical challenges that redemption-in-kind could cause. For this reason, IOSCO recommends using it, amongst other tools, to deal with exceptional market conditions and redemptions pressures, to the extent that investors are able to deal with direct ownership (Recommendation 9).

Gates (Q27)

Respondents mainly disapproved the imposition of gates stressing that it should not be a "widespread solution". Yet, one respondent (IMMFA) suggested empowering MMFs boards to gate the fund, if judged to be in the best interest of investors.

One respondent (HSBC) suggested limiting the total number of shares that a fund is required to repurchase on any trading day to 10% of the shares issued. Another respondent (Axa) supported gates "in case of complete absence of liquidity in the financial market". One respondent (Inverco) noted that exceptional measures for redemptions are in place, including the possibility of requiring a forewarning of 10 days in case of large redemptions and allowing partial suspensions if trading of securities that represent more than 5% of MMF net assets was suspended or affected.

Based on comments received and taking into account the differences in the various legal and regulatory frameworks, IOSCO considers that MMFs may be able to use gates under stressed market conditions (Recommendation 9). As part of "know your shareholders" procedures, responsible entities may establish specific safeguards regarding large investors (see Recommendation 6).

Private liquidity facility (Q28)

The respondents unanimously concurred with IOSCO to say that the establishment of a private liquidity facility faces challenges that make the option unworkable. Hence the respondents did not support the implementation of this option. Several respondents also highlighted moral hazard concerns (CFA).

Several respondents (IFIA, EFAMA, IMMFA, HSBC) recalled that the US Federal Reserve ruled out providing MMFs with access to the discount window via a private liquidity facility without MMFs converting into SPBs.

Only one respondent (CMA) suggested implementing this option.

Given the challenges associated with the establishment of a private liquidity facility, IOSCO did not draw up recommendations on this policy option.

Section 4:

Ratings (Q8, Q29, Q30)

Most respondents agreed that the reference to ratings in MMF regulation was not good and some advocated a removal of such reference (IMMFA, EFAMA, Axa, Natixis, BNPP, AFG, AF2I). However, many respondents highlighted the risks and the uncertainly it could create for investors in the absence of credible alternative (IMMFA, ACT, Vanguard) and that "the use of ratings should not be eliminated or otherwise restricted" (Blackrock) as ratings act as "preliminary screens in an independent credit review". Several respondents (e.g. CMA, Blackrock) therefore viewed the preservation of ratings as necessary. One respondent (State street) highlighted that the wholesale elimination of ratings could increase rather than reduce systemic risk. Another commentator indicated that "the minimal credit risk standard required for MMFs is an appropriate regulatory approach to limiting risk for MMF investors" (Fidelity).

With regard to triple-A ratings, views were contrasted. The triple-A rating was viewed as a "label" and a few respondents said it should be prohibited (HSBC), although others (ACT) said it was very important for investors. Views were also contrasted with regard to the usefulness of CRAs as "auditors". Some respondents mentioned that the triple-A rating creates homogeneity among funds and confusion among investors (especially as methodology could actually differ from one agency to the other). One respondent (SWIP) suggested implementing ratings for fund managers rather than funds, although describing several challenges associated with this proposal. This respondent also noted that rating agencies have become very intransigent in their application of their methodologies.

Some respondents highlighted the circular reference between external ratings (funds must invest in instruments rated by the CRAs to obtain the triple-A rating) and the immense pressure for funds to maintain AAA rating, with potential herding or cliff effects. However, there was scepticism regarding the promotion of different ratings (vs. the current environment where almost all rated funds are "triple-A" funds).

One credit rating agency (Fitch) challenged these views by highlighting the key benefits of MMF ratings: the mitigation of risks provided by MMF rating criteria, an objective profiling, the ongoing monitoring and the comparable information on rated MMFs. This respondent also supported a greater use of the full MMF rating scale and stressed the necessity to better educate investors on methodology used by CRAs.

Last but not least, several answers highlighted that some CRAs included sponsor support in their methodology, which was strongly criticized. Respondents also referred to the case of three funds which were recently put under watch because of the apparent lack of support from their sponsors, which led to massive redemptions. One CRA (Fitch) disputed these views stressing that the "multi-dimensional" role of sponsors in the MMFs was taken into account, "including internal controls, investment decision-making, operational support, and acting as a potential source of stability to the fund in times of stress". Finally, one respondent (IMMFA) noted the differences in the methodologies of the three main credit rating agencies, although this analysis was challenged by one CRA (Fitch).

One (confidential) response noted that investors should be made clear that external ratings are only one element to take into consideration and suggested that the rating methodology should be sent to all investors in a summarized format by the fund providers.

Considering the importance of ratings in the MMF industry, IOSCO drew up two recommendations that aim at avoiding mechanistic reliance to ratings in MMF regulation, promoting the internal assessments of the risks by managers and by investors in money market funds, increasing the transparency of CRAs' methodologies and improving investor education with regard to MMF ratings (Recommendation 11 and Recommendation).Further work could be done to assess the advantages and risks related to the ratings of funds.

Other areas to consider (Q31)

Several respondents from Europe (EFAMA, UBS, IFIA, SWIP, IMMFA), as well as respondents from the USA) recommended requiring MMFs to disclose their portfolio holdings in a standardised format. Some respondents also suggested disclosure of shadow-NAV. It was recalled that the SEC already requires monthly portfolio holdings disclosure. IMMFA has also issued non-binding guidance to its Members on standardised portfolio holdings.

One respondent (CFA) suggested adopting a clear and visible disclosure regarding the risk of investing in MMFs, as well as the importance of disclosure to investors regarding the applicable mechanisms against runs and breaches of regulatory thresholds of deviation in valuation.

Several respondents encouraged a greater use of stress testing (EFAMA, AFG, SWIP). For instance, one commentator (SWIP) suggested "the implementation of periodic stress tests that would analyze the risk profile of a fund by "re-pricing" the entire fund"; this asset manager conducts such stress tests on a weekly basis.

One commentator (EADS) advocated for clear guidance regarding the maximum concentration of an issuer, "preferably also reflecting the credit rating (…) and the size of such issuer" as well as a "consolidation of issuers belonging to one group of companies". This same respondent noted that some MMFs do not appropriately consider the size of an issuer and some MMFs can be considered as one of the largest lenders to small issuers (we refer to Question 21 above where a similar comment was made). Another respondent highlighted the need for "more specificity on portfolio diversification requirements" (Federated). This respondent also suggested enhanced supervisory analysis, with consideration of "red flags" such as unusual growth or portfolio returns, and portfolio exposure to particular issuers.

One contribution suggested requesting funds to publish "living wills" (SWIP), specifying the process around which a fund would close, as well as the options available to investors and likely timescales.

Several recommendations address the issues identified by respondents, as well as some of the suggestions made. Notably:

Recommendation 14 emphasises the need for appropriate disclosure in fund documentation. The use of stress testing is addressed in Recommendation 8. Concentration risk is addressed in Recommendation 2.

IOSCO does not consider the public disclosure of shadow-NAV and portfolio holdings as necessary. Public disclosure may also exacerbate run risk as investors could overreact if the risk evaluation on a fund suddenly changes. With regard to the periodic reporting to regulators of the funds' portfolio holdings, while such reporting (already in place in the United States and in other jurisdictions) would be clearly beneficial to monitor risks and interconnections in the financial system, this may have the unintended consequence of leading investors to think that the regulator is monitoring the MMFs and would be able to intervene to prevent losses. Depending on the different monitoring models and systems in place, regulators may need to consider expanding their monitoring capabilities.

Global or regional solution? (Q32)

Most respondents highlighted that a global solution was an objective but was not realistic, given the differences among countries. Several respondents (IFIC,IIFA) opposed a "one size fits all" approach since they considered that "the implementation on a national level of a regulatory approach promoted by IOSCO that does not take into account the unique characteristics of a particular jurisdiction's money market fund industry could create unintended adverse consequences, rather than help mitigate risks" (IIFA).

However, several respondents were in favour of defining a minimum set of principles (Fidelity, IMMFA, HSBC, AMFI), or "guiding principles" (Vanguard). Other commentators (AFG, BNPP, Axa, Natixis) stressed the importance of having the same underlying rules if IOSCO decided to back a same level playing field.

The objective of IOSCO's recommendations is to establish internationally agreed standards for the regulation of MMFs. IOSCO acknowledges that there are important differences between jurisdictions and that the implementation of its recommendations may vary from country to country.

APPENDIX III – LIST OF WORKING GROUP MEMBERS

Autorité des marchés financiers (France)

Bafin (Germany)

Central Bank of Ireland (Ireland)

Comissão de Valores Mobiliários (Brazil)

Commission de Surveillance du Secteur Financier (Luxembourg)

Conseil Déontologique des Valeurs Mobilières (Morocco)

Financial Services Authority (U.K.)

Japan Financial Services Agency

Ontario Securities Commission (Canada)

Securities and Exchange Board of India

Securities and Exchange Commission (U.S.A.)

IOSCO General Secretariat