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IMPACT ASSESSMENT

Accompanying the document

Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
on Money Market Funds

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Introduction

Money Market Funds (MMFs[1]) serve as an important source of short-term financing for financial institutions, corporates and governments. In Europe, around 22% of short-term debt securities issued either by governments or by the corporate sector are held by MMFs. MMFs hold 38% of short-term debt issued by the banking sector.

On the demand side, MMFs provide a short-term cash management tool that provides a high degree of liquidity, diversification, stability of value as well as market-based yield. MMFs are mainly used by corporations seeking to invest their excess cash for a short time frame, for example until a major expenditure, such as the payroll, is due.

MMF, therefore, more than any other investment fund, represent a crucial link bringing together demand and offer of short-term money. Due to their central place in the money market, MMFs are subject to close scrutiny from central banks. Their holdings are part of the definition of the monetary aggregate M3. With assets under management of around 1'000 billion Euros, MMFs represent a category of funds that is distinct from all other mutual funds. The majority of MMFs, around 80% of the assets and 60% of the funds, operate under the rules of the Directive on Undertakings for Collective Investment in Transferable Securities (UCITS), its implementing acts and guidelines issues by Committee of European Securities Regulators (CESR) and European Securities and Markets Authority (ESMA). Because of the systemic interconnectedness of MMF with the banking sector on the one hand and with corporate and government finance, on the other hand, MMFs are also subject to a special set of ESMA guidelines. In addition, the average size of a MMF by far exceeds the average size of a UCITS fund. For example, an individual MMF can reach the size of € 50 billion[2].

The issue of MMFs has been at the core of the international work on shadow banking. The Financial Stability Board (FSB) and other institutions, such as International Organization of Securities Commissions (IOSCO) and European Systemic Risk Board (ESRB) have analysed the financial sector in the course of 2011 and concluded that certain activities and entities were of systemic importance but had not been addressed to a sufficient degree. In the asset management sector, MMFs were singled out, especially those MMFs that maintain a stable share price, providing the impression that fund holdings are equivalent to a bank deposit. The above international bodies formulated policy recommendations designed to help the regulators in tackling certain issues raised by MMF. This impact assessment analyses the proposed policy tools and assesses their impacts, taking into account the specificities of the European MMF market. The list of options discussed in this report aim to address investor runs and the attached systemic consequences of such runs on the short-term funding for the European economy.

[1] Please see Annex 1 for a glossary of certain terms and notions contained in this report.

[2] The biggest MMFs in the EU are operated by JPMorgan (€50 & €30 billion); BlackRock (€30 billion) and BNP (€30 billion). As of September 2012, 22 EU MMFs had assets under management exceeding €10 billion.

1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

1.1. Shadow banking context

The 2008 crisis was global and financial services were at its heart, revealing inadequacies including regulatory gaps, ineffective supervision, opaque markets and overly-complex products. The response has been international and coordinated through the G20 and the FSB. The European Union has shown global leadership in implementing its G20 commitments. Overall, the reforms will equip the EU with the tools designed to ensure that the financial system, its institutions and markets are properly supervised.

However, there is an increasing area of non-bank credit activity, called shadow banking, which has not been the prime focus of prudential regulation and supervision. At the November 2010 Seoul Summit, the G20 Leaders identified some remaining issues of financial sector regulation that warranted attention. They highlighted "strengthening regulation and supervision of shadow banking" as one of these issues and requested that the FSB, in collaboration with other international standard setting bodies, develop recommendations to strengthen the oversight and regulation of the "shadow banking system". The "shadow banking system" can broadly be described as "credit intermediation involving entities and activities (fully or partially) outside the regular banking system".

The FSB's work highlighted that the disorderly failure of shadow bank entities can entail systemic risk, both directly and through their interconnectedness with the regular banking system. The FSB has also suggested that as long as such activities and entities remain subject to a lower level of regulation and supervision than the rest of the financial sector, reinforced banking regulation could drive a substantial part of banking activities beyond the boundaries of traditional banking and towards shadow banking.

After the November 2011 G20 Cannes Summit, the FSB has initiated five work-streams tasked with analysing the issues in more detail and developing effective policy recommendations. These work streams include: (i) the Basel Committee on Banking Supervision (BCBS) will work on how to further regulate the interaction between banks and shadow banking entities; (ii) IOSCO will work on regulation to mitigate the systemic risks (including run-type risks) of Money Market Funds (MMFs); (iii) IOSCO, with the help of the BCBS, will carry out an evaluation of existing securitisation requirements and make further policy recommendations; (iv) a FSB subgroup will examine the regulation of other shadow banking entities; and, (v) another FSB subgroup will work on securities lending and repos. These work-streams bring together the EU and other major jurisdictions including the US, China and Japan, who are each considering appropriate regulatory measures.

1.2. International work on MMFs

Following a public consultation of international stakeholders organised during the first half of 2012, IOSCO published its final recommendations[3] in October 2012. IOSCO issued a list of 15 recommendations aimed at addressing vulnerabilities arising from the liquidity side as well as the issue of MMF valuation. These recommendations serve as a basis for the definition of the options discussed in this impact assessment. The FSB reviewed the IOSCO recommendations in November 2012 and endorsed them as an

[3] Policy recommendations for Money Market Funds, Final report, FR07/12 – presented in Annex 9

effective framework for strengthening the resilience of MMFs to risks in a comprehensive manner.

The US authorities decided to engage in a reform of their national market. A first proposal was discussed throughout 2012 by the Securities and Exchange Commission (SEC) but the project was finally abandoned in August 2012[4]. The Financial Stability and Oversight Council (FSOC) however decided to continue the reform and proceeded with the publication of a consultation[5] in November 2012 indicating the way the US authorities will follow.

The ESRB has decided to set up an expert group on MMFs during the summer 2012 with the task to analyse the European MMF market and formalize recommendations for an EU context. The work started by gathering empirical data in the main EU jurisdictions hosting MMFs. The recommendations have been finalized in December 2012 and have been published the 18.02. 2013[6].

1.3. Related EU initiatives

The European Commission will present in the first half of 2013 the key results from the Green Paper on shadow banking issued in March 2012[7].

The European Parliament adopted a resolution on shadow banking[8] in November 2012 where it *"invites the Commission to submit a review of the UCITS framework, with particular focus on the MMF issue, in the first half of 2013, by requiring MMFs either to adopt a variable asset value with a daily evaluation or, if retaining a constant value, to be obliged to apply for a limited-purpose banking licence and be subject to capital and other prudential requirements; stresses that regulatory arbitrage must be minimised;"* The document addresses all the topics related to shadow banking and takes position regarding the way MMFs should be reformed in Europe.

Related to the specific topic of credit ratings, the European Parliament adopted the Commission proposal aimed at reducing the reliance on external credit ratings (CRA III[9]).

1.4. Consultation of interested parties

Since the beginning of 2012 the Commission has been engaged in extensive consultation with representatives from a wide range of organizations. The interaction has taken the form of bilateral and multilateral meetings[10], one written public consultation on shadow banking, one written public consultation on asset management issues including MMFs and a public conference on shadow banking. Through this process the Commission has obtained a wealth of information about the functioning of the MMF market and its various segments, as well as views on the issues to be solved and how to solve them. An

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[4] http://www.sec.gov/news/press/2012/2012-166.htm

[5] Proposed recommendations regarding money market mutual fund reform, FSOC

[6] http://www.esrb.europa.eu/pub/pdf/recommendations/2012/ESRB_2011_1.en.pdf?2d1004d0e636912dd9458d9368499761

[7] See http://ec.europa.eu/internal_market/bank/docs/shadow/green-paper_en.pdf

[8] European Parliament resolution of 20 November 2012 on Shadow Banking (2012/2115(INI)) – Annex 8

[9] http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P7-TA-2013-0013&format=XML&language=EN#BKMD-11

[10] Please see Annex 11 for the reports of the meetings with stakeholders.

important part of this information has been used in the preparation of this impact assessment.

1.4.1. Consultation on shadow banking

The responses to the Green Paper offered a broad picture of the European shadow banking sector which permitted to develop more targeted questions on MMF specific issues for the consultation on asset management. It was followed by a public conference in April 2012 attended by stakeholders from the EU and the US. Representatives from the regulator and industry sides, forming the panel on MMFs[11], presented their views on the need to reform the EU MMF market.

1.4.2. Consultation on asset management

A MMF chapter has been introduced in a broader consultation on various asset management issues[12] published on 26 July 2012 (it was closed on 18 October 2012). Stakeholders were informed about the availability of the consultation on the website of DG MARKT through the publication of a press release[13] and through electronic emails. The Commission services received 56 responses related to the MMF section[14]. All contributions have been thoroughly examined and relevant information contained in them has been taken into account throughout the report[15].

1.5. Impact Assessment Steering Group and IAB

Work on the Impact Assessment started in August 2012 with the first meeting of the Steering group on 28 September 2012, followed by 2 further meetings, the last one taking place on 4 December 2012. The following Directorates General (DGs) and Commission services participated in the meetings: Competition, Economic and Monetary Affairs, Employment Social Affairs and Inclusion, Health and Consumers, Industry and Entrepreneurship, Legal Services, Secretariat General, and Taxation Customs Union. The report with the minutes of the last steering group were sent to the Impact Assessment Board on 12 December 2012.

DG MARKT services met the Impact Assessment Board on 16 January 2013. The Board analysed this Impact Assessment and delivered its positive opinion on 18 January 2013. During this meeting the members of the Board provided DG MARKT services with comments to improve the content of the Impact Assessment that led to some modifications of this final draft. These are:

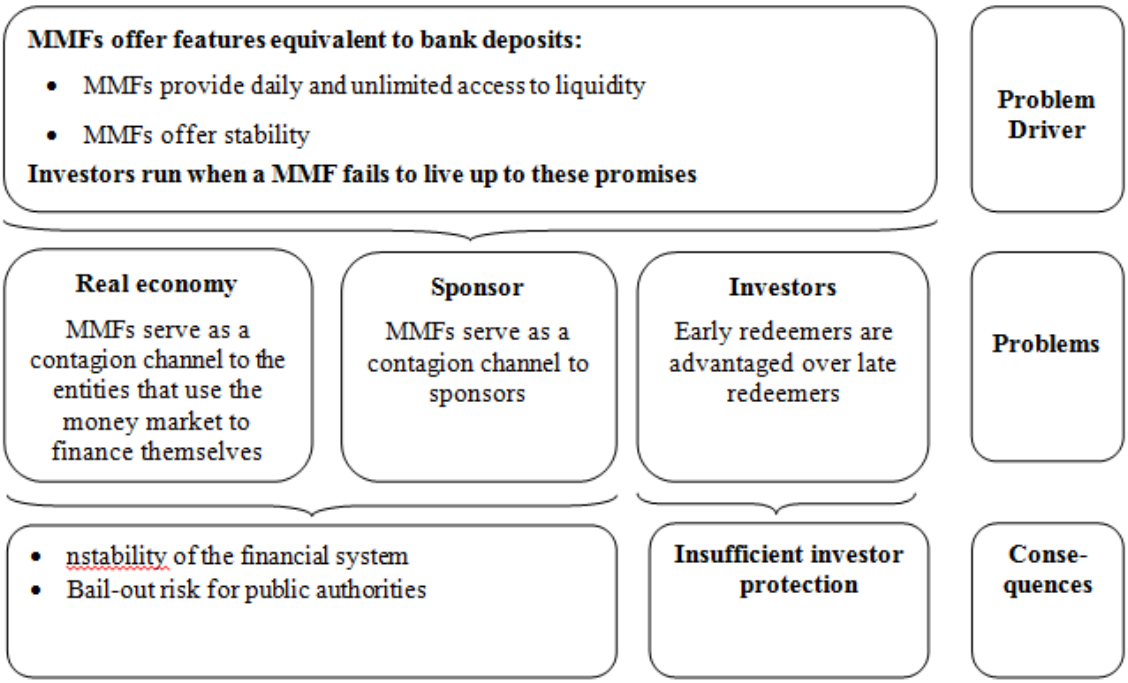
- The problem definition should provide greater detail on the MMF markets and underpin its description with further EU examples illustrating, in particular, the cross-border dimension of the problems.
- The report should better link both the objectives and the options with the identified problems and present a set of quantifiable operational objectives as a basis for robust progress indicators.
- The report should better assess the impacts on investors, and should strive to quantify the compliance costs that the envisaged measures would entail. The impacts

[11] See http://ec.europa.eu/internal_market/bank/docs/shadow/programme_en.pdf
[12] See http://ec.europa.eu/internal_market/consultations/docs/2012/ucits/ucits_consultation_en.pdf
[13] See http://europa.eu/rapid/press-release_IP-12-853_en.htm?locale=en
[14] Responses: http://ec.europa.eu/internal_market/consultations/2012/ucits/index_en.htm
[15] A detailed summary of the responses can be found in Annex 10.

on Member States and on international regulatory coherence should be also explained.

- The report should systematically present stakeholders views, in particular, in the sections analysing and comparing the options.

2. PROBLEM DEFINITION



2.1. Problem driver: MMFs offer features equivalent to bank deposits

MMFs are used by investors to place their cash for short periods of time. They represent a convenient tool for investors because they offer features analogous to bank deposits: instantaneous access to liquidity and stability of value. When the investors perceive that there is a risk that the MMFs may fail to live up to these promises, they will start to redeem, possibly leading to a so-called "run".

Investor runs are characterized by massive and sudden redemption requests by a large group of investors that want to avoid losses and be able to redeem at the highest possible price. Investor runs are systemically relevant as they force the MMFs to sell their assets rapidly in order to meet outstanding redemption requests. The spiral of redemptions itself accelerates the decline in the fund's net asset value (NAV), thus exacerbating declines in the NAV and the fear that the money market as a whole is unstable.

The MMF market is concentrated in a few Member states with FR, IE and LU representing more than 95% of the market in terms of assets under management. The market is nevertheless highly interconnected with other countries due to the high proportion of cross border investments and investors, and the cross border contagion links between the MMF and their sponsor domiciled in other countries.

2.1.1. MMFs provide daily and unlimited access to liquidity

MMFs may hold investment assets that may mature in a year or more but issue units or shares that are redeemable daily on demand. As such, MMFs provide maturity transformation, but in the absence of appropriate techniques and without any explicit

liquidity backstop, they may have little capacity to satisfy redemptions once the value of their portfolio assets declines. Due to liquidity mismatches between the fund's assets and its commitment to provide for daily redemptions, the fund may be unable to meet all redemption requests, increasing the tendency toward 'runs' on MMF among investors and thus market instability.

When the MMF is confronted with redemptions, it will start to sell the most liquid assets which have the lowest liquidity costs, before being obliged to dispose of less liquid assets associated with higher liquidity costs when the redemption pressure increases. Therefore the more the redemption pressure increases, the more the MMF will sell assets with higher liquidity costs, the more the share price of the MMF will decrease. Because investors know that there might be such a mismatch between the asset's liquidity and the liquidity offered to them, they prefer to redeem as soon as possible in order to profit from the most favourable liquidity conditions, thus passing the liquidity cost to remaining investors. This can be seen as a first mover advantage. Investors use MMFs due to their high liquidity profile and once there are indications those MMFs may fail to satisfy this criterion, investors prefer to redeem.

The liquidity cost of an asset is mainly determined by its quality, basically its maturity and its credit quality. If not properly managed, both factors contribute to the liquidity mismatch. MMFs invest predominantly in money market instruments issued by different types of issuers, such as banks, governments and corporates. These instruments are in general short term and of good quality. But during stressed market situations, as in 2007 and 2008, these instruments can be affected by financial turmoil.

In 2007, several EU funds encountered difficulties following the subprime crisis in the US. These funds were sold to investors as MMF equivalents even if the majority of them did not comply with the then prevailing national rules (absence of EU rules in 2007 on MMFs). The problem stemmed from the fact that these "dynamic" or "enhanced" MMFs were invested in US Asset Backed Securities (ABS), principally in Asset Backed Commercial Papers (ABCP) which proved to be illiquid once the crisis started. The ABCPs are backed by different securities representing different types of assets: student loans, credit card receivables, auto loans or residential mortgages (including subprime). If there are any significant negative developments in any of the underlying markets, the quality and the risk of the ABCP will be affected. The 2007 crisis in the ABCP market, and subsequently in the MMF market, was linked to a sudden deterioration in liquidity due to the inability to price ABCP backed by US subprime residential mortgages. The events listed in Annex 5.1 illustrate the consequences of this drying up of liquidity on the MMF market. The fact that some MMFs that were invested in ABS were unable to meet all redemption requests led to investor runs on other MMFs.

In 2008, EU MMFs were again confronted to a crisis after Lehman Brothers defaulted which led to MMFs in several Member States having to face unusual large redemption requests. Investors lost confidence in the ability of the fund to maintain its daily liquidity because their investments in money market assets, especially the commercial paper issued by banks, were turning into increasingly illiquid asset classes.

Two academic papers[16] demonstrate the link between portfolio risks and runs: they observe that funds offering higher yields (thus higher liquidity risk and credit risk of the assets) prior to the crisis were confronted with larger runs than funds following a more conservative approach.

2.1.2. MMFs offer stability

The fact that MMFs offer price stability, often accompanied by AAA rating awarded by the credit rating agencies (CRA), gives the impression to investors that they are investing in a guaranteed bank-like product.

Price stability: Two closely linked core ingredients make MMFs stand out from the remaining universe of mutual funds as regulated in UCITS or alternative investment funds as regulated in the AIFMD.

MMFs, as opposed to all other investment fund vehicles, are structured as an investment that can be redeemed at a stable share or unit price. The method to achieve this stable price is the linearization of the value of investment assets (either for the entire range of assets or for those that mature in less than three months), often coupled with sponsor support in case the NAV of the investment assets deteriorate beyond a certain point.

Because MMFs are allowed to price investment assets using the amortized cost method, they avoid the fluctuations inherent in valuing a financial asset. This valuation method allows the MMF managers to linearize the value of the investment assets over their lifecycle, thus maintaining a stable price for the assets. On the other hand, a classic investment fund, not using amortized cost, uses the market value of the assets to price its portfolio, thus the NAV of the fund fluctuates in line with the market value of the underlying assets. Analysing the role that amortised cost accounting plays in a MMF does not call into question the overall usefulness of this accounting method for the remainder of the investment fund universe. What is at issue in this impact assessment is whether amortised cost, coupled with the promise of a stable share price, creates a situation where MMFs are particularly prone to sponsor support.

The fact that investors almost never observe movements in the NAV of their funds reinforces their expectation to have invested in a guaranteed product whose share price will always be stable. The stability of price contributes to the wide-spread investor perception that MMFs are equivalent to risk-free cash equivalent bank deposits. In stressed market conditions, investors begin to realise that MMFs might not live up to this stability expectation and for the first time might experience the loss of value of their shares. This realisation, coupled with the wish not to lose money, reinforces the incentive to redeem as soon as market stress begins to appear.

The use of amortized cost is used at different degrees in Europe, some countries allowing the use of this method for the entire portfolio and some others allowing it only for those assets in a portfolio that mature in less than three months. The MMFs using this method for their entire portfolio are usually called Constant NAV (CNAV) funds because their price never fluctuates. The funds using the amortized cost only for a proportion of their

[16] "The Cross Section of Money Market Fund Risks and Financial Crises", Patrick E. McCabe (2010); "Money Market Funds Run Risk: Will Floating Net Asset Value Fix the Problem?", Jeffrey N. Gordon (2012)

portfolio are usually called Variable NAV (VNAV), because their share price is subject to fluctuation.

The fact that the price of the CNAV MMFs never fluctuates and that the majority of CNAV MMFs maintain a stable NAV at €1 or $1 per share issued by rounding the market value of their shares to the nearest cent, further reinforces investors' perception to have invested in a deposit-like (guaranteed) product. In addition, the providers of such funds clearly state in their marketing material that the objective of their funds is to preserve the capital[17]. Even if this guarantee is normally only "implicit", investors in such MMFs often expect the sponsor to unconditionally support the MMF to maintain its stable NAV, creating an ultimately false expectation in the market that such investments are in a "guaranteed" vehicle. This triggers false incentives and exacerbates runs once investors realise that either there is no sponsor support after all or that sponsor support will be too little, too late to prevent the MMF from "breaking the buck".

When the market value of the fund's shares declines to € 0.9950, this situation is called "breaking the buck" (breaking the dollar or breaking the euro) because the fund must decrease its NAV from €1 per share to reflect current market value. According to CESR guidelines[18], a MMF should avoid situations where discrepancy between the market value and the value resulting from amortized cost accounting becomes material; otherwise the MMF can no longer issue and redeem units at the stable price. In the case of a fund that redeems all shares at €1, the permitted level of material discrepancy is usually set at 0.005 cents, an amount equivalent to the difference between €1 and €0.9950[19]. This means that the NAV will always be maintained at €1 or $1 as long as the value of the fund's shares remains between 0.9950 and 1.0050. When there is a material discrepancy between the market value and the rounded share value, the fund is obliged to lower its NAV to reflect the current market value of its portfolio.

In fact this rarely happens because the sponsors step in to provide support: the sponsor will pay for maintaining the difference between the stable value of €1 and the market value at a level that becomes not material. The support may take different forms, such as providing cash injections, liquidity facilities in the form of loans or by buying units of the fund at a price higher than the market price.

Such an event occurred in 2008 in the US when the Reserve Primary Fund was unable to maintain its stable NAV after Lehman defaulted (the fund held assets issued by Lehman). During the week following this event, the investors withdrew money amounting to 300 billion USD or 14% of total US MMF assets out of a fear that other sponsors would not be able to maintain the stable price[20]. In fact the outflows directly following the collapse of the Reserve Primary Fund were more than two times larger than the initial outflows triggered by the Lehman collapse. This tends to prove that the absence of sponsor support is in itself a cause of runs. The European CNAV MMFs were also affected by massive redemptions. According to data collected from the IMMFA organization[21], the CNAV MMFs encountered redemptions amounting to 25% of their total assets in a very short time period. Witmer, 2012, finds that CNAV funds “are more likely to experience

[17] Please see Annex 4 for examples.
[18] CESR's guidelines concerning eligible assets for investment by UCITS, CESR/07-044
[19] Please refer to Annex 7.1
[20] Please see graph in Annex 6.4.
[21] Institutional Money Market Funds Association (IMMFA), IMMFA is the organisation regrouping the European CNAV MMFs

sustained outflows" and that these outflows "were more acute during the period of the run on the Reserve Primary fund". He also notes that: "consistent with the theory that constant NAV funds receive additional implicit support from fund sponsors, fund liquidations are less prevalent in funds with a constant NAV following periods of larger outflows".[22] According to his findings, the outflows from European CNAV largely surpassed the outflows from European VNAV in September 2008.

AAA rating of funds: Credit ratings play a key role in MMFs as both the fund and the assets in which the fund invests may be rated. At the level of the fund, certain MMFs require the highest possible note, AAA, in order to comply with the industry code of practice[23]. AAA ratings create wrong expectations to investors that they are investing in a guaranteed product which, in turn, leads to runs when the CRA decides to put the AAA note on negative watch or to downgrade it. In addition, the methodology used by the different CRAs creates ambiguities regarding the factors taken into consideration for assessing the quality of a MMF. Basically S&P rating relates to credit risk of the MMFs investment assets, Moody's to credit and liquidity risk associated with these assets while Fitch's evaluates credit and liquidity risk of the assets plus an additional assessment of the likelihood of sponsor support. Therefore the ratings cannot be used interchangeably as they do not refer to the same analysis.

The fact that one CRA takes into consideration the ability of a sponsor to support their MMF also creates wrong expectations. Investors may be reinforced in their belief that they invest in a product that will be guaranteed whatever happens. When three funds from Prime Rate Capital Management (PRCM), belonging to the UK based Matrix group, were put on negative watch by Fitch in December 2011, they experienced very high levels of redemptions in just 2 weeks: -50% for their Sterling fund, according to IMMFA[24]. Matrix Group had over £4 billion of assets that were offered to retail and institutional clients.

2.2. Problems

The problems linked to investor runs are of a systemic nature due to: (1) MMFs close links to the real economy (the role that MMFs play in satisfying the short-term financing needs of entities using the money market as a funding tool), (2) their link to sponsors. In addition, runs on MMF also have an investor protection angle, since those that redeem late (usually private investors) are at an inherent disadvantage when compared to early redeemers.

2.2.1. Contagion to the real economy

The liquidity level of the funds has proven during the crisis not to be of a sufficient level which led some funds to suspend redemptions or to use other restrictions. In 2007, it is estimated that around 15 MMFs in the EU had to close, to suspend redemptions or to apply haircuts on the valuation of their MMF. In 2008, some EU MMFs were again

[22]« Does the Buck Stop Here ? A Comparison of Withdrawals from Money Market Mutual Funds with Floating and Constant Share Prices" Bank of Canada working paper, Jonathan Witmer, 2012
[23] IMMFA Code of practice. European VNAV MMFs are usually not rated.
[24] IMMFA response to the EC consultation

obliged to suspend redemptions due to their inability to satisfy all redemption requests while others chose to decrease the NAV of their MMF[25].

Depriving investors of their short-term MMF investments may have repercussions on other entities that rely on short time finance through MMF. As mentioned above, in Europe, around 22% of short-term debt securities issued either by governments or by the corporate sector are held by MMF and MMF hold 38% of short-term debt issued by the banking sector. The economy is therefore highly interconnected with the MMF sector. This problem has a strong internal market angle since the investments of the MMF are largely performed on a cross border basis, as evidenced in Annex 3.3. This is particularly true for the MMFs domiciled in IE and LU (less than 3% of the MMF's assets domiciled in those two countries are invested domestically according to the ESRB survey). A problem arising on a MMF domiciled in a specific country could then rapidly affect the financing of entities domiciled in other countries. The Reserve Primary failure illustrates this cross border contagion: a US MMF caused a severe liquidity crisis affecting the European MMFs and thus the European issuers of short term debt.

Because MMFs play a central role in the short term funding of entities like banks, corporates or governments, investor runs on MMFs may cause broader macroeconomic consequences. During the financial crisis of 2008, MMFs were forced to sell some of their investment assets in a declining market, fuelling a liquidity crisis. In addition, managers of MMFs were obliged to put aside enough cash resources in order to meet increased redemption requests. This prevented them from investing in short term securities, or restricted them to investing only in ultra-short term securities. In these circumstances, money market issuers faced severe funding difficulties with respect to longer term debt. The markets for longer-term commercial paper to be issued to MMF essentially dried up. While financial institutions (mainly banks) account for the largest part (around 85%) of the 1'000 billion EUR issued to MMFs, governments represent a share of around 10% whereas corporates account for roughly 5%. Governments and very large corporates use the money market as a means to obtain short term financing, alongside bank credit lines. Any contagion to the short term funding market could then also represent direct and major difficulties for the financing of the "real economy".

In addition to this system-wide event, an isolated event can also generate systemic implications. When an AAA rated fund is confronted with a negative watch or a downgrade, this can precipitate large redemptions. For example when Fitch Ratings placed three Prime Rate Capital Management (PRCM) funds on negative watch rating, the PRCM funds suffered significant redemptions, 50% in the case of its Sterling fund[26] A single rating decision may have consequences for the whole money market. Because the fund must sell its assets very quickly, a change in a single fund's rating may provoke a general price decline in money market instruments. A run on a fund with a larger size than the PRCM (the biggest EU fund has more than €50 billion in assets under management) confronted with the same events could have larger systemic implications, as described in the previous paragraph.

Another aspect relates to the rating of the assets in which the MMFs invest. In order to keep their AAA rating and avoid investor's runs, MMFs will invest only in very high

[25] Please see Annex 5.1 and 5.2
[26] IMMFA response to the EC consultation, page 22

quality instruments that benefit from the highest possible rating. Therefore once an issuer of money market instruments is put on negative watch or downgraded, MMFs will sell these instruments as quickly as possible, out of a fear that holding such 'downgraded' instruments may endanger the MMFs own AAA rating. These fire sales may have grave consequences for the downgraded issuer because its access to the money market funding may suddenly close, which may affect its viability.

2.2.2. Contagion to sponsors

Under the heading of sponsor support, this impact assessment will discuss contagion risks with respect to two types of sponsors: asset managers or banks.

An MMF can be sponsored either by an asset manager or by a bank. In case one MMF in a portfolio encounters problems in terms of liquidity or the NAV, this could have repercussion on the own funds of an asset manager or those of the sponsoring bank. MMFs have historically relied on discretionary sponsor capital[27] to maintain their NAV. In the case of CNAV, MMF sponsors may decide to provide support in order to avoid 'breaking the buck'. Sponsors are often forced to support their sponsored MMFs out of fear that their MMF is 'breaking the buck', due to the reputational risk, may trigger a panic that could spread into the sponsor other businesses. For bank sponsors, the risk is even more acute because the panic could spread to the bank's retail client base which in turn could lead the bank to default.

Sponsors are largely unprepared to face such situations because the "implicit" guarantee is not recorded as an explicit guarantee that would require the build-up of capital reserves. Because banks do not build capital reserves directly linked to their exposure to the risk of MMFs, , sponsor support may reach proportions that exceed their readily available reserves, depending on the size of the fund and the extent of redemption pressure. This, in turn, may provoke the failure of the sponsor and risk contagion to other entities that sponsor MMF. Because most of the sponsors in Europe are banks, it may create a contagion channel to the whole banking sector if one bank were to face funding difficulties due to the support provided to the MMF. As an example (Annex 5.2), European banks such as Société Générale, Barclays or Deutsche Bank, made losses linked to their MMF activities amounting to hundreds of millions of Euros. The exact magnitude of the sponsor support is however difficult to estimate due to the lack of communication from the sponsors.

Because MMFs and sponsors are rarely domiciled in the same country, the sponsor support creates cross border contagion channels. For example none of the sponsors of the MMFs domiciled in IE and LU are domiciled in those jurisdictions.

The importance of sponsor support can also be demonstrated by looking at the counterfactual; i.e. the absence of sponsor support. In this case the balance sheet of the asset manager may be largely insufficient for providing the support. The largest sponsors manage over €250 billion in MMF assets worldwide while in some cases their readily available cash in their balance sheet amount to only a few hundred millions[28]. The example of the Reserve Primary Fund is revealing: the manager announced that it will support the fund with its own money, and actually did so until it lacked the resources to continue redeeming all shares at $1. The sudden drying up of sponsor support led the

[27] Please refer to Annexes 5.1 and 5.2 for Europe and 6.2 for the US.

[28] For example, Federated Investors manages $285 billion of MMF assets while having $366 million of current assets (2011 Annual Report).

CNAV MMF to break the buck, which created the run and finally led to a liquidation of the fund.

There is large evidence that European CNAV MMFs benefited from sponsor support during the crisis. The sponsor support has not been absent for VNAV MMFs during the crisis but suspension of redemption and NAV decreases were used more widely than sponsor support. In contrast to CNAV MMFs, VNAV MMFs do not need NAV support (i.e. loss absorption). The motivations behind the sponsor support to VNAV were, according to market participants that gave support, to indemnify clients in order to avoid complaints about mis-selling practices.

Because the sponsor support is so important for the ability of a MMF to maintain its stable price, the quality of the sponsor has become a decisive criterion in the investment choice of investors. According to a survey[29] made by Fitch Ratings, 80% of the European treasurers that have been consulted consider the financial standing of the sponsor when selecting a MMF. According to McCabe (2010) a factor influencing the runs is the credit risk of the sponsor. McCabe notices that sponsors with higher credit default spreads (measure of credit risk) were encountering larger outflows. In some cases MMF run by asset managers can be put at a disadvantage in comparison to a MMF run by banks. Because banks have to comply with minimum capital requirements and have much larger balance sheets than asset managers, investors have a tendency to switch to bank sponsored MMFs when a crisis arises, further increasing the redemption pressure on MMFs run by asset managers. In other cases, as highlighted by Gordon (2012), the banks can be put at a disadvantage in comparison to asset managers: during the 2008 crisis, when there was a complete loss of trust in the US banking system, MMFs run by US banks were suffering larger outflows than MMFs run by pure asset managers. This shows that there is a complete shift in investor behaviour: instead of looking at the portfolio risk and reward profile of the fund, they look at the sponsor ability to support the fund.

This is also illustrated by the reasons advanced by Fitch after it changed its opinion on PRCM funds, MMFs run by an asset manager. A statement from Fitch says: “The sponsor’s financial resources are no longer consistent with a ’AAAmmf’ rating, even after taking into consideration the funds’ conservative investment guidelines.”[30] This rating agency puts the emphasis on the financial strength of the sponsor instead on the intrinsic risks of the portfolio. This indicates a clear shift that AAA rated MMFs (CNAV MMFs) are no longer considered as classic investment funds but rather as bank guaranteed products. The fact that a larger sponsor, Federated Investors, announced during the week following the negative watch that it will buy the manager of PRCM funds calmed investors who stopped their redemptions. Fitch reaffirmed its earlier rating on that basis. While not downgraded, the MMFs owned by the asset manager Henderson Global Investors have been sold to Deutsche Bank in 2010 because the manager did not want to bear any longer the risk attached to the "implicit" guarantee given to investors[31]. These events give evidence that small asset managers have difficulties to provide the necessary guarantees for maintaining a stable share price.

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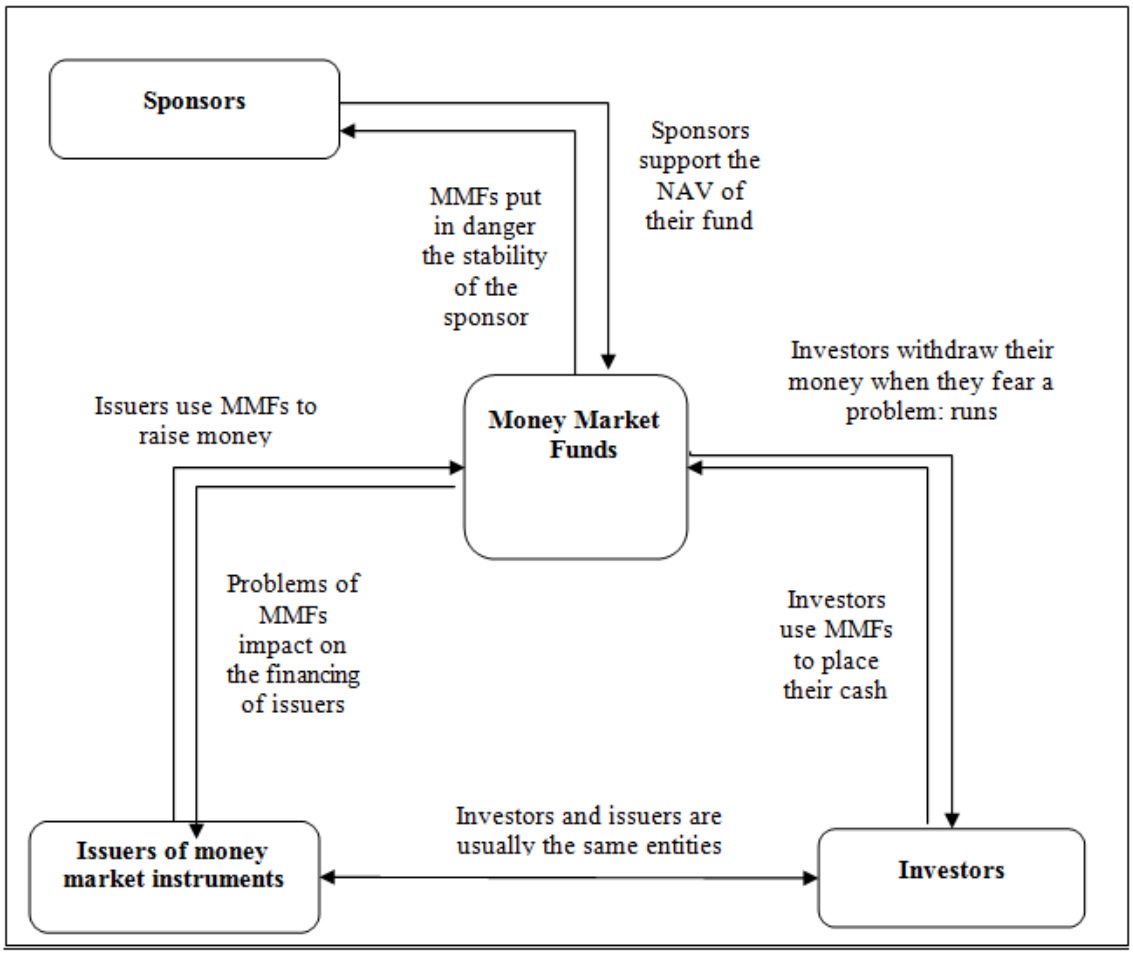
[29] “European Treasurer Survey 2013”, Fitch Ratings, 26 February 2013.

[30] "Fitch puts Matrix-owned funds on review due to firm's financial resources", Money Marketing, 12 December 2011. It further adds in its statement: *"The review does not reflect any negative development in the funds’ investment portfolios, which continue to be conservatively managed and fully meet the ’AAAmmf’ portfolio guidelines set forth in Fitch’s rating criteria for money market funds."*

[31] "Deutsche Bank scoops £3bn cash mandate", Financial News, 06 October 2010

Potential contagion channels induced by MMFs



2.2.3. Early redeemers are advantaged over late redeemers

The first mover advantage creates a situation where late redeemers have to bear the costs associated with early redemptions. There is thus a transfer of money from late redeemers to early redeemers. In the case of VNAV funds, the cost of the redemption generally amounts to the difference between the price at which the fund sells the assets (the bid price) and the price at which the investor gets redeemed (the mid-price). The difference between the bid price and the mid-price is usually very low but tends to increase during stressed market conditions. In the case of CNAV funds, the cost of the redemption may represent a substantial disadvantage for the late redeemers because the difference between the market value and the €1 price is usually higher[32].

The transfer of money for CNAV funds is well illustrated by the following example, provided by Chairman Shapiro in her testimony before the US senate, June 21, 2012: "Assume, for example, a fund with 1,000 shares outstanding with two shareholders, A and B, each of which owns 500 shares. An issuer of a security held by the fund defaults, resulting in a 25 basis point loss for the fund—a significant loss, but not one that is large enough to force the fund to break the buck. Shareholder A, aware of a problem and unsure of what shareholder B will do, redeems all of his shares and receives $1.00 per share even though the shares of the fund have a market value of $0.998. The fund now

[32] Please refer to Annex 7.2 for a concrete example of calculation.

has only 500 shares outstanding, but instead of a 25 basis point loss has a 50 basis point loss and will have broken the buck. Shareholder A has effectively shifted his losses to Shareholder B."

What the above example shows is that the early redeemer, A, by taking out 500 shares at $ 1 has taken the full value of its shares, thereby shifting all the losses onto the remaining investor who now has to bear all of the loss when redeeming the remaining 500 shares. In addition the late redeemers may have to support additional inconvenience when the redemptions are temporarily suspended or even worse when the fund is liquidated after having broken the buck. The access to the liquidity is then stopped for the investor.

Another detrimental effect affects the retail investors in particular. Studies demonstrate that institutional investors are first to redeem as soon as stress appears in the markets, often leaving retail investors to bear the losses. During the 2008 US MMF crisis, redemptions were almost exclusively requested by institutional investors because they often possess superior knowledge of the market and have greater capacities and resources to react quickly, often on the basis of insight that is not yet available in the public domain[33].

2.3. Consequences

2.3.1. Financial stability and bail-out risk

Because the money market and sponsors are systemically relevant, investors may expect that, once sponsors are unable to support the stable NAV of their MMFs, governments would intervene and take the sponsors' place in providing financial assistance to MMFs. Following the Reserve Primary Fund breaking the buck, the US authorities had to provide unlimited guarantees in order to stop contagion. Once the US authorities announced that they would guarantee the $3 trillion of money invested in MMFs, the market calmed down and redemptions stopped. Without the support of the US government, the US MMFs would have continued to suffer from large redemptions[34].

The public authorities in Europe had also to step in to stop the contagion. Germany (DE) passed a law to stabilize the market with a specific article dedicated to the support of short-term instruments[35] accompanied by the intervention of their central bank. Luxembourg (LU) announced that it would take all necessary steps needed to stabilize the national money market funds[36]. In addition, the European industry pushed the ECB to grant liquidity support to MMF or their sponsors. Instead, the ECB decided to reduce the liquidity pressure by lowering interest rates and by broadening the scope of eligible collateral for banks (including usual money market instruments such as non-Euro marketable debt instruments and certificates of deposit traded on non-regulated markets).

The different reactions from the European entities were not conducive to enhance the stability of the European market as a whole. The fact that the DE authorities guaranteed their national MMFs had consequences on other countries. The DE guarantee resulted in flows from LU domiciled funds into DE domiciled funds, which led the LU authorities to

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[33] Please refer to Annex 6.4

[34] Please refer to Annex 6.3 for the details of the different programs put in place by the US authorities and to Annex 5.4 to see the redemptions stopping after the announcement of the support.

[35] Gesetz zur Umsetzung eines Maßnahmenpakets zur Stabilisierung des Finanzmarktes (Finanzmarktstabilisierungsgesetz – FMStG). See Annex 5.4.

[36] "Summary of government interventions in financial markets – Luxembourg", Mayer Brown, 2009

make an equivalent declaration. Ireland (IE) also experienced immediate problems after the DE and LU announcements but the sentiment cooled down when the ECB intervened.

2.3.2. Insufficient investor protection

MMFs are most of the time not used for long periods of time but only for short period of time when the investor wants to place its excess cash for a few days or a few weeks. If the fund suspends redemptions for a few days or few weeks, this can put in danger the cash management process of the investor. In the case of a corporate using MMF to place their cash, a suspension can lead to the inability to perform the planned operational expenditures such as paying salaries. The consequences attached to liquidation may be extremely disruptive for the investor since redemptions will remain suspended for a potentially very long period of time and the precise amount recovered in the end will remain uncertain for an equally long time. The viability of an investor having a substantial part of their cash invested in a liquidated fund would then be put into question.

2.4. How would the problem evolve without EU action? The base line scenario

Rules governing MMF are currently scattered throughout different pieces of legislation, some taking the form of EU directives, some the form of guidelines developed by CESR and some the form of purely national legislation[37]. If no action is taken to create a legislative framework applicable to MMFs, it is very likely that the problems that have been identified will persist and could be aggravated by future market developments. Should investors be confronted to a new crisis affecting MMFs, they may decide to definitely stop using MMFs, thus endangering the existence of the money market and the issuers relying on it. Current rules are inherently insufficient to address an issue that has such a systemic impact for the whole EU. The EU is best placed to ensure a coherent response (please refer to Annex 7.4 for a discussion of other alternatives).

The MMFs would remain unprepared to face stressed market situations that are likely to reoccur in the future. The liquidity level might still not be sufficient to meet all redemption requests and the incentives to redeem first will still be present. Overall the contagion channels will persist, continuing to represent a threat for the European banking system and for the entities using the money market as a financing tool. The responses from the EU national authorities to a future crisis might still diverge to a large extent (e.g. by providing different levels of State guarantee in an uncoordinated manner), endangering the viability of the single market. The base line scenario is further developed in sections 5.1.1 and 5.2.1.

Action is required now to ensure harmonization of the EU law with the recommendations of the international organizations and the rules already applied in other jurisdictions. IOSCO, FSB or ESRB have finalized their conclusions and they recommend a new regulatory framework for MMFs. Europe also needs to align its rules with the higher standards that are already implemented in other jurisdictions, as the ones on liquidity implemented in the US. There is also a need to move forward by engaging the debate

[37] Please see Annex 2.1 for a full description of the current rules

surrounding the issues linked to the stability, as the US did with the publication of the FSOC recommendations[38].

2.5. Subsidiarity and proportionality

According to the principle of subsidiarity (Article 5.3 of the TFEU), action on EU level should be taken only when the aims envisaged cannot be achieved sufficiently by Member States alone and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the EU. The aim of the proposal is to ensure a level playing field across Europe among the different operators that offer MMFs.

On account of their systemic importance to finance sectors of the EU economy, the aim is also to create a robust framework covering MMF as an essential source of short-term financing for the European economy. As shown in this impact assessment, when MMFs are confronted with large-scale redemption requests, the markets for commercial paper to be issued to MMF can quickly dry up. Issuers depend on MMFs as a financing tool and are evenly located throughout the EU. Governments and very large corporate use the money market as a means to obtain short term financing, alongside bank credit lines. Any contagion to the short term funding market could then also represent direct and major difficulties for the financing of the European "real economy".

In addition, as many operators that offer MMFs in Europe are domiciled in Member States other than those where the funds are marketed, the creation of a robust framework is essential to avoid cross-border contagion between a MMF and its sponsor. This is especially acute when the sponsor is located in a Member State that may not have the budgetary resources to bail out a defaulting sponsor. As MMF are predominantly domiciled in two EU jurisdictions (IE and LUX), both jurisdictions in which no sponsor banks are domiciled, the cross-border dimension of sponsor support becomes acute. The cross border dimension is further illustrated by the high proportion of non-domestic MMF investors in certain countries (IE and LU) as well as the high proportion of investments in money market instruments issued in other Member States.

By harmonising the essential product features that constitute a MMF the proposal aims to establish a uniform level of investor protection. Detailed rules on the daily or weekly liquidity of assets held by a MMF, the accounting methods used to calculate the NAV of money market instruments held in a fund, the calculation of a share price, possible additional requirements on those offering a stable NAV, policies on issuer concentration and 'know-your-customer' policies to anticipate large-scale redemptions are examples of measures that would require a uniform application across the EU in order to ensure their full effectiveness. Individual action at Member State level would lead to confusion on the key features of a MMF, its liquidity and the stability of its share price. Uncoordinated action at national level also risks that Member States define different liquidity ratios, different limits on issuer concentration and different methods on how to calculate the NAV and the share price applicable for redemptions. If each of these items were addressed in a different manner at national level, the risk of runs and cross-border contagion between a MMF and its sponsor would not be addressed effectively; especially when the issuers and the MMFs are located in different Member States. As MMF invest in a broad range of financial instruments across the EU, the failure of one MMF (for

[38]http://www.treasury.gov/initiatives/fsoc/Documents/Proposed%20Recommendations%20Regarding%20Money%20Market%20Mutual%20Fund%20Reform%20-%20November%2013,%202012.pdf

example due to insufficient regulation at national level, evidenced by the uneven implementation of the ESMA guidelines) would have repercussions on government and corporate financing across the EU.

National regulatory approaches are inherently limited to the Member State in question. Regulating the product and liquidity profile of a MMF at national level only entails a risk of different products all being sold as MMF. This would create investor confusion and would impede the emergence of a Union wide level playing field for those who offer MMF to either professional or retail investors. Therefore, action at European level is needed.

All of the above-mentioned product requirements are currently not part of existing UCITS rules. Although UCITS rules contain requirements on the investment instruments eligible to a UCITS funds, rules on measuring leverage and fund exposure as well as detailed rules on the operation of UCITS managers, the specific product profile of MMF –as described above – are not yet covered by the UCITS single rule book. Nevertheless, and in order not to introduce regulatory divergences in the harmonised UCITS universe, any update of the UCITS rules to account for the special features of MMFs must be undertaken at European level as well. In addition, and in order to avoid regulatory arbitrage, MMFs that are not covered by the UCITS rules must also be included in the creation of a uniform rule-book on the MMFs at European level.

The options analysed below will take full account of the principle of proportionality, being adequate to reach the objectives and not going beyond what is necessary in doing so. Whenever possible we have ensured that the retained policy options are compatible with the proportionality principle, taking into account the right balance of public interest at stake and the cost-efficiency of the measure. The requirements imposed on the different parties have been carefully calibrated. Whenever possible, requirements have been crafted as minimum standards (e.g., daily or weekly liquidity, issuer concentration limits) and regulatory requirements have been tailored so as not to unnecessarily disrupt existing business models (e.g., providing for appropriate transitional periods before the NAV of a MMF has to be floated or leaving operators the choice between stringent capital requirements and floating the NAV of their MMF). In particular, the need to balance investor protection, avoidance of cross-border contagion, efficiency of the markets, the financing of the European industry and costs for the industry have all been balanced in laying out these requirements.

3. OBJECTIVES

3.1. General, specific and operational objectives

In light of the analysis of the risks and problems above, the general objectives are to:

(1) Enhance financial stability in the internal market;

(2) Increase the protection of MMF investors

Reaching these general objectives requires the realisation of the following more specific policy objectives:

(1) Prevent risk of contagion to the real economy;

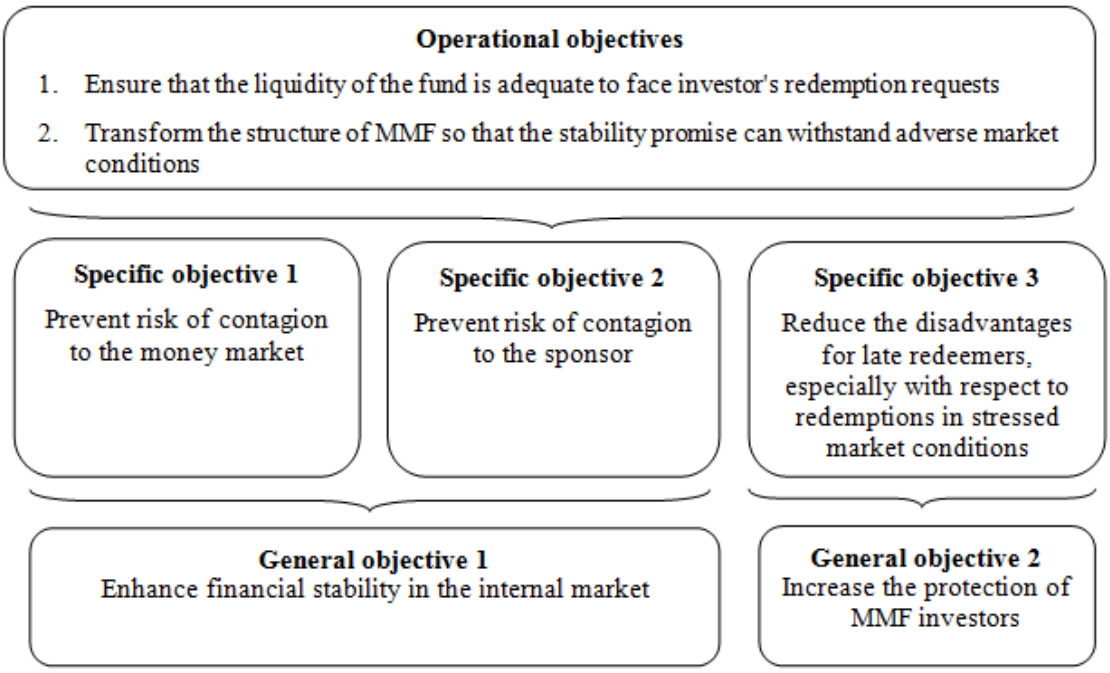
(2) Prevent risk of contagion to the sponsor;

(3) Reduce the disadvantages for late redeemers, especially with respect to redemptions in stressed market conditions.

The specific objectives listed above require the attainment of the following operational objective:

(1) Ensure that the liquidity of the fund is adequate to face investor's redemption requests. This objective will be measured against the level of liquidity reached by the MMFs. This is linked to the natural liquidity that is independent from the secondary market constraints, and to the quality of the assets. A MMF with enhanced liquidity facilities and a portfolio of better quality will be able to face more effectively the redemption requests.

(2) Transform the structure of MMF so that the stability promise can withstand adverse market conditions. The structure of the MMF offers stability through three main aspects: the marketing material that promises a guarantee when this is not the case, the sponsor support for maintaining the NAV and the AAA rating that gives a false sense of security. According to these three features, this objective will be measured against three criteria: change in marketing materials, reduced events of sponsor supports and absence of massive redemptions following a rating downgrade.



3.2. Consistency of the objectives with other EU policies

The identified objectives are coherent with the EU's fundamental goals of promoting a harmonised and sustainable development of economic activities, a high degree of competitiveness, and a high level of consumer protection, which includes safety and economic interests of citizens (Article 169 TFEU).

3.3. Consistency of the objectives with fundamental rights

The legislative measures setting out rules for the provision of investment services and activities in financial instruments, including sanctions need to be in compliance with relevant fundamental rights embodied in the EU Charter of Fundamental Rights ("EU CFR"), and particular attention should be given to the necessity and proportionality of the legislative measures.

The following fundamental rights of the EU Charter of Fundamental Rights are of particular relevance:

• Freedom to conduct a business (Art. 16)

• Consumer protection (Art. 38)

Limitations on these rights and freedoms are allowed under Article 52 of the Charter. The objectives as defined above are consistent with the EU's obligations to respect fundamental rights. However, any limitation on the exercise of these rights and freedoms must be provided for by the law and respect the essence of these rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet the objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others.

In the case of the fund legislation, the general interest objective which justifies certain limitations of fundamental rights is the objective of ensuring the market integrity and stability. The freedom to conduct a business may be impacted by the necessity to follow the specific objectives of ensuring sufficient liquidity, preventing the risk of contagion and enhancing safeguarding of investor's interests. We have focused our assessment on the options which might limit these rights and freedoms. The proposed new rules will overall reinforce the right to consumer protection (Art. 38), whilst respecting the fundamental rights and observing the principles recognised in the Charter of Fundamental Rights of the European Union as enshrined in the Treaty on the Functioning of the European Union.

4. POLICY OPTIONS

In order to meet the first operational objective, the Commission services have analysed a total of seven different policy options. For ease of reference, these options are grouped into different headings, such as options on redemption restrictions, options on liquidity policies and options on MMF 'customer profiling'.

Policy options	Summary of policy options
1.1. No action	Take no action at EU level
Redemption fees and restrictions	
1.2 Impose a hold back period for a proportion of the redemption order	MMFs would split the redemption in two phases. The investor would be able to redeem a substantial part (e.g., 95%) without restriction but would have to wait some time to receive the balance (5%). The held-back amount would serve to absorb any losses that may have occurred during the period.
1.3 Impose a liquidity fee	MMF managers may decide to implement a liquidity fee on redeeming shareholders during stressed market conditions. The fee would be based on the mark to market NAV.
1.4 Redemption in-kind	Under this option, the managers may decide to pass the liquidity cost of the

	redemption to the investor, by transferring the securities directly to the investor instead of the cash. This system would be applied to large redemption requests.
Increase the liquidity of portfolio assets	
1.5 Set minimum liquidity thresholds for overnight and weekly maturing assets	MMFs would be obliged to hold minimum amounts of assets maturing overnight and in one week. This would allow the fund to have almost certain access to minimum amount of cash on regular basis.
1.6 Enhance the quality of the portfolio	MMFs would be obliged to ensure a high level of diversification by limiting the exposure to one single counterparty to 5% of the portfolio assets. In addition the exposure to certain ABS products will be prohibited.
Implement a "Know your shareholders" policy	
1.7 MMF managers should develop policies to anticipate large redemptions	MMFs would have to adopt policies and procedures aimed at ensuring better knowledge of their customer base. This would allow better monitoring and anticipation of large redemption requests.

Options 1.2, 1.3 and 1.4 are mutually exclusive.

In order to meet the second operational objective, the Commission services have analysed a total of 9 different policy options. For ease of reference, these options are grouped into different headings, options on the transparency, valuation of MMF assets, on capital buffers and bank status and an option on rating.

Policy options	Summary of policy options
2.1. No action	Take no action at EU level
Increase transparency	
2.2 Increase transparency toward investors	The managers of MMFs would be required to clearly state in their marketing material that their product does not benefit from any kind of guarantee.
MMF valuation methodology	
2.3 Require all MMFs to have a fluctuating NAV: impose a full mark to market method and prohibit any method based on 'rounding' NAV or share prices.	MMFs would not be allowed to price their shares at a stable €1 per share net asset value (NAV). In order to convert to a floating NAV, two changes are necessary. First the amortized cost methodology should not be allowed anymore but the use of the mark to market methodology should be mandated for valuing all assets. The second change consists of requiring funds to publish their NAV at the detail of 1 basis point. This measure would stop the rounding method which permits MMF to publish a NAV of €1 when the true NAV could vary anywhere between 0.9950 and 1.0049.
2.4 Require all MMFs to have a fluctuating NAV: impose a full mark to market method except in the last 3 months and stop the rounding method	The MMFs would not be allowed to use price at a stable € 1 per share but could still value their assets at amortized cost, as long as the latter have a remaining maturity of less than 3 months. For all other assets, the use of the mark to market method would be mandated. As under option 2.2, the detail of the NAV should go to 1 basis point in order to avoid rounding.
NAV buffers	
2.5 Introduce a NAV buffer for CNAV MMFs financed by investors	MMF that offer price stability would be obliged to create a fund-level reserve as a potential backstop against falls in the 'real' or 'shadow' NAV. The reserve would be drawn upon if losses on assets caused the MMF NAV to deviate from the redemption price of the CNAV (€1). The financing by investors would require retention of a portion of the MMF income to fund the NAV buffer.
2.6 Introduce a NAV buffer for CNAV MMFs financed by the manager	As option 2.5 but the buffer would be funded by the MMF manager itself.
Conversion to a bank status	
2.7. Require bank-like regulation for CNAV MMFs	CNAV MMFs would have to reorganize as special purpose banks and be subject to banking oversight and regulation. This would lead MMFs to adopt bank-like capital reserve requirements and grant them access to central bank

	refinancing.
Valuation methodology or capital buffers	
2.8 Require MMF to float their NAV, except when they can demonstrate a sufficient capital buffer	Managers of CNAV MMFs would be required to float the NAV of their fund (option 2.3) or, if they prove to their regulator that they have built a 3% NAV buffer, they would be authorized to continue using CNAV MMFs (option 2.6).
Ratings	
2.9 Ensure that the MMF manager no longer pay for credit ratings at fund level	Under this option, managers will be prohibited from paying CRAs to award a rating on their funds

Groups of options (2.3-2.4), (2.5-2.6), 2.7 and 2.8 are mutually exclusive as are sub-options 2.3 against 2.4 and 2.5 against 2.6..

5. ANALYSIS OF IMPACTS

This section sets out the advantages and disadvantages of the policy options, measured against the criteria of their effectiveness in achieving the specific objectives (prevent risk of contagion to the money market, to the sponsors and create equitable treatment for all MMF investors) and their efficiency in terms of achieving these options for a given level of resources or at lowest cost. Impacts on relevant stakeholders and their views (see the text boxes) are also considered. The retained policy options should score the highest for each related specific objective while at the same time have the least costs and least impacts on stakeholders.

5.1. Options aimed at ensuring that the liquidity of the fund is adequate to face investor's redemption requests

5.1.1. Policy option 1.1: take no action at EU level (baseline scenario)

The baseline scenario for this set of options means that there will be no changes to all of the rules that are currently governing the liquidity of the MMFs. These rules are mostly provided by the CESR guidelines on MMFs which apply to all European funds that market themselves as MMF. These guidelines have limited the maturity of the assets in which the MMFs can invest and introduced maximum levels for the weighted average life (WAL) and weighted average maturity (WAM) of the MMF portfolio. These measures reduced the sensitivity of the MMFs to market risk which in turn increased the global liquidity of the European MMFs.

However these guidelines may not suffice to prevent large outflows in stressed market conditions because investors would still have an incentive to redeem in order to profit from the best conditions. In addition the secondary market of the money market instruments might still suddenly dry up, leaving no other possibilities to the fund than suspending redemptions. Suspensions are used by managers as a last resort, after they have explored all other possibilities. Taking no further action would imply that the funds would not be provided with intermediary tools that could prevent immediate recourse to suspensions. This would leave the problems of contagion and unfair treatment of investors completely unaddressed.

The results from the consultation highlight the need (expressed by the majority of the stakeholders from the MMF industry) to increase the liquidity level of assets held in MMFs. Some managers, from the FR market; consider that the liquidity should be enhanced for CNAV funds only while others, predominantly from DE, consider that no additional rules are needed.

Redemption fees and restrictions

The three following options are aimed at reducing the redemption pressure by acting on the investor side, by reducing some of the liquidity features of MMFs. The three possible measures are discussed in the IOSCO recommendation 10.

5.1.2. Policy option 1.2: Impose a hold back period for a proportion of the redemption order

Impact on financial stability: By retaining a portion of the redemption order (the 'hold-back'), the MMF keeps the possibility to adjust the redemption price downwards, at least on the amount withheld at redemption. This provides the MMF with some flexibility to revalue assets should the value of its assets decline after fulfilling the main part of a redemption order. The aim of this option would be to cause shareholders that redeem early to more fully bear the costs of their early redemption – essentially by requiring that they remain exposed to potential decreases in the NAV of the fund for some period after their initial redemption has been fulfilled. MMF shareholders would then be required to internalize the liquidity costs created by their redemptions which would lessen their incentive to engage in a run. Because the hold-back would apply irrespective of market conditions, it has the advantage of addressing the liquidity issue in all market conditions.

Both the level of the hold-back amount and the length of the hold-back period are critical for correctly assessing potential impacts of this option on financial stability. A hold-back amount set at a high level would fulfil its objective of reducing run risk but could prove disruptive for investors. On the other hand, a hold-back amount that would minimize the impacts for the investors could be less efficient in tackling the run risk. The same principle applies to the length of the hold-back period; the longer this period, the higher the negative impacts for the investors. On the other hand, a longer hold-back would better address liquidity bottlenecks.

Impact on MMF investors: The main drawback of this option is that it would impose redemption restrictions on MMF investors. This result would appear counterintuitive as MMFs have always been associated with high degree of liquidity; ease of redemption indeed represents one of the most important reasons why investors chose MMFs in the first place. Limiting the possibility of investors to redeem would automatically decrease the attractiveness of the MMFs in comparison with other products such as bank deposits.

A secondary effect for investors is that retail investors would not be negatively impacted anymore if institutional investors redeem first. As demonstrated during the crisis, institutional investors were the first to react, potentially leaving the retail investors to bear most of the MMFs loss in value. Removing the first mover advantage would also remove the advantages (better knowledge and resources to evaluate the risks) that institutional investors possess at the expense of retail investors.

Impact on the MMF sector and the economy: should the attractiveness of the MMFs be reduced for investors, this would in turn decrease the role played by MMFs in purchasing short term debt instruments, thus decreasing the significance of MMFs as a financing tool for the European economy.

Cash managers often invest their excess cash resources for a few days or a few weeks only. Therefore, retaining a portion of their investments on a longer period than their primary investment period could seem disproportionate. This could discourage cash managers to invest at all in MMF: cash managers know that they would have less cash

available to finance the daily operations of their company or less cash to finance unexpected investments.

The responses to the consultation and interviews with industry participants reveal that even a small hold-back amount could dramatically impact the attractiveness of MMF as a flexible cash management tool. The responses to the consultation were almost unanimously opposed to this mechanism.

During the debate surrounding the work of the US SEC for reforming MMFs, the Investment Company Institute (ICI) commissioned Treasury Strategies[39] to undertake a study on the impacts of various proposals, including the hold-back mechanism. The study has been realised with US investors only. 90% of the investors that have been asked said that they would decrease or stop using MMFs if such an option would be retained. The Association for Financial Professionals (AFP), a US based association of cash treasurers, asked its members on the same question[40]: 80% would stop or reduce investing in MMF.

Impact on MMF managers: Option 1.2 also raises operational challenges for MMF managers who would need to adjust their redemption processes. Bifurcating redemption into two phases and monitoring the retained amount over an extended period could increase the costs and complicate the operations at the MMF middle and back offices.

5.1.3. Policy option 1.3: Impose a liquidity fee

The envisaged mechanism would impose a fee equivalent to the amount required to compensate for a decline in the mid-value of a MMF's portfolio before and after any redemption. This fee would be calculated taking into account the liquidity cost of the whole portfolio, not just the most liquid assets[41]. The fee would be applied only during stressed market conditions and would therefore avoid creating permanent disturbances for the investors. Different trigger mechanisms can be envisaged for the application of the fee. It can for example be linked to the amount of daily redemptions (expressed as a percentage of the fund's total assets under management), to a point in time when redemptions cause the bid value to substantially deviate from the mid-value or when the bid value substantially deviates from the par.

Impact on financial stability: A liquidity fee could diminish the incentive of runs if investors know that they would have to pay the cost of their redemption order. This could also incentivize them to remain invested in the funds because if they decide to sell the MMFs they would inevitably be subject to the liquidity fee. As the fee is dependent on stressed market conditions, an investor that remains invested would still have a chance to avoid the fee if the market conditions return to normal.

On the other hand, since investors would know that a liquidity fee can be imposed, they will have an incentive to start redeeming once they sense a slight stress in the markets in order to redeem before the market situation deteriorates even further and the fee is activated. In addition, the mere activation of a liquidity fee (depending on the trigger point chosen) could then confirm the signal of a stressed market and thus, by itself, give

[39] www.treasurystrategies.com/sites/default/files/TSI_MMF_ReformFindings.pdf
[40] "2012 AFP Liquidity Survey – Report of survey results", July 2012
[41] Please refer to Annex 7.2 for further explanation and concrete examples.

rise to a wave of panic among existing MMF shareholders. This is because the activation of the fee indicates either that the NAV has sunk below a certain threshold or that the MMF is facing massive redemptions. This could ultimately result in a closure of the fund as it is unlikely that new investors will subscribe once they become aware of the situation. The existence of the fee has pro-cyclical effects.

Impact on MMF investors: Because investors have been used to a highly liquid and relatively inexpensive product, some of them could consider switching from MMFs to other products. The frequency of the use of the liquidity fee and its amount is however key to assess the exact impacts on the investors. On the other side, the system would ensure a fairer treatment between investors once the fee is activated: late redeemers would not have any more to bear the costs of early redeemers. But it is not possible to exclude that investors with better knowledge might still decide to redeem before the activation of the fee.

Impact on the MMF sector and the economy: negative impacts cannot be ruled out but it is expected that, due to the temporary application of the fee, the impacts would be less disruptive than under the permanent mechanism of option 1.2.

Impact on MMF managers: The liquidity fee could raise some operational challenges for the managers. Once the fee is activated, managers would have to perform calculations based on mark to market prices of the assets and apply the fee equitably to all redeeming shareholders of the day. The mark to market prices may not be easily accessible and may raise operational costs.

The liquidity fee mechanism is supported by three MMF providers: *IMMFA, HSBC* and *BlackRock*, although *BlackRock* proposes to impose a standard fee of 1%. *IMMFA* prefers to let the decision to implement the fee to the Board of directors of the fund. *HSBC* and *BlackRock* propose to base the activation of the fee on objective triggers. *BlackRock* also proposes a liquidity trigger: when half of the daily or weekly liquidity is reached, the fee should be activated. Other respondents recommend applying the fee to CNAV funds only but the majority of the stakeholders believe that a fee would not be operationally achievable, that it would most likely increase runs due to its pro-cyclical effect and that it will decrease the attractiveness of the MMFs for the investors. In its response to the consultation, the CFA Institute[42] presents the results of a survey they conducted among their members on both sides of the Atlantic. Only 30% of the European respondents think that liquidity fees should apply to MMFs.

5.1.4. Policy option 1.4: Redemption in-kind

Large redemptions may impose liquidity costs on other shareholders in the MMF by forcing the MMF to sell assets in an untimely manner. A large redemption causes the MMF to sell securities, possibly in a declining market and transfer the loss to all remaining shareholders, instead of isolating the loss to the redeeming shareholder.

Impact on financial stability: A requirement that MMFs distribute large redemptions in-kind would force redeeming shareholders to bear their own liquidity cost and potentially reduce the incentive to redeem. This would permit MMFs to distribute, at least to a large redeeming shareholder, securities in-kind, in proportion to the redemption request and

[42] Please see Annex 12 for the details of the CFA Institute survey.

transfer to that shareholder, and that shareholder only, the market risk of selling the redeemed securities on in order to generate cash.

Impact on MMF investors: While this option has the advantage to almost eliminate the liquidity risk of the MMF, it does not eliminate this risk completely but passes it on to the investor. An investor confronted with urgent cash needs may still decide to sell-off the assets immediately after having received the securities from the fund. This option would therefore not prevent a general decline of the value of assets in a money market fund but could just delay the systemic implications of large redemptions and it is not granted that it could prevent runs since investors would still have an incentive to redeem before such a mechanism is implemented. It is also questionable that all investors would have the same operational capabilities to properly sell the securities because the burden of valuing and liquidating these assets would fall directly on the investors. Such a mechanism would have to be implemented only for large institutional investors that have such capabilities, potentially creating unfair treatment among investors.

Impact on the MMF sector and the economy: Apart from the operational challenges, this option could decrease the attractiveness of the MMF sector as a whole as investors become aware that, at least in times of stressed market conditions, they would have to sell redeemed securities themselves in the market, thus bearing the 'cost of liquidity' that is normally assumed by the MMF. This creates additional costs and delays and it is far from certain that investors would be ready to bear these burdens. Reduced attractiveness will tend to negatively impact the role played by MMFs in financing the economy, even if the mechanism is applied during stressed market conditions only.

This option receives very little support. Only two stakeholders (*IMMFA* and *HSBC*) argue that it represents a useful tool to manage large redemptions while acknowledging operational challenges. *EFAMA* and *BVI* analyse that the valuation, operational and legal issues will be too high. In the CFA Institute survey, only 19% of the EU respondents think that redemption in-kind should apply to MMFs.

Liquidity of portfolio assets

Both following options are aimed at enhancing the liquidity profile of the MMFs by increasing the natural liquidity and by enhancing the quality of the portfolio.

5.1.5. Policy option 1.5: Set minimum liquidity thresholds for overnight and weekly maturing assets

Impact on financial stability: When a MMF is confronted with redemption requests; it faces pressure to sell assets as soon as possible to meet these requests. Imposing minimum liquidity requirements could limit the liquidity costs associated with the sale of assets. If a minimum portion of the fund's holding is going to mature every day, respectively every week or month, this would ensure minimum cash reserves are available at no additional cost to redeem shareholders. The MMF would not be dependent on the secondary market - which is the first to suffer in a liquidity crisis. By increasing the ability of the fund to meet the redemption requests at no additional cost, it could allow the MMF to be better equipped in facing investor's runs. Nevertheless the positive impacts may not be overstated because, in stressed market conditions, the liquidity may evolve quickly and defaults of issuers are not excluded, even when exposure is confined to their short-term assets.

By decreasing the average maturity of the instruments held by the fund, such liquidity limits would also reduce the market risk of the MMFs since their portfolio would be less sensitive to interest rate fluctuations.

Impact on investors: Impacts on investors could prove to be rather limited; it could maybe lightly decrease their return because of the lower yields associated with very short term assets but at the same time decrease the risk associated with their investment. Therefore the impacts will be rather positive.

Impact on MMF managers: Managers would have to closely monitor their investments in order to follow these new requirements. They would lose some discretion in selecting assets since they had to invest in very short term assets in order to bring the portfolio composition in line with the new standards. This option has the advantage to be already implemented to certain MMFs through the IMMFA code of practice (see Annex 2.3), thus limiting any impacts in relation to the CNAV funds domiciled in IE and LU. According to the ESRB data, the MMFs already hold 20.6% of their portfolio in assets maturing the next day and 28.3% in assets maturing in less than one week.

Impact on the MMF sector and the economy: The trend toward investing more in very short term assets may have potential implications on the short term funding market. Because MMFs would be obliged to maintain very short term liquidity ratios, they would invest less in securities maturing at the end of the yield curve, potentially impacting entities that finance themselves under this maturity range (mainly between 1 and 2 years). This option might spawn a contraction of money supply in the yield curve range between mid-maturity and 397 days. The impact on European MMF may, however, be limited since only a very tiny proportion (only 1% of MMF assets are invested in the 1-2 years maturity range) of such mid-maturity assets are held in short-term MMF. Issuers of such short term debt instruments will therefore face very little impacts.

The vast majority of the respondents, being MMF managers, public authorities or investors, to the consultation would favour the principle of liquidity constraints. Some MMF managers however fears that it might decrease portfolio returns and thus reduce the attractiveness of MMFs, or that it could lead to a squeeze in the availability of very short term instruments.

This option is the recommendation 7 of IOSCO and is already implemented in the US under the rule 2a-7.

5.1.6. Policy option 1.6: Enhance the quality of the portfolio[43]

The liquidity of the MMFs is defined by the maturity of the assets (option 1.4) and the credit quality of the assets. The quality is mainly measured by the credit risk of an asset. An asset with high credit risk will usually be subject to larger price fluctuations and less liquidity.

[43] Regarding the issue of asset encumbrance, MMFs are less exposed to that problem. They do not make use of practices such as securities lending (except in two identified cases) or repurchase agreements (repos); they only make use of reverse repos on a daily or maximum two days basis. Therefore the analysis of this section will only focus on measures that will have a direct impact.

Impact on financial stability: At the level of the portfolio[44] the credit risk can be mitigated to some extent through diversification: MMFs invest in assets issued by different issuers in order to limit impact on the portfolio of one single credit event. UCITS funds have currently the possibility to have a maximum exposure of 40% towards one issuer (or to issuers belonging to the same group) by combining the investments in money market instruments and deposits. Non-UCITS funds do not have such rules. Under this option, the maximum exposure to one issuer would be limited to 5% for the money market instruments and 5% for the deposits. This would reduce the risks faced by the MMFs, thus preserving their ability to perform the requested redemptions. On the other side, the MMFs that use the extended portfolio limits allowed by the ESMA rules could benefit from a higher limit set at 10% per issuer of money market instruments. These funds are not in the ESMA "short-term" category, always use fluctuating pricing methods and investors are aware of their longer term nature. For these reasons they can sustain a higher exposure limit than the short-term MMFs that are more prone to investor's runs.

At the level of the assets, the MMFs would be prohibited from investing in certain ABS products such as Asset Backed Commercial Papers (ABCP) where the underlying assets do not consist of corporate debt. Those products linked to residential mortgages, student loans or other types of assets would be prohibited. Only securitized products linked to corporate debt and subject to strong prudential rules will be allowed up to a maximum of 10% of any single MMF portfolio. This option is designed to perpetuate the useful role that ABCP may play in financing the short term funding needs of small and medium companies that do not have the required size to issue directly money market instruments. This sector of the securitisation market was also less affected during the crisis.

The appropriateness of other ABS products for a short term and very liquid vehicle, such as a MMF, is questionable. The MMF managers have significantly reduced their exposure to the asset-backed sector since 2007 and the CESR guidelines now require the manager to take into account the operational and counterparty risk inherent in these structured financial transactions. However, risk cannot be ruled out entirely. Nothing prevents MMFs to increase again their investments in these kinds of products and it is not granted that another crisis will not affect this sector in the coming years. Because investors in MMFs are particularly risk-averse, any concerns in some ABCPs might cause investor's runs. Furthermore not all managers have the capabilities and resources to correctly assess the underlying risks of such instruments: it requires thorough analysis for evaluating the risk of each underlying security as well as the risks stemming from the structuring process of ABS. This can lead to the selection of instruments that are inappropriate for cash management purposes. In addition, the valuation of certain ABS is inherently highly complex leading to opaque prices which undermine investors trust. At the end this might impact the confidence that investors have in the stability of the MMFs. The prohibition to invest in certain ABS might represent a good solution to avoid any further problems linked to this market. The clarity towards investors will be increased and the stability of the MMF sector reinforced.

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[44]As a general rule, the provisions applying to the portfolio of a MMF will also apply to the collateral received by the MMF (same eligibility and diversification rules) in order to ensure the same degree of liquidity for all assets. This may have an impact for MMFs receiving collateral that has long maturities or is of poor credit quality. For example a 10 years bond will not be eligible anymore for the collateral. Government assets would not be subject to such a rule provided that they comply with certain liquidity and credit criteria.

Impact on the MMF sector and the economy: The impacts of reducing the exposure limit would be rather limited for the CNAV funds domiciled in IE and LU. Under the IMMFA rules (representing 50% of the EU MMF assets), CNAV MMFs are already required to apply the 5% limit. Other funds will have in certain situations to adapt to these new rules. According to a representative panel of French VNAV funds, in some circumstances the exposure to a single issuer exceeds the limit of 5%. This is mainly the case for issuers that are important credit institutions. Some VNAV MMF managers argue that a 5% limit will have an impact on the issuers of money market instruments and on the portfolio of the MMFs itself. Different issuers of money market instruments may belong to a larger group thus their exposure would fall under the 5% limit applying to the whole group. This may reduce the possibility for a MMF to buy such instruments. This may for example be the case for regional banks issuing instruments and that belong to a larger banking group; the limit of 5% will include the regional banks and the banking group together. On the other side managers of VNAV MMFs argue that respecting a 5% issuer limit is difficult due to a scarcity of eligible issuers. This would impact the portfolio management of their fund.

These arguments may be valid for some VNAV MMFs but it is difficult to prove to which extent these managers cannot adapt to the new rule when half of the European market (CNAV MMF) already follows the 5% issuer's limit. In addition many VNAV MMFs already follow the 5% limit without apparent difficulties. It should also be noted that the 5% limit will apply to money market instruments and to deposits separately which will enable the MMF to have a total exposure of 10% to a credit institution, provided that half is invested in money market instruments and half in deposits. The limit will not apply to government assets due to the lower risk attached to sovereign issuers. In addition the non-short-term MMFs will be able to use a higher limit of 10% which could bring the total limit to 15% by adding the 5% deposit limit. These funds represent around 50% of all VNAV funds so the impact will be much more limited on these funds.

Such a measure would also enhance international coherence because it is already implemented in the US, under rule 2a-7.

The impacts of prohibiting the use of ABCP will be limited because the managers invest only marginally in these assets. According to the ESRB survey, only 0.7% of the assets would be concerned. According to the data from IMMFA and concerning IMMFA funds only, the proportion of ABS in the portfolio ranges between 2% and 4% (this is a bit more than the 1.2% observed in the ESRB survey for CNAV funds). Issuers of ABCP should however be to some extent impacted, except the ones that issue ABCPs linked to corporate debts.

This option has not been directly tested in the consultation but the 5% exposure limit goes in the same direction as existing US rules (rule 2a-7), a policy often advocated by the stakeholders.

Impact on investors: Impacts on investors are expected to be very limited, their return should not be affected but the risk of their investment would decrease.

5.1.7. Policy option 1.7: MMF managers should develop policies to anticipate large redemptions

Impact on financial stability: As mentioned in the problem description, large and unanticipated redemptions may endanger the viability of a MMF. Requiring the manager

to actively monitor its client base would permit the manager to anticipate large outflows and to adjust the portfolio composition to this upcoming event. Policies and procedures should be in place to ensure that appropriate efforts are undertaken to identify risk characteristics of the shareholders. Important indicators could be the identifiable pattern of investor's cash needs, the type of investor, and their risk aversion, the client's concentration in the fund or the seasonality of the flows. Particular attention should be paid to the main holders of the fund who can destabilize by their redemption the liquidity of the fund. Active monitoring of these holdings plus close relationship would help the manager to detect any need of cash.

Impacts on MMF investors: Impacts on investors would be rather limited; they may need to communicate more with the MMF manager on their investment horizon.

Impacts on MMF managers: "Know your customer" policies could increase some costs for the managers but this is mitigated by the fact that most of the managers are already engaged in active monitoring policies. According to a manager that already performs this task, the cost would comprise the need to build up an IT infrastructure to automate the provision of data which is estimated to amount to around €100'000, assuming that no pre-existing IT infrastructure can be reused. A drawback of such a method is that it would be impossible, without having an impact on data protection rights, to identify all clients since large proportions of assets are held through portals or omnibus accounts. There is no possibility to know the identity of the clients behind these nominee accounts, a fact which reduces the practicability of such an option. It is also doubtful that such an option could address the liquidity risk in its entirety since the incentives to run would still be present to a large extent as it would be difficult for the manager to anticipate the irrational behaviour often linked with investor's runs.

Impacts would be larger if clear client concentration limits would be imposed on top of client policies and procedures. This would have the advantage to limit the redemption risk arising from one single investor but would unduly impact the managers and the investors in regard of the limited additional advantages. Such a mechanism would be difficult to implement because it would be difficult to manage investor's positions just around the limit. This could force managers to redeem investors without their consent because they surpass the limit. The attractiveness of the MMF could be damaged for the investors while the managers would face additional burdens to manage the limits. Furthermore such a mechanism could not prevent investor's runs because a limit can be set on single investors only.

This option is the recommendation 8 of IOSCO and is already implemented in the US under the rule 2a-7.

This option was not directly tested in the consultation but was in numerous occasions cited by MMF managers, mostly running CNAV funds, as an appropriate option to anticipate large redemption requests.

5.1.8. Impact summary

Option 1.1 is not a viable option as it leaves the core problems without a coordinated EU policy response. Not acting at the level of EU rulemaking would entail that potentially the entire EU money market sector might be exposed to systemic risk.

Redemption fees and restrictions: A comparison between options 1.2, 1.3 and 1.4 reveals that the permanent hold-back mechanism in option 1.2 represents the highest burden for investors. A permanent hold-back is complex to administer and could have negative consequences for the viability of the entire money market industry. Both options 1.3 and 1.4 have the advantage of being temporary schemes, only triggered by stressed market conditions. This reduces their possible negative impacts. Option 1.4 appears to be more incisive than option 1.3, mostly due to the operational burden put on the investor who cannot redeem in cash but carries the liquidity risk of having to find buyers for the redeemed securities in a stressed market place. This might, in the end, result in much higher costs for the investors than the liquidity fee envisaged under option 1.3.

However none of these three options can address, in a satisfactory manner, the entirety of the problems, because none of these options would have any impact in preventing the problems. Of the three, Option 1.2 would have most success in preventing runs but its negative impacts are too large. The mechanisms of options 1.3 and 1.4 could help the fund to prevent a run by clearly indicating to investors that there is no advantage of redeeming early since the costs will be equalized among all investors. But there is a risk that the trigger will, in itself, convince investors that it is time, in any case (and irrespective of the fee), to redeem their investments with this particular MMF.

Increase the liquidity of portfolio assets: Option 1.5 has the advantage of increasing the ability of the fund to face redemptions by increasing the global liquidity standards and thus reducing the incentive to run to profit from better liquidity conditions. Impacts on investors and managers appear manageable but the objective to stop runs may not be completely achieved. Option 1.6 represents a good complement to option 1.5. It increases the quality of the assets, thereby reducing the risk of a credit event that could impact the liquidity profile of the fund.

Implement a "Know your shareholders" policy": By improving the information of the manager, option 1.7 could help in identifying and anticipating future redemptions but in no case could anticipate massive investor's runs or increase the ability of the fund to respond to these requests. In that sense it doesn't fulfil the objective but still represents a useful daily management tool that can be implemented at little cost.

Each option is rated between "---" (very negative), ≈ (neutral) and "+++" (very positive) based on the analysis in the previous sections. The benefits are, however, nearly impossible to quantify in monetary terms. The costs should be understood in a broad sense, not only as compliance costs but also as all the other negative impacts on stakeholders and on the market. This is why we have assessed the options based on the respective ratio costs-benefits in relative terms. The assessment highlights the policy option which is best placed to reach the related objectives outlined in section 3 and therefore the preferred one. The coherence with the US regulation is indicated in the effectiveness column. The options with the highest rates are bold bordered.

	Impact on stakeholders	**Effectiveness**	**Efficiency**
1.1 No action	0	0	0
1.2 Impose a hold back period for a proportion of the redemption order	(--) Investors will be confronted to delayed redemptions (-) Operational cost for managers	(+) By internalizing liquidity costs, investors have no more first mover advantages, thereby reducing runs and contagion	(--) Delay costs for investors and monitoring costs for the managers, aggravated by the permanent basis of

			the hold back
1.3 Impose a liquidity fee	(-) Investors will have to pay a fee in stressed situations (+) Fairer treatment once the fee is applied	(≈) Reduces the runs once the fee is applied but increases the runs before the fee is applied. Contagion channel still exists. (-) Pro cyclical effects	(-) Additional costs not compensated by improved stability
1.4 Redemption in-kind	(+) Managers do not face anymore the liquidity risk (--) Investors bear the full liquidity risk	(≈) Could reduce the incentive of runs but cannot eliminate it	(-) Investors will bear the costs of liquidating the assets
1.5 Set minimum liquidity thresholds for overnight and weekly maturing assets	(++) Investors will benefit from increased daily liquidity and less market risk (-) Investors could see their yield diminishing (-) Middle range maturity issuers could be affected	(++) Probability of a liquidity crisis diminishes (+) Strong convergence with the US regulation	(+++) Should not lead to increased costs but would grandly increase the liquidity level
1.6 Enhance the quality of the portfolio	(++) Investors benefit from reduced investment risk (-) Issuers of securities in ABCP can be affected	(++) Lower risk of credit risk, thus reducing liquidity risk	(+++) Very limited costs for the diversification provided
1.7 MMF managers should develop policies to anticipate large redemptions	(+) Managers can better adapt their portfolio profile to upcoming events	(+) Better anticipation of liquidity risk (+) Strong convergence with the US regulation	(+++) Very limited costs largely compensated by the increased information

5.2. Options aimed at transforming the structure of MMF so that the stability promise can withstand adverse market conditions

5.2.1. Policy option 2.1: take no action at EU level

If the risks associated with the stable pricing model are not addressed, the risk could persist that these MMFs could, in stressed market conditions, continue to represent a threat for the financial stability. The sponsors will continue to provide support to their MMFs without being prepared for it. This could still lead to situations where contagion can spread to the sponsor and the economy. The stability of the financial system would not have been increased.

In addition, no action at EU level will most probably leave the current market as it is, with countries allowing the use of amortized cost accounting for all MMF assets and others allowing a partial use of this accounting model. If nothing were done, a problem arising with a MMF domiciled in one country could destabilize its national financial market but also spill over onto the EU financial market as a whole. The risk of systemic spill-over is especially acute when the total volume of MMF assets under management in some Member States can represent up to five times the national GDP of that Member State[45]. In these circumstances, the issue arises whether all Member State would have

[45] According to Eurostat, the national GDP in 2011 of one Member State was 42.6 billion EUR whereas the total assets of CNAV MMFs domiciled in that country amount to about 150 billion EUR while total assets of all MMFs amount to around 240 billion EUR.

sufficient resources and capabilities to mitigate major stress in the MMF sector or whether recourse to the resources of other Member States or the European Central Bank might become necessary.

Most of the respondents to the consultation stressed the need to ensure consistency of the rules at the EU level. Investors often operate across national borders and would prefer a standard approach. In the absence of a standard approach to MMF regulation, those same cross border investors may allocate between different funds on the basis of their regulation. A group of around 10 stakeholders from each category, managers, trade bodies or the CZ authorities think however that no additional measures are required.

5.2.2. Policy option 2.2: Increase transparency

Impact on financial stability and MMF investors: MMFs are often considered as guaranteed products, although they are subject to credit, interest-rate and liquidity risk. Recurrent sponsor support has taught investors to look beyond disclosures that these investments are not guaranteed and can lose value. Marketing material of MMF providers often implicitly recognizes that MMFs are very stable: they promote the preservation of capital as a key feature. They also often categorize MMFs in the lowest grade in their risk scale, at the same place as bank deposits. The fact that MMFs, principally IMMFA funds, maintain an AAA rating reinforces the sentiment that MMFs are guaranteed.

All these indications create confusion among investors about who owns the risk. Increasing the transparency and disclosures that investors invest in normal investment funds subject to market movements may reduce their incentive to run. Should investors be prepared that losses in value are possible, they would not be surprised if such an event happens. They would in this case not lose confidence and not rush to redeem. The marketing material, including the Key Investor Information Document (KIID) plus any factsheets distributed to clients, should contain in plain and visible text a warning that MMFs are not guaranteed.

Currently the managers perform mark to market valuations to assess if the discrepancies with the amortized cost value are not becoming material but this market value is never communicated to investors. Under this option, the managers would communicate the true value of their portfolio to investors. Investors would then be aware that the market value of MMF moves. In addition the sponsors would have to be more transparent about the support they give to their MMF. Any occurrence of sponsor support would have to be recorded and published by updating the KIID. Managers would also have to communicate the exact composition of their portfolio, including the list of the assets they hold plus any relevant information that investors should know to evaluate the risk of the fund.

Such an option could help to change the perception of investors but it is not granted that it will suffice. Investors will still benefit from the stability of value and will still engage in runs if the sponsor is not able to provide the support. And nothing will prevent sponsors to continue supporting their fund. Another drawback is that the disclosure of the true NAV might be an incentive to run in itself if investors decide to redeem when the difference becomes material.

Impact on MMF managers: The costs would be very limited because UCITS managers are already obliged to produce KIID. The obligation to disclose the support might not be

welcomed by many managers, as they are often reluctant to admit that they provide support.

The option to increase transparency has not been directly tested in the consultation but it has been advocated by some stakeholders, mostly CNAV managers, as a means to increase the awareness of investors that CNAV MMFs are not a guaranteed investment.

This option is covered by the IOSCO recommendations 13 and 14.

5.2.3. Policy option 2.3: require all MMFs to value their assets marked to market

Impact on financial stability: Short-term MMFs have recourse to the amortized cost method to maintain a constant NAV. Requiring the MMFs to use the marked to market accounting for all of their assets would lead all MMFs to have a NAV that fluctuates with the value of the underlying investment assets. Combined with a more accurate rounding method, the CNAV would not be able anymore to maintain the NAV constant and would automatically become VNAV funds. VNAV MMFs with all assets marked to market would provide price transparency to investors regarding the actual value of their investment assets held by the fund. The VNAV MMFs domiciled in France would also have to adapt their valuation methodology. Currently they use the amortized cost method for the assets having a remaining maturity of less than 3 months. In average this represents a proportion between 60% and 80% of the portfolio. This means that in practice the French VNAV do not move as much as VNAV would do if they were not using amortized cost.

Mark-to-market accounting would change investors' perception and re-establish the underlying truth that MMF investments are investments into a fund vehicle and thus do not comprise a capital guarantee. Despite their particular marketing, MMF ultimately cannot escape the investment profile of an open end mutual fund. Awareness of the current value of their holdings could reduce the heightened run risk because a MMF would no longer hold out the promise that every share, if redeemed before the 'buck is broken' would automatically be redeemed at € 1. As demonstrated in the problem definition, it is not uncommon that MMFs receive support from their sponsors to maintain a constant NAV. Because this creates ambiguity among investors about who carries the risk of fluctuating value of MMF investment instruments, removing the use of constant NAV pricing will clearly indicate that the risks and rewards rest with investors. When investing in VNAV MMFs, investors would understand and price the risks they are subject to and would therefore be less inclined to expect sponsors to provide a 'guarantee' against the risk of fluctuations in the value of MMF investment assets.

The option obliging all MMF to price shares reflecting the fluctuations of the MMFs investments would not automatically prohibit any form of sponsor support but a fluctuating NAV lessens the incentives for sponsor support. The risk of contagion to the sponsor would be reduced once the absence of a constant NAV accounting lessens the incentive and need for sponsor support. This would in turn reduce the risks that public authorities and central banks have to intervene when a systemically important institution is facing difficulties. If investor's runs are minimized, the contagion to the money market and thus the impacts on the real economy would also be limited.

Impact on ratings: This option could indirectly address one aspect of the problem linked to the rating of the fund. Because the price will start floating, the incentive for the

sponsor to support the fund diminishes or even disappears. The CRAs could in this case not any longer take the financial strength of the sponsor as a criterion for awarding a favourable rating. In this case Fitch would have to change its methodology. It could then be assumed that the credit event arisen on PRCM in 2011 could not happen in the future anymore.

Because all CRAs include credit and liquidity criteria in their methodologies, a future downgrade can however not be excluded. It could be mitigated by the fact that investors would change their perception that they invest in a guaranteed product, which could ultimately reduce the runs after a potential downgrade. Such an argument could be valid to some extent but would not completely remove the risk of runs following a downgrade. Most of the times, the rating criterion is enshrined in the investment guidelines of the investors and whatever the reason of the downgrade can be, they may be forced to sell.

Impact on MMF managers: Managers of CNAV funds argue that the impact of such a move would be disruptive for the business model of MMFs, mainly for those domiciled in IE and LU. Indeed, by imposing mark-to-market accounting, some MMF managers would have to implement new policies and procedures to value their assets. Whereas the use of the amortized cost is relatively straightforward from an accounting perspective, the use of a mark to market accounting may prove challenging in some market situations. Because money market instruments do not always benefit from accurate and transparent market prices, managers may be obliged to use other methods to calculate the fair value of their assets, such as the mark-to-model method. Price discovery and price calculation may in a first stage increase some costs for a non-experienced managers, at least for the time that it implements the new procedures. This drawback should be mitigated by the fact that managers already calculate the mark to market NAV in order to "shadow" the real price of their CNAV MMF. This "shadow NAV" is calculated at least once a week and compared with the stable NAV in order to anticipate discrepancies that may develop between the two values. Difficulties of adapting to a floating NAV should therefore not be overestimated. Managers of French VNAV MMF would have to use market prices for their entire portfolio but as for CNAV managers, they shall already calculate the mark to market price of the assets in order to compare it with the amortized cost price. The impact should be therefore limited. *Impact on the MMF sector and the economy:* Managers of CNAV funds argue that the phasing out of the amortized cost method could lead to a contraction of the whole MMF market because MMFs with constant NAV and VNAV funds may not be perfect substitutes for certain investors. Investors such as large cash managers (corporate treasuries) and pension funds[46] may have to follow investment guidelines preventing them from investing in fluctuating NAV MMFs because changing these guidelines could be impossible for them (44% according to a recent study by Treasury Securities). The responses to the consultation also highlight the different tax treatment that would apply to VNAV funds in some jurisdictions (no European example was provided). The Fitch survey of European treasurers identifies that 31% of the respondents think that the simple treatment for accounting and tax is strength of the CNAV. Because the movements of the NAV would have to be recorded as capital gains

[46] Pension funds were mentioned by a UK manager of CNAV as a typical class of investors that would have difficulties in investing in VNAV due to their investment restrictions. No precise figures exist on the share of pension funds in CNAV funds but this argument is backed by the results of the survey showing that 44% of the investors are subject to investment restrictions. However this argument makes little sense when we look at the proportion of pension funds in MMFs in the Euro area: they hold only €5.9 billion of shares representing less than 0.005% of their total assets (ECB monthly Bulletin November 2011).

to the tax authorities, this would decrease the attractiveness of the MMFs. In addition investors very much praise the convenience of the €1 NAV for cash planning purposes; a floating NAV would be more difficult to manage.

According to the ICI survey, 79% of the current MMF users state that they would decrease or stop using MMFs in case constant NAV funds were to disappear. In the AFP survey, it is indicated that 55% would decrease or stop using MMFs. Treasury Securities conducted a survey among EU investors for the account of Federated Investors: 69% of the CNAV investors in Europe would stop or decrease their usage of CNAV should they disappear. 44% of the respondents indicate that they have investment policy, law or other restriction preventing them to invest in VNAV funds.

According to the Fitch survey of European corporate treasurers, the results are a bit more balanced. This survey is the only one that identifies the respondents as being European treasurers only (68 in total). 42% of the treasurers using CNAV would have significant or material operational impact if the regulation forces MMFs to move to a VNAV accounting model. 47% would have marginal or none impacts whereas 11% are not sure. Asked about the strengths and drawbacks of the CNAV and VNAV model, the respondents identify the clear risk profile of CNAV as the main advantage (69%) whereas they identify the false perception of guarantee as the main drawback (50%). The main advantage of the VNAV is their true portfolio valuation (75%) and their main drawback is that their NAV can be volatile (50%).

These results are backed by some responses to the consultation that highlight that the consequences of such a measure could largely outweigh any positive impact that may result from a fluctuating NAV. The stakeholders arguing that this option will have negative impacts on managers and on the sector as a whole are predominantly managers of CNAV MMFs, domiciled in IE and LU. First they believe that CNAV are not more risky than VNAV, thus there is no need to focus only on CNAV funds. Secondly they are convinced that the MMF market will die in its current form because a large category of investors cannot switch to VNAV MMFs, due to the above-mentioned constraints (investment policies) that certain investor groups face. These investors will be forced to go into less-regulated and less transparent investment products. The LU and IE authorities are concerned that such a measure could reduce the importance of the MMF industry in their country.

All of the above arguments and survey results are, however, at least in the European context, counterbalanced by other facts and arguments. The European investor base of both CNAV and VNAV funds is largely similar, as evidenced in Annex 3.2. Discussions with MMF users from the corporate sector and responses from the consultation highlight that the CNAV / VNAV difference is not the only criterion in the choice of investors. Other characteristics, such as diversification, portfolio quality or level of return are also very important.

As fluctuations of a CNAV or VNAV MMF are, in normal market conditions, insignificant (+/- 20 basis points or +/- € 0.002 at best) the investor impact of a change in value accounting should not be overstated. Investor impacts would only result in case of a sudden decline in NAV and in these circumstances a floating NAV has multiple advantages, most notably: equity in treating all investors alike. While fluctuations in VNAV increase during stressed market conditions, even during the sovereign debt crisis of the summer 2011 when VNAV MMFs experienced increased volatility and larger than

usual price fluctuations, there was little increase in redemptions. This may suggest that investors accept temporary negative fluctuations in the NAV of a MMF.

Impact on MMF investors: There is also little evidence that European CNAV clients could satisfy their need for a short-term investment but highly diversified and liquid investment with products roughly comparable to short-term MMF. While it is often argued that bank deposits are a close substitute to MMFs - they provide a guaranteed product and market-based yield – bank deposits lack the high degree of diversification inherent in an MMF investment. Because MMFs invest in numerous assets issued by a large number of different entities, they provide much better diversification than a bank account where the depositor carries the insolvency risk of a single banking counterparty. This risk is not mitigated by a deposit guarantee scheme either, as corporate investors might not be covered. Even if an investor had enough resources to open different bank accounts to spread the risk, this practice would still not suffice to create the high level of diversification inherent in an MMF investment. In addition, managing bank accounts is costly and liquidity is often more restricted than with MMFs. Therefore, bank deposits are not a viable alternative to a MMF.

The CFA survey shows different results: asked if they agree or disagree that CNAV MMFs should be required to switch to a variable NAV, 39% of US respondents agree and 45% disagree whereas 53% of EU respondents agree and 17% disagree. 16% in the US and 31% in Europe are not sure. According to the consultation, this option is supported by a large majority of VNAV managers, mainly domiciled in FR and also by public authorities such as DE and FR.

The results of the above presented studies are mixed but they tend to indicate that some investors might not be ready to accept investing in floating NAV funds.

Investors in French VNAV MMFs are already used to see NAV fluctuations so that a full variability should not impact too much their behaviour toward MMFs. To the contrary they will benefit from additional clarity about the real value of their MMF. The problems linked to CNAV investors, such as potential accounting or tax constraints, are not present for French VNAV investors.

This option is the IOSCO recommendation 4 on fair value and use of amortized cost.

5.2.4. Policy option 2.4: require MMFs to value their assets mark to market except in the last three months

The amortized cost method would be disallowed for all MMF assets whose maturity exceeds three months.

Impact on financial stability: Proponents of this solution argue that the above-mentioned disadvantages associated with the CNAV would be removed while preserving a certain degree of flexibility for valuing assets with less than three months' remaining maturity. The rationale behind this differentiation is that MMF assets (primarily debt instruments), in the last three months of their life, are rarely subject to large fluctuations in their value. This is because such short-term instruments present less vulnerability to interest rate or credit risk. Therefore, the prices of these assets would not be so different from those that result from amortized cost accounting.

Impact on MMF managers: Valuing all assets mark-to-market could unduly increase the costs and complexity of the fund's valuation processes. For many securities, mark to market pricing may just be an estimate based on pricing models because secondary market may not exist for these securities. The cost involved in requiring it for every security, even securities with very short maturities, may therefore not be justified. But this argument is largely discredited by the fact that managers already perform mark to market valuations and there are no obvious cases for MMF assets that are excessively difficult to value at fair market prices. This argument is also backed by the results of the CFA Institute survey which shows that 81% of the EU respondents think that it is feasible to calculate a fair value on a daily basis for all assets held by MMFs.

Impact on the MMF sector and the real economy: The risk with this option is that MMF managers may decide to invest exclusively in securities that have a remaining maturity of less than three months. Because they could not use amortized cost accounting for the whole portfolio anymore, MMF might be tempted to invest exclusively in very short-term assets who mature in less than three months. Such an investment policy may lead to a contraction of money supply in the yield curve range between three months and 397 days, which has detrimental effects on the corporate sector wishing to issue debt with maturities exceeding three months. Furthermore it is not certain that even very short-term securities might not suffer from price deviations. In highly stressed market conditions, as experienced in 2008, very short term assets can see their price declining following a sudden increase in interest rates or a sudden decrease in the credit quality of the issuer. The risk is much lower than a security above three months but the risk is still present.

Option 2.4 has the advantage of limiting some of the valuation costs for the CNAV MMFs (50% of the market) while having no impact on current VNAV. But the drawback vis-à-vis Option 2.3 is that the MMF's share price may still be overestimated, especially in conditions of extreme market stress as during the events in 2008 (where even short-term investments were prone to fluctuations beyond 20 basis points).

Because Option 2.4. is already implemented in almost all Member States except IE and LU, it is possible to supply empirical evidence: More than 80% of the portfolio of the short term MMFs is invested in assets having a remaining maturity of less than 3 months. For non-short term MMFs, the proportion is 60%. This indicates that in fact the French VNAV apply the amortized cost to the majority of their portfolio. Therefore, their NAV moves very little and not to the extent that would be required to reveal that MMFs shadow NAV.

Impact on ratings: As with option 2.3, requiring floating the NAV would reduce the negative spill-overs when a fund is downgraded but it could not be completely ruled out that investors engage in a run if investment guidelines continue to mention the rating.

The consultation did not ask a specific question on this valuation method; however those stakeholders that supported option 2.3 were mostly in favour of maintaining the 90 days exemption. These stakeholders are almost exclusively managers or trade associations representing them domiciled in FR.

This option is the IOSCO recommendation 4 on fair value and use of amortized cost.

5.2.5. Policy option 2.5: introduce a NAV buffer for CNAV MMFs financed by MMF's investors

The NAV buffer would serve as a backstop in case the CNAV MMF is not able to maintain a stable NAV (under this option, MMF managers could continue to apply a stable NAV to all short-term MMF). Because the MMF is obliged to decrease the NAV when the market price declines to 0.9950 per share ("breaking the buck"), it has an in-built backstop of a mere 50 basis points. In addition, this 'buffer' is entirely financed by those shareholders that do not redeem early.

The NAV buffer would be added to this original backstop of 50 basis points to increase the safety margin between the constant NAV of €1 and the 'shadow' market price. The amount of the capital buffer is a key element in assessing its potential impacts: An amount that is too low risks being insufficient in case of stressed market situations, whereas an amount that is too high will be costly to fund and could threaten the business model of the MMF.

Depending on the way the buffer will be financed (by the investor under option 2.5 and by the manager under option 2.6), the level of the buffer will be set at different levels for the purpose of the analysis. Under option 2.5, the buffer will be set at a level that would be realistic as regards the current economic situation, in particular the yield currently achieved by an investment in a MMF.

A proposal made by some industry participants[47] consists in applying risk weights to the maturity range of the assets. Basically the more an asset has a long remaining maturity, the higher will be the NAV buffer. The analysis of current portfolio composition of CNAV MMFs reveals that the NAV buffer would, on average, amount to 25 basis points, which would be added to the existing 50 basis point in-built 'buffer' that results from the rounding procedure.

Impact on financial stability: An additional buffer of 25 basis points could increase the stability of the MMF to face large and unexpected redemptions. The stability of the NAV would be recognized as a key feature of the MMF but the investors would have to pay the price of it. It could mitigate the incentive for investors to redeem early in a declining market, as there would be a backstop dedicated to compensating for the 'first' losses. This pre-funded loss absorption capacity would give time to investors to moderate their reaction to small and temporary changes in the value of their shares. The MMF would be in turn more resilient to market shocks and therefore it would reduce the probability that the sponsor has to intervene to support the MMF.

Option 2.5, however, poses issues as regard the appropriateness of the method to calculate the buffer and its adequacy to mitigate the run risk. Linking the risk of an asset to its remaining maturity may not correctly capture all risks attached to an asset. According to the general rule, the greater the exposure of an asset to interest risk, the more the asset's value will fluctuate. Therefore, the price of an asset with a long remaining maturity will fluctuate more than that of an asset with a shorter maturity. While this rule is usually valid during normal market conditions, it may prove inaccurate during stressed market conditions when all assets are subject to larger than usual price fluctuations. This method is also vulnerable to unexpected credit events because it does not consider the credit quality of the assets as a factor of additional risk. Apart from the

[47] Proposal made by Fidelity Investments, please refer to Annex 7.3.1 for the details

method used to establish the buffer, the level of this buffer raises some doubts regarding its capacity to mitigate the risk of runs. In the case of the Reserve Primary Fund, when it was finally forced to re-price its NAV, the latter decreased from $ 1 per share to $ 0.97 per share (a sudden drop of 300 basis points).

This 'real-life' example is instructive as a fund is considered as 'breaking the buck' as soon as the NAV decreases below $ 0.995, a decrease of 50 basis points. It is therefore questionable that a buffer of a mere 25 basis points will prove sufficient to absorb sudden (but realistic) losses in stressed market conditions. An inadequate buffer could also give the erroneous impression that investor losses have greater protection than they actually do. On the other side, if the buffer would be set at higher levels, it could take too much time to implement and prove too costly for investors.

Impact on MMF investors: At the end of August 2012, European CNAV MMFs were generating an annual net yield of 8 basis points[48]. In order not to deprive investors of their anticipated return, the build-up of the buffer must be drawn out over an extended period. For example if we set the time frame at seven years, as some industry participants propose, it would cost the investors (shareholders) around one half of their annual return at current levels to reach a level of 25 basis points. Even if this option were deemed economically feasible, the buffer would not be operational for the next seven years. On the other hand, an aggressive build-up, over a few months only, could potentially cause disruptions to the financial markets due to the decline in MMF assets that would result from returns being siphoned-off to establish the reserve. In light of this situation, it is questionable that a buffer higher than 25 basis points could reasonably be envisaged.

It should also be noted that an additional drawback of this option is that it would create some transfer of benefits from existing shareholders -- who would contribute to the establishment of the buffer -- and future shareholders who may later benefit from this buffer, although they did not contribute toward its build-up.

The option to impose buffers receives very little support in the responses to the consultation, although it has not been asked directly how the buffer would have to be funded, through the investor or through the sponsor. It is important to recall that both the ICI and AFP surveys did not mention the funding source in the question which significantly alters the results. In the ICI survey, only 36% would decrease or stop using MMFs while 56% would continue at current level and 8% would increase. In the AFP survey, 55% would stop or reduce using MMFs.

The CFA Institute survey makes further distinctions. First, 54% of the persons that have been asked in Europe agree that CNAV MMFs should have to maintain capital reserves while 26% disagree. Asked if the capital reserves should be financed by fund investors, 30% agree and 47% disagree.

This measure is one of the proposed options of the IOSCO recommendation 10.

5.2.6. Policy option 2.6: introduce a NAV buffer for CNAV MMFs financed by the manager

Under this option MMF managers would be required to establish, fund and maintain the reserve for the MMF that they manage. The level of the buffer would be set at 3% and

[48] "Fitch: Potentially Negative Euro Yields Won't Impact MMF Ratings", 18 September 2012

would be applied to all assets under management, irrespective of their nature. As explained under option 2.5, applying different risk weights to the assets may not capture entirely the risks posed by these assets. This takes into account the largest loss of NAV that was ever suffered by a CNAV MMF (the Reserve Primary Fund's loss of 300 bps). This is also aligned with the proposal under discussion in the US. It also takes into account that MMF assets (especially if the reforms proposed in this IA on liquidity and credit quality are implemented) are more liquid, more transparent and easier to value than the assets held in a bank's balance sheet. For example, while banks invest many of their assets in long-term loans, fixed-rate mortgages, residential, car or small business loans, ABCP, as well as bonds with long maturities, MMFs must limit their investments to short-term, highly rated and liquid instruments. Because of the high quality of assets that are (and will be in future) eligible for investment by MMFs, these assets are less risky and seek out a lower return than assets held in a bank. This justifies limiting the NAV buffer to a potentially lower percentage when compared to own capital to be required from a bank. In addition, the liquidity and maturity mismatch in banks is greater than in MMFs that, as mentioned above are limited to investing in highly liquid and short-term debt instruments.

Impact on financial stability and MMF investors: The buffer has many positive aspects for the financial stability: the manager, and its sponsor behind, would no longer be obliged to provide support without being prepared and having provisioned for it, which would reduce the probability of a sponsor failure. The NAV buffer would also contribute to avoiding immediate contagion to the sponsor, at least if the loss does not reach proportions above 3%. The buffer might fail to cover losses that rise even beyond those suffered in the case of the Reserve Primary Fund. In this unlikely event, additional sponsor support, above the NAV buffer, might again be required leading to contagion toward other financial service providers and, ultimately, the public purse. The systemic risk is therefore circumscribed to events that have an impact of less than 3% of the NAV. The negative effects on the money market are reduced and the probability of a bailout diminishes but is not completely removed.

The buffer might also serve to absorb the regular price movements inherent in financial instruments. When MMFs are forced to sell assets in a declining market environment, for example to satisfy redemptions, the buffer will be used to compensate the differences between the stable NAV and the true market price of the asset sold. This means that the buffer will not only be used to compensate for a default of an issuer (the Lehman example) but also to compensate regular discrepancies between the stable price and the mark to market price of an asset.

Impact on investors: A manager financed NAV buffer would not directly impact investors and would bring clarity in the market. It could effectively bring some additional confidence to investors that they invest in a "bank-like" product, which could reduce the incentives for them to run at the first sign of stressed market conditions. MMF will gain in stability and late redeemers will not be impacted negatively by first movers. One side effect could be that some of the increased costs of capital that fund managers incur in building up a NAV buffer are passed on to investors. The cost of capital for the manager is determinant for assessing the potential impact on the management fees paid by the investors. According to various discussions with stakeholders, the annual cost of capital would range between 3% and 10%, depending on the financial situation of each manager. A cost of 3% makes sense regarding the current interest rates for borrowing money in the market. A cost of 10% would only make sense by reference to the opportunity cost, meaning that a bank would achieve a rate of return of 10% should the money be used for

another purpose. With a 3% cost of capital, the cost for the fund will amount annually to 3% of the 3% buffer, thus 0.09% of the fund's assets. With a 10% cost of capital, the cost will be 0.30%. This has to be put in relation with the current management fees that range usually between 20bps and 50bps annually. It is however difficult to assess how much of this cost will be passed to the investors as an increase of their management fees.

In a low yield environment, these annual costs might appear as high but compared to historical returns of a MMF it is relatively low. In addition some CNAV MMFs are already yielding negative returns and this has not provoked massive outflows. This tends to show that investors are more attracted by the security offered by the MMFs through the diversification than the level of the yield offered. This focus on security instead of yield is even more acute when the bank deposits, a substitute of the MMF, may be impaired (example of the banks in Cyprus).

As mentioned above, the precise percentage of a NAV buffer can always be contested. If the buffer is set at a too low percentage, it might be insufficient to contain a run. On the other hand, if the NAV buffer is set at too high a level, it may entail that most MMFs that are not sponsored by a bank either float their NAV or exit the MMF market altogether. While the former result would contribute to financial stability and effectively 'plug' the contagion channel that currently exists between CNAV MMF and their sponsors, the latter result would certainly be unfortunate: the MMF sector would then become even more concentrated, easily reaching concentration levels which themselves might raise systemic issues. This argument has to be counterbalanced by the current situation in the CNAV market: there are currently 23 providers of CNAV MMFs, the tenth largest share 85% of the market and the 5 largest share 65% of the market. In that sense, the market is already highly concentrated[49].

The chosen 3% buffer has, apart from the reasons set out in the previous section, been chosen because it would have been sufficient to absorb most of the losses that occurred during the 2008 crisis. According to a study realized by the Federal Reserve Bank of Boston (please see annex 6.2 for details), out of the 123 instances of support that occurred in the US MMFs during the crisis, only at three occasions the amount was larger than 3%: two times it was close to 3% (3.06% and 3.23%) and one time it was clearly larger (6.33%). If there is a foreseeable risk that the potential loss of the NAV (e.g., due to an impairment of a particular MMF asset) will exceed 3%, the manager will be required to take appropriate measures, including raising the NAV buffer so that it covers the foreseeable loss or potential impairment of a MMF asset.

For example, when the Reverse Primary Fund broke the buck, it decreased its NAV first to \$0.99 and then to \$0.97[50]. Although the exposure to defaulted Lehman assets amounted to only 1% of its NAV, the higher losses in NAV can be attributed to managerial errors committed by the fund after the Lehman's default. The additional decrease in NAV was caused by the fund redeeming, for a certain period of time, investors at par and thus above the shadow NAV. Therefore, when the fund broke the

[49] This has to be put in relation with the number of 285 providers that offer MMFs in Europe. The providers often operate with different asset management subsidiaries. In this case the number would be higher.

[50] The day after Lehman was forced to declare bankruptcy – September 15, 2008 – all of the Lehman position, accounting for 1% of the Reserve Primary Fund's NAV, was priced at zero. This led to the NAV declining to \$0.99 per share. Subsequent redemptions caused an additional decline of around 2 cents. Finally, the fund was liquidated and all shareholders in liquidation received 99 cents per share.

buck, it had to adjust its NAV at a level below that solely attributable to the fact that Lehman paper was re-valued at zero. Therefore, with the 3% buffer, the fund would have been able not only to face the losses of its Lehman paper falling to a value of zero but it would also have been able to redeem all investors at par. In that scenario, the entire run on the MMF sector might well have been avoided. This would not have caused a panic among investors in other MMFs.

On the other hand, a NAV buffer funded by the manager would de facto make the link between the MMF and its sponsor official. The 3% buffer represents a clear and transparent backstop. This is not to say that the buffer would be sufficient in all circumstances to prevent a contagion to the sponsor's other activities. Under very extreme circumstances, especially when default of some MMF debt is coupled with bad managerial decisions, losses might still exceed the buffer. It might also be possible that a rapidly growing MMF would need to rapidly increase its 3% buffer to reflect the increase in NAV, although an impending 'exhaustion' of sponsor support could be apprehended by limiting net inflows into this MMF. Nevertheless, while systemic risk of any MMF would not be entirely eradicated by a buffer, it would be better contained than in a situation marked by the absence of a buffer.

Impact on the managers and MMF sector as a whole: Undesirable effects cannot be ruled out as financial 'firepower' may vary from one manager to another. Managers that have a bank as a sponsor may finally rely on the financial strength of their parent bank to build up the buffer. Independent managers will have to finance the buffer on their own and raise capital on the market. This might oblige independent managers to pay high returns to those investors that invest in the share class issued to constitute the buffer. Bank sponsors, for their part, will be forced to increase their capital reserves in order to comply with the 3% buffer that would apply on all their MMF assets. In a difficult environment where the banks have already to increase their capital reserves to comply with upcoming Basel III rules, it is not certain that all banks would have the capacity to absorb the MMF assets. The consequences for them largely depend on the size of their current balance sheet and the size of the MMF assets under management. Annex 7.3.2 estimates the amount of money to be set aside plus its associated annual cost for European and US banks maintaining a business of CNAV MMFs. European banks will have fewer difficulties in building up the buffer when compared to their US counterparts because European MMF have less assets under management.

Raising the capital may also prove challenging for the asset managers that do not have a bank as sponsor. In this case, the capital reserves would be built up directly at the level of the manager. Their capital requirements are usually set at lower levels and they have less access to funding sources than banks may have. It is therefore not excluded that some small asset managers will decide to exit the business of CNAV. The table in annex 7.3.2 demonstrates that the biggest providers of CNAV MMFs in Europe are usually asset managers belonging to a banking group. Pure asset managers generally manage lower amounts of assets and small actors are not present in the business of CNAV MMFs. As described in the problem definition, some small asset managers have already been forced to exit the business because their financial strength was not enough to cope with the "implicit" guarantee provided to CNAV.

In total, if all managers decide to build up a buffer, the initial amount of the capital to be raised will amount to around €14 billion in Europe. The asset managers that belong to a banking group will represent 70% of that amount. From the other 30%, one pure asset manager, *BlackRock*, accounts alone for half of it; other pure asset managers will have

much lower amounts of buffer to finance. Additional on-going capital inflows might be required to maintain the buffer depending on the performance of the MMF and evolution of subscriptions and redemptions.

Apart the financing problem, the buffers may raise certain operational challenges for the asset managers. They are generally not used to this kind of bank requirement and it may be costly for them to implement and monitor the changes in the buffer. Because the buffer will have to move with redemptions / subscriptions and with losses / gains on the assets, the manager will have to adapt the buffer level on a continuous basis.

To avoid disruptive effects on the manager, a transition period should be necessary to give enough time for building up the buffer and adapting the monitoring tools.

Both options, 2.5 and 2.6, received very little support in the consultation. Almost all responses to the consultation highlight the danger on the MMF's viability should investors be required to pay for the buffer, although the precise amount of buffer has not been tested. On the other side, participants in the consultation questioned the ability of all sponsors to raise the necessary capital. Only *BlackRock*, a pure asset manager, supports the idea that sponsors should be able to set aside some reserves to be used during "rainy days". Although not their preferred option, the DE and UK authorities reckon that it remains an option to consider.

The CFA survey shows that 76% of the EU respondents agree that MMF sponsors that provide capital guarantees to investors should be subject to capital requirements. Asked if the capital reserves should be financed by fund sponsors, 32% agree and 44% disagree. This is almost the same result as for investor funded buffers.

This measure is one of the proposed options of the IOSCO recommendation 10.

5.2.7. Policy option 2.7: Require bank-like regulation for CNAV MMFs

Impact on financial stability: MMFs have been identified by the FSB as belonging to the shadow banking universe because they perform bank-like activities. MMFs accept funding with deposit-like characteristics, perform maturity and liquidity transformation as banks do and undergo credit risk transfer as banks. The only difference is that they do not have bank status.

Transforming the stable MMFs into special purpose banks would increase the oversight and supervision they are subject to, will apply bank capital requirements and insurance coverage. Central banks will be able to more closely monitor their financing needs and would be able to provide direct support to MMF having liquidity problems. Access of MMF to central banks facilities could almost completely remove the incentive of investors to run if they know that the CNAV benefits from such support. The impact of option 2.7 on financial stability therefore rates as positive.

On the other hand, subjecting MMF to banking regulation would impact central bank monetary policies once the new 'bank' MMF would suddenly need large amount of liquidity. Finally the contagion risk may not be completely ruled out, because the banking sector would now be fully exposed to the risks of the MMF assets.

Impact on the manager and MMF sector as a whole: The implementation of such a model may prove challenging for a number of reasons. Depending on the portfolio of the MMF, large amounts of equity would be necessary to capitalize these new banks in order

to meet the capital requirements. Because some MMF sponsors are not very highly capitalized, raising substantial amount of equity may be a large hurdle and may further reduce MMFs capacity to supply short-term credit. The exact amount of the capital requirement would vary to a large extent, according to the type and maturity of the assets held by the MMF. As an example a MMF investing exclusively in assets issued by governments would probably have a very low requirement. To the contrary, a MMF investing in assets issued by banks or corporate and on a longer term basis (more than 3 months) would face a high requirement which could largely exceed the 3% level foreseen under option 2.6.

Additional costs, which are difficult to quantify exactly, will fall under MMF managers: they would see a considerable increase in their operative costs if they have to comply with the entire list of prudential rules faced by the banks.

Under this option the asset managers that are not sponsored by a bank will most probably have to exit the business. The capital requirements combined with the prudential rules that apply to banks might be too costly for the asset managers, which could leave the business of CNAV MMFs entirely in the scope of a few banks. This would lead to increased concentration in the sector, thus less competition between the actors of CNAV MMFs.

Impact on investors: Investors will gain in stability what they could lose in yield. It can be expected that the cost of investing in MMFs will increase if managers face additional burdens. On the other side investors will benefit from the stability of a bank deposit.

This option has not been directly tested in the consultation but the opposition was strong among the MMF managers during the consultation process of IOSCO.

5.2.8. Policy option 2.8: Require MMF to float their NAV, except when they can demonstrate a sufficient capital buffer

Under this option, the manager of CNAV MMF will have the choice to either float the NAV of the MMF (option 2.3) or, if floating the NAV would entail massive investor redemptions from MMFs, finance a 3% buffer on all assets under management (option 2.6). Option 2.8, therefore, takes into account that some respondents to the consultation have voiced concern that not all investors would remain invested in MMF once the NAV had to be floated. This concern, although limited to a minority of EU respondents, is taken into account by allowing the manager to exceptionally keep a CNAV.

While Option 2.3 has the merit to address the systemic risks associated with a run on MMF in a very effective and simple way, Option 2.8 acknowledges the fact that it may cause some difficulties for certain MMF investors to continue to use this cash management tool once the NAV is floated. Option 2.8 would address these difficulties with the aim of keeping MMFs as a relevant tool for short-term financing for the government, municipalities and Europe's corporate sector.

In order to avoid potential disruption associated with the general floating of all MMF's NAV for the financing of the real economy (the entities that depend on issuing short-term debt to MMFs), Option 2.8 would allow continuation of CNAV associated with a robust 3% NAV buffer to be financed by the MMF sponsor. On the other hand, as floating the NAV would be much more effective in breaking the link between sponsor banks and the MMF sector (and thus avoid contagion of the banking sector), the

competent authorities will have to monitor that each MMF manager that wishes to maintain the CNAV structure can demonstrate that the buffer has been properly financed and set up in a segregated account. The competent authorities should be satisfied that the CNAV MMF manager will be able to maintain the 3% buffer at all times and that he has developed a clear and effective governance structure for the use of this buffer.

Impact on financial stability: Option 2.3 has the clear merit of clarifying that investments in mutual funds are not to be confused with bank deposits. Investments in mutual funds provide a high level of diversification but the value of its assets fluctuates in line with market prices and can be subject to losses. Floating the NAV will clearly indicate to investors that they invest in a product whose stable value is not guaranteed. Investors will get used to market fluctuations and will no longer expect that the sponsor steps in every time the fluctuation of the NAV of the fund exceeds a certain threshold. In this sense, option 2.3 removes the feature that makes MMF a guaranteed product and removes the incentive for the sponsor to provide discretionary support.

Option 2.6 adopts a different approach. While it acknowledges the fact that CNAV MMFs are different from guaranteed products, this option recognizes that only sponsor support allows the MMF to promise a stable share price upon redemption. In order to avoid the opacity that shrouds the current models of discretionary sponsor support, this option aims to make sponsor support more predictable by means of a minimum reserve that needs to be set aside in order to finance the sponsor support. By requiring a 3% NAV buffer, option 2.6 allows managers to continue supporting their funds but at the same time increases their proven capacity to provide such support. To that extent, contagion risk is reduced, but not entirely eliminated.

Impact on the MMF sector as a whole and the economy: Both options could generate additional burdens that could have negative impacts on the MMF sector and on its funding capacity of the economy. Under option 2.3 it is not excluded that certain investors may not wish to invest in fluctuating NAV MMFs, thus possibly reducing the size of the MMF sector and, in consequence, its role as a short-term financing tool for European issuers. Under option 2.6, it is not excluded that certain managers may decide to exit the business of CNAV MMFs due to the costs associated with the buffer. In this case this would also impact the MMF sector and the real economy.

On the other hand, option 2.3 has the advantage to be easier to implement: such a system already exists in Europe and it would not generate costs as high as under option 2.6. Option 2.6 has the disadvantage to be complex; it will require substantive costs to adapt the systems of the managers that wish to build up a buffer.

Impact on investors: Under this option, the risk of investors switching to alternative products is less pregnant than on the individual options 2.3 and 2.6 because they will have the same choice as before but with expanded guarantees.

The choice foreseen under this option 2.8 between option 2.3 and 2.6, has not been tested among the stakeholders. The stakeholders' views of each option are discussed under their respective section.

5.2.9. Policy option 2.9: Ensure that managers no longer pay for credit ratings

Under this option, managers will be prohibited from paying CRAs to award a rating on their funds. The aim of this option is to stop the rating at fund level without impacting the liberty of opinion of the CRAs. However this option does not, and cannot, prevent other actors, such as investors, to pay CRAs for awarding a rating on a MMF. It is therefore not excluded that the rating at fund level will not be perpetuated, but in a different manner. The right to conduct a business for managers should not be impacted, considering that this measure does not impinge on their ability to manage and market their products. There should be no impact on the attractiveness of their funds since this measure will be evenly applied by all managers at the same time.

It is to be expected that the rating at fund level will most probably cease once the fund managers stops paying the rating agency for this service. Nevertheless, no longer allowing the manager to pay for a rating at fund level, does not impinge on the rating agency's fundamental right to express a ratings opinion, should it find others parties who are interested in such a rating. In any case, CRAs will remain entirely at liberty to express their opinion on MMFs in whatever context they may be called upon to do so. On the other hand, no longer allowing the MMF manager to pay for a rating on his own MMF, might initially or permanently decrease the revenue stream of CRAs.

Impact on financial stability: Because investors place too much emphasis on the ratings of a fund, one of the options would be to prohibit the fund to use credit ratings. Sudden massive redemptions following a downgrade would be in this case impossible. This would grandly contribute to increase the stability of the whole MMF sector. The disappearance of AAA ratings would also contribute to change the perception that investors do not invest in a guaranteed product and thus lessens their incentive to run.

Option 2.9 will also have positive impacts on the issuers of money market instruments. Because MMF managers have to comply with a certain set of criteria in order to be awarded the AAA rating, they only invest in very high quality assets. But the issuers of these assets might be put under review or downgraded by the same CRAs that award the AAA to the fund. There is therefore enormous pressure to keep the assets in line with the criteria of the CRAs. The consequence is that, once an issuer is downgraded, the fund will be obliged to sell all assets related to this issuer. In this case credit ratings are not anymore an opinion but a form of indirect regulation. If the incentive to ‘fire-sell’ assets is removed, the negative effects on issuers of short-term debt will also be removed. An issuer would no longer lose access to the short term funding market just because it was put under review by a CRA.

Impact on investors: Credit ratings have been useful for investors since until recently there was no common definition of MMF in Europe. It was very difficult to perceive the different risk characteristics of MMFs subject to different national legislations which often imposed weak constraints on credit, liquidity and interest rate risk. IMMFA requires its members to be rated due to this situation. To the contrary MMFs domiciled in France are usually not rated because the MMF sector has long been carefully delineated by rules that prescribe the characteristics of a MMF asset. Fund ratings were therefore not required to establish investor confidence in France.

The broadening and strengthening of regulation of MMFs and increased transparency to investors on the investments made by MMFs reduces the need for a fund rating. CNAV

MMFs that follow IMMFA rules (domiciled in IE and LU) will be the almost only ones that will have to adapt since French MMFs are usually not rated.

In its response to the consultation, IMMFA recognize the risks of ratings but they do not think that MMFs should be prohibited from being rated. They however support proposals to mitigate problems posed by fund ratings: remove the criteria of sponsor support in the rating decision and give enough time to managers to dispose of assets that have been downgraded in order to avoid asset fire sales. They subsequently add that, if ratings were prohibited, there would need to be a substantial lead time before implementation to allow investors in MMFs to update their treasury policies and for fund sponsors to provide additional transparency to investors. HSBC, a member of IMMFA, however supports the prohibition of ratings if a transitional period is foreseen.

This option addresses the IOSCO recommendation 12 and 13.

5.2.10. Impact summary

Option 2.1 cannot be retained as it would not address the problem of contagion to the sponsors and the economy. Investors will continue to believe that they invest in a guaranteed product and sponsors will continue to provide support without being prepared for it.

Increase transparency: By increasing the transparency, option 2.2 can achieve some of the objectives but will never be sufficient to completely isolate the risk of MMF from the money market and the sponsors. Because the costs are relatively modest, it can still represent a good complement to any other option.

MMF valuation methodologies: Option 2.3, will have large impacts on the industry because all short-term MMFs (with no exception) will be caught by the new valuation policy. The costs may be higher to implement the new valuation rules for all assets. On the other hand, option 2.3 may better achieve the objectives to prevent the risk of runs linked to the stable price and limit contagion to other financial service providers. Cost associated with changing the valuation method on the money market cannot be ruled out. It is not to be expected that all traditional MMF investors will readily switch to floating NAV products. For this reason, Option 2.3 would require sufficient transition time to allow investors to adapt to the new rules.

Option 2.4 represents the status quo for the majority of VNAV MMFs (that use amortised cost for assets maturing in less than three months) but would still be as disruptive for CNAV MMF (that use amortised cost for their entire portfolio) as Option 2.3. The cost of changing the valuation method would be the same for investors invested in CNAV. Because option 2.4 would achieve the results of option 2.3 only partially and because the costs might not be so different, option 2.3 appears preferable.

NAV buffers: NAV buffers either financed by investors (2.5) or by the fund sponsor itself (2.6) would increase the resilience of MMF. Option 2.5 has the advantage that the investor pays, thus clearly indicating that the risk and reward of the investment belongs to the investor. This has also the advantage not to impact the sponsors' business model, as sponsors don't need to raise additional capital. But on the other hand, the problem is that the buffers that could reasonably be envisaged in the 'investor-pays' scenario would not be enough to limit the contagion. Because it is impossible to raise the buffer without reducing the attractiveness of the MMFs for the investors, this option will not achieve the

desired objectives. Even with a buffer at 25bps, it will take 7 years to build up, thereby already decreasing any immediate benefits for investors. Option 2.6 is the clear winner over option 2.5 because investors will not be directly impacted. It may prove costly for managers to fund the buffer and it is not sure that all managers will decide to do it but at least the buffer level can be sufficient to prevent a future crisis and limit contagion.

Conversion to a bank status: From all options considered, option 2.7 (submit all CNAV MMF to banking regulation) appears as the most incisive and thus represents the most challenging policy change. The impacts of this option in terms of capital requirements and prudential supervision will be enormous. In light of the large capital required and the ensuing increased cost of sponsoring a CNAV MMF, it appears unlikely that the CNAV MMF sector will survive in its current form if this option were chosen. Most likely, this option will engender a significant concentration of the MMF sector in Europe.

This option also entails a significant risk that the newly created banks, in order to respect the mandatory capital ratios, would invest less in the money market, or would invest only in very high quality assets demanding less capital. The essential function of the MMF sector - satisfying short-term financing needs of banks, corporation or governments - would be at peril.

Require MMF to float their NAV, except they decide to build a buffer: Option 2.3 would be the clear winner in terms of effectiveness of reducing systemic risk but negative impacts on certain traditional CNAV investors cannot be excluded. As a second best option, option 2.6 would be added as a fall-back for those MMFs that will decide to build an appropriate 3% buffer for maintaining the CNAV feature of their MMFs.

Ratings: Prohibiting the use of ratings appears to be the only possible measure to avoid future fire sale following a downgrade. Increasing the transparency, floating the NAV would never completely remove the possibility of a run.

	Impact on stakeholders	**Effectiveness**	**Efficiency**
2.1 No action	0	0	0
2.2 Increased transparency	(+) More information for investors	(+) Increased transparency could diminish investor expectations (-) Price transparency could increase runs	(+) Low implementing costs but low results
2.3 Require all MMFs to have a fluctuating NAV: impose a full mark to market method and prohibit any method based on 'rounding' NAV or share prices.	(---) Reduced attractiveness of MMFs for certain investors, thereby potentially affecting the money market (-) Managers will have to change their valuation procedures	(+++) Full price fluctuation eliminates the "guaranteed" feature (+++) Incentive for sponsor support is removed	(++) Increased financial stability attached with some costs for investors

2.4 Require all MMFs to have a fluctuating NAV: impose a full mark to market method except in the last 3 months and stop the rounding method	(-) Reduced attractiveness of MMFs for certain investors, thereby potentially affecting the money market (≈) Managers will have to slightly change their valuation procedures	(+) Partial price fluctuation reducing the "guaranteed" feature (+) Incentive for sponsor support is limited	(+) More limited costs than 2.3 but less effectiveness
2.5 Introduce NAV buffers for MMFs financed by shareholders	(--) Investors will see their yields decreasing, reducing the attractiveness of MMFs	(+) Less risk of contagion to the sponsor but not to the money market	(-) Increased costs for investors, not compensated by increased safety
2.6 Introduce NAV buffers for CNAV MMFs financed by the sponsor	(--) Sponsors will have to bring money (-) Disadvantage for small sponsors	(++) The buffer eliminates the contagion channel (+++) Investors will benefit from a guaranteed investment	(++) Increased resilience at the cost of sponsor involvement
2.7 Require bank-like regulation for CNAV MMFs	(--) Spill over effects on banks (--) Asset managers will be forced to exit the business	(+++) Complete stability of the MMF (++) Investors will benefit from a bank deposit safety	(+) Costs too high in comparison to the results achieved
2.8 Require MMF to float their NAV, except when they can demonstrate a sufficient capital buffer	(+) Market participants will have the choice (+) Regulators would be able to control whether the 3% buffer has been properly implemented	(+) Both options would increase, albeit to different degrees, financial stability	(+++) Costs compensated by increased stability
2.9 Ensure that the MMF manager no longer pay for credit ratings at fund level	(-) Less information for investors (++) Managers are less dependent from CRA decisions (--) CRA lose a business	(+++) Removal of runs following a downgrade	(++) Costs compensated by increased stability

6. THE RETAINED POLICY OPTIONS AND INSTRUMENT

6.1. The retained policy options

The first objective is best fulfilled by a combination of options 1.5, 1.6 and 1.7. None of the three first options can be retained due to the detrimental effects they would cause on the attractiveness of the MMFs for the investors. Increasing the liquidity of the fund and enhancing the redemption monitoring will increase the ability of the fund to face large redemption orders. This will in turn reduce the probability to use the suspension of redemptions, thereby reducing the contagion risks. Furthermore the early redeemers will not anymore cause undue costs that would have to be paid by late redeemers.

The second objective is best achieved through a combination of option 2.2, 2.8 and 2.9. Because there subsists some doubts that some disruptive effects cannot be excluded under option 2.3 (the easiest and most effective way to fulfil the second objective), it is preferable to retain option 2.8 and give a tightly circumscribed choice to market participants. A CNAV could be maintained only if managers set aside an appropriate capital buffer not inferior to 3% of NAV in order to limits the risk of uncontrolled contagion. Some managers will not decide to pay and will prefer to fluctuate the NAV.

This may result in some asset declines for these managers, which could be compensated by asset increases by the managers who decide to build up a buffer. Because the choice would be left to the manager, he will have to inform the investor of the valuation method chosen. In case a fluctuating NAV is adopted, the fund manager would have to specifically emphasise that there is no capital guarantee. Therefore option 2.2 will be required to increase the transparency, regardless of whether a floating NAV or a capital buffer is chosen. Option 2.9 would come as a complement in order to stop the risk of runs following a downgrade.

The retained policy Option 2.8 mirrors recent FSB conclusions: *"The FSB has reviewed the IOSCO recommendations and endorsed them as an effective framework for strengthening the resilience of MMFs to risks in a comprehensive manner. In particular, the FSB endorses the Recommendation 10 requirement that stable NAV MMFs should be converted into floating NAV where workable. The FSB believes that the safeguards required to be introduced to reinforce stable NAV MMFs' resilience to runs where such conversion is not workable should be functionally equivalent in effect to the capital, liquidity, and other prudential requirements on banks that protect against runs on their deposits."*

After this kind of optimization procedure, the preferred combination of options is therefore: 1.5, 1.6, 1.7, 2.2, 2.8 and 2.9. Other combinations that have been advocated by stakeholders would not achieve the same results as this combination.

6.2. The choice of instrument[51]

The proposed legislative measure is not concerned with the taking up of the activity as fund manager, but aims to ensure market integrity and stability in relation to managers' activities involving a specific type of funds because of the specific characteristics of such funds. The taking up of activities as fund manager is regulated either by the UCITS directive or by the AIFM directive. The activities of the managers will continue to be subject to AIFMD and UCITS Directive but the product rules contained under UCITS framework will be supplemented by the product rules contained in a new Regulation.

Currently around 60% of the funds and 80% of the fund's assets are regulated as UCITS, the rest falls under AIFMD as of July 2013. Reforming only the UCITS Directive is therefore not an option as it would leave out of its scope a substantial part of the MMF sector. In pursuit of the objective of the internal market integrity the proposed legislative measure will create a regulatory framework for MMFs in view of ensuring an increased protection of investors in MMF, as well as enhancing financial stability by preventing contagion risk. The proposed provisions will specifically target to ensure that the liquidity of the fund is adequate to face investor redemption requests and to render the structure of MMFs safe enough to withstand adverse market conditions. The provisions envisaged will deal, amongst others with the scope of eligible assets, with diversification rules, rules related to exposures to credit, interest rate and liquidity risks. These are prudential product rules that aim to render the European MMFs more secure and efficient, mitigating hereto related systemic risk concerns.

Article 114(1) TFEU provides the legal basis for a Regulation creating uniform provisions aimed at the functioning of the internal market. Prudential product rules

[51] Please refer to Annex 7.4 for the full analysis.

establish the limits of the risks linked to MMFs. They underpin the correct and safe functioning of the internal market. In the absence of a Regulation setting out rules on MMFs, diverging measures might be adopted at national level, which are likely to cause significant distortions of competition resulting from important differences in essential investment protection standards.

Currently, there are no specific prudential rules for MMFs laid down in EU law[52], but only some generic guidance contained in CESR guidelines[53]. This results in large divergence and legal uncertainty, especially as regards action needed once MMFs are in trouble, with the crisis showing different reactions in different Member States. That creates an unlevel playing field impeding the internal market.

The proposed Regulation streamlines prudential requirements related to MMFs creating a common framework directly applicable to managers of MMFs. It would clearly demonstrate that MMFs are subject to uniform rules in all EU markets. This would boost stability of this product as a source of short-term finance for government and the corporate sector across the EU. It would also ensure that MMFs remain a reliable vehicle for the cash management needs of European industry.

6.3. The scope of legislation

The legislation will apply to all MMFs currently marketed and used as such in Europe. For this purpose, the definition of MMFs should be broad and precise enough to capture all funds that are MMFs in the European Union. For this purpose, the definition of the ECB plus the one of the CESR will be used plus the recommendation 1 of the IOSCO which specify that "*the definition should ensure that all Collective Investment Schemes 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)*".

The new regulation will apply to all managers of MMFs, irrespective of whether these managers are authorised according to the rules on management companies contained in UCITS or under the AIFMD.

6.4. The impact on retail investors and SMEs

The strengthening of the provisions to better deal with first mover advantages will give retail investors a fairer treatment. Because the losses were often borne by the retail instead of the institutional investors, this will re-equilibrate the balance. By increasing the safeguards, more retail investors will be attracted to these markets.

With regard to SMEs, their protection will be enhanced when acting as investors. SMEs, as other corporates of larger size, may use MMFs to place their excess cash for short

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[52]The UCITS Directive and AIFMD foresee only capital requirements rules for ensuring the creditworthiness of managers, as well as other authorisation requirements and conduct of business rules. The UCITS Directive also contains some rules defining the features of a UCITS. However neither the AIFMD nor the UCITS Directive contains any prudential rules concerning MMFs. An MMF irrespective whether it is a UCITS or an AIF has specific risk characteristics that are not covered by prudential requirements neither in the AIFMD nor in the UCITS Directive.

[53] See the description of the baseline scenario (section 5.1.1) and annexes 2.1 and 2.2 for details about the CESR guidelines.

periods. Reducing the probability to face limits or suspensions of redemptions will prevent SMEs from suffering cash shortfalls.

6.5. Social impact

To the extent that the proposed policies will help contain the effects of future financial crises on the real economy, they will also help reduce the social costs of those crises (e.g. unemployment). Regarding the impacts on the asset management sector's employment, should the assets under management be maintained at current levels, no further impact would be expected.

6.6. Environmental impact

Nothing would suggest that the proposed policy will have any direct or indirect impacts on environmental issues.

6.7. Impact on third countries

As described in section 1.2, the work surrounding shadow banking is international. The G20 Members have all agreed to request the FSB to undertake a review of the sector and to make recommendations. The IOSCO recommendations have been endorsed by the FSB in November 2012. The US, as the largest MMF market in the world, requires special attention in order to avoid regulatory arbitrage with the EU. At this stage it is difficult to predict which option will be chosen in the US but their consultation document proposes only 3 options: floating NAV, capital buffers at 1% with hold-back mechanisms or capital buffers at 3% coupled with additional rules. The outcome of this IA goes in the same direction by requiring either a floating NAV or buffers. It is also fully aligned with the IOSCO and FSB recommendations. At this stage it is therefore possible to claim that there are no significant risks of regulatory arbitrage between the US and the EU. Whether this will remain the case after all consultative and legislative processes will have been concluded, it is very difficult to predict. To this effect, the Commission services are engaged in a dialogue with the US to prevent that major divergences develop in the next phase of rulemaking.

According to existing data and dialogue with industry participants, MMF investors from outside the EU represent only a minority share. It is not easy for an EU based investor to use US based MMFs, or inversely for a US based investor to use EU MMFs. This is explained by time lags and currency hedging that would become expensive. In this regard, only the investors in USD denominated MMFs may wish to move between MMF domiciles from one continent to the other. According to the Securities and Exchange Commission (SEC)[54], the use of European MMFs in the US is very limited. No EU fund has received the authorization to be publicly sold to US investors but some EU funds could still be privately offered. This is however difficult because US investors would face in this case significant adverse tax implications. This information is confirmed by IMMFA figures that say that US investors account for only 10% of the investors in IMMFA funds.

Regarding the asset side, US MMFs are large investors in European assets and inversely EU MMFs are important investors in US assets. As such MMFs on both sides of the

[54] Response to Questions Posed by Commissioners Aguilar, Paredes, and Gallagher, Division of Risk, Strategy, and Financial Innovation, U.S. Securities and Exchange Commission, November 30, 2012, footnotes 61-66.

Atlantic represent an important financing source not only for corporates and banks in their own continent but for those entities in the other continent as well.

Since the asset management sector is a global market, it is important to monitor not only the actions of the US, but also those of other G20 members. Particular attention will also need to be given to countries that are not part of the G20, as they are not bound by the Group's commitments and may therefore be tempted to attract businesses to their jurisdiction. This could have a negative impact on the competitiveness of the EU (market participants may simply move their business to a jurisdiction that has either weaker rules or none at all), although it is hard to judge what the magnitude of this impact could be.

However, any potential loss of competitiveness or opportunities for regulatory arbitrage will have to be taken into account when deciding on the best way to implement the desired policy initiatives.

7. MONITORING AND EVALUATION

Ex-post evaluation of all new legislative measures is a priority for the Commission. Evaluations are planned about 4 years after the implementation deadline of each measure. The forthcoming Regulation will also be subject to a complete evaluation in order to assess, among other things, how effective and efficient it has been in terms of achieving the objectives presented in this report and to decide whether new measures or amendments are needed.

In terms of indicators and sources of information that could be used during the evaluation, the data provided from the national central banks, the national regulators, European bodies such as the central bank, ESMA and ESRB and from international organizations such as IOSCO and FSB. By centralizing the data at the EU level, the ECB is able to give a broad and detailed picture of the key features of the European MMF market. This will be used to monitor the liquidity level, the types of assets, the issuers of the assets and the investors of the MMFs. Occurrences of sponsor supports, redemptions linked to rating downgrades and change of marketing practices will be monitored for following the attainment of the second operational objective. Based on these indicators it will be possible to draw conclusions regarding the impacts of the reform on financial stability. The impacts on the MMF industry will also be carefully followed through the monitoring of the assets under management, the number of MMFs or the participation in the financing of the economy.

The international organizations plan to conduct peer review of the implementation of their recommendations in the different jurisdictions. The European Commission will closely monitor the reviews in order to ensure that the recommendations have been evenly applied by all G20 Member States.

ANNEX

1. ANNEX 1: GLOSSARY

Alternative Investment Fund Managers Directive (AIFMD)	Directive 2011/61/EC of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010.
Amortised cost / Amortised cost accounting	An accounting method that takes the purchase price of the financial instrument and adds the cumulative amortisation, that is, the difference between the purchase price and the value of the financial instrument at maturity. Cumulative amortisation is calculated by equally spreading or discounting estimated future cash payments throughout the life of the financial instrument.
Asset Backed Commercial Paper (ABCP)	A form of secured Commercial Paper issued by a short-term investment vehicle or conduit (such as a special purpose vehicle (SPV)) with a maturity between 90 and 180 days. The Commercial Paper is backed by assets such as trade receivables and is used for short-term financing needs.
Asset Backed Security (ABS)	A security whose value and income payments are derived from and collateralised by a specified pool of underlying assets which can be receivables such as mortgage or credit cards credits.
Breaking the buck	Breaking the buck alludes to the fact that a Constant NAV (CNAV) is not guaranteed. A MMF 'breaks the buck' whenever there is a material discrepancy between the market value and the amortised cost value of the portfolio and the MMF can no longer issue and redeem units at the stable NAV of $1/€1 per unit.
Capital buffer	Cash or securities held above minimum capital requirements that serve the special purpose of a safety-net from which losses incurred are first depleted.
Certificate of deposit (CD)	A commitment to deposit a fixed sum of money for a fixed period of time at a bank in exchange for interest. A depositor may withdraw the amount deposited before maturity by paying a penalty.
Commercial paper (CP)	An unsecured short-term debt instrument normally issued by large companies to finance their short-term liabilities. Maturities on commercial paper typically range from 1 to 270 days. CP is usually issued at a discount, reflecting prevailing market interest rates.
Committee of European Securities Regulators (CESR)	CESR is the predecessor of ESMA.
Competent authority	Any organisation that has the legally delegated or

	invested authority, capacity, or power to perform a designated function.
Constant NAV (CNAV)	CNAV MMFs seek to maintain an unchanging face value NAV (for example $1/€1 per unit/share). Income in the fund is accrued daily and can either be paid out to the investor or used to purchase more units in the fund. Assets are generally valued on an amortised cost basis. (Compare with VNAV)
Credit Default Swap (CDS)	A contract between a buyer and a seller of protection to pay out in the case that another party (not involved in the swap), defaults on its obligations. CDS can be described as a sort of insurance where the purchaser of the CDS owns the debt that the instrument protects; however, it is not necessary for the purchaser to own the underlying debt that is insured.
Directive	A legislative act of the European Union, which requires Member States to achieve a particular result without dictating the means of achieving that result. A Directive therefore needs to be transposed into national law contrary to regulation that have direct applicability.
European Securities and Markets Authority (ESMA)	The successor body to CESR, continuing work in the securities and markets area as an independent agency and also with the other two former level three committees.
European Systemic Risk Board (ESRB)	Was set up in response to the de Larosière group's proposals, in the wake of the financial crisis. This independent body has responsibility for the macro-prudential oversight of the EU.
European Union (EU)	An economic and political union of 27 member states.
Financial Stability Board (FSB)	It brings together national financial authorities and international standard setting bodies to coordinate, develop and promote the implementation of effective regulatory, supervisory and other financial sector policies at an international level. The FSB was mandated by the G20 Leaders to promote financial stability.
Floating Rate Note (FRN)	A debt instrument that has a floating coupon.
Hedging	The practice of offsetting an entity's exposure by taking out another opposite position, in order to minimise an unwanted risk. This can also be done by offsetting positions in different instruments and markets.
Idiosyncratic event	An event that causes the value of a financial instrument to change more or less than the market in general (but not in an abrupt or sudden way). In other

	words, it is an event that is uncorrelated to the overall market.
Institutional Money Market Funds Association (IMMFA)	The Institutional Money Market Funds Association is the trade association which represents the European triple-A rated CNAV money market funds industry.
Interest rate swap	A financial product through which two parties exchange flows; for instance, one party pays a fixed interest rate on a notional amount, while receiving an interest rate that fluctuates with an underlying benchmark from the other party. These swaps can be structured in various different ways negotiated by the counterparties involved.
International Organization of Securities Commissions (IOSCO)	A global cooperative body that promotes international cooperation amongst securities regulators. IOSCO facilitates cross-border cooperation and seeks to reduce global systemic risk, the protection of investors and to ensure fair and efficient securities markets.
Investor run	A large amount of redemption requests by investors in MMF. The cause is typically an expectation of large losses by the MMF. Losses are exacerbated as assets may need to be sold at sub-optimal prices due to the daily liquidity promised by MMFs to investors. These events trigger a downward spiral that increases the amount of investor redemption requests as no investor would want to remain invested in the MMF and bear the losses.
Liquidity	A complex concept that is used to qualify market and instruments traded on these markets. It aims at reflecting how easy or difficult it is to buy or sell an asset, usually without affecting the price significantly. Liquidity is a function of both volume and volatility. Liquidity is positively correlated to volume and negatively correlated to volatility. A stock is said to be liquid if an investor can move a high volume in or out of the market without materially moving the price of that stock. If the stock price moves in response to investment or disinvestments, the stock becomes more volatile.
Liquidity transformation	Similar to the concept of Maturity Transformation, liquidity transformation refers to the situation where a MMF accepts investments by investors in the form of cash and, in turn, invests the invested cash into less liquid assets.
M3	A “broad” monetary aggregate that comprises M2 plus repurchase agreements, money market fund shares and units as well as debt securities with a maturity of up to

	two years. A monetary aggregate is the currency in circulation plus outstanding amounts of certain liabilities of monetary financial institutions (MFIs) that have a relatively high degree of liquidity and are held by non-MFI euro area residents outside the central government sector. The Governing Council has announced a reference value for the growth of M3.
Mark-to-market	Accounting for the value of an asset or liability based on the current market price. The value of an asset or liability therefore fluctuates in accordance with the changes in market conditions.
Mark-to-model	Accounting for the value of an asset or liability on the basis of internal assumptions or financial models.
Maturity transformation	The situation where a MMF accepts investments by investors that mature or are redeemable in the short-term (daily) and, in turn, invests the invested amount into assets that have a longer term maturity date (such as 3 months).
Maximum residual maturity	The maturity until legal redemption, that is, the maturity used for calculating the WAL. The maximum residual maturity is the date at which the fund manager has certainty that the instrument will be reimbursed (maturity date).
MMF[55]	There are two categories of MMFs in the EU: 'Short-Term Money Market Funds' and 'Money Market Funds'. This approach distinguishes between short-term money market funds, which operate a very short weighted average maturity (WAM) and weighted average life (WAL), and money market funds which operate with a longer weighted average maturity (WAM) and weighted average life (WAL). For both categories of MMFs, CESR guidelines establish a list of criteria with which funds must comply with to use the label 'Money Market Fund'.
Money Market	The market, in which short-term funds are raised, invested and traded, using instruments which generally have an original maturity of up to one year.
Net Asset Value (NAV)	The term used to describe the price or value of the fund on a per share basis. The NAV is calculated by dividing the total value of all the assets in a portfolio, less any liabilities, by the number of outstanding shares in the fund.
Prime money market fund	A fund that may invest in high-quality, short-term

[55] As prescribed by the CESR Guidelines on a *Common Definition of European Money Market Funds* (Ref. CESR/10-049).

	money market instruments including Treasury and government obligations, certificates of deposit, repurchase agreements, commercial paper, and other money market securities.
Regulation	A form of European Union legislation that has direct legal effect on being passed in the Union.
Repurchase agreement (Repo / Sale and repurchase agreement)	Short-term secured loans, obtained by borrowers to fund their securities portfolios, and by lenders as a source of collateralised investment. A contractual agreement whereby one agrees to sell a security at a specified price with a commitment to buy the security back at a later date for another specified price.
Shadow NAV	The MMF price per share, calculated on the basis of mark-to-market valuation of the MMF assets. The shadow NAV reflects the current market value of the securities rather than the amortised cost of those securities. Because markets are constantly changing, the shadow NAV is constantly changing too. As a result, the shadow NAV normally differs from the NAV calculated on the basis of amortised cost (CNAV).
Sponsor support	Financial assistance provided to a MMF by its fund manager or a parent company or any other affiliated company. Sponsor support is typically provided to prevent disruptions to the operation of the MMF, such as to maintain a stable NAV and in the event of an investor run, in order to re-assure investors that they will not bear any losses by remaining invested in the MMF.
Time deposit (TD)	A time deposit is money that is deposited for a fixed period of time at a bank and cannot be withdrawn before such period of time has elapsed.
Treasury bill (T-bill)	A short-term debt obligation backed by the U.S. government with a maturity of less than one year. T-bills are sold in denominations of $1,000 up to a maximum purchase of $5 million and commonly have maturities of one month (four weeks), three months (13 weeks), or six months (26 weeks).
Undertakings for Collective Investment in Transferable Securities Directives (UCITS)	Undertakings for Collective Investment in Transferable Securities Directive, a standardised and regulated type of asset pooling.
Variable NAV (VNAV)	VNAV MMFs value their assets on the basis of the mark-to-market model, therefore, unlike CNAV MMFs, they allow for fluctuations in the NAV to reflect the current market value of the securities in the fund.
Volatility	The change in value of an instrument in a period of

	time. This includes rises and falls in value, and shows how far away from the current price the value could change, usually expressed as a percentage.
Weighted Average Life (WAL)	The weighted average of the remaining life (maturity) of each security held in a fund, meaning the time until the principal is repaid in full (disregarding interest and not discounting). Contrary to what is done in the calculation of the WAM, the calculation of the WAL for floating rate securities and structured financial instruments does not permit the use of interest rate reset dates and instead only uses a security's stated final maturity. WAL is used to measure the credit risk, as the longer the reimbursement of principal is postponed, the higher is the credit risk. WAL is also used to limit the liquidity risk.
Weighted Average Maturity (WAM)	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, assuming that the maturity of a floating rate instrument is the time remaining until the next interest rate reset to the money market rate, rather than the time remaining before the principal value of the security must be repaid. In practice, WAM is used to measure the sensitivity of a money market fund to changing money market interest rates.

2. ANNEX 2: DEFINITION OF EUROPEAN MMFS

2.1. MMF definitions

Rules governing MMF are currently scattered throughout different pieces of legislation, some taking the form of EU directives, some the form of guidelines developed by CESR and some the form of purely national legislation. All of these rules have a particular impact on the way the MMFs are structured and operate in Europe.

Commission Directive 2007/16/EC on assets that are eligible for UCITS funds introduces the possibility that UCITS funds can value money market instruments using either market data (mark-to-market method) or alternative valuation models including systems based on amortized costs. This implies that all UCITS funds can value MMF instruments on an amortized cost basis, as long as they respect the criteria defined in the Eligible Assets Directive, as well as an additional range of criteria defined in CESR guidelines on eligible assets. CESR guidelines introduced two conditions for allowing the use of amortized cost: either the asset has a maturity of less than 3 months; or the fund invests only in instruments with a remaining maturity of less than 397 days and has a Weighted Average Maturity (WAM) of less than 60 days. This distinction is at the origin of the separation between MMF businesses models that currently prevail in Europe.

When CESR decided to develop guidelines on MMFs, it based its definition on short-term MMF on the above mentioned CESR guidelines on eligible assets: short-term MMF have to invest in assets with a remaining maturity of less than 397 days and a maximum

WAM of 60 days. Short term MMF can maintain either a constant or a fluctuating NAV. This decision has the following consequences:

1. As the CESR definition of a short-term MMF coincides with the earlier CESR conditions for using the amortized cost (397 days and WAM of 60 days), all short-term MMF may use amortized cost to value their assets.

2. As CNAV MMF rely on amortised cost to reflect a stable share value, the latter must comply with the short-term MMF definition.

3. Variable or fluctuating NAV (VNAV) MMFs, which do not rely on amortized cost accounting to reflect a stable NAV, do not need to comply with the definition of short-term MMF. Nevertheless many VNAV MMFs are structured as short-term MMFs.

The current structure of the CESR guidelines has led to the following result:

1. Some Member States, such as France (FR), allow short-term VNAV funds to employ amortized cost for those assets with a remaining maturity inferior to three months.

2. Some other Member States, such as IE and LU, allow short-term MMFs to value all of their assets at amortized cost.

The second category of MMF developed by CESR, MMF, can invest in assets having a remaining maturity of up to two years and a WAM of six months. This means that the MMFs cannot apply amortized cost accounting to all their holdings but only to assets with a remaining maturity of less than three months. Thus CNAV MMFs are de facto excluded from this category. MMFs that are not structured as UCITS funds have only to respect the CESR guidelines on MMFs and their national rules since they are not subject to the provisions laid down in the Eligible Assets Directive or the CESR guidelines on eligible assets that apply only to UCITS.

Main characteristics of CESR distinction:

	Short Term MMF	**MMF**
Use of amortized cost	Assets with less than 3 months or entire portfolio	Assets with less than 3 months
NAV	Constant or Variable	Variable
WAM	60	6 months
WAL	120	12 months
Maximum residual maturity	397 days	2 years
Minimum rating	Two highest short term ratings	Two highest short term ratings Investment grade rating for sovereign issuance

These MMF characteristics as laid down in the CESR guidelines will serve as a basis for defining the core set of rules that will apply to MMFs in the new legislative text.

- Use of amortized cost and NAV: these two points will be modified according to the conclusions from the impact assessment.
- WAM, WAL, maximum residual maturity: these provisions will be maintained. They are already applied in almost all Member States where MMFs are domiciled; therefore there should be no impacts.

- Minimum rating: the high quality requirement for the money market instruments will be maintained while at the same time over reliance on ratings will be avoided, in accordance with the general policy of the Commission.

According to an ESMA peer review of the application of the guidelines on MMFs, 12 Member States have fully applied all provisions contained in the guidelines. These 12 Member States also coincide with the Member States where the MMFs are mostly domiciled. At the end of July 2012, 8 Member States have not transposed the guidelines in their national system and the rest of the Member States have applied the guidelines only partially.

2.2. Definition of money market instruments

MMFs invest in short-term instruments, usually referred as money market instruments (MMI). There are 4 different layers of definition:

1. UCITS directive (85/611/EEC), article 1(9): instruments normally dealt in on the money market.

2. The definition of MMI in the eligible asset directive (2007/16/EC), article 3, precise the meaning of instruments: instruments that are admitted to trading on a regulated market or not. The meaning of "normally dealt in the money market" shall be understood as a reference to financial instruments which fulfil one of the following criteria:

a. they have a maturity at issuance of up to and including 397 days,

b. they have a residual maturity of up to and including 397 days,

c. they undergo regular yield adjustments in line with money market conditions at least every 397 days,

d. their risk profile, including credit and interest rate risks, corresponds to that of financial instruments which have a maturity as referred to in points (a) or (b), or are subject to a yield adjustment as referred to in point (c).

3. The CESR guidelines on eligible assets (CESR/07-044) add the following precisions: no exposure to precious metals and prohibition of short selling. They give a list of instruments that usually comply with the criterion "normally dealt in on the money market": treasury and local authority bills, certificates of deposit, commercial paper and banker's acceptances.

4. The last layer of definition is contained in the CESR guidelines on MMFs (CESR/10-049):

- Deposits with credit institutions are added to the eligible assets for MMFs

- MMI must be of high quality, which is assessed according to the credit quality, nature of the asset class, for structured financial instruments the operational and counterparty risk and the liquidity profile.

- To assess the credit quality, the fund must refer to the two highest available short-term credit ratings awarded by each recognized credit rating agency.

- The assets must have a residual maturity until the legal redemption of less than 397 days (2 years for non short-term MMFs)

- Not take direct or indirect exposure to equity or commodities, including via derivatives; and only use derivatives in line with the money market investment strategy of the fund. Derivatives which give exposure to foreign exchange may only be used for hedging purposes. Investment in non-base currency securities is allowed provided the currency exposure is fully hedged.

- Limit investment in other collective investment undertakings to those which comply with the definition of a Short-Term Money Market Fund.

These 4 layers of definition represent the current scope for defining the eligibility criteria of the assets in which MMFs can invest.

In order to define MMI and precise the contours of the eligibility criteria in the law, most of these rules will be maintained and inserted in the new legislative framework that will apply to MMFs. These rules are mostly adequate to ensure that MMFs invest in assets in line with their low risk profile. There will be no impact because all Member States already apply the rules contained in the UCITS directive and the Member States where the MMFs are usually domiciled apply also the CESR guidelines.

2.3. IMMFA Code of practice

In addition to the previous rules, certain MMFs (only the CNAV) adhere to the code of practice established by the Institutional Money Market Funds Association (IMMFA). The rules contained in the code are mostly aligned with the 2a-7 rules in the US.

Concentration	Max 5% exposure to a single "family", may be raised to 10% for 5 days Max 25% for one single repo counterparty, except for sovereign and AAA Max 5% in illiquid assets (deposits and repos with more than 5 days maturity)
Liquidity	Min 10% of daily assets Min 20% of weekly assets
Redemption	Possibility to use in-kind redemptions
Valuation	Amortized cost and shadow mark to market NAV calculated once a week Escalation procedure when both values differ by a marginal amount (guidance provides 10bps, 15bps and 25bps difference)
Rating	Min AAA rating

The assets under management by IMMFA funds amount to around €515 billion, representing a bit more than 50% of all European MMFs. IMMFA makes a distinction, as in the US, between prime MMFs that invest in assets from all types of issuers and government MMF that invest in assets issued by sovereign entities. The breakdown is as follows:

In millions of EUR	Prime MMF	Government MMF
USD denominated MMFs	163'059	70'994
EUR denominated MMFs	96'432	6'912
GBP denominated MMFs	171'825	7'518

Source: IMMFA, October 2012

3. ANNEX 3: FACTS AND FIGURES OF THE EUROPEAN MMF INDUSTRY

The European MMF landscape is covered by different institutions that provide statistical data. The European Central Bank (ECB) closely monitors the MMF as part of its monetary policy. MMFs are classified as marketable instruments in the broad monetary aggregate M3. The ECB collects data on all MMFs domiciled in the EU but puts the emphasis on MMFs domiciled in Eurozone countries only. The provider of fund data, Morningstar, collects data on all investment funds worldwide and therefore has a detailed database for all EU domiciled MMFs. Data from IMMFA represents a good proxy for MMFs domiciled in LU and IE since the majority of their MMFs follow their code of practice.

The European Systemic Risk Board (ESRB) conducted a survey of the European MMF industry in September and October 2012. The survey covers approximately 70% of the MMFs in Europe. The data are very useful as they permit to complement other data or to gain access to data that were not previously available.

3.1. List of EU countries where MMFs are domiciled

	France		Ireland		Luxembourg		Spain		Italy		Germany		Total sample	
	# of funds	AUM	# of funds	AUM	# of funds	AUM	# of funds	AUM	# of funds	AUM	# of funds	AUM	# of funds	AUM
CNAV	0	0	65	272,973	57	132,266	0	0	0	0	0	0	122	405,239
	0.0%	0.0%	66.3%	88.2%	19.1%	52.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.7%	41.4%
ST-VNAV	111	185,800	3	11,701	6	23,409	4	208	0	0	0	0	124	221,118
	25.5%	47.0%	3.1%	3.8%	2.0%	9.3%	5.6%	2.3%	0.0%	0.0%	0.0%	0.0%	12.9%	22.6%
VNAV	95	141,800	6	8,707	7	19,375	67	8,774	13	7,855	18	4,213	206	190,723
	21.8%	35.9%	6.1%	2.8%	2.3%	7.7%	94.4%	97.5%	92.9%	99.0%	37.5%	69.3%	21.4%	19.5%
Unknown	229	67,743	24	16,089	228	75,560	0	18	1	79	30	1,864	512	161,353
	52.6%	17.1%	24.5%	5.2%	76.5%	30.2%	0.0%	0.2%	7.1%	1.0%	62.5%	30.7%	53.1%	16.5%
Total(*)	435	395,343	98	309,471	298	250,610	71	8,999	14	7,934	48	6,077	964	978,434

(*) source ECB

	Total assets in €	EU share	Number of funds	% of MMFs' assets under UCITS regime	% of MMFs registered as UCITS
France	381,676,240,628	40.00%	455	71.83%	44.40%
Ireland	284,551,725,662	29.82%	108	85.67%	75.00%
Luxembourg	240,294,204,306	25.19%	262	92.60%	73.28%
Sweden	11,869,036,737	1.24%	28	97.48%	96.43%
Spain	11,073,501,828	1.16%	111	70.71%	66.67%
UK	9,363,817,338	0.98%	34	27.79%	64.71%
Germany	4,722,223,477	0.49%	14	99.83%	92.86%
Finland	4,255,528,408	0.45%	12	90.33%	75.00%
Portugal	1,947,879,298	0.20%	12	11.62%	33.33%
Italy	1,398,696,481	0.15%	6	100.00%	100.00%
Poland	1,098,031,440	0.12%	14	20.32%	14.29%
Belgium	869,273,837	0.09%	11	19.67%	27.27%
Austria	724,803,397	0.08%	10	84.60%	60.00%
Netherlands	152,663,642	0.02%	1	0.00%	0.00%
Greece	37,359,042	0.004%	2	100.00%	100.00%
Latvia	21,897,119	0.002%	1	0.00%	0.00%
Lithuania	12,029,091	0.001%	1	100.00%	100.00%
Denmark	2,819,086	0.000%	1	100.00%	100.00%

Slovenia	869,959	0.000%	1	100.00%	100.00%
	954,072,600,776		**1,084**	**81.09%**	**59.59%**

Source: Morningstar, Commission own calculation, September 2012

The above table shows FR, IE and LU as the three leading domiciles for MMFs in Europe, enjoying around 95% of the EU share. Assets under the UCITS regime in the whole EU represent more than 80% of the total whereas funds registered as UCITS account for around 60% of the total. Around the three main domiciles, we notice a higher proportion of UCITS assets and funds in IE and LU than in FR.

The MMF characteristics differ between the three main jurisdictions. IE and LU almost entirely host MMFs following a CNAV model, allowing the use of amortized cost for the entire portfolio of short-term MMF, whereas all MMFs domiciled in FR can use amortized cost only in the last three months of an asset. In the CESR definition, CNAV funds are only in the short-term category. The VNAV are split between the short-term MMF category and the MMF category. They appear according to these categories in the ESRB survey.

The data from the ESRB survey match more or less the data collected by Morningstar regarding the total size of the European MMF sector (954 billion vs. 978 billion) and the size of each fund domicile. The table below is interesting because it adds a further layer of information: the split between CNAV, short term VNAV and VNAV.

Another source of data can be used to identify the weight of MMFs in each Member State. ESMA conducted a peer review of the application of the CESR guidelines on MMFs and Member States were asked to provide data regarding their own market. They are provided in the following table. The assets are generally have been measured at mid 2012.

	Short-Term MMF		MMF		Amount of assets under management		Amount of assets under management	
					ST-MMF		MMF	
	UCITS	Non-UCITS	UCITS	Non-UCITS	UCITS	Non-UCITS	UCITS	Non-UCITS
AT	0	0	7	0	0	0	405	0
BE	2	0	4	3	165	0	411	96
BG	0	0	7	0	0	0		0
CY	0	n/a	0	n/a	0	n/a	0	n/a
CZ	0	0	1	2	0	0	3	101
DE	0	0	24	0	0	0	4,089	0
DK	0	0	1	1	0	0	DKK 1,412	n/a
EE	0	0	0	0	0	0	0	0
EL	5	n/a	17	n/a	52	n/a	673	n/a
ES	1	3	36	31	47	160	4,630	4,127
FI	3	0	10	0	843	0	2,925	0
FR	91	204	90	256	140,465	81,471	132,090	43,298

HU	0	32	0	25	n/a	n/a	n/a	n/a
IE	89	8	4	1	295,741	7,769	1,037	929
IT	0	0	12	0	0	0	8	0
LI	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LT	0	0	1	0	0	0	12	0
LU	60	35	70	38	214,204	32,963	39,506	12,677
LV	0	0	2	0	0	0		0
MT	0	4	0	2	0	32	0	197
NL	0	0	1	0	150	0	150	0
PL	0	0	2	0	0	0	196	0
PT	0	0	0	9	0	0	0	275
RO	0	0	1	0	0	0	3,690	0
SE	10	3	10	1	18bn SEK	0.2bn SEK	52bn SEK	1bn SEK
SI	0	0	3	0	23	n/a	23	0
SK	0	0	2	0	0	0	17	0
UK	7	3	7	1	n/a	n/a	n/a	n/a

Source: ESMA (amounts in Millions of Euros unless otherwise specified). n/a indicates that the Member State has not provided the information.

3.2. Type of investors

	Financial sector	Non-financial companies	Direct private investors	Others
France	49%	26%	9%	12%
IMMFA	49%	28%	5.3%	17.7%

Source: France: "Ce que détiennent les OPCVM français" Banque de France
IMMFA: IMMFA and HSBC response to the EC consultation.
The financial sector classification includes in FR: banks, insurances, MMFs, other investment funds
The category "Others" in IMMFA data include wholesale distributors for 7.2% and portals for 5.6%

IMMFA further notices in its response to the consultation that the percentage of non-financial companies (corporate treasurers) listed at 28% underestimate their true proportion because they often use financial institutions, portals and distributors. Therefore they believe that the majority of their clients are corporate.

IE and LU MMFs are predominantly held by non-domestic investors, their domestic investor base is very small (around 5%). Other countries have to the contrary a large domestic investor base (around 80-90%) and only a minor proportion of assets detained by non-residents.

Regarding the domicile of investors, IMMFA[56] indicates that European investors represent 78% of their investor base, as of December 2010.

[56] "Money Market Funds in Europe and Financial Stability", ESRB, June 2012

3.3. Portfolio composition by sector

Allocation of investments by type of fund and by counterpart sector

	MFIs	Non-financ. Corp.	Government	Other Financ. Intermediaries
1 -C-NAV	73.9%	12.3%	10.8%	2.9%
2 - Short term V-NAV	79.7%	11.2%	8.4%	0.7%
3- V-NAV (excl. ST V-NAV)	74.7%	7.9%	16.0%	1.4%
1 - UCITS	75.5%	11.0%	11.3%	2.2%
2 -non-UCITS	73.7%	12.6%	12.5%	1.2%
Total	75.3%	11.1%	11.4%	2.1%
Total from ECB data [1]	75.5%	6.6%	11.1%	6.9%

Source: ESRB survey.

This table shows that each type of fund performs almost the same investments. Around 75% is invested in monetary financial institutions (mainly banks), the rest being split between corporate and government assets.

Selected breakdown of MMF investment by region and sector

	CNAV funds based in Ireland				CNAV funds based in Lux.				VNAV funds based in France				Funds based in IT, ES and DE			
	MFI	NFC	Gov.	OFI	MFI	NFC	Gov.	OFI	MFI	NFC	Gov.	OFI	MFI	NFC	Gov.	OFI
Domestic	5,253	1,531	57	2	2,482	20	584	0	109,905	12,087	4,709	555	6,390	213	10,093	101
Other EU	75,270	12,053	6,997	808	46,404	9,414	6,237	3,631	53,949	11,218	1,732	50	1,887	338	1,345	136
RoW	128,173	18,440	19,188	6,213	28,133	6,101	8,669	735	3,100	678	0	0	284	54	237	8

Source: ESRB survey. MFI=Monetary Financial Institution, NFC=Non Financial Corporation, Gov= Government, OFI=Other Financial Institution, RoW=Rest of the World

This table shows that funds in IE and LU are mostly invested in non-domestic assets (domestic assets represent 2.5% for IE and 2.8% for LU) whereas funds in other countries play a large role in buying domestic debt. This also confirms that monetary financial institutions are the main issuers of instruments bought by MMFs.

3.4. Portfolio composition by asset type

Regarding IMMFA only, IMMFA provides this classification in its response to the consultation:

	Fund count	Assets (currency millions)	Treasury	Govt Other	Repo	TDs	CDs	CP	ABCP	FRNs	Other
USD Prime funds	22	210,562.0	2	3	17	13	18	35	4	7	1
EUR Prime funds	22	98,721.5	5	3	7	26	18	33	4	4	0
GBP Prime funds		136,735.3	1	2	7	22	28	33	2	5	0

Treasury: US Treasury securities, Govt Other: securities issued by other governments, Repo: repurchase agreement (usually collateralized with government assets), TD: Time Deposit, CD: Certificate of Deposit, CP: Commercial Paper, ABCP: Asset Backed Commercial Paper, FRN: Floating Rate Note

The ESRB survey has collected the information for each type of MMF:

	Cash	Money market instruments	o/w to MFIs	Repos	o/w to MFIs	ABS	Government debt	Other instruments/ not allocated (*)
1 -C-NAV	7.9%	63.3%	51.5%	8.6%	8.5%	1.2%	10.8%	8.5%
2 - Short term V-NAV	4.0%	77.5%	67.3%	5.8%	5.8%	0.1%	8.4%	4.5%
3- V-NAV (excl. ST V-NAV)	5.3%	66.5%	59.1%	5.3%	5.2%	0.0%	16.1%	7.0%
1 - UCITS	6.3%	66.3%	56.0%	8.1%	8.0%	0.8%	11.3%	7.7%
2 -non-UCITS	8.9%	73.6%	61.1%	1.2%	1.2%	0.1%	12.6%	4.1%
Total	6.5%	67.0%	56.4%	7.3%	7.2%	0.7%	11.5%	7.3%

Source: ESRB survey.

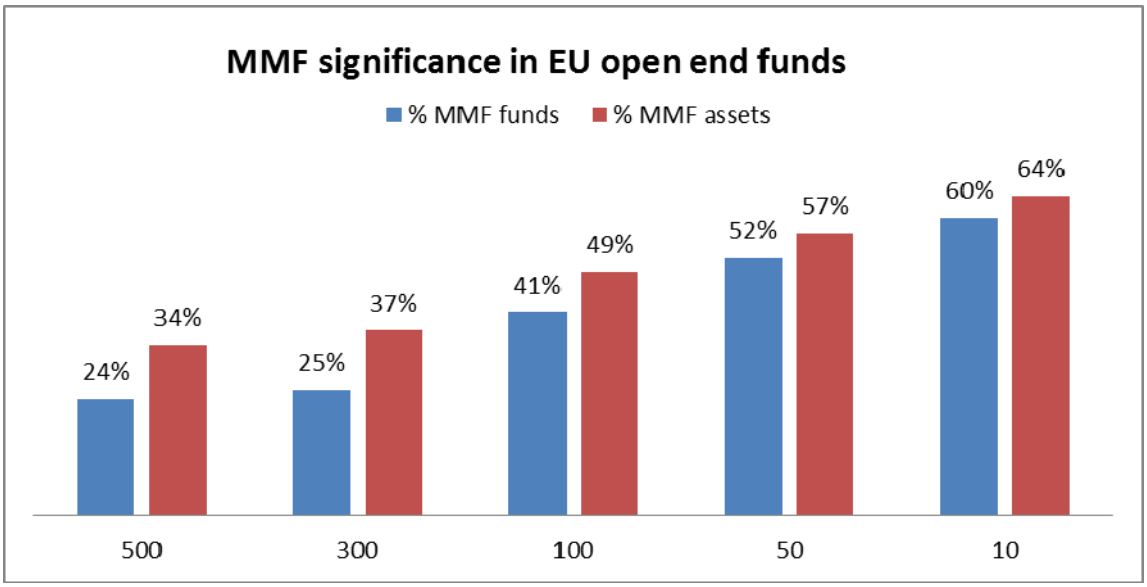
Breakdown of assets by type of fund and by maturity bucket:

	1 day or below/overnight	> 1 day; <= 1 week	> 1 week; <= 1 month	> 1 month; <= 3 months	> 3 months; <= 6 months	> 6 months; <= 1 year	> 1 year; <= 397 days	> 397 days (for MMFs other than STMMFs)
1 -C-NAV	25.8%	11.0%	17.4%	27.8%	12.2%	5.7%	0.0%	0.0%
2 - Short term V-NAV	16.9%	4.8%	18.3%	41.0%	13.0%	5.9%	0.0%	0.0%
3- V-NAV (excl. ST V-NAV)	12.4%	3.3%	13.5%	32.7%	20.4%	16.3%	1.5%	2.4%
1 - UCITS	22.1%	6.8%	17.0%	31.8%	13.7%	8.2%	0.4%	0.6%
2 -non-UCITS	14.5%	2.7%	15.3%	36.5%	19.7%	10.8%	0.4%	0.3%
Total	20.6%	7.7%	16.7%	32.1%	14.3%	8.3%	0.4%	0.6%

Source: ESRB survey

3.5. Systemic significance of the MMFs in Europe

In average the MMFs are much larger and much more concentrated than any other type of investment fund. According to EFAMA the net assets of the European fund industry reached 8'658 billion EUR at the end of August 2012, which makes the proportion of MMFs around 11% of that total. But from the biggest EU open end investment funds, the MMF proportion rises considerably, as evidenced in the following graph. Almost 50% of the assets of the 100 biggest EU open end funds are held by MMFs.



Source: Morningstar, Commission own calculation, September 2012
The horizontal axis represents the 500, 300, 100, 50 and 10 biggest EU funds. The vertical axis shows the proportion of MMF assets and funds in that total.

According to the Morningstar database, the MMF assets are also extremely concentrated because the 200 biggest MMFs totalize more than 86% of the entire MMF assets, 22 MMFs have assets surpassing 10 billion Euros and the biggest MMF has more than 50 billion Euros of assets. As listed in the following table, the size of the biggest European MMF providers is very significant. These figures do not take into account the US market where some of these providers are also engaged in MMF activities and which would largely inflate some figures.

	MMF provider	Total EU MMF assets in EUR
1	JPMorgan	118,414,166,972.99
2	Amundi	83,695,650,747.26
3	BNP Paribas	74,207,688,909.29
4	Goldman Sachs	59,758,792,060.69
5	BlackRock	58,040,252,658.05
6	Natixis	39,426,042,403.29
7	CM-CIC	37,155,834,834.34
8	HSBC	32,448,445,062.33
9	Deutsche Bank	27,624,299,858.37
10	BNY Mellon	27,509,914,850.55

Source: Morningstar, Commission own calculation, September 2012
The different MMF providers have been grouped under the heading of their parent company.

4. ANNEX 4: MARKETING PRACTICES

One of the reasons that make believe the investors that they invest in a product as stable and liquid as bank deposits is linked to the definition of MMF and the message used by the providers.

- Definition contained in the CESR guidelines on MMFs: "A short-term Money Market Fund or a Money Market Fund must have the primary objective of maintaining the principal of the fund and aim to provide a return in line with money market rates."

- IOSCO (27 April 2012) describes MMF as "an investment fund that has the objective to provide investors with preservation of capital and daily liquidity"

- IOSCO describes investor's expectations as follows: "investors have come to regard MMFs as extremely safe vehicles that meet all withdrawal requests on demand and are in this sense, similar to bank deposits"

Here below are examples of investment objectives written in the marketing documents of the funds (examples chosen among the 10 biggest European MMFs). All these funds follow the CNAV system.

- Investment objective of JPMorgan Liquidity Funds: "To achieve a competitive level of total return in the reference currency consistent with the **preservation of capital and a high degree of liquidity**."

- Investment objective of Goldman Sachs Liquid Reserves Fund: "For investors seeking to maximise current income to the extent that it is consistent with the **preservation of**

capital and the maintenance of liquidity by investing in a diversified portfolio of high quality money market securities."

- Investment objective of BlackRock Institutional Sterling Liquidity Fund: "The Institutional Sterling Liquidity Fund (the Fund) seeks to maximise current income consistent with the **preservation of principal and liquidity** through the maintenance of a portfolio of high quality short-term "money market" instruments."

- Insight Investment ILF GBP Liquidity fund: "The investment objective of the Fund is to provide investors with **stability of capital and of Net Asset Value per Share (in the case of the Stable Net Asset Value Shares) and daily liquidity** with an income which is comparable to sterling denominated short dated money market interest rates."

- Legal & General Investment Management Sterling Liquidity Fund: "To provide an income whilst offering **daily access to liquidity and maintaining the value** of the investment."

Here below are other examples provided during the regulatory debate:

- Fidelity's 2011 survey reveals that retail and institutional investors overwhelmingly indicated that they first and foremost invest in US MMF for **safety of principal and liquidity**"

- BlackRock Lobbying and investor brochure (August 2011) 'the principle focus of MMF is **capital preservation, liquidity management** and operational ease of use – not yield

- BlackRock, same brochure, short-term MMF managed to the same objectives: **capital security, liquidity**, operational ease

- ICI, MMF brochure 2012: "throughout the history of MMF, investors have benefitted from the convenience, **liquidity, and stability** of these funds. Individual or retail investors use money market funds as **savings vehicles** to amass money for future investments and purchases".

- HSBC, Proposal for MMF reform, November 2011: 'there are important differences between the operation of a MMF and a typical investment fund …. First, the pricing mechanism of a MMF means that an investor who invests today and then experiences a sudden need for cash tomorrow can redeem at **minimal risk of loss of principal, even if interest rates have risen in the intervening period**."

- JP Morgan, MMF Strategy review, September 2011: "This growth [UCITS MMF] is partly a result of further maturity of the European market, as more investors become familiar with the product in their search for **security and liquidity**".

- ICI, Testimony before the US Senate (June 2012): "Today over 57 million retail investors, [….] rely on the MMF industry as a low cost, efficient cash management tool that provides a **high degree of liquidity, stability of principal value**, and market based yield".

5. ANNEX 5: EUROPEAN MMFS THROUGH THE CRISIS

Different studies have been conducted and some information is available that gives an illustration of the consequences of the crisis in Europe. These data should be analysed carefully as they are not representative of the entire magnitude of the crisis. Some problems such as liquidation and suspension of redemptions were avoided due to the support provided by some sponsors. It is difficult to give a broad picture of this support but there is a study conducted by Moody's and some individual known supports.

5.1. List of known 2007 events on European MMFs

Date	Domicile	Name of the funds	Cause	Event	Source
Summer 2007	LU	Axa IM US Libor Plus Strategy	100% invested in ABS that fall in value	AXA bailed out the 740m fund	"Axa picks up tab on sub-prime fund", Financial News, 02/08/2007
Summer 2007	FR	Oddo 3 fonds monétaires dynamique	Valuation problems in certain assets	Suspension and liquidation: guarantee for retail investors (cost: 25mio) and low redemption levels for others	ODDO press communiques
Summer 2007	DE	Union Investment ABS Invest Fund	Investment in subprime mortgage loans	Suspension of redemptions after 100mio of redemptions from 950mio total	"Union Investment Halts Redemptions From Bond Fund", Bloomberg, 04/08/2007
Summer 2007	DE	Frankfurt Trust - ABS Plus	Investment in ABS and CDOs	Suspension of redemptions following redemption requests amounting to ¼ of the fund	"Frankfurt Trust freezes fund on investor fears", FT, 07/08/2007
Summer 2007	LU	WestLB Mellon Compass ABS fund	Investment in ABS	Suspension of redemptions after inability to calculate the NAV	"WestLB Mellon venture freezes assets", FT, 07/08/2007
Summer 2007	LU & FR	Different BNP ABS funds	Investment in ABS	Suspension of redemptions after inability to calculate the NAV: 400m redemption from 2bn	BNP Paribas Press release 09/08/2007
Summer 2007	LU & FR	DWS ABS Fund	Investment in ABS	Haircut of 2.6% after 900m of redemptions from 2.1b	"DWS keeps ABS fund open as US sub-prime crisis ebbs", IPE 13/08/2007

Other funds suffered troubles during the ABS crisis. At least 5 other funds (known from our services) encountered similar problems. In addition to the 2 identified sponsor supports (AXA and Oddo), at least two others are known for 2007:

Date	Name of the sponsor	Cause	Event	Source
2007	Société Générale	Lack of liquidity in dynamic MMF	200m of money provided to ensure liquidity for the clients	4ème actualisation du document de reference 2007, SG

2007	Barclays	Lack of liquidity	£276m of money provided to guarantee difference between mark to market and par	"Shadow Banking and Financial Stability: European MMFs in the global financial crisis", Bengtsson, 2012

The 2007 events were entirely driven by the difficulties encountered in the ABS market in the US. At that time, a lot of MMFs were invested in ABS in order to offer returns above the normal money market rate. They were usually designed as dynamic or enhanced MMFs. Most of these funds were not classified as MMF according to the national legislations but were considered by investors as MMF equivalent. Especially in France, none of the funds that had to suspend redemptions did comply with the then applicable regulation on money market funds[57]. Nowadays these funds do not exist anymore.

5.2. List of known 2008 events on European MMFs

----------CONFIDENTIAL----------

CESR /08-837: responses to the questionnaire on the impact of recent market events on money market funds

CESR sent a questionnaire during the 2008 turmoil to assess the situation on MMFs in Europe. 15 Member States responded:

AT	8 funds currently suspended. Inability to face redemption orders. One fund suspended since 2007
BE	No identified problems
DK	No identified problems
ET	Problems with the use of amortized cost
FI	Increasing amount of redemptions combined with liquidity crisis. Fall in NAV of the funds.
DE	Secondary market for MMI is illiquid. Use of mark to model to value assets. Significant redemption requests. Scarcity of short term government bonds, only few short term securities. Will lead soon to suspension of redemptions.
GR	Decline of 6.35% in domestic UCITS NAV and 20.15% decline in foreign UCITS NAV due to redemptions
HU	No identified problems
IE	Increased redemptions but only 3 funds suspended redemptions (3 Lehman funds). a certain flight to quality was observed.
IT	No major difficulties. Steady increase of redemptions but funds was able to face them.
LU	3 funds suspended redemption due to illiquidity and valuation problems.
PT	Asset valuation issues
ES	Temporary partial redemption for one MMF because investments in CDOs
SE	No identified problems
UK	No identified problems even if higher redemptions

Some funds have benefited from support from their parent company:

IE	Cash injections, direct credit support to cover realized and unrealized losses, or direct purchase of assets at amortized cost rather than market value

[57]Consultation report of the IOSCO standing committee 5, Working group on Money Market Funds

DE	direct purchase of fund units
PT	Injection of cash or lending
UK	Support from depositary to a number of institutional funds

The Member States did not give precise number on the number of occurrences and the total amount of such support.

It is difficult from this information to draw precise conclusions. The most evident one is that funds suffered from a sudden dry of liquidity in money market instruments associated with troubles to precisely value the assets. This crisis was not anymore only driven by the problems on the ABS market but more by a general liquidity crisis of all money market instruments, especially the commercial papers issued by financial institutions.

Some public information exists on the sponsor support provided in 2008 by European asset managers.

- Moody's, "Sponsor Support Key to Money Market Funds": the study has analysed the support received by CNAV funds enabling them to maintain the stable value. The main conclusion is as follows: "even well-managed money market funds investing in high quality short-dated securities may experience a material decline in their mark-to-market value and/or shortage of liquidity within their underlying securities". Over the history of MMFs, more than 200 CNAV MMFs in Europe and the US received sponsor support. Before the crisis Moody's tracked 69 European CNAV MMFs and identified one occurrence of sponsor support in 2002. In the US Moody's recorded 145 MMFs that would have broken the buck without the support of their sponsor. During the financial crisis (August 2007 to December 2009), 26 funds in Europe received support and 36 in the US. At least 20 managers were identified in the US and in Europe that have provided support for an estimated amount of $12.1 billion.

- CSSF 2008 annual report: "*Pursuant to Article 50(2) of the law of 20 December 2002 on undertakings for collective investment as amended, certain money market funds had to temporarily take out short-term loans to finance their redemptions*." However the exact amount of support is not provided.

- Société Générale (reference document 2009): the precise amount of support is not provided but it is indicated that the negative results of the bank include support to the liquidity of dynamic MMFs and valorisation adjustments of certain assets.

- Deutsche Bank (2008 annual report): €150 million injected into consolidated MMFs

5.3. Graphs of MMF assets in Europe

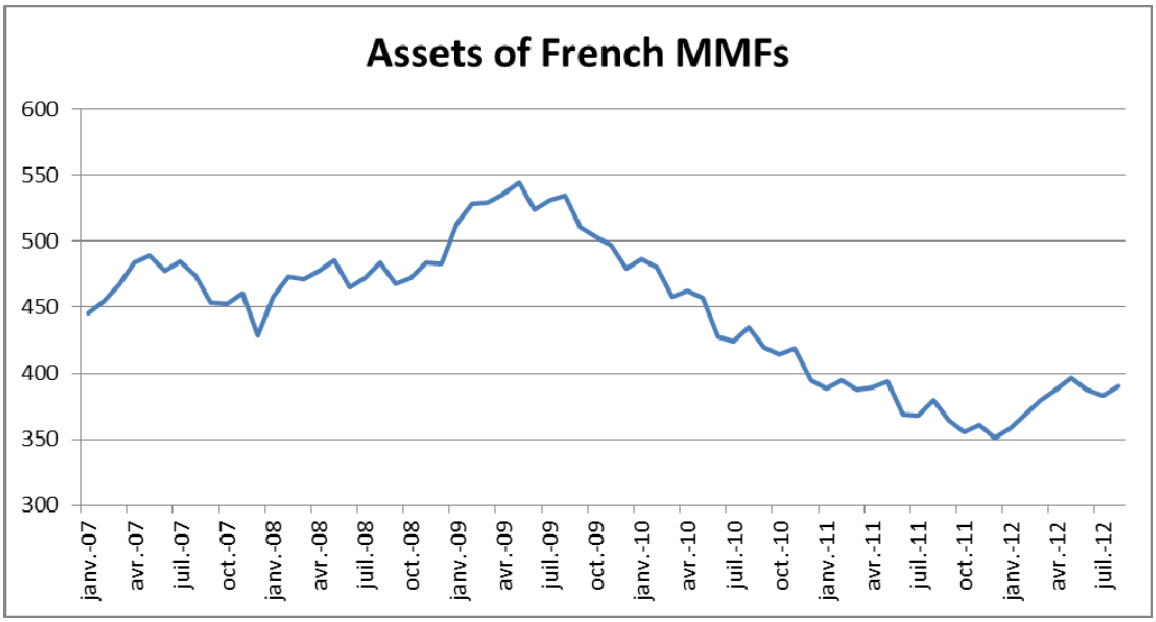
Central banks provide data on the evolution of MMF assets over the past. Data from FR, LU and ECB have been retrieved but it was impossible to find equivalent data from the Central Bank of Ireland. Data from the IMMFA MMFs (CNAV funds) are also available. There is a general trend of asset increase till 2009 followed by a continuous decline till now. We see that French MMFs did not experience a decline in 2008 (but a decline in the second semester of 2007 linked to the ABS crisis) and we also see that IMMFA MMFs

suffered an important decline in the fourth quarter of 2008. This shortfall is not visible in LU data but would maybe be observable in IE data. Since data from IE are missing, we can extrapolate the following:

	Sep-08	Dec-08	Change
FR	467.7	483.2	+15.5
LU	326.6	340.2	+13.6
IE	*387*	*347*	*-40*
ECB	1261.3	1250.4	-10.9

We know the data from FR, LU and ECB. From the hypothesis that other Member States did not experience a massive outflow (which is unlikely due to their relative small proportion in total MMF assets); we can assume that IE MMFs suffered a loss of around €40 billion during the last quarter of 2008. This would make sense with IMMFA data. The difference between these €40 billion EUR decline and the 25% decline observed in IMMFA graph may be explained by the difference in the selected time frame. The 25% decline was directly followed by an equivalent increase, therefore over the quarter the loss is less than 25%. These data give an indication that the funds domiciled in IE experienced a run whereas the funds domiciled in LU and FR did not.

7.1.1. *France*



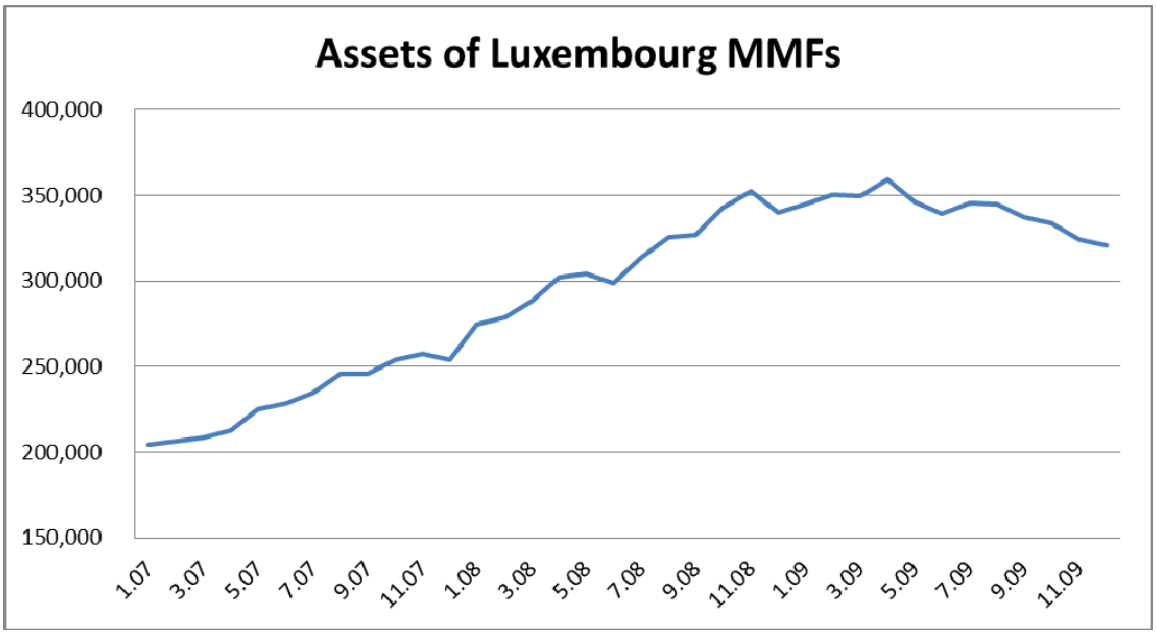
Source: Banque de France, numbers in billion

This graph highlights that the French MMFs registered declines in assets during the second semester of 2007. This corresponds to the time where some "dynamic" MMFs triggered panic among investors which spreads to the classic MMFs. The 2008 crisis is not marked by any decline but rather by an increase of the assets. This is evidence that the French MMFs were not affected by the US turmoil following the collapse of Lehman Brothers.

7.1.2. *Luxembourg*

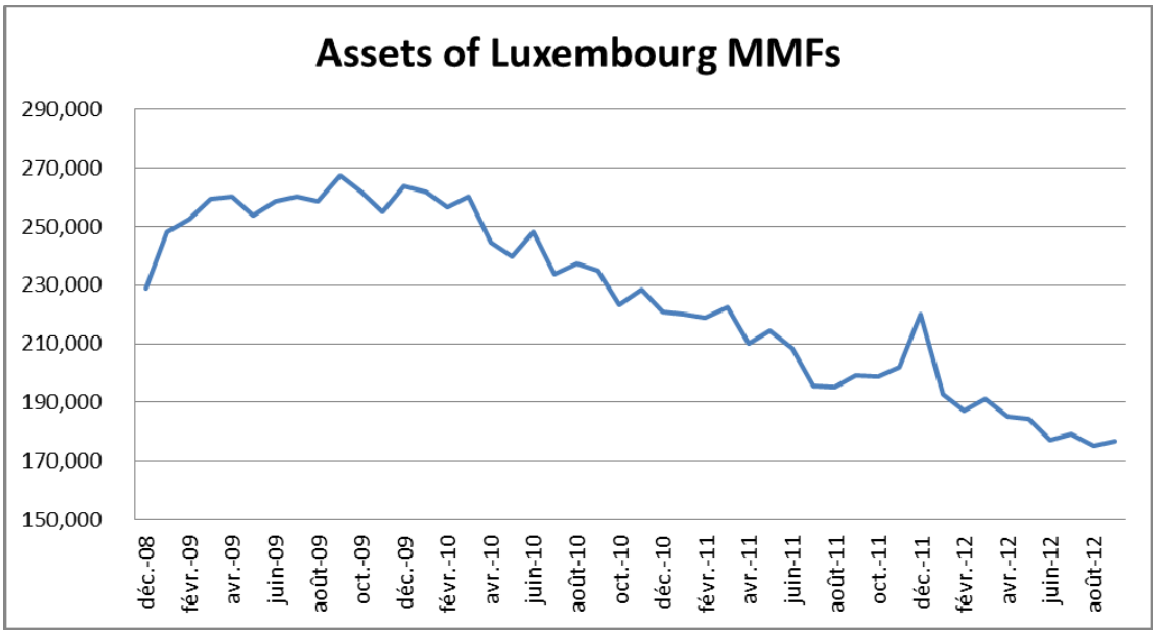
We provide two graphs for the LU MMFs since the Banque Centrale du Luxembourg provides two series of data that are not directly comparable. The first series of data does not integrate the new CESR definition whereas the second one does, which substantially

decrease the assets of the LU MMFs. However we can observe a pattern equivalent to France where the assets were growing till 2009 before declining till 2012.



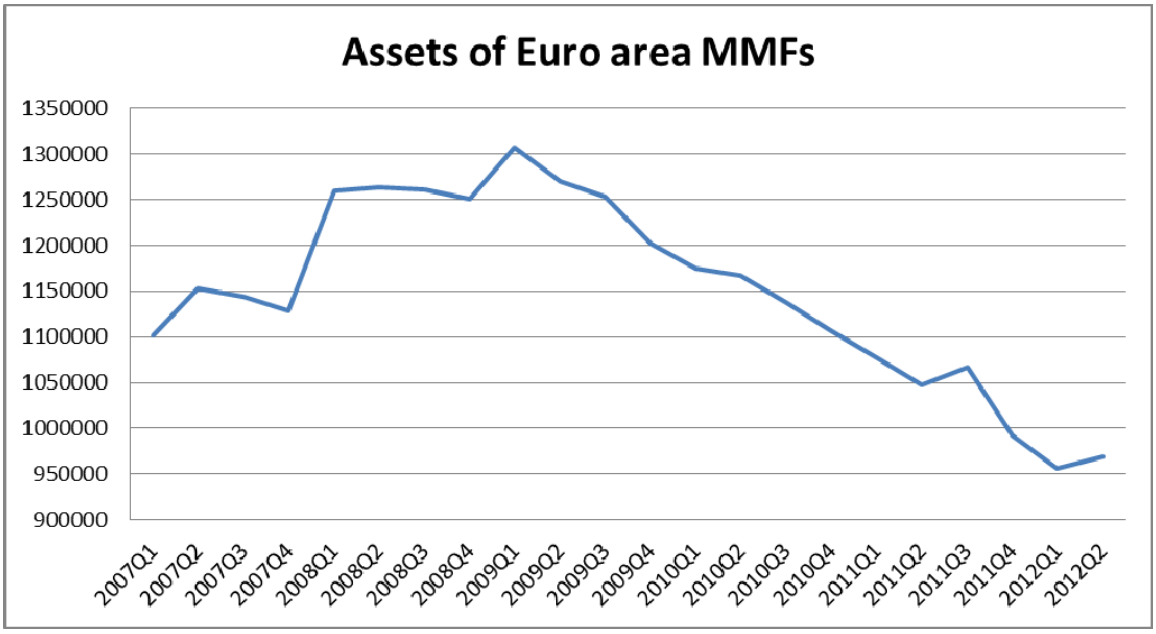
Source: Banque Centrale du Luxembourg, numbers in million

As shown in the graph, the MMFs in Luxembourg were not materially impacted by the different crisis. We cannot detect any substantial decline in the assets of the MMFs.



Source: Banque Centrale du Luxembourg, numbers in million

Euro area



Source: European Central Bank, number in million

The ECB collects the MMF data from the 17 Member States that have adopted the Euro as currency. Units of these MMFs detained by Euro area residents are included in the definition of the M3 monetary aggregate. The Euro area figures represent more than 97% of all MMF assets in the European Union. From the chart we can notice the same pattern observed for FR and LU, with an increase in assets till the beginning of 2009 followed by a continuous decline till 2012. This may be explained by the sovereign crisis that started in 2009 that may have altered the confidence of the investors in the stability of the European market as a whole. The decline between mid-2011 and 2012 is explained by a new statistical definition of the MMFs.

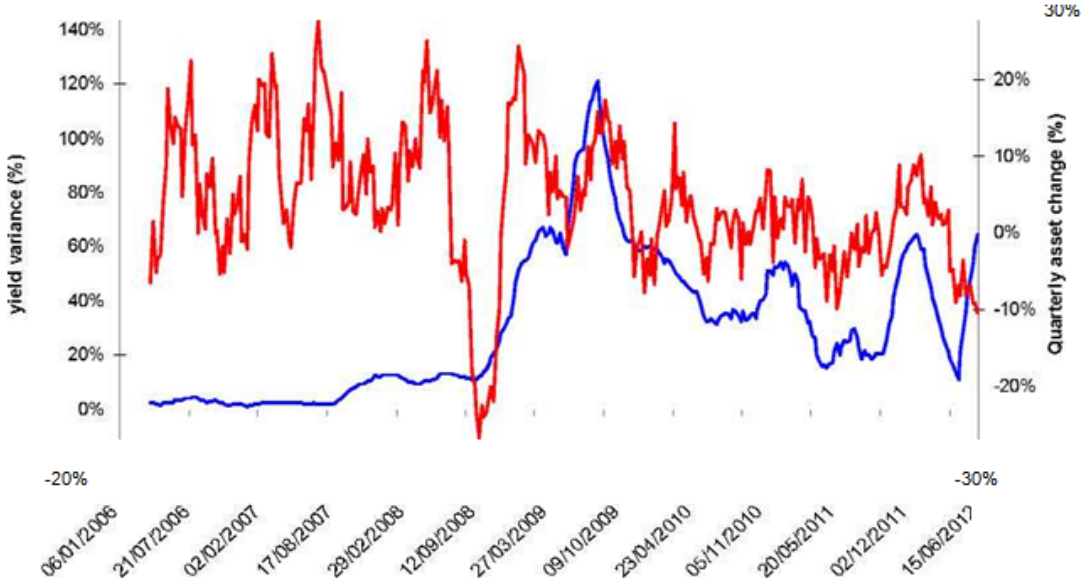
Following the adoption by CESR of new MMF guidelines, the Governing Council of the ECB decided in August 2011 to adopt the new CESR definition by the means of an ECB regulation[58]. According to the ECB[59] the new definition "*significantly alters the picture of the money market fund industry in some Member States*". The ECB evaluates the drop since July 2011 in the reporting population of €193.7 billion (18% of the assets), mainly coming from drops in Ireland (-28%) and Luxembourg (-22%). This may be explained by the fact that some funds did not want to comply with the new CESR guidelines and preferred to be reclassified in the bond fund category, not subject to these new guidelines.

7.1.3. *IMMFA MMFs*

In its response to the EC consultation, HSBC and IMMFA provided a graph explaining that there is no clear relationship between the deposit rates and the flows in MMFs. But this graph also tells us that the IMMFA funds suffered approximately a 25% decline in assets following the US events. This decline is further confirmed by the subsequent IMMFA graph.

[58] Regulation ECB/2011/12
[59] ECB Monthly Bulletin April 2012

MMF quarterly asset flows and yield variance versus EONIA



Blue line: IMMFA monthly average gross yield variance monthly versus EUR O/N Libor (percentage)
Red line: Quarterly asset change

Assets under management in billions of Euro

Source: IMMFA

5.4. Governmental support

The ECB has taken concrete actions since the summer 2007 to mitigate the liquidity problems. In 2008 it extended the list of assets eligible as collateral for ECB credit operations. This expanded the estimated outstanding collateral available for ECB credit from about €10 trillion to around €11.5 trillion. A key element of the broadening of eligible collateral is the inclusion of certificates of deposits traded on non-regulated markets. Finally the reduction of interest rates such as the marginal lending facility rate to 3.75% was also providing significant relief to most participants.

On 19th November, Jürgen Stark, member of the executive board of the ECB said: *"The mandate of the ECB is to maintain price stability over the medium term. This mandate must be adhered to both in normal times and times of crisis (…) There is absolutely no reason to deviate from this approach during times of crisis. This being said, the ECB, in cooperation with other central banks, has shown remarkable flexibility in terms of liquidity provision. This flexibility was necessary in order to avoid the breakdown of the interbank market, which is a very important transmission channel for monetary policy."*

Germany: *"Die Bundesbank wird rasch Schritte ergreifen, die Liquidität von nach deutschem Recht errichteten Geldmarktfonds und geldmarktnahen Fonds sicherzustellen. Dies kann über die befristete Bereitstellung von Sonderliquiditätshilfen gegen Sicherheiten bei der Deutschen Bundesbank erfolgen."*

6. ANNEX 6: US MMFS THROUGH THE CRISIS

6.1. Description of 2007 and 2008 events

The US market experienced only one occasion before the crisis where a MMF broke the buck. Otherwise no major event was recorded, except the supports provided from time to time from the sponsor. The US MMFs were able to withstand the 2007 subprime crisis more easily than their European counterparts. Despite investments in structured vehicles, the MMFs had enough cash to face the valuation problems and also benefited from support from their bank sponsor.

The collapse of Lehman in 2008 was followed by dramatic consequences for the US money market. The funds that detained Lehman assets were confronted with heavy redemption requests. One of them, the Reserve Primary Fund suffered massive runs that conducted the fund to break the buck and close because the sponsor was not able to provide the needed money to support the NAV, as the other funds did. Despite having announced to investors that the family's owner money will be used to support the fund "to whatever degree is required", the sponsor did not provide the announced support[60]. This event led many investors to redeem their positions in prime MMFs. During the week of September 15, 2008, investors withdrew approximately $300 billion from prime MMFs representing around 14% of the total assets held by those funds[61]. Between September 9 and September 23, the value of holdings in prime MMFs decreased by $410 billion.[62]

[60] "Court drama puts focus on money funds", Financial Times, 14 October 2012
[61] Consultation report of the IOSCO standing committee 5, Working group on Money Market Funds
[62] ESRB: Occasional Paper no. 1, Money Market Funds in Europe and Financial stability, June 2012

In order to face the large amount of redemptions, managers started to retain cash instead of buying money market instruments such as commercial papers (CPs). This had the effect to reduce the maturity of CPs to only a few days and to increase the credit spreads to unsustainable levels. Issuers relying on this source of funding were grandly affected when this source of short term funding suddenly was not accessible anymore.

6.2. Sponsor support

The Federal Reserve Bank of Boston produced a very detailed analysis of the support provided from 2007 to 2011[63]. The paper analyses only the direct support (cash contributions and purchase of securities above market price) but excludes other forms (like sponsor engagements) that played also a significant role in stabilizing the NAV of the funds. Only the losses are recorded, not the amount of money injected to buy the distressed assets. In this case, it would have been much higher: for example Credit Suisse disclosed sponsor purchases in the amount of $5.69 billion during 2007. This is important as it is the indicator of the ability of the sponsor to support the fund or not. The main results are listed below:

- 123 instances of support for a total lost amount of $4,414,916,361.
- In 21 instances the support was higher than 0.5% of the assets which permitted the fund not to break the buck. Adding the supports on the full period, 31 funds received more than 0.5% of support. The largest support represented 6.3% of the MMF assets.
- These figures do not take into account that a support of less than 0.5% often prevented an increased redemption pressure which would have materialized without the support.

The paper makes the following conclusion regarding the impact of such support:

"Investors in MMMFs choose these funds because of the stability and liquidity that they provide. This is precisely why these investors are prone to run during a financial crisis when either or both of these product features may be compromised. If investor losses resulted from market events more frequently, it is possible that the investor base and level of interest in the funds today would be very different. But, as this paper shows, such outcomes are not frequent, as even in times when market events would have caused losses to many investors, the voluntary actions of sponsors has negated this impact.

It is unclear whether MMMFs, as currently structured, are really pass-through entities. Fund investors see no fluctuations in their share values based on changing interest rates or credit spreads. When fund losses materialize, it is usually the sponsors rather than investors who absorb them. And in the only recent example of investors being required to absorb a loss, a run was triggered on other funds that may have significantly impacted the broader economy absent government intervention.

If sponsor support were explicitly required and planned for, and all sponsors had the consistent ability to provide support, such a business model might not be viewed as problematic. But the current model is concerning in that it reinforces investor confidence in the stability of the product without the ability of all sponsors to consistently deliver."

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[63] "The Stability of Prime Money Market Mutual Funds: Sponsor Support from 2007 to 2011", August 13, 2012

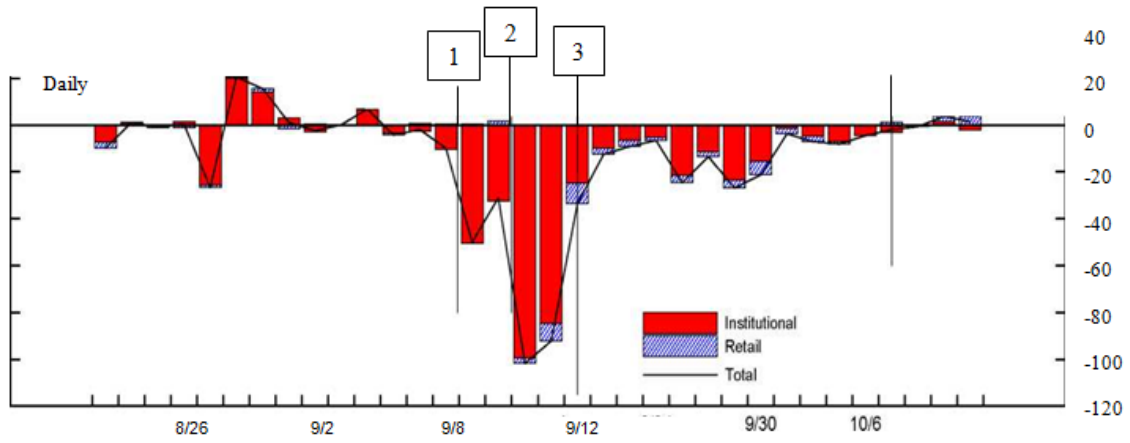
The SEC made its own research and estimates that throughout their history the MMFs in the US were supported on more than 300 occasions (with 100 funds only in September 2008)[64] and estimates that during the period from August 2007 to December 31, 2008, almost 20% of all MMFs received support[65].

6.3. Governmental support

The sponsor support was not enough to resume the redemption pressure. Therefore the US authorities set up different programs aimed at stabilizing the market. The Treasury department guaranteed the $1 NAV for more than $3 trillion of MMF assets and the Federal Reserve Board provided facilities to support the money market. Two other programs were created: the Asset Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) for the ABCP and the Commercial Paper Funding Facility (CPFF) for the issuers of CPs. These actions permitted to ease the pressure on MMFs and money market instruments.

6.4. Graphs of MMF assets in USA

The following graph shows the aggregate daily net flows in prime US MMFs during the 2008 crisis. Event 1: Lehman bankruptcy, Event 2: Reserve breaks the buck, Event 3: Treasury guarantee. We can see that following the Reserve Primary breaking the buck, the outflows have been more than doubled in comparison to the outflows following the Lehman collapse. The two days following the Lehman collapse, the outflows amounted to around $50 and $30 billion whereas the two days following the Reserve event, the outflows amounted to around $100 and $90 billion. In the third day, governmental support was announced. This tends to indicate that the runs were larger following a MMF breaking the buck than following the collapse of a major bank.



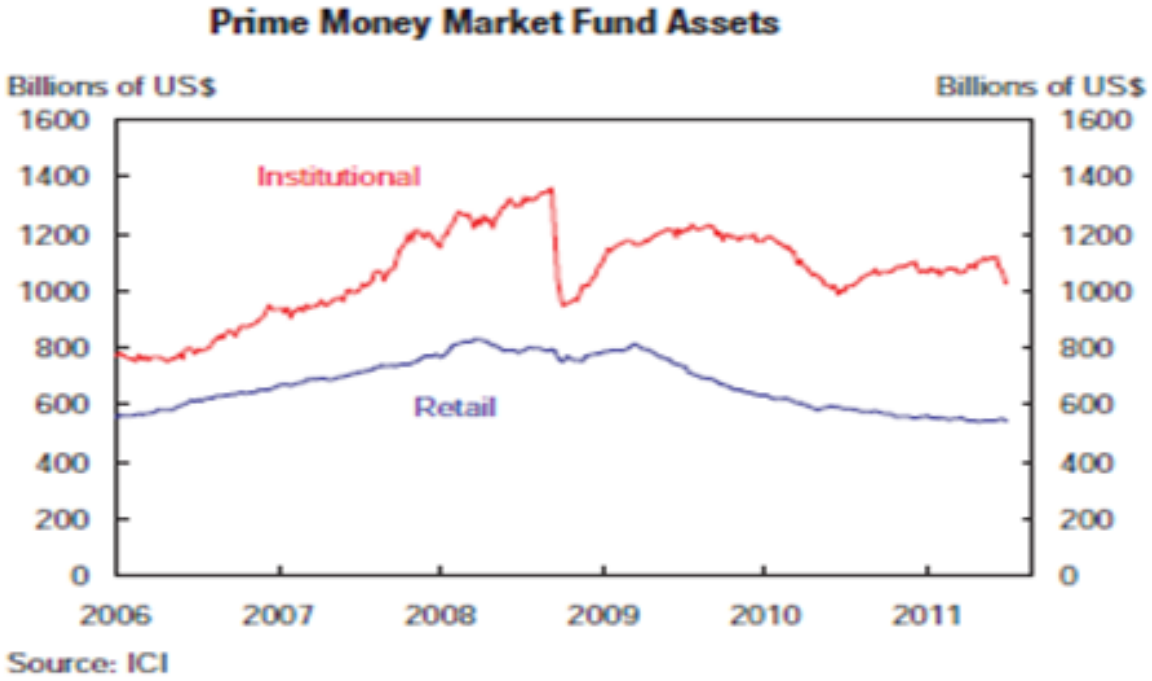
Source: The Cross Section of Money Market Fund Risks and Financial Crises, Patrick E. McCabe

Institutional versus retail investors: as mentioned in the problem definition, the investors are not equally exposed to the risk of runs. Because institutional investors often possess better knowledge and capacity, they anticipate the risks to a larger extent than retail investors do. For that reason, we have noticed during the 2008 crisis a sharp decline of

[64] Testimony on "Perspectives on Money Market Mutual Fund Reforms" by Chairman Mary L. Schapiro, U.S. SEC, before the Committee on Banking, Housing, and Urban Affairs of the United States Senate, June 21, 2012

[65] Consultation report of the IOSCO standing committee 5, Working group on Money Market Funds

institutional investors holding of MMFs whereas the retail investors remained massively invested. This distinct behaviour is accompanied by negative impacts on retail investors since they have to bear the run's costs provoked by the institutional investors.



6.5. Post crisis events

The US SEC undertook after the crisis to reform the MMFs in order to increase their stability. This resulted in an updated rule 2a-7 which, as a principal measure, forces US MMFs to hold minimum amounts of daily (10%) and weekly (30%) liquid assets. This has increased the overall liquidity of the funds but did not address the structural features of MMFs. As highlighted by Chairman Shapiro in its testimony before the US Congress, *"the events of last summer* [2011] *demonstrate that money market fund shareholders continue today to be prone to engage in heavy redemptions if they fear losses may be imminent."* During a 3 week period (beginning June 14, 2011), outflows of $100 billion were recorded, representing 6% of the total assets of the prime MMFs. The major difference with 2008 is that there were no real credit losses.

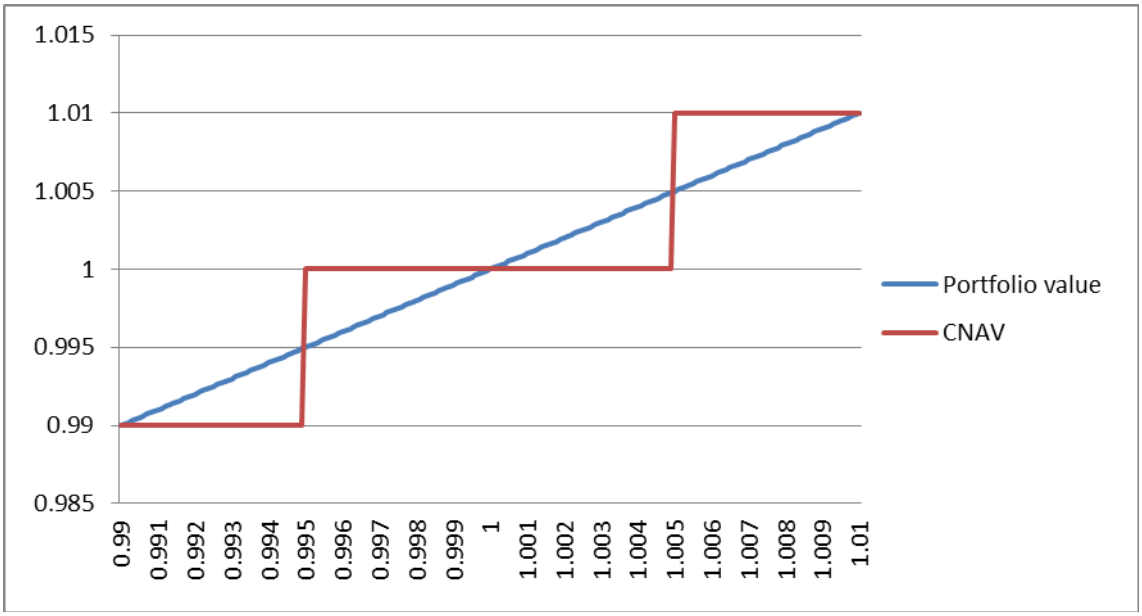
The sponsor support did not stop after the reform. The study of the Federal Reserve Bank of Boston has identified 13 instances of support in 2011. During meetings held with stakeholders (HSBC, Fidelity and Federated), it was indicated to the Commission services that the support was mainly driven by the credit downgrade of a Norwegian bank, Eksportfinans[66]. This event highlights that peripheral events such a downgrade of a non-major bank triggers the need for the sponsor to support their MMFs.

[66] "Eksportfinans downgraded to junk", Financial Times, November 22, 2011

7. ANNEX 7: EXPLANATION OF SOME MECHANISMS

7.1. Price mechanism of the MMF

The following graph shows the price movements of a CNAV MMF compared to the evolution of its portfolio value. Because the fund is able to round to the nearest cent, the NAV is only moving at 0.995 and 1.005. The sudden price decrease at 0.995 is called "breaking the buck". It is clear from the graph that investors make a gain in redeeming when the red line is above the blue line and that investors make a loss in redeeming when the blue line is above the red line. This demonstrates the valuation mechanism behind the rationale to redeem early.



7.2. Liquidity fee mechanism

The liquidity fee mechanism should reduce the incentive to run by equalizing the mid-price before and after the redemption. The following example describes how it should work in practice. For a matter of convenience, we will assume that both VNAV and CNAV MMF trades around 1 EUR and that the fund of 10 million units faces a redemption request of 1 million units. The mid-price of the fund is set at 0.9985 EUR but the price at which the assets can be sold in the case of redemption is only 0.9975 (bid price).

The VNAV MMF accepts redemptions at a price 0.9985 EUR which is equivalent to its mid-price but the price at which the assets can be sold in the case of redemption is only 0.9975 (bid price). This 10 bps difference is equivalent to an advantage of 1'000 Euros for the redeeming investor. Because this advantage has to be paid somehow, the remaining investors will have to bear it since the mid-price will move downward to 0.99838 ((9'000'000-1'000) * (0.9985 / 9'000'000)).

In order to pay out the investor at 1 Euro, the CNAV fund will need to sell assets with a value of 1'002'506 (=1'000'000 / 0.9975). The mid-price will move down to 0.99822 ((9'000'000-2'506) * (0.9985 / 9'000'000)). There is therefore a first mover advantage of around 25 bps, equivalent to 2'506 Euros, paid by the remaining investors.

The proposal to introduce liquidity fees is based on this principle. The fee should equalize the mid-price before and after the redemption. Therefore the investor in CNAV would have to pay 25 bps which would bring the mid-price from 0.9982 back to 0.9985. In the case of the CNAV the investor would have to pay a fee of 10 bps, which would bring the mid-price from 0.99838 back to 0.9985.

7.3. Capital buffer

7.3.1. Capital buffer mechanism paid by investors: Fidelity proposal

Different types of mechanism exist but one industry participant has proposed to introduce the following method to calculate the buffer level. The idea was presented by Nancy Prior, Head of Fidelity MMF business, at two occasions, the 03rd of October 2012 at a meeting with the Cabinet of Commissioner Barnier and the 04th of October at a meeting with the Commission services in charge of asset management. The weighting of each security should be calculated as follows:

Government assets, including repos with government asset as collateral	0%
Assets having a remaining maturity of less than 7 days	0%
Assets having a remaining maturity of more than 7 days	100bps * time remaining * par amount Example for an asset having a par amount of 1 and 250 days till the maturity: 100bps * (250/360) * 1 = 69bps

According to a sample from the largest CNAV MMFs domiciled in Europe, the average proportion of assets with less than 7 days is about 40%. The average proportion of government securities is about 10%, meaning that the assets without risk weighting amount to 50% of a CNAV MMF portfolio. Further assuming that the assets above 7 days are evenly dispersed around the mean of 180 days, it means that they contribute for 50bps (100bps * (180/360) * 1). Since it represents only 50% of the portfolio, the average buffer would amount to 25bps. This amount was considered as representative by the participants from Fidelity. Fidelity further mentioned that the buffer should be built over a period of 7 years in order to limit the impacts on investors. Based on an average yield of 8bps per year, this would currently deprive investors of almost 50% of their annual yield. The negative impact would be almost completely removed if the yields were, as in the past, around 3% per year but there is no indication that the monetary policy of the central banks will change in the next years.

7.3.2. *Capital needs of the NAV buffers*

Here below is a table representing the impacts of different levels of capital buffers on the Core Tier One (CT1) ratio of major banks involved in the business of CNAV MMFs. First the table lists the Asset Under Management (AUM) of each bank, both in the US and the EU. Then according to their current CT1, the foreseen decrease in their CT1 is calculated if the banks were forced to build buffers. The impacts might be substantial, especially for US banks that manage larger amounts of MMFs than their European counterparts. It is important to keep in mind that the impacts are measured taking into account all AuM, in Europe and in the US. This would suggest that US would implement such an option too.

Bank	**AUM of sponsored MMFs ($m)**	**CT1 ratio**	**Change in CT1 ratio given required MMF capital buffer size**

	US	EU	Sum		0.5%	1.0%	2.0%	3.0%	5.0%
HSBC	13,381	42,610	55,991	9.10	-0.08	-0.16	-0.32	-0.47	-0.79
Lloyds		27,862	27,862	10.78	-0.03	-0.05	-0.10	-0.15	-0.25
RBS		19,057	19,057	10.56	-0.01	-0.03	-0.06	-0.08	-0.14
Deutsche Bank	41,616	39,301	80,917	9.52	-0.08	-0.16	-0.33	-0.49	-0.82
UBS	52,816	377	53,193	10.80	-0.07	-0.13	-0.26	-0.39	-0.65
BNY Mellon	152,944	36,387	189,331	13.43	-0.93	-1.85	-3.70	-5.55	-9.26
State Street	67,979	30,660	98,639	12.09	-0.50	-1.00	-2.00	-3.00	-5.01
Northern Trust	26,042	11,979	38,021	12.06	-0.34	-0.67	-1.34	-2.01	-3.35
Goldman Sachs	133,776	77,136	210,912	12.07	-0.23	-0.46	-0.92	-1.38	-2.31
JP Morgan	252,827	167,849	420,676	10.07	-0.17	-0.34	-0.69	-1.03	-1.72
Morgan Stanley	78,040	4,751	82,791	13.01	-0.13	-0.26	-0.53	-0.79	-1.31

Source: Bank of England, October 2012

The preceding table did not include asset managers that were not sponsored by a bank. The table here below includes all operators of CNAV MMFs in Europe. The cost of a 3% buffer is calculated on European assets only. There might be some discrepancies in the AuM in comparison to the preceding table but this is explained by the different date taken and by the currency chosen.

If everything remains constant, the 3% buffer will require European managers to raise around €14 billion of capital. This amount has been calculated taking into account the assets under management by CNAV funds that adhere to the IMMFA code of practice. BlackRock is the only pure asset manager in the top 5 and it is also the one that has indicated in its response to the consultation that managers should be able to set aside enough resources to face "rainy days". Other pure asset managers (e.g. Ignis, Insight or Federated) will face lower amounts of buffer in comparison to banks (e.g. JPMorgan, Goldman Sachs or Deutsche Bank). The cost of the capital would depend on the required return demanded by investors.

The annual cost of capital is also provided for different, ranging from 3% to 11%. These amounts represent the cost that the different sponsors will have to pay every year for maintaining the 3% NAV buffer. The cost of capital is dependent on every sponsor, meaning that some sponsors will have fewer costs than others.

	AuM in mio EUR	Money set aside in mio EUR	Annual cost of capital for a 3% buffer in mio EUR				
			3%	5%	7%	9%	11%
JPMorgan	118,460	3,554	107	178	249	320	391
BlackRock	71,961	2,159	65	108	151	194	237
Goldman Sachs	60,227	1,807	54	90	126	163	199
Deutsche Bank	30,787	924	28	46	65	83	102
HSBC	26,702	801	24	40	56	72	88
BNY Mellon	25,232	757	23	38	53	68	83
State Street	20,482	614	18	31	43	55	68
Ignis	19,964	599	18	30	42	54	66
Insight	17,075	512	15	26	36	46	56
BNP Paribas	16,462	494	15	25	35	44	54
RBS	13,122	394	12	20	28	35	43

Northern Trust	9,728	292	9	15	20	26	32
Federated Investors	9,349	280	8	14	20	25	31
Amundi	6,594	198	6	10	14	18	22
Fidelity	5,533	166	5	8	12	15	18
Invesco	5,485	165	5	8	12	15	18
Morgan Stanley	5,061	152	5	8	11	14	17
Western AM	3,512	105	3	5	7	9	12
Aberdeen AM	3,441	103	3	5	7	9	11
Société Générale	2,041	61	2	3	4	5	7
Bank of America	1,434	43	1	2	3	4	5
Scottish Widows	701	21	1	1	1	2	2
UBS	115	3	0	0	0	0	0
TOTAL	**473,469**	**14,204**	**426**	**710**	**994**	**1,278**	**1,562**

Source: IMMFA data, Commission own calculation, October 2012

7.4. Choice of instrument

There are some industry initiatives[67] currently under way, many of which have already delivered improvements in the way MMF market works. However, the self-regulatory approach lacks consistence as it is not universally adhered to by all market participants. Rather, the existing initiatives can serve as a starting point for legislative action because they provide useful information on the detailed measures that may be targeted. Since the IMMFA rules are mostly inspired by US legislation on MMFs, they also help to harmonize legislation at international level and reduce regulatory arbitrage.

ESMA might also propose improvements to the CESR's guidelines (on eligible assets and on MMFs). Doubt remains, however, whether all promising options can be achieved at the level of ESMA guidelines. Coherence in how the new set of uniform rules is applied on the ground may also suffer as ESMA guidelines are not legally binding.

Therefore guidelines developed by ESMA may not be the appropriate tool. Whereas competent authorities and market participants are expected to make every effort in order to comply with guidelines or recommendations issued by ESMA in accordance with Article 16 of the ESMA regulation, competent authorities are also allowed to disregard such guidelines and recommendations provided they state their reasons ("comply or explain"). Hence guidelines adopted by ESMA cannot warrant the observance of harmonised rules. The same applies to a Commission recommendation.

An advantage of choosing a Recommendation is certainly the high flexibility that this instrument gives to Member States -- the latter may decide whether or not to make the rules of the recommendation binding at national level. In other words, a Recommendation would simply provide the national policy makers with the Commission's suggested course of action and express certain policy preferences. But a recommendation would have no immediate effect on the situation to be addressed as Member States' legislators would then be left to decide whether to make the Commission's policy recommendation legally binding or not at national level. In case

[67] IMMFA code of practice: http://www.immfa.org/About/Codefinal.pdf. See Annex 2.3 for more details.

they would choose to do so, they would need to translate the recommendation into self-executing and mandatory rules in their jurisdictions.

In the context of the problems and objectives that are defined above such flexibility is actually a severe drawback.

(1) The identified problems concern areas that are of critical importance for the smooth functioning of money markets and therefore the European economy as a whole,

(2) The cross-border effects of diverging national rules addressing the MMF market constitute a severe drawback for the efforts to create a safe and efficient money market, and

(3) Solving the identified problems requires a high level of harmonisation of rules (and thus legal certainty). A legally non-binding instrument, such as a Recommendation, turns out to be inadequate. It may lead to a situation in which i) no action is taken by Member States, ii) action is undertaken only by some of them (potentially on different subsets of the issues), or iii) action is undertaken, but the Recommendation is not followed by all Member States that decided to act, leading to potentially contradicting solutions that could actually worsen the situation. Due to the seriousness of the identified problems, neither outcome is acceptable.

This means that the basic policy choice - should action be considered necessary at EU level - for introducing these changes is through a harmonising legal instrument at the EU level. For this there are two options, namely to a directive or a regulation.

While it is correct to say that the main type of legislative instruments introducing EU financial services legislation has traditionally been Directives, this choice reflected the contents and the objectives pursued with those instruments. Directives approximated national rules on the taking up of business and the provision of services and in a gradual manner. They also allowed a first step at integrating those rules in the legal systems of the Member States that were essential to achieve the states aims while providing Member States with many options on how to best achieve those aims.

The basic foundations of an internal market for asset management were created by means of the UCITS directive and the AIFM directive, which harmonised the rules on the authorisation and supervision of fund managers. Yet, the gradual evolution of an internal market for asset management showed the limits inherent in trying to create a level playing field by means of a Directive. As many details were left to national discretion, the transposition of a Directive often resulted in significant room for divergences at national level. As the market for asset management becomes more integrated, cross-border competition between asset managers and fund domiciles has increased. Often, the more intense level of cross-border marketing of investment funds has created appeals that the applicable EU rules should not only facilitate free movement of services but should also strive to create a more level playing field and equal conditions for competition among fund managers.

Against the background of existing access to the fund management activity, as provided by the UCITS and AIFM directives and their implementing measures, additional regulatory concerns regarding the level playing field among MMF need now to be considered. At this stage of maturity of asset management rules in the internal market, legislative measure on MMF is no longer concerned with the taking up of the activity as

fund manager or marketing a fund across national borders, but aims to ensure market integrity and stability in relation to managers' activities involving a specific type of funds. This is because MMFs are closely intertwined with the real economy on the one hand and the banking sector on the other hand. .

In view of the objectives of the current proposal, a directive does not seem to be the right choice of instrument. A proposal regulating the essential features of a MMF requires that the legislative framework is applied throughout the EU with exactly the same scope, without any gold-plating and without allowing residual powers to national legislators. In fact, the objectives to limit the risk of runs and stop contagion would require absolute clarity and uniformity as to the personal and material scope of application, the conditions of its application throughout the EU without exceptions or diverging implementations by national authorities and jurisdictions.

It is these characteristics of this legislative instrument that in a sense dictate the choice of a regulation as the most appropriate form, since:

(1) directly applicable regulations are the only way to have effectively uniform rules throughout the EU, to the recognised benefit of industry and the users of these rules. They eliminate divergences in applicable law between Member States. At the same time, uniform rules do not mean "one size fits all" and are not incompatible with a certain degree of flexibility for national supervisors in the application of those rules.

(2) Regulations reduce legal uncertainty: in case of directives national law provisions have to be interpreted in the light of the underlying directives, which themselves may require interpretation, whereas regulations are applicable without a second layer of national legislation.

(3) Regulations ensure that European law is applicable immediately and to its full extent in the whole Union after its adoption by the legislator. They avoid the resource-intensive and time-consuming transposition of directives by Member States and the monitoring of timely and correct transposition by the Commission.

(4) The numerous infringement cases against Member States for late, non- or incorrect transposition of directives are evidence that the transposition of EU law is ineffective in many instances. Depending on the content of the regulations, adaptations of national legislation may continue to be necessary in some cases. But this is much more limited than the transposition of a directive, and in most cases application of a regulation in the markets will not depend upon it.

(5) The transposition process has proven particularly inappropriate for quick responses needed in times of crisis and to implement G20 commitments within the timeframes committed to at the international level.

(6) Regulations can be directly invoked by the parties concerned before national administrations and courts, whereas this applies only in very limited circumstances for Directives.

For all these reasons, the Commission services consider that a regulation is the preferred option.

8. ANNEX 8: EUROPEAN PARLIAMENT RESOLUTION ON SHADOW BANKING

MMFs are discussed under the points 31 and 32 of the resolution.

31. Recognises the important role played by money market funds (MMFs) in the financing of financial institutions in the short run and in allowing for risk diversification; recognises the different role and structure of MMFs based in the EU and the US; recognises that the 2010 ESMA guidelines imposed stricter standards on MMFs (credit quality, maturity of underlying securities and better disclosure to investors); notes, however, that some MMFs, in particular those offering a stable net asset value to investors, are vulnerable to massive runs; stresses, therefore, that additional measures need to be taken to improve the resilience of these funds and to cover the liquidity risk; supports the October 2012 IOSCO final report in its proposed recommendations for the regulation and management of MMFs across jurisdictions; believes that MMFs that offer a stable net asset value (NAV) should be subject to measures designed to reduce the specific risks associated with their stable NAV feature and internalise the costs arising from these risks; considers that regulators should require, where workable, a conversion to floating/variable NAV, or, alternatively, safeguards should be introduced to reinforce stable NAV MMFs' resilience and ability to face significant redemptions; invites the Commission to submit a review of the UCITS framework, with particular focus on the MMF issue, in the first half of 2013, by requiring MMFs either to adopt a variable asset value with a daily evaluation or, if retaining a constant value, to be obliged to apply for a limited-purpose banking licence and be subject to capital and other prudential requirements; stresses that regulatory arbitrage must be minimised;

32. Invites the Commission, in the context of the UCITS review, to explore further the idea of introducing specific liquidity provisions for MMFs, by setting minimum requirements for overnight, weekly and monthly liquidity [20 %, 40 %, 60 %] and to charge liquidity fees upon a trigger which also leads to a direct information obligation to the competent supervisory authority and ESMA;

9. ANNEX 9: IOSCO RECOMMENDATIONS AND FSB ENDORSMENT

	IOSCO Recommendations	EU response
1	Money market funds should be explicitly defined in CIS regulation	UCITS, AIFMD, MMF regulation
2	Specific limitations should apply to the types of assets in which MMFs may invest and the risks they may take	UCITS, MMF regulation
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).	UCITS, AIFMD
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.	Option 2.8
5	MMF valuation practices should be reviewed by a third party as part of their periodic reviews of the funds accounts.	Obligation to appoint a depositary in UCITS and AIFMD
6	Money market funds should establish sound policies and procedures to know their investors.	Option 1.7
7	Money market funds should hold a minimum amount of liquid assets to strengthen their ability to face redemptions and prevent fire sales.	Option 1.6
8	Money market funds should periodically conduct appropriate stress testing.	Will be included in MMF regulation (already present in AIFMD and IMMFA

		rules)
9	Money market funds should have tools in place to deal with exceptional market conditions and substantial redemptions pressures.	UCITS rules on suspensions of redemption
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.	Option 2.8
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.	Option 2.9
12	CRA supervisors should seek to ensure credit rating agencies make more explicit their current rating methodologies for money market funds.	Option 2.9
13	MMF documentation should include a specific disclosure drawing investors' attention to the absence of a capital guarantee and the possibility of principal loss.	Option 2.2
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.	Option 2.2
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.	ESMA guidelines on repos

Extract from the FSB document: "Strengthening Oversight and Regulation of Shadow Banking, An integrated Overview of policy recommendations, 18 November 2012

Money market funds (MMFs) form a large element within the shadow banking system: they provide short-term non-deposit funds to the regular banking system, and also fund separate non-bank chains of credit intermediation. During the crisis, moreover, certain types of MMFs experienced investor runs, some of which necessitated large scale support from sponsors or the official sector to maintain stability in the MMF sector. The MMFs that faced runs typically offered stable or constant net asset value (NAV) to their investors, fostering an expectation that their claims were similar to bank deposits. Thus, when a large loss due to holdings of asset-backed securities (ABSs) and other financial instruments caused some MMFs' net asset values to drop below their promised par value (i.e. they "broke the buck"), this prompted investor redemptions across MMFs, destabilising the sector as well as the borrowers that rely on funding from MMFs.

Given the demonstrated potential for systemic run risk among MMFs, the FSB requested IOSCO in October 2011 to develop policy recommendations for MMFs. IOSCO issued a consultation report in April 2012 that provided a preliminary analysis of the systemic importance of MMFs and their key vulnerabilities, including their susceptibility to runs.

Based on this analysis, the consultation report set out policy options that could reinforce the soundness of MMFs and address the identified systemic vulnerabilities. These possible policy options included: a mandatory move from stable NAV to floating (or variable) NAV; enhancements to MMF valuation and pricing frameworks; enhancement of MMF liquidity risk management; and reduction in the reliance on ratings in the MMF industry.

The consultation period ended in June 2012, after a one-month extension of the initial deadline. Based on the comments received, IOSCO issued 15 policy recommendations intended to provide the basis for common standards for the regulation and management

of MMFs across jurisdictions in October 2012.9 The recommendations cover a range of issues associated with MMFs including:

i. *General (regulatory framework) – MMFs should be explicitly defined in collective investment schemes (CIS) regulation as they present several unique features. Such regulation should include specific limitations on the types of assets MMFs may invest in and the risks they may take. Regulators should closely monitor the development and use of other vehicles similar to MMFs so as to reduce regulatory arbitrage. (recommendations 1-3)*

ii. *Valuation – MMFs should comply with the general principle of fair value when valuing their assets. Amortised cost method should only be used in limited circumstances. Such MMF valuation practices should be reviewed by a third party as part of their periodic reviews of the funds accounts. (recommendations 4-5)*

iii. *Liquidity management – MMFs should establish sound policies and procedures to know their investors (e.g. cash needs, sophistication, concentration). MMFs should hold a minimum amount of liquid assets to strengthen their ability to face redemptions and prevent fire sales. They should periodically conduct appropriate stress testing and have tools in place to deal with exceptional market conditions and substantial redemption pressures. (Recommendations 6-9)*

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

v. *Use of credit ratings – Regulatory obligations of the responsible entities regarding internal credit risk assessment practices should be strengthened and mechanistic reliance on external credit ratings should be avoided. Credit rating agencies should make more explicit their rating methodologies for MMFs. (recommendations 11-12)*

vi. *Disclosure to investors – MMF documentation should include the absence of a capital guarantee and the possibility of principal loss. MMFs' disclosure to investors should include all necessary information regarding their practices in relation to valuation and the applicable procedures in time of stress. (Recommendations 13-14)*

vii. *MMFs' practices in relation to repos – When necessary, regulators should develop guidelines strengthening the framework applicable to the use of repos by MMFs, taking into account the outcome of current work on repos.10 (recommendation 15)*

The FSB has reviewed the IOSCO recommendations and endorsed them as an effective framework for strengthening the resilience of MMFs to risks in a comprehensive manner. In particular, the FSB endorses the Recommendation 10 requirement that stable NAV MMFs should be converted into floating NAV where workable. The FSB believes that the safeguards required to be introduced to reinforce stable NAV MMFs' resilience to runs where such conversion is not workable should be functionally equivalent in effect to the capital, liquidity, and other prudential requirements on banks that protect against runs on their deposits.

10. ANNEX 10: FEEDBACK OF THE CONSULTATION

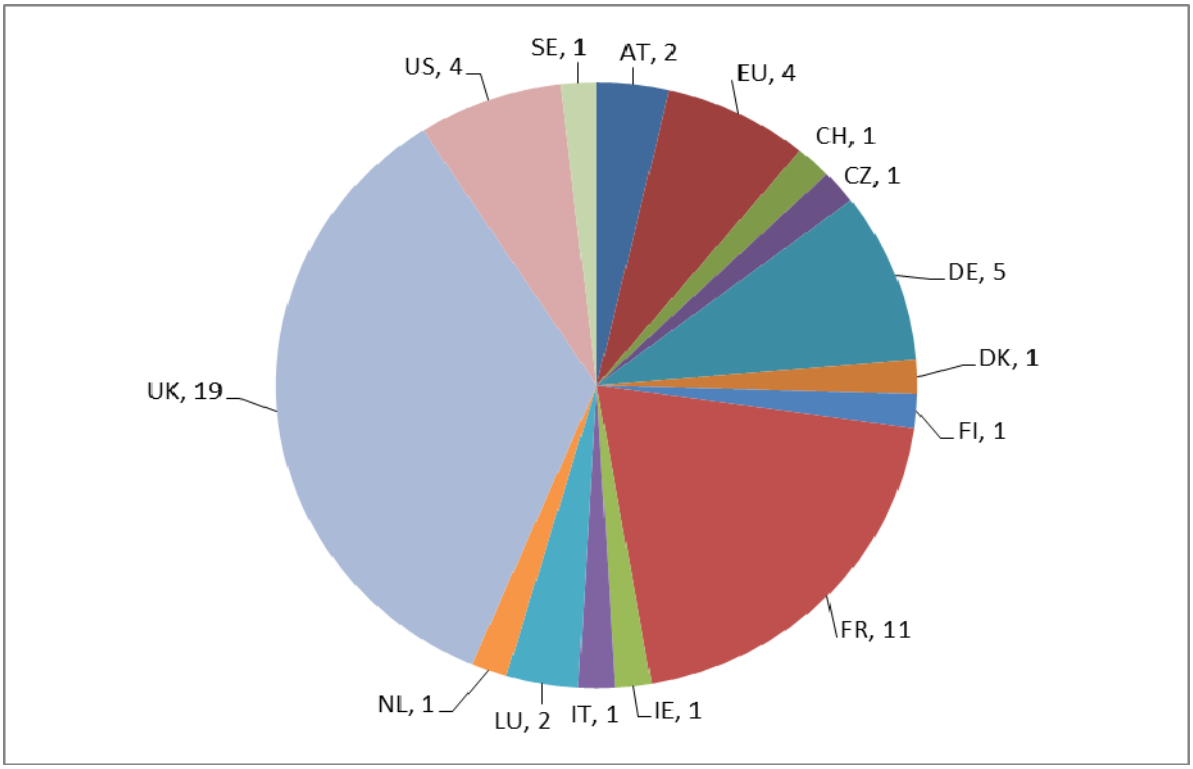
Here below is the list of respondents to the MMF questions contained in the UCITS consultation.

	Name	Nationality	Category
1	Amundi	FR	Financial firm
2	Association Française de gestion (AFG)	FR	Trade organization
3	Association française des investisseurs institutionels (AF2I)	FR	Trade organization
4	Association of British Insurers (ABI)	UK	Trade organization
5	Association of private client investment managers and stockbrokers (APCIMS)	UK	Trade organization
6	Association of the Luxembourg Fund Industry (ALFI)	LU	Trade organization
7	Assogestioni	IT	Trade organization
8	Austrian Authorities	AT	Public authorities
9	Aviva Investors	UK	Financial firm
10	AXA Investment Managers	FR	Financial firm
11	Baillie Gifford	UK	Financial firm
12	Barclays (Confidential)	UK	Financial firm
13	BlackRock	UK	Financial firm
14	BNP Paribas Asset Management	FR	Financial firm
15	Bundesarbeitskammer Österreich (BAK)	AT	Trade organization
16	Bundesverband Deutscher Investment-Gesellschaften (BVI)	DE	Trade organization
17	CAMGESTION (BNP)	FR	Financial firm
18	CFA Institute	EU	Non-profit organization
19	Czech authorities (CZ)	CZ	Public authority
20	Danish authorities (DK)	DK	Public authority
21	Deutsche Bank AG	UK	Financial firm
22	European Federation of Financial Services Users (EuroFinuse)	EU	Trade organization
23	European Fund and Asset Management Association	EU	Trade organization
24	Federated Investors	US	Financial firm
25	Fidelity Investments	US	Financial firm
26	Finance Watch	EU	Non-profit organization
27	Finish authorities (FI)	FI	Public authority
28	French authorities (FR)	FR	Public authority
29	German authorities (DE)	DE	Public authority
30	German Insurance Association (GDV)	DE	Trade organization
31	HSBC Global Asset Management	UK	Financial firm
32	Insight Investment	UK	Financial firm
33	Institutional Money Market Funds Association (IMMFA)	UK	Trade organization
34	International Capital Markets Association (ICMA)	UK	Trade organization
35	Investment Company Institute (ICI)	US	Trade organization
36	Investment Company Institute Global (ICI Global)	UK	Trade organization
37	Investment Management Association (IMA)	UK	Trade organization
38	Irish Funds Industry Association	IE	Trade organization
39	Katarzyna Putra	n/a	Individual
40	La Banque Postale	FR	Financial firm
41	Law society of England and Wales	UK	Trade organization
42	Luxembourg authorities (LU)	LU	Public authority
43	M&G	UK	Financial firm

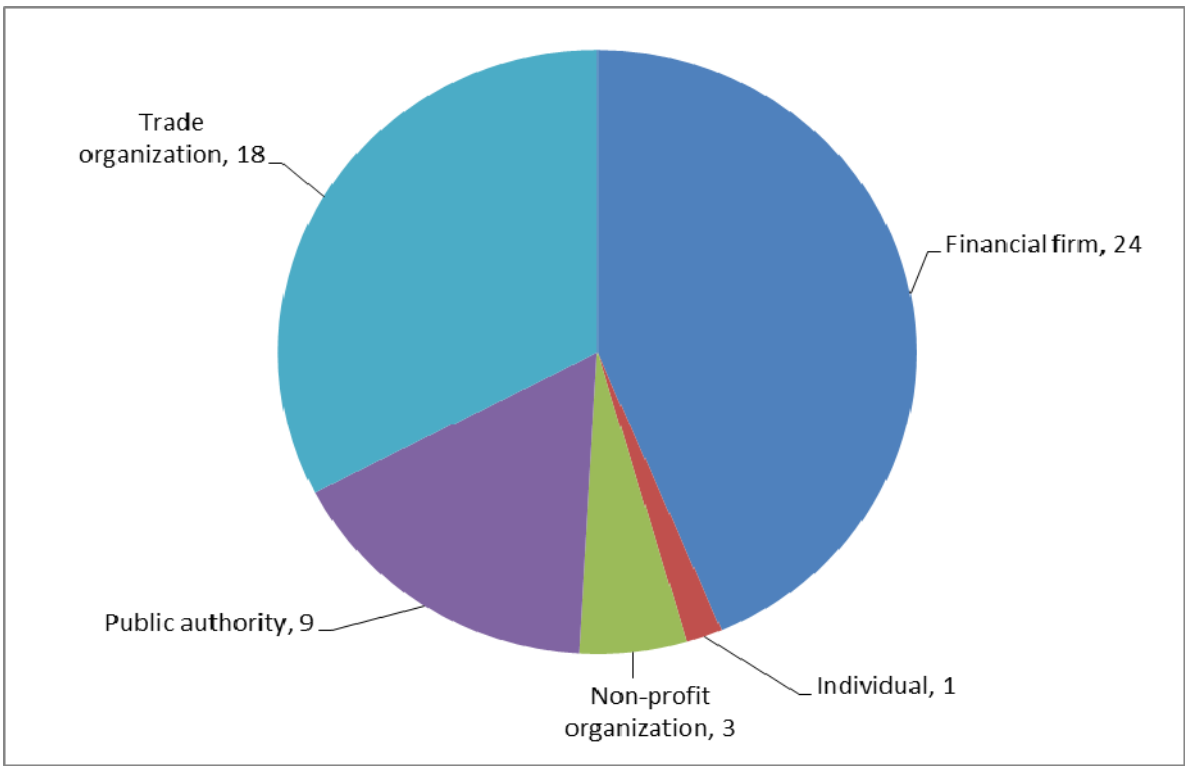
44	Moody's	UK	Financial firm
45	Morgan Stanley (Confidential)	UK	Financial firm
46	Natixis Asset Management	FR	Financial firm
47	Natwest Trustee & Depositary Services	UK	Financial firm
48	SOMO	NL	Non-profit organization
49	Standard & Poor's	FR	Financial firm
50	State Street Corporation	US	Financial firm
51	Swedish authorities	SE	Public authority
52	THEAM (BNP)	FR	Financial firm
53	UBS AG	CH	Financial firm
54	Union Investment	DE	Financial firm
55	UK authorities	UK	Public authority
56	World Economy, Ecology & Development (WEED)	DE	Non-profit organization

Geographical origin of the respondents

The geographical origin has been attributed according to the address provided in the response. Therefore some stakeholders are classified as coming from the US while they have also operations in the EU. The EU origin indicates the EU wide nature of the activities of the respondent.



Category of the respondents



The consultation on MMFs was divided in 4 sections for a total of 21 questions.

10.1. General questions

(1) What role do MMFs play in the management of liquidity for investors and in the financial markets generally? What are close alternatives for MMFs? Please give indicative figures and/or estimates of cross-elasticity of demand between MMFs and alternatives.

Most of the respondents indicate that MMFs represent a useful tool to manage short-term cash. Investors are attracted by their high degree of liquidity and their low risk due to a large diversification. Most of the investors are institutional, only a small proportion of retail investors are invested. MMFs serve as safe short-term liquid asset class for investing cash. MMFs are also used by risk-averse long term investors that are seeking for safe harbour.

As buy side entities, MMFs contribute to the demand of securities issued by companies, offering them the possibility to diversify their financing from bank loans to securities. The same applies to governments and financial institutions. In this way MMFs constitute alternative funding for the real economy. Because MMFs have substantially lower operating costs than commercial banks, the cost to borrowers of obtaining financing through MMFs is much lower than is available from commercial banks.

Bank deposits or Certificates of Deposits (CDs) were often cited as the closest alternative to investments in MMFs. However it is not evident that it represents a viable alternative. Due to their counterparty risk, direct investments in deposits require time and expertise that MMF managers offer at low cost (*Amundi*). *HSBC, IMMFA* mention that institutional investors have cash assets exceeding the amount of deposit guarantee schemes which would expose investors to the full credit risk of the bank. *HSBC, IMMFA*

have conducted a historical analysis between the level of the deposit rates and the flows into MMFs (graph in Annex 3.3.3). They conclude that investors are not driven by returns of bank deposits but that investors choose MMFs for their diversification, liquidity, security of capital, ease of use and transparency.

One stakeholder, *UBS*, notices that substitutes depend on the type of MMF and type of investors. For an institutional investor, the closest substitute is a money market mandate, with capital guarantee for replacing CNAV and without capital guarantee for replacing VNAV. Retail clients have insured bank deposits as substitute. They see a cross elasticity of -0.9 for institutional, respectively -0.7 for retail investors.

AF2I, one of the few contributions from the investor side, indicates that the cross elasticity between MMFs and bank deposits mainly relies upon interest rate levels and creditworthiness in banks. In the portfolio of the French institutional investors represented by *AF2I*, MMFs represent 4.5% of their assets, where it is more pregnant for small insurance and retirement institutions.

A second alternative is the direct investment in the money market instruments. But again this is not seen as a viable solution as it requires a large degree of expertise (due to credit analysis and sizes required) to invest on its own that only few investors possess. MMFs represent a much easier way to achieve the desired level of diversification.

(2) What type of investors are MMFs mostly targeting? Please give indicative figures.

MMFs are mostly used by institutional investors, retail investors representing only a small percentage. Please refer to the table in Annex 3.2 on the type of investors.

(3) What types of assets are MMFs mostly invested in? From what type of issuers? Please give indicative figures.

MMFs are investing in all types of short term products: commercial papers, treasury bills, floating rate notes, short term bonds, repos or deposits. Issuers are banks, financials, corporate issuers, sovereigns, agencies and supranational. Please refer to the table in Annex 3.3 on portfolio composition.

(4) To what extent do MMFs engage in transactions such as repo and securities lending? What proportion of these transactions is open-ended and can be recalled at any time, and what proportion is fixed-term? What assets do MMFs accept as collateral in these transactions? Is the collateral marked-to-market daily and how often are margin calls made? Do MMFs engage in collateral swap (collateral upgrade/downgrade) trades on a fixed-term basis?

The majority of MMF managers that responded use reverse repurchase agreements only as a manner to place cash on a short term basis (mostly callable on a 24 or 48 hours basis) against the exchange of extremely safe collateral (often government assets, otherwise highly rated securities).

Securities lending is very uncommon due to the counterparty risk. However some German stakeholders engage in such transactions: according to the response from the *DE authorities*, 2 out of 30 MMFs perform securities lending transaction. *BVI, GDV* and *Union Investment* also mention the use of both.

All *IMMFA* MMFs do not make use of securities lending. Repos are used to place cash for short periods, mostly overnight, and are backed by high quality collateral, mostly government securities (see table in Annex 3.3 for their proportion).

(5) Do you agree that MMFs, individually or collectively, may represent a source of systemic risk ('runs' by investors, contagion, etc…) due to their central role in the short term funding market? Please explain.

Yes	Only CNAV	No
7	5	21

The majority of the respondents do not think that MMFs are systemically relevant. They did not cause the crisis but were affected by it. The runs observed in 2008 were mainly caused by a loss of confidence in the solvency of the banking system which decreased the investor confidence since MMFs were extensively invested in bank assets. Therefore the MMFs were not the cause of the problem but were affected by it. The 2008 crisis is sometimes explained by a "flight to quality" because investors decided to sell their exposures to prime MMFs invested in bank assets in order to buy government securities. Investors feared that the objective to preserve capital and daily liquidity would not be ensured anymore which leaded investors to redeem.

Another argument often advanced is linked to the size of the European MMF industry. Banks represent a much bigger risk; they continue to keep a preponderant role in financing the economy. MMFs, with 4% of the balance sheets of monetary financial institutions, represent only a small proportion in comparison to the 96% for the banks. As such banks are much more risky than MMFs in Europe. BVI further notes that the size of the European MMF market has been reduced with the introduction of the CESR's guidelines. It is another sign that the MMFs, due to their small size, are not systemic.

In addition, some pointed out that MMFs, as investment vehicles, are already largely regulated through UCITS and the attached CESR guidelines. The CESR guidelines on MMFs have represented a major and decisive step towards greater transparency and increased clarity. They provide a robust framework to limit the main risks to which MMFs are exposed.

On the other side some (*HSBC, Finance Watch, WEED, BAK, FR and DE authorities*) believe that MMFs are systemically important due to their exposure to investor's runs and the contagion channels to the banking system and the money market.

The *UK authorities* believe that both CNAV and VNAV funds have characteristics that make them appear bank-like in some respects. They offer relatively immediate liquidity and undertake credit transformation by generating investor returns through credit, liquidity and maturity mismatches. They are also large and potentially systemic compared to other elements of the shadow banking system.

Some stakeholders (*Amundi, AXA, AF2I, UBS, FR, SE and DE authorities*) make a distinction between CNAV and VNAV funds. They recognize that CNAV MMFs may face additional challenges than VNAV MMFs.

(6) Do you see a need for more detailed and harmonised regulation on MMFs at the EU level? If yes, should it be part of the UCITS Directive, of the AIFM Directive, of both Directives or a separate and self-standing instrument? Do you believe that EU rules on MMF should apply to all funds that are marketed as MMF or fall within the European Central Bank's definition?

Yes	No
27	8

It was mostly agreed that Europe needs a harmonized response for reforming the MMFs but the opinions varied regarding the appropriate tool to implement the changes. Whatever the tool chosen, it must however ensure that all funds that use the MMF label must comply with the new set of rules. Many stakeholders encourage regulators to codify the key features and principles of MMFs by including them directly in the definition of MMF.

- Some (*IMMFA, EFAMA, Deutsche Bank, FI authorities*) recommend creating a common definition of European MMFs in both UCITS and AIFMD directives in order to apply the new rules on all MMFs, irrespective of their legal status. ESMA should then be empowered to develop technical standards using the CESR guidelines as a starting point.

- A self-standing piece of legislation should be avoided (*EFAMA, State Street, Morgan Stanley*) as this would lead to a propagation of separate legislative instruments covering different segments of the investment fund industry. Therefore new rules should be accommodated within the UCITS framework.

- Some others (*HSBC, IMA, Morgan Stanley, State Street, Federated, BlackRock, ABI*) would prefer to amend the UCITS directive and the CESR guidelines.

- *ALFI* proposes to regulate the MMFs in UCITS only and any entity operating outside the UCITS regime as a MMF should then be considered as a bank and regulated as such.

- *Aviva, SOMO* recommend creating a stand-alone instrument in order to ensure that there is harmonized regulation for MMFs at an EU level for both UCITS and AIFs. The *SE authorities* recommend creating a single harmonized regulation on MMFs in order to promote a level playing field.

- Others (*Amundi, AFG, Barclays, BNP, Natixis, ICMA*) believe that a change in law (e.g. UCITS) is not necessary. Updating CESR guidelines represents a good solution because these guidelines have the advantage to apply on all types of MMFs, being UCITS or not. *AF2I* think that the CESR guidelines accomplished a very good job and they don't need to be reviewed.

- *Union Investment* and the *AT authorities* recommend upgrading the CESR rules in the UCITS directive.

- *Finance Watch* proposes to keep the CESR distinction but by including a stronger difference by asset type, preventing short term MMFs from investing in structured financial instruments or ABCP. The categories should be renamed and provide a difference between "Money Market Fund" and "Short Term Investment Fund".

- *La Banque Postale* thinks that CNAV MMFs should not be in UCITS.

- *Fidelity* urges the regulators to expand their focus beyond MMFs, to examine investment products that remain unregulated and non- transparent in the money market. Pools, structured vehicles and other funds that offer cash investment without

the strict rules under which MMFs operate should be regulated at the same level than MMFs.

- Finally a group of stakeholders (*IFIA, BVI, Insight, GDV, UBS, CZ authorities, Baillie Gifford, NatWest*) believes that Europe does not need to reform the MMFs.

(7) Should a new framework distinguish between different types of MMFs, e.g.: maturity (short term MMF vs. MMF as in CESR guidelines) or asset type? Should other definitions and distinctions be included?

Maintain CESR distinction	Focus on short-term only
17	5

Most of the answers highlight the need to have consistency in the definition of MMF at the EU level. Investors often operate across national borders and would prefer a standard approach. In the absence of a standard approach to MMF regulation, those same cross border investors may allocate between different funds on the basis of their regulation.

Regarding the current definition of short-term MMF and MMF used in the CESR guidelines, the opinions are split.

- The current distinction introduced by the CESR guidelines should be maintained (*Amundi, IMA, Deutsche Bank, Barclays, Aviva, BlackRock, AFG, BVI, Insight, Union Investment, ABI, EFAMA, BNP, Natixis, UBS, State Street, LU authorities*) because investors are now used to it and because it gives the choice to the investors.

- *HSBC, IFIA, Morgan Stanley, Federated, Fidelity* believe that the CESR classification is confusing and would need different naming conventions. They argue that MMFs not classified as short-term MMFs are in fact short term bond funds, not MMFs.

- One noted (*AF2I*) that the definition of MMF provided in the CESR guidelines is misleading because it introduces the notion of preservation of capital. MMFs should not implicitly or explicitly deliver any type of guarantee. In that sense, the only objective a MMF can achieve is to seek an investment return linked to the money market.

- *GDV* recommends introducing a distinction between MMFs investment goals, liquidity requirements and investors.

10.2. Valuation and capital

(1) What factors do investors consider when they make a choice between CNAV and VNAV? Do some specific investment criteria or restrictions exist regarding both versions? Please develop.

Most of the responses make the observation that CNAV and VNAV MMFs have been offered in parallel in Europe for many years. Many investors find it convenient and efficient to diversify their assets in CNAV MMFs for tax reasons and because the variability in the price of a VNAV complicates their cash-flow planning. In some countries, the availability of CNAV MMFs provide investors with the same tax and

accounting treatment that would apply if they invested directly in their own cash management portfolios and thus reduces the administration costs for investors, providing ease, as the return is qualified as income and not capital gain. The responses did not contain any specific example of tax regimes being favourable for CNAV or VNAV funds.

- It is often argued (*Aviva, ICMA, AFG, Amundi, Natixis, BNP*) that from a commercial point of view there is a major difference between CNAV and VNAV funds in the way they are perceived. CNAV are viewed as deposit like instruments with a stability of value that refers to the accounting of a deposit. In that sense, it may be that investors would choose a CNAV MMF rather than a VNAV MMF base on the misconception that the capital value is guaranteed. On the contrary VNAV MMFs are understood to be investment schemes.

- The CNAV / VNAV distinction is for some stakeholders (*IMMFA, HSBC*) not seen as a key driver in the choice of investors. They are more focused on funds that meet their objectives of diversification, security of capital and liquidity. After that only investors will start looking at the price mechanism or at the rating of the fund.

- *Deutsche Bank* analyses that most investors in Europe are used to CNAV funds which maintain a constant value and have a monthly dividend payment. Those who invest into VNAV funds (mainly French investors) are usually buying daily income accumulating funds. They do not see a real difference in the type of MMF other than difference in income recognition. Investors choose different funds for different accounting requirements, tax reasons, cash flow planning (which is complicated by VNAV valuation) and administration costs.

- *BlackRock* makes an historical explanation. In the two largest MMF markets, the USA and France, there is in effect little investor choice between CNAV and VNAV MMFs on an on-going basis. CNAV MMFs have become engrained in the USA and VNAV MMFs in France driven by a mixture of regulation, tax and accounting regulations and product familiarity. In France, CNAV MMFs are prohibited and investors have developed a strong preference for VNAV MMFs although their investments in CNAV MMFs did increase during the Eurozone crisis. *BlackRock's* experience is that the original decision was rarely taken on the basis of the accounting treatment of one fund or another but because CNAV MMFs were rated by CRAs and that this rating was required by the investing entity in the absence of MMF regulation or guidelines.

- A difference in settlement practices is noted by *UBS*. Units of CNAV MMFs are generally settled the same day or the day after whereas units of VNAV MMFs are settled within two or three days. *UBS* further notes that another important consideration might be the strength of the (implicit) capital guarantee by the fund sponsor for the CNAV.

(2) Should CNAV MMFs be subject to additional regulation, their activities reduced or even phased out? What would the consequences of such a measure be for all stakeholders involved and how could a phase-out be implemented while avoiding disruptions in the supply of MMF?

Yes	No
16	15

The responses to this question are mostly linked to the responses to the question 1. When both types of funds were considered as being merely equivalent, the stakeholders do also believe that CNAV MMFs should not be subject to additional rules. But numerous responses highlight the fact that CNAV MMFs are more prone to runs and should be subject to additional regulation.

- The range of possible options for increasing the rules on CNAV varies to a large degree. *AF2I* and *Banque Postale* argue that CNAV must be prohibited; *Aviva* thinks that regulators should require, where workable, a conversion to VNAV; *SE authorities* believe that additional regulation or reduction of activities should be considered; *Amundi*, *BNP*, *Natixis*, *AFG*, *FR authorities* require additional measures such as reducing the amortized cost to the last 3 month of an asset; *ABI* thinks of imposing capital buffers; and *ICMA*, *LU authorities* would see a need for increased transparency and disclosures. *Barclays* think that CNAV exacerbate runs but they don't see any appropriate measure, apart increased liquidity rules for all MMFs. *Finance Watch* thinks that the amortized cost method is misleading for investors.

- *DE authorities* are in favour of requiring a full variability of the NAV using mark to market valuation for all funds. Because the investor base of VNAV and CNAV is mostly equivalent, they do not expect significant disruptions.

- In order to ensure level playing field between VNAV and CNAV, *UBS* favours a requirement to make the implicit capital guarantee of CNAV MMFs explicit, by requiring the sponsor to record a deferred liability on its balance sheet and to disclose actual support given to any CNAV MMF in the annual report.

- The rest of the respondents stress the fact that no distinction should be made between CNAV and VNAV (this includes *Fidelity, Federated, Deutsche Bank, EFAMA, BlackRock, Insight, BVI, ALFI, State Street, IMA*). Runs affected both types of funds during the crisis therefore requiring CNAV funds to move to a VNAV system will not reduce the probability of future runs. It has never been proven that CNAV were more dangerous than their VNAV counterparts. If a conversion to VNAV was required by regulators, this could undermine the utility of MMFs to a large number of investors. It may have the perverse effect of driving investors toward less-regulated and less transparent investment products, thus increasing the systemic risk.

- According to an analysis performed by *HSBC* and *IMMFA* (6 VNAV MMFs were surveyed), the NAV of French VNAV did not move so much during the crisis, indicating that both types of funds are largely similar. Furthermore the incentives to support funds are not linked to CNAV only but also to VNAV: *HSBC* indicates that they decided to support their own VNAV funds offered in France during the crisis.

- *IFIA* stresses the need to adopt a coordinated approach among all global regulators. Any change must be globally consistent regarding the approach and the timeframe in order to avoid market distortion and investor confusion.

(3) Would you consider imposing capital buffers on CNAV funds as appropriate? What are the relevant types of buffers: shareholder funded, sponsor funded or other types? What would be the appropriate size of such buffers in order to absorb first losses? For each type of the buffer, what would be the benefits and costs of such a measure for all stakeholders involved?

Yes	No
4	21

The support to this option is very modest. The largest majority of the stakeholders doubt that it could reduce incentives of runs and increase the overall stability of the market. The design and implementation of capital buffers on CNAV funds would give rise to numerous questions which will be difficult to answer, including the potential size of the buffer and whether it is high enough. Moreover the way the buffer should be founded poses questions. An investor's funded buffer would reduce the yields that investors receive from their investments while a sponsor's funded buffer would create disadvantages between sponsors that have access to capital and others that do not. It would also increase the ambiguity of risk ownership. Moreover some worry that imposing capital buffers on investment funds would drive the investment fund industry toward adopting bank-like regulation. Investment funds are not banks and there is no reason that it should change in the future.

BlackRock expresses another opinion in this respect. While they believe that buffers are not a panacea due to numerous reasons, they continue however to support the idea that sponsors should be able to set aside some reserves in a tax-efficient manner for a "rainy day" to be used in support of their funds. They recall that they were among the first ones in 2011 to advocate for treating MMFs as special purpose banks that would hold capital and have access to central bank money.

ABI believes that CNAV should introduce capital buffers. The buffer would be established within each MMF by siphoning a small amount of income from the portfolio to be set aside as an NAV cushion. The buffer capital would be regarded as an asset of the portfolio and, as such, would be calculated into the NAV and results in a higher NAV for the MMF. The siphon would be turned on and off depending on the size of the buffer relative to the pre-determined minimum capital requirement. Shareholders of the MMF would “own” the buffer.

Capital buffers could be seen as a second best solution for the *German authorities*, after the change of accounting rules. Capital requirements could be imposed on the manager / sponsor but they must be high enough to protect the funds against runs. The *UK authorities* believe that capital buffers should be explored as an option for CNAV funds. They further point out that any further action in this area should be informed by the work of the FSB and IOSCO.

(4) Should valuation methodologies other than mark-to-market be allowed in stressed market conditions? What are the relevant criteria to define "stressed market conditions"? What are your current policies to deal with such situations?

Most of the respondents recognize that MMF managers should have the flexibility to choose the most appropriate solution to value their assets in stressed market conditions. Each type of model, amortized cost, mark to market and mark to model may be used according to different circumstances.

- The use of amortized cost is appropriate most of the times because it gives an accurate picture of the true value of an asset (*IMA, State Street, EFAMA, Fidelity, BlackRock*).

- *IMMFA and HSBC* mention that market prices are a mix of traded, quoted and evaluated prices. Money market instruments are usually marked to market with evaluated prices since they are generally held to maturity. Evaluated prices are

generally calculated mark to model taking into consideration factors such as interest rates or credit spreads. In that sense this method is not superior to the amortized cost.

- *Amundi, Natixis, Aviva, AFG* stress the need to apply the general principle of fair value and ensure that the assets are valued according to current market prices. 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, could be used. Amortised 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 amortisation method. In addition to the risk of mispricing of individual instruments, the use of amortised cost accounting could create opacity for investors regarding the actual net asset value of the funds. Therefore they recommend that the amortised cost accounting should be subject to strict conditions (e.g. less than 90 days).

- Some respondents (*Amundi, Natixis, AFG*) consider that valuing assets at bid during stressed situations can be appropriate. Using the technique of swing price may also be useful to let the redeemer pay for the impact of its order. Some (*AF2I, UBS*) believe that only the use of mark to market should be allowed in stressed market conditions.

10.3. Liquidity and redemption

(1) Do you think that the current regulatory framework for UCITS investing in money market instruments is sufficient to prevent liquidity bottlenecks such as those that have arisen during the recent financial crisis? If not, what solutions would you propose?

Most of the respondents underline that liquidity is the key feature of the MMFs. The possibility to invest and redeem at all time is essential for all investors. That being said, most of the stakeholders see a need to improve the general liquidity of the MMFs in order to avoid future liquidity bottlenecks. The range of possible measures is large: liquidity fees, different types of restrictions and liquidity constraints.

- *EFAMA* (plus many other stakeholders that express the same opinion) notes that the vast majority of MMFs are UCITS which means that their managers must, amongst other things, employ a risk management process that enables them to monitor and measure at any time the risk of the positions and their contribution to the overall risk profile of the portfolio. The crisis has however highlighted the importance of a uniform European definition of MMFs based on defensive portfolio strategies and

liquidity risk management system for being prepared for a long-lasting liquidity

shock. The CESR guidelines have rightly addressed this concern on a pan-European basis. Hence, at this stage, the reform of MMFs should focus on the fund's internal liquidity risk, by requiring MMFs to adhere to certain liquidity requirements and to take into account investor concentration and segments, industry sectors and instruments, and market liquidity positions.

- The liquidity requirements should take the form of minimum liquidity levels at the level of the MMF to enable funds to be able to meet redemption requests without relying on secondary market liquidity. Those requirements need to be proportionate to the role of MMFs in providing short term funding to the banks, companies and governments. The liquidity requirements receive some support (please refer to question 4).

- The introduction of a "know your customer" policy is also favourably welcomed by some stakeholders (*IMMFA, EFAMA, ALFI, HSBC, Federated, Fidelity, BlackRock*). MMFs should be required to know their clients, in order to enable them to monitor subscription/redemption cycles and manage risks arising from shareholder concentration. Such measures may need to be accompanied by requirements on intermediaries to disclose the identity of underlying investors to MMFs.

- Some stakeholders (*Amundi, AFG, Natixis, BNP, SE authorities*) consider that current rules are enough to prevent liquidity problems on VNAV and that CNAV may require additional measures.

- A group of respondents (*AF2I, BVI, Insight, GDV, Deutsche Bank and Union Investment, UBS, Aviva*) is not convinced that there is a need to reform the liquidity profile of the MMFs. The current rules contained in UCITS plus the rules on WAL and WAM that have been added by the CESR guidelines are sufficient.

- Any additional rules on liquidity should apply to AIFs only (*AF2I*).

- *IMA* is in favour of reviewing the liquidity rules but supports a common approach for all UCITS funds.

- *Deutsche Bank* recalls that MMFs, as UCITS funds, have already the possibility to take up to 10% credit / leverage which makes sense to use in times of stress: the fund could place repo transactions and use the cash received to fulfil extraordinary redemptions.

(2) Do you think that imposing a liquidity fee on those investors that redeem first would be an effective solution? How should such a mechanism work? What, if any, would be the consequences, including in terms of investors' confidence?

Yes	Not on VNAV but maybe on CNAV	Other methods	No
6	6	5	13

Only 6 stakeholders formally recommend the introduction of a liquidity fee mechanism and 2 recommend it for CNAV funds only. It is seen by other stakeholders as potentially dangerous if it decreases the general liquidity of the fund and because of possible runs once the fee is applied.

- is recommended to introduce a liquidity fee applied during stressed market conditions in order to disincentive investors to run. The decision to activate such a fee could be left to the board of the fund (*IMMFA, EFAMA, Barclays*). Some objective triggers are also envisaged: when there is a 25bps deviation from the par (*HSBC*) or when certain liquidity thresholds are reached (*BlackRock*). The amount varies in size; for some it should cover the difference between the par and the shadow NAV, for another (*BlackRock*) it should be fix at 1%.

- For *Deutsche Bank*, liquidity fees would undermine the benefits of MMF, which stand for daily redemptions. Such an approach could undermine stability as it would give an incentive to engage in a pre-emptive run if investors fear that the liquidity fee may be imposed in the event of market stress. *Deutsche Bank* thinks however that the Board of Directors should have the right to impose liquidity fees if deemed necessary to protect remaining investors.

- Some stakeholders (*AFG, Natixis, BNP*) think that VNAV MMFs do not need liquidity fees because they already value their assets marked to market. Only CNAV should be subject to such a fee (*EFAMA, ALFI*).

- *Aviva* makes a distinction between CNAV and VNAV funds. They have concerns regarding the introduction of a liquidity fee for VNAV as they believe that it may be difficult to identify a suitable set of parameters that would trigger the activation of the liquidity fee and this would leave such a decision open to question. They are also concerned that the imposition of a liquidity fee could lead to a mass transfer of institutional investors into other investment vehicles, especially in cases where the liquidity fee is perceived to be too high. They think that with regards CNAV MMFs, these funds are able to maintain both their stable price and provide liquidity in normal market conditions, so liquidity fees should only be introduced, in principle, during stressed market conditions. But overall they are of the view that a liquidity fee would be unpopular with investors.

- A group of stakeholders think at imposing other methods, such as swing prices (*Amundi*), dilution levies (*AXA*), partial single swinging pricing (*UBS*), or a dual approach like in the UK (*IMA*). The *LU authorities* recommend the use of gating mechanisms.

- The rest of the stakeholders (*ABI, State Street, Federated Investors, DE authorities, SE authorities, Union Investment, GDV, AF2I, Insight, BVI, Finance Watch, Amundi, Morgan Stanley*) believe that a liquidity fee would not be operationally achievable and would most likely increase the runs due to its pro-cyclical effect. This would also reduce the attractiveness of the product for the investors which at the end would be detrimental for the whole sector.

(3) Different redemption restrictions may be envisaged: limits on share repurchases, redemption in kind, retention scenarios etc. Do you think that they represent viable solutions? How should they work concretely (length and proportion of assets concerned) and what would be the consequences, including in terms of investors' confidence?

Restricting the liquidity of a MMF is seen as a dangerous option by almost all respondents. This is a key feature of the MMFs and the investors might decide to stop investing in MMFs if such mechanisms were to be introduced. The hold-back mechanism

was categorically opposed because it would decrease too much the attractiveness of the MMFs.

- It was noted that UCITS funds have already the possibility to suspend redemptions which is seen as an appropriate tool to manage stressed situations. They also have the possibility to limit the redemptions at 10% per day in certain circumstances in order to protect the investors.

- Some, like *IMMFA* and *HSBC*, think that MMFs should be allowed to perform redemptions in-kind but see some challenges in the practical implementation. Furthermore *HSBC* proposes to limit the total redemptions in one day at 10%.

- Other stakeholders (*BVI, EFAMA*), categorically reject the redemption in-kind, seeing a lot of drawbacks. It is difficult to divide assets into very small positions and the valuation of assets could be complicated. Furthermore it could lead to a decline in the market price of the securities received by the investors if they decide to sell them.

- *Finance Watch* suggests introducing a uniform one month gate of 50% of the assets used in exceptional circumstances. This would limit the run risk and contagion risk and preserve investor confidence.

(4) Do you consider that adding liquidity constraints (overnight and weekly maturing securities) would be useful? How should such a mechanism work and what would be the proposed proportion of the assets that would have to comply with these constraints? What would be the consequences, including in terms of investors' confidence?

Yes	No
21	8

The majority supports the introduction of minimum daily and weekly liquidity levels. It is seen as a good mean to increase the overall liquidity of the portfolio. They further point out that this system is already implemented in the US since 2010 and that it has proven to work.

- *HSBC, Morgan Stanley, Fidelity, Federated, ALFI, Morgan Stanley, ABI, State Street, BlackRock* are in favour of 10% daily and 30% weekly thresholds (based on US model and definition).

- *IMMFA* notices that their members are currently required to have at least 10% / 20%.

- *BNP, Natixis, AFG, Amundi* are in favour of 10% daily and 15% weekly thresholds (based on the definition of maturing assets).

- *Aviva, IFIA, EFAMA, Union Investment, La Banque Postale* support the idea of liquidity constraints but do not mention any specific limits.

- *Barclays, AXA* are not opposed to minimum liquidity levels but it should be dynamically decided by the manager.

Some drawbacks cannot be ruled out because it could force MMFs to shorten their investments, thus reducing the range of maturities available for issuers. The definition of the liquidity is also seen as a challenge.

- *Finance Watch* prefers imposing stricter rules on the maturity and weighted average life of the assets.

- *BVI, Deutsche Bank, GDV, Assogestioni, AF2I* doubt that the negative implications of the liquidity constraints (decreasing portfolio returns and shrinking attractiveness) could be compensated by any gain in investor confidence.

- *IMA* fears that requiring minimum amounts of investments with short realization period could lead to a squeeze in the availability of such investments and push prices up which is not in the interests of investors.

- *Insight Investment* considers that rating criteria and WAL / WAM limits are enough; other limits may steer investors toward enhanced cash products not having the MMF label.

(5) Do you think that the 3 options (liquidity fees, redemption restrictions and liquidity constraints) are mutually exclusive or could be adopted together?

The responses are intrinsically linked to the responses to both precedent questions. The biggest majority of the responses indicate that only one measure is needed. The stakeholders that supported the imposition of a liquidity fee (or the methods of swing prices and dilution levies) think that it could work together with liquidity constraints.

(6) If you are a MMF manager, what is the weighted average maturity (WAM) and weighted average life (WAL) of the MMF you manage? What should be the appropriate limits on WAM and WAL?

The vast majority of the stakeholders believes that CESR Guidelines provide a robust framework to limit the main risks to which MMFs are exposed, i.e. interest rate risk, credit/credit spread risk and liquidity risk. Specifically, the reduction in the WAM to no more than 60 days for short-term MMFs and 180 days for MMFs, limits the overall sensitivity of the funds' NAV to changing interest rates. The reduction of the WAL to less than 120 days for short-term MMFs and less than 397 days for MMFs, limits credit and credit spread risk.

10.4. Investment criteria and rating

(1) Do you think that the definition of money market instruments (Article 2(1)(o) of the UCITS Directive and its clarification in Commission Directive 2007/16/EC16) should be reviewed? What changes would you consider?

Yes	No
6	15

Most of the respondents do not think that the definition of money market instruments should be reviewed. The UCITS directive, the Eligible Asset directive plus the CESR guidelines provide already a solid definition.

- *HSBC, IMMFA, BlackRock* believe that the definition in UCITS should better reflect that the majority of money market instruments are not traded on an exchange but are traded between entities.

- *Morgan Stanley* would welcome a review that clarifies what is not eligible.

- *The LU authorities* are of the view that the definition should be reviewed in order to include a reference to the maturity feature of the money market segment. They give the example of a 20 years floating rate note re-fixing the interest rate every year with significant spread risk that should not qualify as money market instrument.

(2) Should it be still possible for MMFs to be rated? What would be the consequences of a ban for all stakeholders involved?

Prohibit ratings	Mixed views	No prohibition
2	14	7

The views are mixed on this issue. While the majority of the respondents recognize added value of the ratings, they also see a risk when the funds are downgraded. It is indicated that ratings provide an external source of information very useful for investors.

- The rating of a fund conveys useful information but the way CRAs have performed during the last years pose question. Therefore the methodology used by CRAs could be reviewed (*IMA, Barclays, State Street, IMA, EFAMA, ALFI, Federated*).

- *EFAMA* and *ALFI* note that CRAs have lost credibility because their forecasts were generally wrong. Therefore it is doubtful that a rating of MMFs offers any additional information value to investors.

- *BNP, Natixis, AFG, Amundi, ICMA* believe that rating is a commercial activity and nothing should prevent CRAs from offering their services. However a rating of MMF should not be expressed on the same scale as issuance ratings in order to avoid misinterpretation.

- A ban of rating could have possible repercussions on investors that might not be able to rapidly change their investment guidelines. Furthermore it would increase the burden on investor's due diligence procedures although the investors may lack the capacity and resources to conduct detailed investigations prior the investment (*AXA, Aviva, ABI, BlackRock, Insight, Individual, LU authorities*)

- *Deutsche Bank* acknowledges a lot of benefits to credit ratings and would see increased burdens for investors without them. But it should not be an issue to ban MMF ratings if enough interim-period is granted.

- *Morgan Stanley* underlines that ratings would become less important to clients if there were a robust, detailed and regulator-monitored set of European-wide MMF definition similar to US SEC rules.

- Some stakeholders recognize that ratings pose some additional risks to the stability of the MMFs. *HSBC* and *Union Investment* are in favour of prohibiting the MMFs to be rated.

- IMMFA recognises the risks of ratings but does not think that MMFs should be prohibited from being rated. They support proposals to mitigate problems posed by MMFs fund ratings. If ratings were prohibited, there would need to be a substantial lead time before implementation to allow investors in MMFs to update their treasury policies and for fund sponsors to provide additional transparency to investors to provide a credible alternative to a MMF rating.

(3) What would be the consequences of prohibiting investment criteria related to credit ratings?

Delete reference to ratings	Do not delete reference to ratings
12	11

The stakeholders are again split on this issue. One part strongly supports the prohibition of credit rating criteria for the investments of MMFs while others fear that a deletion of credit rating criteria might decrease the quality of the assets detained by the fund.

Credit ratings are widely accessible and useful filter for the initial assessment of the creditworthiness. Ratings ensure the existence of a valuable minimum industry-wide benchmark. In the absence of a uniform minimum standard, more aggressive MMF managers may be encouraged to take on additional risk in the pursuit of higher returns. Without ratings this would bring more subjective explanation of the risk profile, bring ambiguity and less harmonisation of rules between managers.

- *AXA, State Street, Aviva, UBS, Fidelity, Morgan Stanley, BlackRock, Federated and Insight* do not support the deletion of the reference to ratings even if some deficiencies are sometimes observed. Internal assessment should be done in parallel.

- *IMMFA* and *HSBC* think that ratings are not the perfect solution but that no other credible alternative exists for defining the quality of an asset. Deleting any reference to ratings would cause great uncertainty to investors.

- *AXA* anticipates that it could be harder for some issues to be accepted by investment managers if information is less readily available for internal credit assessment. Some managers may not have the numbers and quality of staff to perform a full range of credit assessments, which may reduce the demand of certain securities.

- A*BI* believe that managers should be able to make their own assessment but the credit ratings represent a useful filter.

The significance of ratings in CESR guidelines on MMFs is overstated. What matters is that management companies employ a risk-management process which enables them to monitor and assess the credit quality of the money market instruments they invest in. The manager should be responsible and should be able to overwrite the credit rating of an instrument if it can conclude that the instrument is of high quality. Currently the CESR guidelines require that the manager must check the ratings awarded by each recognized CRA which is unworkable due to the high number of CRAs (28).

- *La Banque Postale, BNP, Natixis, AFG, Amundi, Barclays, IMA, EFAMA, ALFI, ICMA, Assogestioni and BVI* think that any reference to credit ratings must be deleted in the CESR guidelines.

(4) MMFs are deemed to invest in high quality assets. What would be the criteria needed for a proper internal assessment? Please give details as regards investment type, maturity, liquidity, type of issuers, yield etc.

An internal credit process can only be carried out with proper resources, policies and procedures in place to monitor credits and set credit limits. Having parameters that only permit certain investment types, maturity, liquidity, and types of issuer does not constitute a credit process. There should be controls on factors such as maximum maturity, liquidity and investment types. Coverage of issuers should be carried out by

experienced credit analysts who perform fundamental research of issuers based on quantitative and qualitative factors. There should be a regular review processes in place for each issuer, and a credit oversight process.

Many factors can be used internally to assess the quality of an issuer or a specific paper:

- Fundamentals: regulatory and economic environment, management and corporate strategy, balance sheet dynamics, earnings previsions….
- Technicals: supply/demand, Central Bank eligibility, Commercial Paper program size, back up lines, public issue/private placement, FRN/asset swaps…
- Relative value: sector peers, similar maturities, instrument type comparison…

11. ANNEX 11: BILATERAL AND MULTILATERAL MEETINGS

03.10.2012
Unit concerned: G4 – Asset management
Stakeholder: HSBC
Topic: Regulation of Money Market Funds (MMF)
Purpose of this report: Fact finding for an impact assessment
Stakeholders present:
Jonathan Curry, Chief Investment Officer – Liquidity
Simon Jowers, Head of European Financial Sector Policy
Members of unit G4 present
Tilman Lueder
Olfa Ben Jamaa
Franck Conrad
Members of unit 02 present
Reinhard Biebel

Key points: MMFs are considered as systemically important. HSBC presented their whole list of regulatory reforms for increasing the stability of the European MMFs.

Liquidity: The overall liquidity of the fund must be increased by requiring MMFs to adopt minimum daily and weekly liquidity thresholds. The IMMFA levels are a good basis (10% and 20%).

The MMF must develop an internal policy for better knowing the customers and introduce client concentrations (for example max 5%).

The fund should be able to limit the redemptions at 10% per day (above use of gates).

It should also be possible to perform redemptions in-kind when the amount is too large.

Runs: Floating the NAV should not be the response for stopping runs. During the crisis French VNAV did not move more than CNAV. They also offer a kind of guarantee.

Liquidity fees are more appropriate. It would be activated once objective triggers are reached (such as a shadow NAV of 0.9975) and in this case a fee should cover the loss caused by the redemption.

Sponsor support: Sponsor support must be prohibited because it is not clear who owns the risk. It creates false incentives from investors that the MMF will be always guaranteed. It can take several forms: cash, liquidity facility, buying of units. HSBC provide support to its French VNAV too.

Credit ratings: It is dangerous to keep the ratings. It should be prohibited in order to avoid negative effects of a downgrade. It would also reduce the pressure on the MMF to maintain their ratings.

Scope: The dual system of CESR is not granular enough, the split between short term MMF and MMF is confusing. Only short term MMFs should be allowed to be MMFs.

04.10.2012

Unit concerned: G4 – Asset management

Stakeholder: Fidelity

Topic: Regulation of Money Market Funds (MMF)

Purpose of this report: Fact finding for an impact assessment

Stakeholders present:

Nancy Prior, President of Money Markets

James Febeo, Senior vice president, Head of regulatory affairs

Members of unit G4 present

Tilman Lueder

Olfa Ben Jamaa

Franck Conrad

Fidelity: Fidelity is the largest provider of MMF in the US with $490 billion but in Europe only $7 billion through Fidelity Worldwide. They see Europe as a market with great potential and want to expand.

Liquidity: The overall liquidity of the fund must be increased by requiring MMFs to adopt minimum daily and weekly liquidity thresholds. The IMMFA levels are a good basis (10% and 20%). With the US 2010 reform, the portfolio risk has been considerably reduced.

If a fee were to be introduced, it should be triggered by a board decision, not on objective triggers and should be fixed amount.

Buffers: The stable price did not cause the crisis, the MMF were caught by a banking crisis. Floating the NAV is not a solution since the incentive to redeem still exists.

But in order to find a solution, they propose to introduce a buffer. This would absorb the first losses. It would be calculated as follows. It would be paid by investors over a period of 7 years.

Government assets, including repos with government asset as collateral: 0%

Assets having a remaining maturity of less than 7 days: 0%

Assets having a remaining maturity of more than 7 days: 100bps * time remaining * par amount. Example for an asset having a par amount of 1 and 250 days till the maturity: 100bps * (250/360) * 1 = 69bps

Sponsor support: Faced with our concern regarding the 2011 sponsor support in the US, after the 2010 reform, they indicated that it was caused by a negative watch from Fitch on a Norwegian bank, "Export Kredit". They pointed out the fact that the support was driven by capital support agreements negotiated before the reform.

Know your customers: It is very important that the managers know their client base in order to anticipate redemptions. The proportion of liquid assets must be increased if the concentration of clients increases.

Scope: The split between short term MMF and MMF is confusing. The European MMF definition is equivalent to short term bond funds in the US. Only short term MMFs should be allowed to be MMFs.

14.10.2012

Unit concerned: G4 – Asset management

Stakeholder: BlackRock, Inc, London

Topic: Regulation of Money Market Funds (MMF)

Purpose of this report: Fact finding for an impact assessment

Stakeholders present:

Bea Rodriguez, Managing Director, cash team

Joanna Cound, Managing Director, Government affairs

European Commission

Tilman Lueder

The company: BlackRock is the second largest manager of global MMF – the largest is JP Morgan. In Europe, BlackRock is also No 2 (behind JP Morgan) running approximately $ 100 billion in MMF denominated in euro, sterling and dollars. BlackRock's MMF client base is largely institutional, with retail clients amounting to less than 10% of assets under management. BlackRock MMF's NAV normally oscillates between € 0.999 and 1.001 (+/- 10 basis points).

The MMF market: In BlackRock's view runs on MMF reflect lack of confidence in the underlying securities not on MMF as a sector. The events of September 2008 demonstrate that investors were in fact redeeming the prime MMF due to their exposure to commercial paper issued by banks. In light with other stakeholders BlackRock argues that almost the entirety of funds that were redeemed from prime MMF were reinvested into government MMF (flight to quality). Therefore, if there was a run in September

2008, it was a run on commercial paper issued by the banking sector not on MMFs themselves.

BlackRock argues that an analysis of MMF in- and outflows shows that the major outflows in US MMF in September 2008 were linked to exposure to bank paper, the general impression that US banks were insolvent coupled with political uncertainty about the US Government's response. On the other hand, as the UK Government quickly nationalised RBS and Lloyds, outflows in sterling denominated prime funds (exposed to bank paper) were minimal.

Main arguments:

- Ms Rodriguez did not believe that the stable vs. variable NAV was particularly relevant in the organisation of a MMF. Runs on funds could never be avoided altogether and were exclusively triggered by credit events pertaining to invested securities. In that case the NAV would oscillate beyond the range of +/- 10 basis points and investors would be incentivised to redeem early whether the redemptions are at par or slightly below.

- Investors in BlackRock funds are aware that asset values are volatile – for them the quality and liquidity of the underlying investment assets are much more important than the method of valuation used to value the daily NAV of these assets. According to BlackRock, the problems with MMF arise when they invest in illiquid and hard-to-value assets such as ABS, ABCP or MBS.

- An additional threat for MMF was their exposure to EU domiciled sovereign debt, BlackRock funds would nowadays only invest in DE, NL or FR bonds.

- In relation to corporate issuers, MMFs have become more modest, the 'single A' was the new standard.

- In any case, BlackRocks MMF often were a cash management tool for hedge funds, sudden drawdowns were therefore to a large extent unavoidable and appropriate 'know-your-customer' policies were in place to anticipate large redemptions.

The stakeholders' policy preferences:

- BlackRock favours (in line with IOSCO) a separate definition of MMF in EU regulations. BlackRock also believes that only funds that comply with UCITS should be eligible to be MMFs.

- BlackRock does not favour capital buffers, whether sponsored by the provider or investors.

- It has some sympathy for liquidity or redemption fees as long as these fees would compensate those investors that do not redeem early in times of stressed markets. But BlackRock believes that current proposals on liquidity fees do not go far enough, the withdrawal fees should even penalise early redeemers and benefit the NAV of the fund (standby liquidity fees). Therefore, BlackRock advocates a liquidity fee which is calculated as twice the difference between the stable NAV and the floating NAV at the time of redemption. For example, if the floating NAV is at 0.9975, the fee would

be 50 basis points. The penalty of 25 basis points would accrue to investors that remain in the MMF.

- BlackRock is opposed to hold-backs, such a system would be disastrous for the image of the industry. This begs the question why a withdrawal penalty would not be equally 'disastrous' but BlackRock argues that investors would be more accepting toward the latter.

05.11.2012
Unit concerned: G4 – Asset management
Stakeholder: Federated Investors Inc., Pittsburgh, USA
Topic: Regulation of Money Market Funds (MMF)
Purpose of this report: Fact finding for an impact assessment
Stakeholders present:
John W. Mc Gonigle, Vice Chairman, Federated
Deborah Cunningham, Chief Investment Officer, Federated
Gregory Dulski, Corporate Counsel, Federated
David Freeman, Luc Gyselen, Arnold&Porter LLP
Members of unit G4 present
Christiane Grimm
Franck Conrad
Tilman Lueder

The company: Federated, active in MMFs since 1974, states that their range of MMF 'cover the waterfront', that is they comprise Government funds, municipal funds (which are tax exempt in the US) and prime funds (which focus on short-term corporate debt). Federated is a big player in the US (No 5 with $ 256 billion in short-term MMF). In Europe, Federated is rather small, managing $ 7 billion in Irish domiciled funds and around $ 4 billion in the funds domiciled in the UK. All of the MMF managed by Federated are so-called 'stable NAV' (CNAV) funds, as this corresponds to overwhelming client demand. It also appears that the EU customer based is mostly comprised of US companies that have euro or sterling denominated treasury needs. Federated never broke the dollar; its investment portfolio (all short term maturities included) oscillates between $ 0.998 and 1.002 per share. This, in Federated's view, justifies recourse to amortised cost accounting for the entirety of its short term MMF portfolio. Federated's cost ratio for MMFs amounts to between 10 and 40 basis points (0.1-0.4%). Bank deposits, in the US, would generate costs of between 3-4%.

The MMF market: In the US, MMFs hold around 40% of short-term securities issued by the corporate sector (both financial and non-financial companies). MMFs are also purchasers of 70% of short-term securities issued by the federal government, federal agencies and municipalities. A company like Federated (representative of the MMF sector) is usually exposed to both government and corporate debt: Federated has around $ 120 billion invested in government securities, $ 125 billion in corporate debt and $ 25 billion in municipal debt. Compared to the industry standard, Federated has a high exposure to municipal debt as it claims to specialise in this area.

Federated was unable to provide a comparable level of detail for the European market. In the course of the meeting it became clear that there is less municipal issuance in Europe (certainly on the Continent) and that Federated seems to specialise more on corporate debt (to be confirmed).

Main arguments: Like many other US fund advisers, Federated argues that the week of September 8, 2008 was highly unusual with the collapse of Lehman, the disappearance of Merill Lynch as an independent entity and the need for the Fed to step in and inject over $ 85 billion into AIG, the biggest US insurer. These difficult market conditions, rather than the method of asset valuation used by a MMF, resulted in a drop in confidence in respect of prime funds (and notably those that invest in short term debt issued by financial institutions). Nevertheless, out of 850 MMF operating in the US, only one MMF (Reserve Primary) broke the dollar and this exclusively on account of its exposure to commercial paper issues by Lehman (this exposure generated a $ 750 million loss in the MMFs portfolio).

Federated also argues that even this loss would not necessarily have led to the MMF breaking the dollar: diligent management by the board would have prevented the MMF from breaking the dollar. Instead of redeeming shareholders at par, despite known losses on the Lehman paper, the Primary Reserve board should have immediately frozen the fund and liquidated its otherwise unimpaired holdings in an orderly manner. Federated argues that it was precisely the board's unwillingness to immediately freeze redemptions at par (even as the Lehman losses were known) that caused the run on the Reserve Primary Fund.

Federated also states that the week of September 8, 2008 did not lead to overall net outflows from MMFs. What they observed was rather investors recalibrating their exposure away from prime funds toward government funds ("flight to safety"). Federated remarks that, even in the best of circumstances, there was high turnover between government and prime MMF as some investor engage in 'window dressing' at certain junctures (demonstrating that they have solid holdings in government debt).

The stakeholders' policy preferences: Federated is not against MMF reform. Essential ingredients, from their perspective, are stricter rules on overnight and weekly liquid assets. They propose a rule that 10% of an MMF's holdings should be in securities that can be converted into cash overnight and at least 30% must be convertible into cash in 5 business days. In their view, this requirement alone would have avoided the Reserve Primary Fund from breaking the dollar. In addition, Federated argues that the liquidity rules should be complemented by a 'know-your-client' rule. For each client that accounts for more than 10% of the fund's shares, the above liquidity thresholds should be adjusted by 10%. That means, a MMF with a single client that accounts for more than 10% of shares, the daily liquidity should increase to 20% and the weekly liquidity to 40%. The latter is an interesting idea not mentioned in their written submissions. Other events that increase the demand for redemptions at certain predictable periods in time (payroll or tax at the end of a month, quarter, etc.) should also be factored into the fund's liquidity planning.

Overall conclusion: Very informative meeting - very focused in the US situation and debate. Federated was invited to submit more granular data for Europe addressing a variety of scenarios, such as:

(i) customer reaction to floating the NAV for EU domiciled funds;

(ii) customer reaction to an obligation that all CNAV funds need to publish the shadow NAV on a daily/weekly basis;
(iii) granular data comparing the performance of CNAV and VNAV funds in situations of market stress;
(iv) in case comparable data under (iii) cannot be obtained, anecdotal evidence of CNAV vs. VNAV MMF investors redemption behaviours in stressed market conditions; and
(v) evidence on close substitutes for CNAV funds in Europe (e.g., bank deposits, unregulated funds, CNAV funds overseas, etc.).

12.11.2012

Unit concerned: G4 – Asset management

Stakeholders: Amundi Asset Management, CM-CIC Asset Management, AXA Investment Managers, Association Française de la Gestion financière

Topic: Regulation of Money Market Funds (MMF)

Purpose of this report: Fact finding for an impact assessment

Stakeholders present:

Mikaël Pacot, AXA IM, Head of Money Markets

Luc Peyronel, CM CIC AM, deputy CEO

Patrick Simeon, Head of monetary business

Sabine de Lépinay, AFG

Members of unit G4 present

Tilman Lueder

Olfa Ben Jamaa

Rostia Roszypal

Franck Conrad

Key points: All stakeholders see the need for a reform of European MMFs and would prefer a transversal approach, focusing on both UCITS and AIF funds. The liquidity profile of the MMFs must be enhanced, the reliance on credit ratings reduced and the linearization over 3 months maturity forbidden.

MMFs through the crisis: Some funds invested in ABS suffered valuation and liquidity problems in 2007. While most of these funds were not classified as MMF, they however provoked negative repercussions on classic MMFs. Most of the French MMFs passed through the crisis without specific problems due to their prudent investment approach: lowering of asset's maturity and reduction of duration. The mark to model has been authorized by the AMF to value the assets that had no market price anymore. French MMFs were not exposed to toxic assets such as German MMFs did; therefore there was no need, as in Germany, to receive support from the public authorities. Such a crisis would not be possible anymore since the rules on MMFs have been strengthened.

The 2008 crisis was linked to the global loss of confidence in US banks. This was again managed through a reduction in maturity and duration. The French MMFs recorded inflows during the 3rd and 4th quarter of 2008 because investors sold their exposure to US banks (IE MMFs) in order to buy MMFs exposed to European banks.

The VNAV funds were able to absorb most of the daily losses in value thanks to the then prevailing high yields (4%). Therefore they did not record large price fluctuations. Some funds benefited however from sponsor support but the rationale was to avoid reputational risk, not to maintain a stable price as CNAV did. Because some MMFs have been sold as daily liquid investments and in fact had more than 800 days of WAL, sponsors preferred to inject cash in the MMF instead of having to deal with misselling complaints. Such a situation could not happen today anymore since MMF rules limit WAL and WAM.

Liquidity: The overall liquidity of the fund must be increased. They propose to introduce a ratio of 10% of daily maturing assets and a ratio of 15% of weekly maturing assets for short-term MMFs. For MMFs, the ratio should be again 10% daily but 15% monthly. They made some the proposal to implement the technique of swing prices: once the amount of daily redemptions / subscriptions exceeds 10%, the fund must use the bid, respectively the ask instead of the mid-price. This method is already used in LU. If they consider this option as theoretically appealing, they see some risks in its application. Once the technique is activated, it could trigger a wave of redemptions. Therefore the regulator should take the decision to apply it to all funds at the same time, but it is seen as not possible with 27 different regulators.

Credit ratings: Credit ratings are seen as an aggravating factor, both at the level of the fund and at the level of the asset. Once a fund loses its AAA rating, it can be systemic since all investors want to redeem. It is always more complicated to maintain the AAA rating because the CRAs impose always more stringent criteria. Some investors require a rating from all 3 biggest CRAs in order to invest in a MMF. More generally the future of MMF rating is seen as problematic: investors put into question the necessity to invest in AAA rated MMF because the criteria to be awarded the AAA are so constraining that the yield is approaching 0. AFG indicates that ratings are not so important when there are clear rules on MMFs.

The reference to ratings in CESR guidelines must be removed: use a reference to investment grade instead of two highest ratings. Very high quality issuers (e.g. BBVA) are often downgraded which forces the MMF to sell all the assets issued by this issuer. Managers are better able to evaluate the risk, through an internal rating process.

Linearization

- (CNAV MMFs are seen as misleading the client: they offer a kind of guarantee. They are dangerous because the discrepancy between the amortized price and the market price can be substantial. This creates liquidity problems when the fund is forced to sell its assets in order to meet redemption requests. They prefer a linearization limited to the last 3 months, but only if the asset does not represent material risk.

- The funds that maintain a stable price at 1 are seen as convenient for many investors and represent advantages when their country of domicile applies a tax on capital gains. Some investors might not easily convert to a VNAV system for these reasons. A system where the fund maintains a share price of 1 while using amortized cost in the last 3 months already exists (e.g. some Amundi funds) but it is challenging to keep the AAA rating as there is a strong pressure from CRAs to invest only in less than 3 months assets.

Scope: Any new regulation should be based on the dual system developed by CESR: short-term MMF and MMF. Investors are now used to it and appreciate the flexibility to

switch from one category to the other in order to meet their different needs. A better denomination could however be found.

Impact of a change in EU legislation: They do not think that the US funds represent any kind of competition for EU funds. Both markets are hermetic. The time lag between the two zones is seen as two important for corporate treasurers that manage their cash on a daily basis. Furthermore it is more costly to invest in € share classes of US funds due to the currency swap between EUR and USD.

15.11.2012

Unit concerned: G4 – Asset management

Stakeholder: BlackRock

Topic: Regulation of Money Market Funds (MMF)

Purpose of this report: Fact finding for an impact assessment

Stakeholders present:

Barbara Novick, Vice Chairman, Head of Government relations and public policy

Joanna Cound, Managing Director, Government relations

Members of unit G4 present

Tilman Lueder

Franck Conrad

US situation: BlackRock explained the situation in the US with the launch of a MMF consultation by the FSOC. It was awaited but it is seen as worrying by the US industry since it represents a major political push for a reform. They regretted that some industry representatives (ICI) were engaged in a conflict with the SEC, which leaded the SEC to abandon the project. They preferred the negotiation approach, in order to avoid being overruled by the FSOC.

They are unsure about the future of such a reform, if the SEC will really act on the basis of FSOC recommendations or not. They pointed out that several key regulators, including Mary Shapiro and Tim Geithner, are going to leave in the next weeks, which could change the situation. Everything will depend of the new Commissioners appointed to the SEC.

The consultation report published by the FSOC is basically the report that the SEC wanted to issue in August. They regret that unworkable options are still discussed, like the Minimum Balance Requirement. It is seen as extremely complex and not applicable.

MMFs through the crisis: They explained that MMFs with stable value are not more prone to runs than MMFs with a variable price. The most important criteria for the investors are the quality of the assets and the liquidity. Once there is a doubt that the MMF may hold poor quality assets, investors will run, irrespective of their pricing model. They pointed out the example of France in 2007 and Germany in 2008.

The Commission pointed out the fact that a lot of MMFs received sponsor support in order to avoid losses. BR acknowledges the fact that MMFs receive regularly support; this is mainly driven by credit events.

Liquidity: The overall liquidity of the fund must be increased. The European MMFs could adopt the same rules as the US but it was recognized that the definition would differ a little bit because it is difficult for Europe to include government assets. When the US introduced such thresholds, they noticed that issuers of short term debt (above 3 months maturity) tended to increase the maturity of the instruments in order not to depend anymore from MMF funding because MMFs were almost exclusively buying very short term assets.

Credit ratings: Opinions were sought on the riskiness of the credit rating of some MMFs. BR mentioned the example of the Prime Rate in the UK. They are not sure if the risks of a downgrade are of a systemic or only idiosyncratic nature.

Runs: Floating the NAV should not be the response for stopping runs. Liquidity fees are more appropriate. It would be activated once objective triggers are reached (such as liquidity levels) and in this case a fee of 1% applies on redeeming shareholders. Confronted with our concern that the activation of the fee may be the trigger of a run in itself, they argued that most probably such a fee would be imposed at the same time to all other MMFs.

Scope: We explained the European dual system, Short Term MMF and MMF, and explained our need not to exclude any type of MMF from the definition. A dual system, with maybe a new denomination, could be seen as workable.

29.11.2012
Unit concerned: G4 – Asset management
Stakeholders: KBC
Topic: Regulation of Money Market Funds (MMF)
Purpose of this report: Fact finding for an impact assessment
Stakeholders present:
Chris Vervliet, KBC
Members of Unit G4 present:
Tilman Lueder
Franck Conrad
Andrea Fenech Gonzaga

CESR Guidelines: KBC finds that although certain parts of the CESR Guidelines are sufficiently prescriptive, other parts, such as those requiring 'diversification' allow significant room for interpretation. In fact, 'diversification' is nowhere defined in the CESR Guidelines. For this reason, KBC has its own internal diversification rules that are based on credit ratings combined with a maximum counterparty concentration limit (per issuer). The concentration limits KBC imposes are generally more strict than those in UCITS and vary according to the type of counterparty (Corporates; Sovereigns; Hybrid). For corporates, the limit is 2.5 to 5% per issuer, while for sovereigns it can be higher. KBC imposes concentration limits both at the level of each fund, as well as on an overall basis, that is, taking into account the positions held by all their MMFs.

KBC does not have CNAV MMFs. KBC does not make use of amortised cost accounting, they instead use different methods depending on the type of instrument and the existence of a secondary market for that instrument. For Term Deposits they use

mark-to-model because of the lack of market prices, whilst for bonds they use markt-to-market. KBC uses markt-to-model also for Commercial Paper. KBC does not take counterparty risk of default in valuing Term Deposits.

By bringing its funds in line with the CESR Guidelines on WAM and WAL, KBC has to a large extent eliminated negative values of its MMFs, particularly for short-term MMFs.

KBC's Client base: KBC's investors are primarily Belgian medium-size corporates and SMEs. Their investors are not large multi-national companies. Investors use MMFs for short-term investments or to park their money prior to longer-term investments.

Eastern Europe: KBC has a number of Eastern European MMFs, particularly in Hungary. Reference was made to the different diversification practices in Eastern Europe as the assets of MMFs in the CZ or HU are more concentrated than those of BE or LUX (continental) MMFs. An important part of the Eastern European MMF market is therefore Non-UCITS.

Financial Crisis: KBC has not encountered any problems with its MMFs during the crisis. During the crisis KBC monitored the prices of their MMFs very closely and made shorter-term investments.

Although KBC only has VNAV MMFs, it argued that their MMFs have a long history of stability and their model has never been tested in a crisis scenario. It is therefore not possible to know whether a CNAV or VNAV would be better in terms of investor runs.

Reference was made to the Axon case, an Asset Backed Commercial Paper vehicle that defaulted notwithstanding its strong AAA rating and in which many MMF managers were invested in. In Axon case, managers decided to support their MMFs.

Sponsor Support: KBC could not provide an answer as to whether they would provide sponsor support to their MMFs. They however emphasised that investors are well aware that they are investing in a fund and that they bear the risk. If KBC were to provide sponsor support this would most likely be for their S&P AAA rated MMF, according to KBC.

Minimum maturity requirements (The US solution): KBC does not believe that imposing minimum maturity requirements, similar to those in the US, would be a good idea. They are of the opinion that maturity limits combined with other criteria, such as diversification, would be too stringent and would significantly reduce the investable portfolio of securities available.

Single Rule Book: KBC is in favour of introducing a single rule book for MMFs (both UCITS and non-UCITS), particularly with the inclusion of the CESR definitions on WAM and WAL. They believe the distinction between Short-term MMFs and MMFs should be retained as investors are well aware of this distinction. KBC does not agree with changing the name of Short-term MMFs to 'Short-term bond funds' as the latter is associated with another category of funds, this would also ensure consistency with EFAMA's new international classification of investment funds according to KBC.

Credit Ratings: KBC does not agree with the removal of ratings for MMFs. Given that CRAs prescribe very strict investment guidelines for MMFs to be awarded a good rating, ratings are seen as a quality label by investors.

KBC found the awarding of high ratings by certain CRAs on the basis of the potential availability of sponsor support by a large parent, to be very alarming. They are of the opinion that this distorts the market to the disadvantage of smaller MMF providers and also poses systemic risks.

30.11.2012
Organisation: Autorité des Marchés Financiers et Trésor
Sujet: Fonds monétaires
Objet du rapport**:** Information
Participants:
Natasha Cazenave, AMF
Frédéric Pelèse, AMF
Emmanuel Doumas; Trésor
Commission européenne
Olfa Ben Jamaa
Christiane Grimm
Franck Conrad

Message général: Les autorités françaises soutiennent fortement l'initiative de la Commission de revoir le cadre applicable aux fonds monétaires. Les fonds monétaires font peser un risque systémique sur l'économie européenne et il est important d'apporter une réponse commune aux problèmes posés.

Outil législatif: Seule une initiative transversale, incluant les fonds OPCVM et AIF, peut être envisagée. La France a 550 fonds monétaires et 1/3 sont des OPCVMs et 2/3 sont des fonds alternatifs. Donc uniquement une révision de la directive OPCVM n'est pas une solution. Un règlement doit être créé qui s'appliquerait aux gestionnaires OPCVM et AIF qui vendent des fonds monétaires. D'ailleurs une telle architecture devrait s'appliquer à chaque type de fonds: un règlement produit (ex: long terme) au-dessus des directives gestionnaires.

Actifs éligibles: Les règles CESR sont pour la plupart de bonne qualité et mériteraient d'être introduites dans le niveau 1.

Les mesures de WAL et WAM sont adéquates et permettent de bien limiter les risques. La distinction short-term MMF et MMF doit être gardée, au risque de perdre un outil d'investissement utile. La problématique du nom des fonds a été soulevée pour savoir si un nom plus approprié serait possible à trouver. Les règles de diversification de la directive OPCVM mériteraient de la clarté, un nouveau règlement devrait les définir. Les produits ABCP ne sont plus beaucoup utilisés mais peuvent représenter un risque. Les règles CESR n'ont pas traité ce point.

Rating: La référence dans les règles CESR aux 26 agences de notation n'est pas opérationnelle. La référence aux ratings devrait être substituée par des critères qualitatifs. Il serait souhaitable d'enlever toute référence aux ratings dans les critères d'investissement. Cela n'est pas pratique pour les gestionnaires qui doivent contrôler 26 agences de notation différentes. Une analyse interne peut s'avérer suffisante. Concernant le rating au niveau du fonds, les ratings sont dangereux car ils provoquent des

mouvements de panique lors d'une baisse de la note. De plus ils créent de la confusion chez les investisseurs qui assimilent AAA - CNAV - IMMFA.

CNAV – VNAV: Le modèle CNAV n'est pas approprié pour les fonds monétaires. Il serait préférable d'adopter un modèle VNAV. Les autorités françaises ont précisées que la linéarisation est utilisée uniquement en cas d'absence d'une valeur de marché (même pour les instruments à maturité résiduelle inférieure à 90 jours). Si jamais, les autorités françaises sont prêtes à descendre à 60 jours (voire 0 jour pour l'AMF) pour l'utilisation du cout amorti. La solution d'introduire du capital au niveau du fonds n'est pas bien vue. Cela représente une "usine à gaz", difficile à mettre en œuvre et surtout très difficile à négocier au Conseil (Trésor).

Liquidité: Soutien à une définition basée sur la maturité, à la différence de la définition US qui se base sur la liquidité. Ils estiment que des planchers de 10% / 15% seraient adéquats. Le trésor envisagerait des planchers différents entre les fonds short term et non short term.

Date : 04.12.2012
Stakeholders: German regulator BaFin
Topic: MMF, among other things
Stakeholders present:
Thomas Neumann
Anahita Sahavi
Jaga Gaenssler
Stephanie Kremer
Members of Unit G4 present:
Tilman Lueder
Franck Conrad
Larisa Dragomir
Christiane Grimm

BaFin inquired about the procedure and state of play regarding the MMF proposal. COM provided an overview over the IA procedure and the different options. BaFin then provided an overview concerning the discussions in the working group of the ESRB. They prefer the V-NAV compared to the C-NAV approach for reasons of addressing the systemic risk of MMFs. Therefore capital buffers for C-NAV would be regarded as the second best option.

12. ANNEX 12: CFA INSTITUTE SURVEY

The text and the results have not been modified from the version provided by the CFA Institute.

Background and Purpose

Following the financial crisis and the first wave of regulation, global regulators are focusing on other areas of financial services that may create systemic risk including "Shadow Banking," which was introduced by the Financial Stability Board in 2011. The International Organization of Securities Commissions (IOSCO) and the European Commission have consulted on Shadow Banking and Money Market Funds (MMFs), and the European Commission is currently consulting on the regulation of UCITS funds, which include MMFs and ETFs.

Many of the proposed reforms take different shapes, but share a common approach: they would impose variable net asset values (VNAVs), capital requirements and/or forms of capital guarantees. MMFs are either "CNAV" funds, i.e. funds with constant Net Asset Value (for example at $1.00), or are "VNAV" funds whose NAV is variable and fluctuates on a daily basis. In some jurisdictions (the US, for example), the market is dominated by CNAV funds, while in others VNAV funds are much more prevalent. In the European Union, CNAV funds represent approximately half of the MMF market and target institutional investors.

Some regulators consider that CNAV funds are inherently prone to "runs" by investors in case of market stress due to their constant value, and therefore require more profound reform. In the US, in response to the Prime Reserve money market fund "breaking of the buck" in October 2008, the Chairman of the SEC is currently proposing to require either a floating net asset value or a stable-NAV coupled with capital requirements and redemption restrictions.

To inform a response to the European Commission, CFA Institute conducted a survey of a sample of members on the issue of money market funds and proposed reforms.

Methodology

On 27 September 2012, all CFA Institute members in the European Union plus a random sample of 15,000 members in the United States were invited via email to participate in an online survey. One reminder was sent to non-respondents on 3 October and the survey closed on 9 October 2012. 637 valid responses were received, for a response rate of 2% and a margin of error of ± 3.8%. As the number of valid responses per question varies (due to survey logic, drop-offs and no opinion responses), the margin of error also varies by question. Valid responses for each question (N) are noted on each chart.

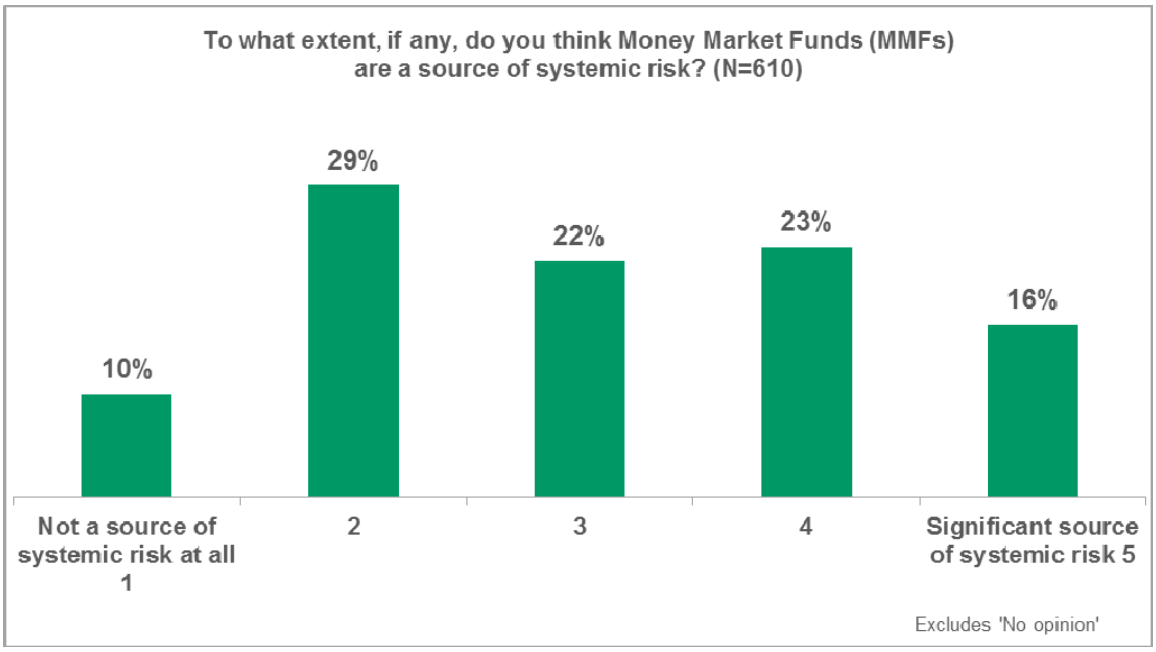
Respondent Profile

Of the 637 members that responded, 57% are from the Americas and 43% from the European Union. 92% of respondents are CFA Institute charterholders. Global (total) results have been re-weighted to accurately reflect the population (83% from the United States and 17%% from the European Union). Statistically significant regional differences are noted throughout the report. Significance testing (z-test) was conducted at the 95% confidence level to determine statistically significant differences by region.

The top job functions of respondents are portfolio manager (24%), research Analyst (12%), financial Advisor (7%), consultant (6%) and risk manager (6%). 39% of respondents listed other occupations (less than 6% each) and 4% of respondents did not provide an occupation.

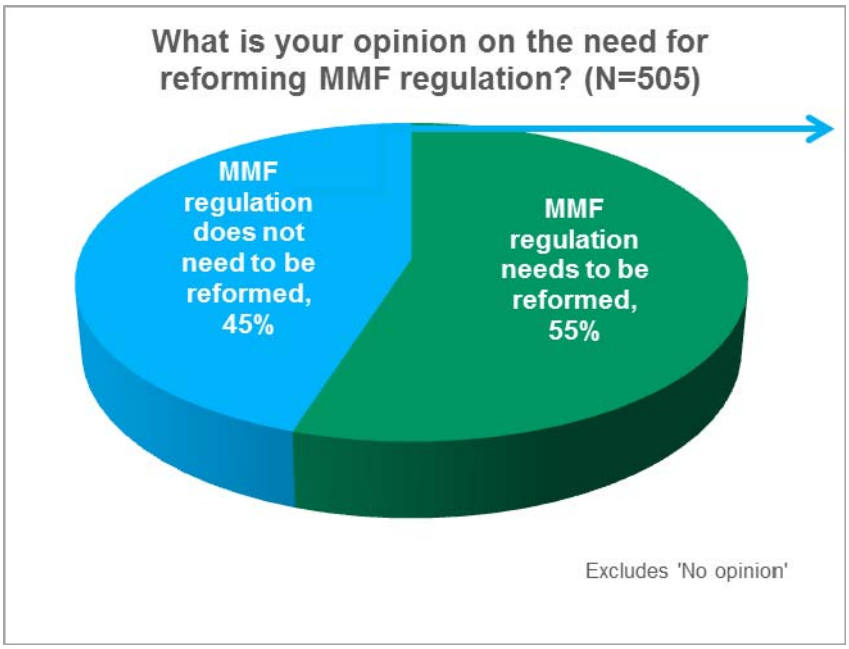
Money Market Funds and Systemic Risk

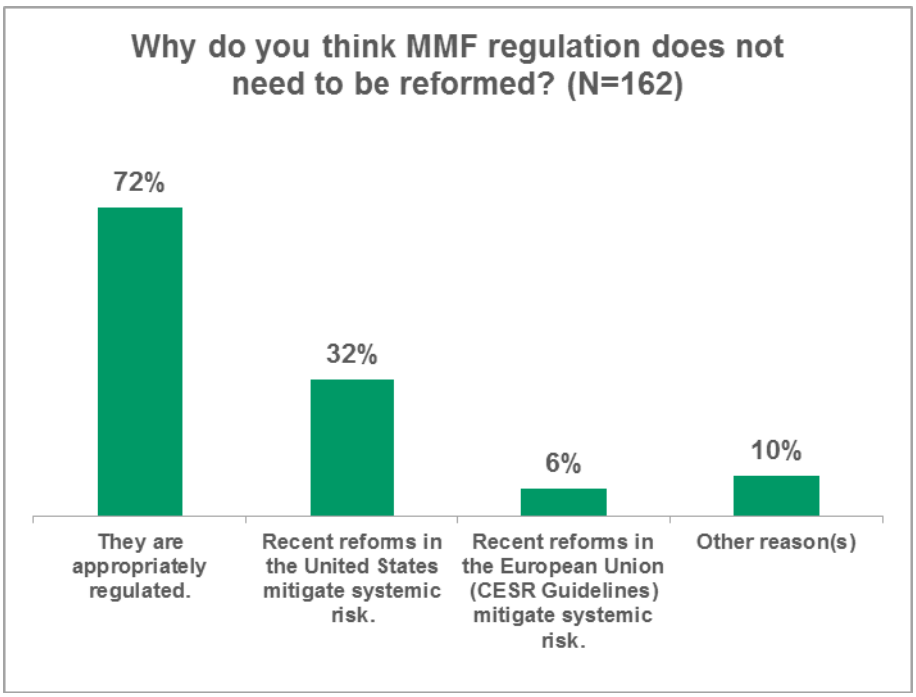
39 percent of respondents think MMFs are a source of systemic risk and 39 percent do not think they are a source of systemic risk.



Money Market Fund Reform

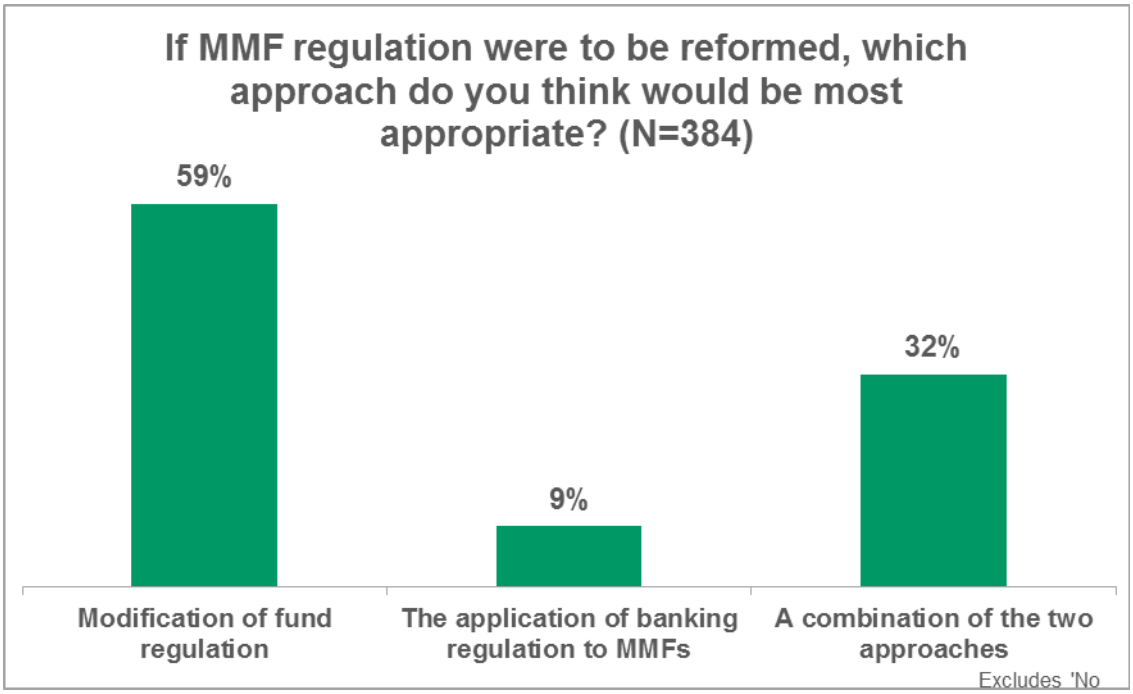
Slightly more than half of respondents (55 percent) think MMF regulation needs to be reformed. Of the 45 percent who do not think MMF regulation needs to be reformed, 72 percent say it is because they are appropriately regulated and 32 percent say recent reforms in the United States mitigate systemic risk.





Proposed Money Market Fund Reforms

59 percent of respondents think modification of fund regulation would be the most appropriate approach to reform MMF regulation. 9 percent think the application of banking regulation would be most appropriate, and 32 percent think a combination of applying banking regulation to MMFs and modifying fund regulation would be most appropriate.

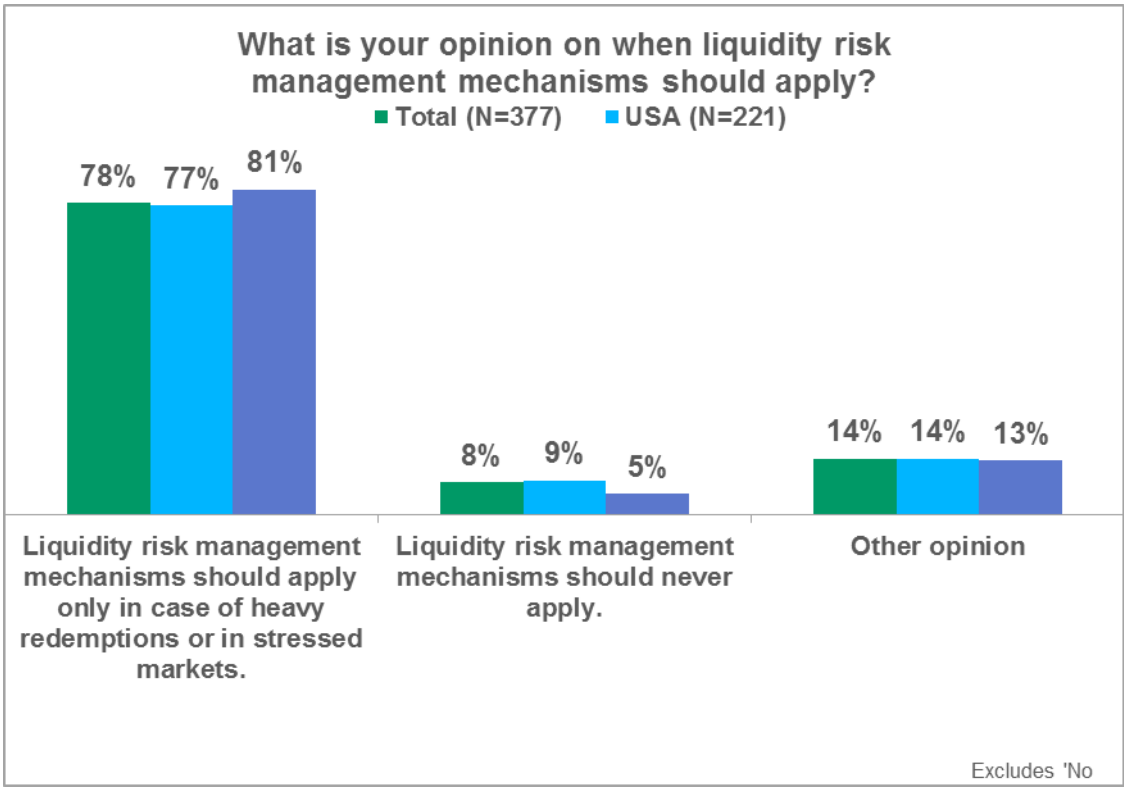


The top three proposed reforms that respondents agree with include 'All MMFs should have liquidity risk management mechanisms to manage "runs" on the funds' (85 percent), 'Disclosure to retail investors regarding investment risks and the lack of guarantees for all MMFs should be strengthened, particularly for CNAV MMFs as they may provide a false sense of security' (78 percent), and 'MMF sponsors that provide capital guarantees to investors should be subject to capital requirements' (75 percent). Significant differences between respondents in the United States and European Union are highlighted in purple.

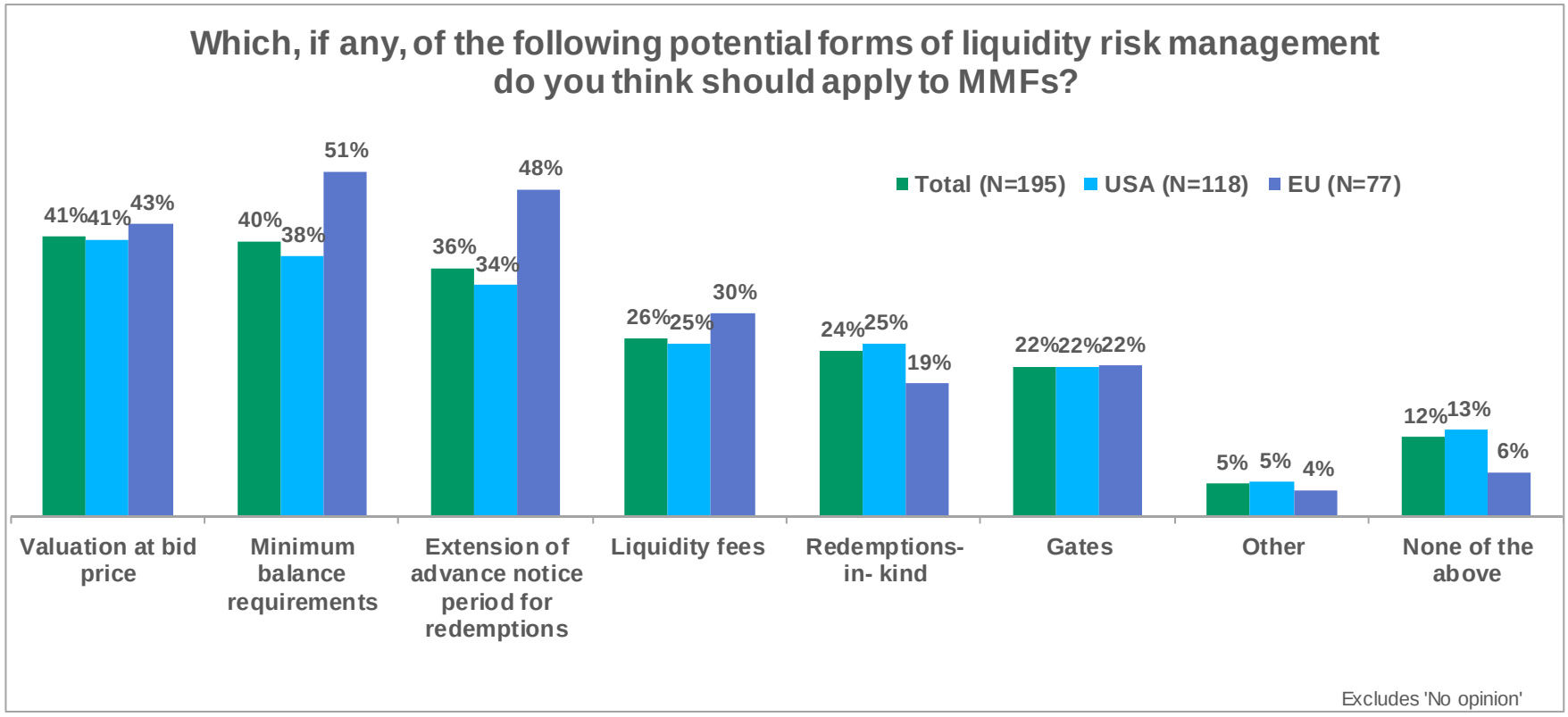
Please indicate whether you agree or disagree with each of the following proposed reforms:									
	Agree			Disagree			Not sure		
	Total	USA	EU	Total	USA	EU	Total	USA	EU
All MMFs should have liquidity risk management mechanisms to manage "runs" on the funds	85%	85%	86%	6%	7%	3%	8%	8%	11%
Disclosure to retail investors regarding investment risks and the lack of guarantees for all MMFs should be strengthened, particularly for CNAV MMFs as they may provide a false sense of security	78%	77%	82%	16%	17%	6%	7%	6%	12%
MMF sponsors that provide capital guarantees to investors should be subject to capital requirements	75%	75%	76%	13%	13%	11%	12%	12%	13%
CNAV MMFs should have to maintain capital reserves	61%	62%	54%	25%	25%	26%	14%	13%	20%
All MMFs (CNAV and VNAV) should have to maintain capital reserves	47%	48%	43%	37%	37%	40%	15%	15%	17%
MMF capital reserves should be financed by fund sponsors	42%	44%	32%	35%	33%	44%	23%	23%	23%
CNAV MMFs should be required to switch to a Variable NAV	41%	39%	53%	41%	45%	17%	18%	16%	31%
Investors in CNAV MMFs should benefit from protection by insurance or guarantee schemes, and the fund/investors should make contributions towards such coverage	33%	32%	36%	39%	39%	41%	28%	29%	23%
The use of amortized cost should be prohibited for all MMFs	30%	28%	42%	29%	31%	21%	40%	41%	37%
MMF capital reserves should be financed by fund investors	29%	28%	30%	47%	47%	47%	25%	25%	23%
Investors in all MMFs (CNAV and VNAV) should benefit from protection by insurance or guarantee schemes, and the fund/investors should make contributions towards such coverage	24%	24%	25%	51%	51%	51%	25%	25%	25%
Private insurance should be used instead of capital reserves, but only to wind up a fund	23%	24%	17%	45%	44%	54%	32%	33%	28%
Private insurance should be used instead of capital reserves to provide a liquidity facility in case of "runs"	15%	15%	11%	57%	56%	62%	29%	29%	27%
MMFs in the European Union already dispose of sufficient liquidity risk management mechanisms	9%	6%	25%	16%	15%	23%	75%	79%	53%
Only institutional investors should be allowed to invest in CNAV MMFs	7%	5%	19%	78%	81%	61%	15%	14%	21%

Liquidity Risk Management

78 percent of respondents think liquidity risk management mechanisms should apply only in the case of heavy redemptions or in stressed markets, with a higher proportion of those in the European Union (81 percent) than in the United States (77 percent).

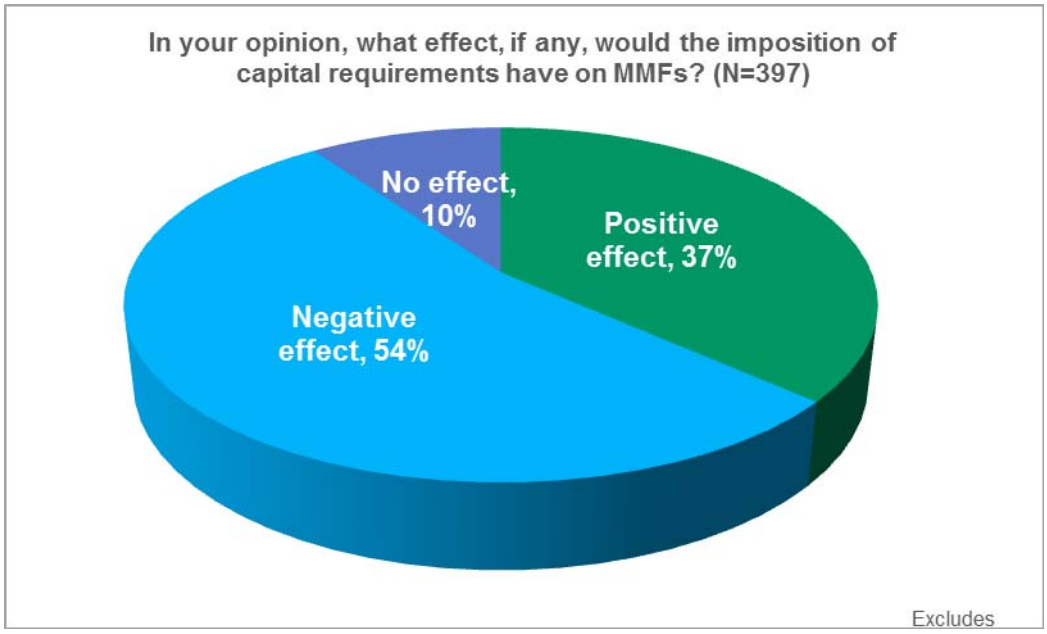


The potential forms of liquidity risk management respondents think should apply to MMFs include valuation at bid price (41 percent), minimum balance requirements (40 percent), extension of advance notice period for redemptions (36 percent), liquidity fees (26 percent), redemptions-in-kind (24 percent) and gates (22 percent). 5 percent of respondents listed other potential forms of liquidity risk management and 12 percent indicated none of the forms listed should apply to MMFs.



Other Issues Related to Money Market Funds

54 percent of respondents think the imposition of capital requirements would have a negative effect on MMFs and 37 percent think it would have a positive effect. 10 percent do not think capital requirements would have an effect on MMFs.



If the use of amortized cost is prohibited, 73 percent of respondents think it would be feasible to calculate a fair value on a daily basis for all assets held by MMFs. A higher proportion of those in the European Union (81 percent) than in the United States (71 percent) think this is feasible.