

IMMFA response to European Commission UCITS consultation document

Please find below the Institutional Money Market Fund Association's (IMMFA) response to the report by the European Commission's consultation on UCITS.

IMMFA represents managers of EU-domiciled, constant net asset value (CNAV) MMFs which meet ESMA's definition of a 'short-term money market fund'. Therefore, all references in our response to a MMF, are references to a short-term money market fund. IMMFA's Members are bound by a Code of Practice (which can be found on our website) the objective of which is to protect investors by imposing high and consistent standards on IMMFA funds.

MMFs provide a simple but valuable intermediation service between lenders and borrowers in the short-term debt markets. They are used, in particular, by institutional investors whose cash assets are generally in excess of the amount guaranteed by deposit insurance schemes. To that extent, investors are exposed to credit risk when they make deposits, and manage that risk by diversifying deposits between creditworthy banks. But there are constraints on the level of diversification that investors can achieve on their own, in particular because they don't have the expertise to assess creditworthiness across a large number of issuers. Therefore they use MMFs which – like other collective investment schemes – can provide higher levels of diversification than investors could achieve individually, and can employ specialist credit analysts through economies of scale.

Prime MMFs invest substantially all of their assets in high-quality, low duration fixed income instruments issued by banks, businesses and governments. In September 2008, a series of headline events undermined investor confidence in the solvency of the global banking system. That caused some US investors to switch their investment from prime MMFs to treasury and government MMFs (which invest in US Treasury Bills and other government agency securities): a classic 'flight to quality'.

US MMF investors were not the only party to lose confidence in the global banking system: banks lost confidence in one another! Consequently, the interbank market and secondary market for money market instruments essentially closed, which made it increasingly difficult for MMFs to sell assets to raise cash to make redemption payments. The flight came to an end when the US Treasury Temporary Guarantee Programme effectively made prime MMFs 'as good as' treasury MMFs and made further switching unnecessary.

Non-US investors didn't react so strongly, and therefore redemptions from non-US MMFs were less severe. Nevertheless, generalising the experience of US MMFs in 2008: a loss of confidence in the banking system may cause some investors to 'fly to quality', including by switching their investments from prime to treasury MMFs. The only credible way of stopping that flight to quality is to restore confidence in the banking system, and quickly. In the intervening period and in the absence of a functioning secondary market, the primary objective of MMF reform should be to ensure that funds have sufficient natural liquidity to meet redemption payments.

Therefore, we recommend that:

- Regulation should specify minimum liquidity requirements for MMFs, in order to be able to make redemption payments 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. IMMFA funds are currently required to hold at least 10% of their assets in overnight cash, and 20% in assets that mature within one week.

- Regulation should require MMFs 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.

We believe those reforms represent an appropriate and sufficient response to the events of 2008. Some regulators have taken the narrative further. They have observed that, insofar as a loss of confidence in the banking system may cause a switch from prime to treasury MMFs, then the funding provided by prime funds to the banking system would necessarily decrease; but in those circumstances, reduced funding would further undermine confidence in the banking system. Therefore, they recommend that MMF reform should not merely focus on ensuring that funds have sufficient liquidity to meet redemption payments, but also should actively disincentivise investors from redeeming.

We have misgivings about this proposal. Investors are entitled to redeem from a MMF if they have legitimate concerns about the creditworthiness of one of its underlying issuers; and a MMF is similarly entitled to withdraw funding from an underlying issuer if that would otherwise frustrate its investment objective ('security of capital and daily liquidity'). If MMFs are reformed in a manner that interferes with those entitlements, then investors are likely to seek an alternative wrapper.

Nevertheless, in the interest of engaging regulators, we have assessed the effectiveness of various reform proposals in disincentivising redemptions and we cautiously recommend that there should be further investigation into the viability and consequences of empowering MMF boards to impose a trigger based liquidity fee on redemptions.

MONEY MARKET FUNDS

QUESTION ONE

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.

MMFs provide a simple but valuable option for investors to outsource the investment of their short-term cash. For investors, they provide a low risk investment vehicle that offers credit diversification and liquidity. They are widely used by institutional investors as an investment option for working capital, as their cash assets are in general well in excess of the amount guaranteed by deposit insurance schemes.

They provide an alternative to direct investment in the short-term markets by investors. There are constraints on the level of diversification that all but the very largest and most sophisticated investors can achieve on their own, in particular because they don't have the expertise to assess creditworthiness across a large number of issuers, but also because they generally cannot invest at the large volumes that are necessary to participate. Therefore they use MMFs which – like other collective investment schemes – can provide higher levels of diversification than investors could achieve individually, and can employ specialist credit analysts through economies of scale.

Assets of IMMFA members amount to over EUR 527bn at the end of August 2012. Without these money market funds, this money would not find its way into the short term markets in the way it does at present, as access to the markets directly is not an option for the vast majority of investors. Without the ability to outsource their cash investment needs to money market funds and, for the majority of investors, without the resources to perform credit analysis, it is likely that this cash would be invested in “too big to fail” banks with the investors relying on credit rating agencies for their credit decisions. This would increase rather than decrease the systemic risk of banks.

For borrowers, MMFs play an important role in the short term debt markets as they are important providers of short-term funding to financial institutions, businesses, non-profits and governments.

The primary alternative to using money market funds is to hold cash in overnight bank deposits. However, there are significant differences between the two. Banks perform risk transformation in an opaque manner in order to generate profits for shareholders who are not necessarily their depositors, whereas MMFs are transparent segregated funds operating in a specific control framework, the risks and returns of which are for the account of their investors.

This aside, assuming overnight deposits to be the closest alternative, if there was cross elasticity of demand between these two products, you might expect to see assets in money market funds fall (i.e. demand) at times when the return offered by money market funds is low compared to the return on deposits, and vice versa, none of which has been the case.

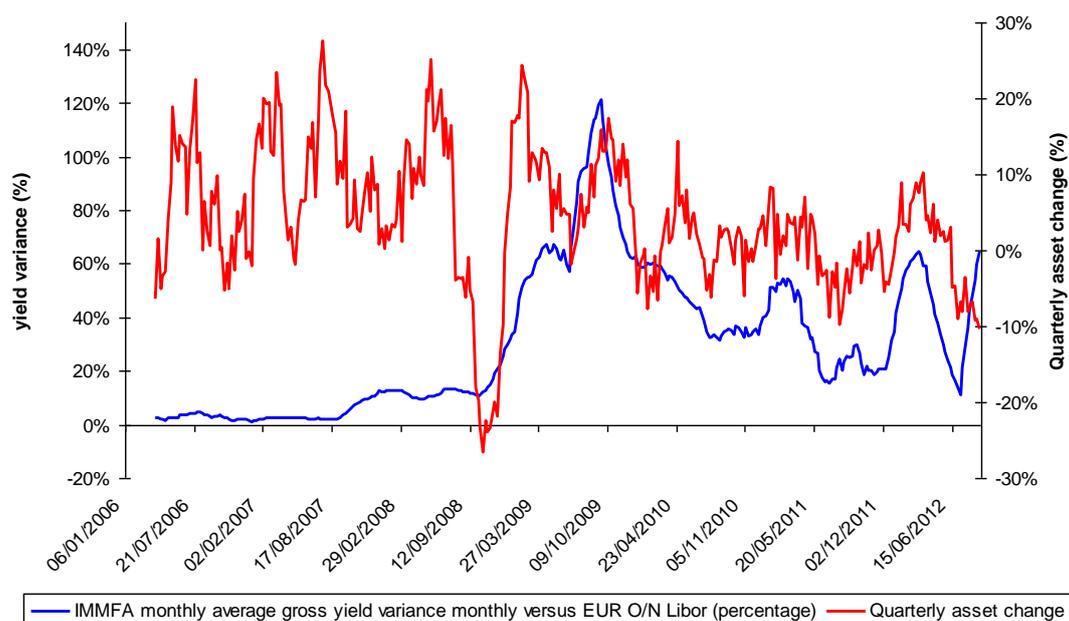
The relationship between these factors is plotted in Chart 1 below. In this assumption we have used EONIA rates as a proxy for overnight deposits, and IMMFA Euro Prime fund average returns as a proxy for Money Market fund returns. The quarterly asset change line (in red), plotted on the right axis, shows that quarterly asset flows in MMFs are relatively large, normally falling within a range of +25% to -10% over any one quarter (excluding the outflows seen during the credit crisis in 2008, where outflows were greater). The blue line, plotted on the left axis, shows the quarterly average variance in percentage terms between Money Market fund returns versus EONIA.

The figures show that there are periods where there appears to be no relationship between returns and asset flows, suggesting that any cross elasticity of demand is weak. For example, during the beginning of the reporting period, in 2006-7, assets flows were mainly positive although quite volatile, whilst fund returns versus EONIA were very stable with only a small variance over the whole period. More recently, in the first quarter of 2010, funds saw strong inflows at the same time as yields relative to EONIA were dropping.

Nevertheless, there are other times when there appears to be at least some relationship between returns and asset flows. In the second half of 2009, funds were experiencing a prolonged period of high returns versus EONIA, they also captured assets during this period, similarly, during the second quarter of 2011, fund returns versus EONIA were dropping off quickly, and over this period, fund assets saw an outward trend.

Whilst there may be some relationship between yields and flows, we believe that the figures show investors are not simply buying based on return, but for more complex reasons, most likely based on whether the product meets their objectives. MMFs have a utility value to investors that is not based on return, but in our view based on the features of MMFs, namely diversification, liquidity, security of capital, ease of use and transparency, which investors cannot achieve through investing directly in banks deposits.

CHART 1 – MMF quarterly asset flows and yield variance versus EONIA



QUESTION TWO

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

IMMFA money market funds are primarily targeted at institutional investors, although we recognise that money market funds in certain domiciles, in the US domestic market for example, target retail investors as well.

IMMFA has carried out two investor composition surveys to better understand the type of investors using IMMFA funds. The latest survey, based on data at June 2010, showed that a large proportion of investors were financial institutions, accounting for just over 49% of assets of those providers who responded, whilst a further 28% was invested by other corporate investors. Of the assets invested by financial institutions, the largest proportion was via asset managers at 15.7%, with a further 9% from insurers, and 6% from pension schemes. The largest client type of the remainder were wholesale distributors at 7.2%, portals at 5.6%, and 5.3% via private clients.

It should be noted that many Financial Institutions, wholesale distributors and portals are acting in an intermediary capacity, and we expect that their underlying client base would also reflect the IMMFA client base, i.e. be predominantly corporate treasurers. So whilst the percentage identified in the survey as via corporate investors is only listed at 28%, we believe that in fact, the majority of clients in IMMFA members' funds are corporate.

QUESTION THREE

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

IMoney.net collects figures for the money market fund industry on asset allocation of money market funds. As at the end of August 2012, the average allocation in IMMFA prime funds, in percentage terms were as follows:

	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

Whilst the allocations above do not represent the industry as a whole, they are likely to be indicative of money market fund assets as a whole.

The table above shows IMMFA funds' exposure to Government debt (the total of Treasury, Government Other, and Repo exposure, which in the IMMFA universe is normally collateralized with government debt) to vary by currency, at around 10% in Sterling funds, 15% in Euro funds, and 22% in US Dollar funds. At the beginning of 2012 these exposures were slightly lower, at 8%, 12% and 18% respectively in Sterling, Euro and Dollar funds.

The majority of the Time Deposits, Certificates of Deposit and Commercial Paper held are invested in debt issued by US, European, Canadian, Australian, and Japanese financial institutions. A proportion is also invested in Government Agencies and corporates, although as there are only a small number of corporate issuers of a sufficiently high credit quality (A-1 or P-1 or F-1) active in the market, the level of assets invested in corporate debt is limited.

Moody's issued a special comment on money market fund trends for Q1 2012, which showed Euro denominated prime money market funds were investing roughly 55% in European (inc UK) Financial Institutions, whilst Sterling denominated funds were investing roughly 58%. Again, these figures do not cover the whole market, but can be assumed to be indicative of the overall trend.

The exposure of US Dollar denominated funds to European Financial Institutions is estimated to be substantially lower than this at present. Whilst there are no comparable figures to the above, Fitch Ratings do report on the top 10 (by asset size) US domestic prime money market funds' exposure to Europe, the latest report based on data to August 2012 shows exposure to Europe to be at 26%. This exposure level has been on a downward trend over the year, starting at approx 32%, although the trend appears to have stabilized. The exposure to European Financial Institutions in European domiciled Dollar denominated funds may be slightly higher than these levels, but the Fitch numbers are likely to be indicative.

QUESTION FOUR

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?

IMMFA money market funds do not use securities lending or collateral swaps.

Repurchase agreements are used by MMFs to invest cash for short periods, typically overnight. MMFs have increased their use of repurchase agreements since the credit crisis as they prefer the high levels of liquidity provided by these overnight instruments, and to receive collateral in return for lending cash rather than placing money on deposit on an unsecured basis. At the end of August 2012, IMMFA funds were making use of repurchase transactions: in USD Prime funds the average was 17%, and in EUR and Sterling Prime funds the average was 7%.

The majority of repurchase agreements executed by MMFs are collateralised with government securities. However, over the past few years some MMFs, particularly US MMFs, have begun execute repo collateralised with non-government securities. Haircuts differ between markets, for example: the standard haircut in the US domestic money markets for US government collateral and in certain European jurisdictions for US, UK and some European government collateral is 102% although they can be higher for other governments and for non-government collateral; whereas in the French domestic market

there is no over collateralization for repurchase agreements backed by Eurozone government collateral. As with haircut levels, there is no standard settlement process for repurchase agreements. For example, some markets such as the French domestic market for repurchase agreements settlement is conducted on a bilateral basis whilst in other European markets and the US market settlement is conducted on a tri-party basis using a central clearing agent.

Whether repurchase agreements are bi-party or tri-party, collateral is marked-to-market daily. In tri-lateral repurchase agreements, automatic margin calls are made in order to ensure appropriate collateralization of exposure on a continuous basis. Where the repo is bi-party, there will also be daily margin calls, although calls may only be executed when a certain threshold has been reached.

ESMA's money market fund definitions have no specific guidelines related to repurchase agreements. With the exception of ESMA's MMF definitions which could benefit from specific guidelines related to repurchase agreements, we believe there are sufficient risk controls for IMMFA members' MMFs.

IMMFA's Code of Practice includes a number of controls that relate to repurchase agreements. These controls refer to the credit quality of the counterparty for any repurchase agreement, reference to the nature of the collateral accepted and appropriate haircut levels and the maximum tenor of any repurchase agreement before it is considered illiquid. The relevant parts of IMMFA's Code of Practice are listed below. MMFs that are rated by a CRA also have guidelines they are required to adhere to that are specific to repurchase agreements:

"IMMFA funds may utilise collateral in repurchase agreements provided the assumed internal or explicit short-term rating of repurchase agreement counterparty is at least A1, P1 or F1, and the relevant Member has experience of utilising such collateral. A suitable haircut should be imposed and consideration should be given to how quickly the collateral may be accessed having regard to the applicable framework.

...have more than twenty five percent of net assets invested with a single repurchase agreement counterparty, unless that counterparty is either a triple-A rated sovereign, or the counterparty is explicitly guaranteed by a triple-A rated sovereign...

...have more than five percent of net assets in illiquid securities. Members should determine which securities are considered illiquid, but this should include any deposit or repurchase agreement with a residual maturity of five business days or more."

The SEC's Rule 2a-7 includes rules specific to the use of repurchase agreements. Repurchase agreements are an eligible investment for US MMFs with certain provisions. For example: all repurchase agreements maturing beyond 7-days must be included in the funds illiquid bucket; repurchase agreements backed by US government collateral can look through to the collateral for diversification purposes; repurchase agreements backed by non-government collateral must follow standard diversification requirements; and all repurchase agreement counterparties must be reviewed for credit quality assessment by the fund.

QUESTION FIVE

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.

Vulnerability to runs

IMMFA does not believe that MMFs represent a source of system risk because each shareholder has an incentive to redeem their shares before others when there is a perception that the fund might suffer a loss. The boards of MMF have a fiduciary duty to treat all shareholders equally.

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

Looked at in this way, a MMF is no different to any other investment fund, i.e. likely to experience redemptions if investors believe it may not meet its investment objective. Specifically, since the investment objective of a MMF is to "provide investors with preservation of capital and daily liquidity...", and since investors feared that prime MMFs might not be able to meet that objective in 2008, it is unsurprising that a significant number decided to redeem.

It is important to contextualise this observation: First, institutional investors were not the only party to lose confidence in the banking system in 2008: far more significantly, banks lost confidence in one another (and before investors started to redeem from MMFs)! Consequently, the interbank market closed, which was a substantial cause of the funding crisis they experienced, and their forced reliance on emergency liquidity support from central banks.

Second, in a 'world without MMFs', institutional investors would behave in essentially the same way, i.e. they would manage credit risk by switching their credit exposure, albeit by switching from direct deposits to direct holdings of Treasuries. (Please note that institutional investors are not 'flighty' depositors, per se. Their behaviour is a rational reaction to bank regulation, in particular to the fact that their deposits are largely uninsured.) Third, a number of reforms have already been made to bank regulation which reduces their reliance on short-term funding from institutional investors (including MMFs). Specifically, the new

liquidity rules contained in the Basel accord discount funding from institutional investors towards a bank's liquidity requirement.

Surely a more plausible explanation of investor redemptions than the 'first mover advantage', i.e. during a financial crisis it is plausible to suggest that investors will 'fly to quality', and implausible to suggest that they will pause to consider the pricing and liquidity structure of MMFs, identify that one investor's redemption might cause a theoretical disadvantage to those who remain, and therefore decide to redeem themselves. The reaction provoked by a crisis is panic/flight to quality, not careful calculation of the second-round consequences of other people's behaviour. Similarly, people run from burning buildings to avoid being burnt, not because they calculate the first person to the exit enjoys a 'first evacuator advantage'.

In summary: a loss of confidence in the banking system may cause a 'flight to quality' by some investors, including switching between prime and Treasury MMFs. The only credible way of stopping that flight to quality is to restore confidence in the banking system, and quickly. Therefore, in the intervening period and in the absence of a functioning secondary market, the main objective of MMF reform should be to ensure that funds have sufficient natural liquidity to meet redemption payments, otherwise there is a risk that MMFs would be forced to gate, which would transmit the crisis into the real economy.

In summary, a loss of confidence in the banking system is likely to cause redemptions from prime MMFs, and such redemptions will necessarily reduce the level of funding MMFs can provide to banks and other issuers.

QUESTION SIX

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?

IMMFA considers there is a need for more detailed and harmonised regulation at the EU level and that this should be part of the UCITS Directive. This could establish a common definition of European money market funds, whilst leaving it to ESMA to develop technical standards using the current CESR/ESMA guidelines as a reference point. We recommend that they:

- specify minimum liquidity requirements for MMFs, in order to be able to make redemption payments 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. IMMFA funds are currently required to hold at least 10% of their assets in overnight cash, and 20% in assets that mature within one week.
- require MMFs 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.

However, in order to ensure that the new rules also apply to non-UCITS MMFs to ensure the quality of the “Money Market” brand, a new paragraph should be added within the AIFMD to require that the new rules on MMFs introduced in the UCITS regulation and the ESMA technical standards also apply to all MMFs that are not UCITS.

The EU rules on MMF should apply to all funds that are marketed as MMF. No fund should be allowed to use the “MMF” label if it does not comply with all the EU rules on MMFs.

QUESTION SEVEN

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?

At the EU level, we recommend that regulation takes account of differences between different types of MMF, depending on their classifications under ESMA.

We also recognise that differences in the relative size and maturity of national economies mean that some money markets are relatively broad and deep (i.e. include a very large number of issuers and investors, and issuance at every available maturity) whereas others are relatively narrow and shallow. Consequently the precise regulatory approach to MMFs is likely to vary in different countries. In addition, local tax and accounting requirements may also necessitate variations in regulation.

Nevertheless, we also believe it would be desirable to ensure a minimum level of international consistency in the treatment of MMFs:

Institutional investors often operate across national borders – corporate treasury being a good case in point – and would therefore prefer a standard approach to MMF regulation. In the absence of a standard approach to MMF regulation, those same cross border investors may allocate between different funds on these basis of their regulation. An important starting point would be a high level definition of a ‘money market fund’ that goes beyond its investment objective and includes key quantitative risk constraints.

VALUATION AND CAPITAL

QUESTION ONE

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.

We do not believe that investors distinguish between CNAV and VNAV that fall under the ESMA “short term money market fund” category because they believe that one or other type offers fundamentally different levels of credit or liquidity risk. When choosing, investors do not initially differentiate based on pricing methodology, but rather will be seeking a fund that meets their objectives and risk appetite, i.e. one offering diversification, security of capital, and liquidity. Once they have identified funds that meet these criteria, then they will look to other features offered by funds, for example, whether a fund targets a stable price (CNAV) or its price floats (VNAV) or whether a fund is rated by a CRA or not which may make one or the other more or less attractive to different types of investors.

The stable 1.00 per share offered by CNAV funds gives investors the ability to transact at a stable price, facilitating same day transaction processing, keeping the settlement cycle short, and reducing float balances investors need to hold. Without a stable price MMFs cannot provide investors with the automated cash management processes they seek, and the operational convenience that a stable price brings, and we believe that these are the primary reasons that investors choose CNAV rather than VNAV.

CNAV funds also offer tax and accounting advantages, as buying and selling at 1.00 per share means there is no capital gains or losses required to be reported for accounting purposes. Investors domiciled in countries where income is taxed differently from capital gains would face additional operational and compliance burden in having to calculate the gains or losses that may have arisen between the dates of subscription and redemption in a VNAV fund.

QUESTION TWO

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?

CNAV and VNAV MMFs provide essentially the same return to investors and pose essentially the same risks. Both are collective investment schemes, whose objective is to provide investors with security of capital and high levels of liquidity, and which seek to achieve that objective by managing a portfolio of high quality, low duration money market instruments. There is no guarantee they will achieve that objective, and so investors in either type face a number of risks, including the risk of loss due to default in a MMF’s portfolio the details of which are fully disclosed.

We therefore see no need to distinguish between them for regulatory purposes, and we do not believe that there are any advantages to reducing their activities. If a distinction were made that disadvantaged one form of MMF relative to the other, then it would give some MMF providers a competitive advantage over the other. Unless very carefully argued and evidenced, such competitive advantages would undermine confidence in the regulatory process: in particular it would suggest regulators are advancing national commercial interests/agendas rather than a substantive regulatory agenda.

Investors use MMFs to manage and diversify credit risk, not as a substitute for a bank deposit - in particular, unlike banks, MMFs: do not employ leverage; do not perform credit transference; and can only perform very limited maturity transformation. Reform should

therefore draw on securities regulation and should apply to MMFs irrespective of their pricing methodology. As noted under question six above, we believe that regulations should take account of distinctions between different types of money market funds depending on their classification under ESMA guidelines, rather than on the basis of a CNAV / VNAV distinction.

Furthermore, expressions CNAV and VNAV are somewhat misleading, and very poorly understood. CNAV is often supposed to refer to a MMF that makes a promise or commitment to provide security of capital, whereas VNAV is often supposed to refer to a MMF whose share price regularly fluctuates in proportion to the market value of its underlying portfolio. Neither supposition is correct.

Appendix A provides a detailed description of the pricing mechanism of CNAV and VNAV funds which meet the European definition of a 'short term money market fund'. We show that CNAV and VNAV funds have much more in common than is often thought. Fundamentally, both use amortised accounting to estimate market prices, although subject to different constraints. And both can offer accumulating and distributing shares, which impact the constancy or variability of investment returns to investors.

To evidence this point, and since the most developed market for VNAV funds is in France, we have looked at the share prices of six of the largest French VNAV 'monétaire' funds (as at June 2007) over a ten year period (from January 1999 to September 2009). Since these funds only offer accumulating shares, we assessed the variability of their share price by looking at their daily yields: a negative yield implies that the day's accumulation of income was more than offset by a mark-to-market loss. We estimated the daily yield by comparing the accumulated share price from one day to the next, and making adjustments for accumulations over weekends and Bank Holidays.

In the case of five of those six funds, at no point during the ten-year period did they post a negative yield, i.e. daily mark-to-market losses were never substantial enough to cause the price of the funds to fall. This is a surprising finding - one might have expected these funds to have experienced significant mark-to-market losses in this period, which would have manifested as a negative yield in the graph below (whereas, in fact, the yield never fell below circa 2.8%). In other words, from an investor's perspective, these funds behaved much the same as if they were CNAV, albeit their yields were presumably more volatile.

We concede that our analysis of the share price of the six largest French monétaire funds might not be regarded as a representative sample. Unfortunately, we have been unable to source a larger data set. It would be helpful if the daily share price movements of, say, the largest thirty monétaire funds could be made available over a ten year period to date.

To be clear, this is not intended to imply any criticism of the pricing mechanism of French VNAV funds: rather, it is simply intended to illustrate that the distinction between CNAV and VNAV funds is often overstated. That ought to come as no surprise. As described above, institutional investors are exposed to credit risk and use MMFs to manage that risk through diversification. Therefore, it is natural that the investment objective of a MMF should be to provide security of capital and high levels of liquidity, and consequently the return of a VNAV fund should be similar to that of a CNAV fund; if it weren't, then the fund wouldn't be much use to investors.

Investor surveys have consistently indicated that mandating a move from CNAV to VNAV would result in very significant outflows from MMFs. For example, a recent survey¹ of US corporate treasurers indicated that if US MMF were mandated to adopt a variable NAV, then:

- None would increase their level of investments in money funds;
- 21% would continue using funds at the same level; and
- 79% would either decrease use or discontinue altogether.

The survey estimated that mandating a move from CNAV to VNAV would result in 61% decrease in MMFs by corporate, government and institutional investors.

If MMFs were reformed in a manner that made them unusable to investors, then we believe either: investors would seek to manage credit risk through segregated accounts, other wrappers (unit linked contracts of insurance, participatory notes etc) or unregulated schemes; or would alternatively be forced to manage that risk by deliberately concentrating their deposits in a few select banks in the belief that they are (or in an effort to make them) 'too big to fail'. Neither outcome would be satisfactory from a systemic perspective.

QUESTION THREE

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?

IMMFA does not support the imposition of capital buffers.

Two arguments have been made in favour of establishing a NAV buffer:

First, that during a financial crisis, a NAV buffer would enable a MMF to sell assets in the secondary market at a loss in order to raise cash to meet redemption payments, without those losses impacting the price of the fund and precipitating further redemptions. We agree with this argument, but think it is overstated. Secondary markets essentially closed down in 2008, and so the loss absorbing capacity of a NAV buffer would have been of limited use in enabling funds to raise cash. The best way of enabling MMFs to meet redemption payments is to reduce their reliance on secondary markets, by focussing on natural liquidity (see our answer to question twenty one.)

Second, that during a financial crisis, a NAV buffer would mitigate the likelihood of redemptions by, in effect, 'over collateralising' MMFs and therefore disincentivising

¹ "Money Market Fund Regulations: the Voice of the Treasurer", Treasury Strategies, April 2012, www.treasurystrategies.com Treasury Strategies surveyed 203 financial executives representing corporate, government, and institutional investors between February 13, 2012 and March 6, 2012. The respondents were sophisticated investors (executives with treasury and cash management responsibilities for their institutions) with 61% of them overseeing short-term investment pools of \$100 million or more.

investors from redeeming for fear they would lose the benefit of that over collateralization relative to any alternative investment option. To the extent that investors did redeem, the buffer would increase relative to the NAV to the benefit of remaining investors, and so the disincentive to redeem would grow still greater. We disagree with this argument. The options facing an investor in a prime MMF with a NAV buffer during a financial crisis would be:

- To remain in the prime MMF, in which case there is a remote chance of a loss if one of fund's assets defaults, and the ensuing loss is greater than the NAV buffer; or
- To redeem from the prime MMF and subscribe to a Treasury MMF.

Faced with these options, it seems pretty clear that a risk-averse investor would redeem: the NAV buffer provides an insufficient incentive to remain in the prime fund, relative to the 'risk free' option of the Treasury fund.

Furthermore, the options for funding and structuring a NAV buffer give rise to additional issues:

Investor funded NAV buffer

An investor funded NAV buffer would result in transfers between different generations of investor, i.e. income retained at the expense of today's investors, would be used for the benefit of tomorrow's investors. That is not consistent with basic principals of securities regulation.

Investor funded subordinated/capital shares

We do not believe investors would invest in MMFs if they were required to make a parallel investment in riskier subordinated shares/capital shares, since it would defeat the purpose of their investment, i.e. to manage credit risk through diversification.

Sponsor funded NAV buffer

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

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

More importantly, a sponsor funded NAV buffer would enable investors not merely to manage credit risk through diversification, but substantially to transfer that risk to MMF sponsors. Consequently, institutional investors would be disincentivised from making any direct deposits, and instead would invest all of their funds in MMFs in order to benefit from the sponsor-funded NAV buffer. That would almost certainly impose unaffordable costs on the sponsor: unless, of course, the sponsor could pass those unaffordable costs back to investors. Either way, we do not think MMFs would be commercially viable. And needless to

say, a sponsor funded NAV buffer would also undermine MMFs as investment products (whose risks and rewards are attributable to its investors).

Third-party funded subordinated shares

These would give rise to essentially the same issues as a sponsor funded NAV buffer. In addition, we do not believe third-parties would invest in subordinated shares. A recent investor survey² of US corporate treasurers indicated that if US MMFs were required to maintain a NAV buffer, then:

- 8% would increase their level of investments in MMFs;
- 56% would continue using funds at the same level; and
- 36% would either decrease their use or discontinue altogether.

However in a follow-up question, if the cost of the NAV buffer were to reduce the yield of the

fund (i.e. because it was investor funded), then:

- 53% of those respondents to the follow-up, who originally answered that they would continue or increase usage, would decrease or stop usage of MMFs if the yield were to decrease by 2bp or more (0.02%).

In conclusion, we do not support a capital buffer: it provides questionable benefits, and imposes unsupportable costs.

QUESTION FOUR

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?

The use of amortised cost accounting is commonly used for money market instruments and is appropriate for MMFs because there are significant issues with the mark-to-market pricing of money market assets.

Market prices are a mix of traded, quoted and evaluated prices. (A traded price is based on an actual transaction in the market; a quoted price is based on a market quote from a market maker/broker; and an evaluated price is estimated on the basis of fundamentals.) The ability of a pricing vendor to source traded, quoted or evaluated prices depends on the dynamics of the market in which the asset is traded:

- Equities are regularly traded on exchange. Therefore, the market prices of equities are usually based on traded prices.
- Fixed income securities are regularly traded, but rarely on exchange, and therefore provide no easily-accessible traded prices. Therefore, the market price of fixed income securities are usually based on quoted and evaluated prices.
- Money market instruments are usually held to maturity. Furthermore, certain money market instruments are not tradeable, e.g. deposits and repurchase agreements.

² Ibid.

Therefore, the market price of money market instruments are usually based on evaluated prices.

We asked two large fund administrators (A and B) to estimate the typical split of traded, quoted and evaluated prices provided to them by pricing agents:

Fund Administrator A

	Equity Fund	Bond Fund	USD MMF	EUR MMF	GBP MMF
Traded price	100%	0%	0%	0%	0%
Quoted price	0%	25%	0%	0%	0%
Evaluated price	0%	75%	100%	100%	100%

Fund Administrator B

	Equity Fund	Bond Fund	USD MMF	EUR MMF	GBP MMF
Traded price	98%	0%	0%	0%	0%
Quoted price	2%	20%	10%	10%	10%
Evaluated price	0%	80%	90%	90%	90%

As can be seen from these estimates, the market prices of money market instruments overwhelmingly comprise evaluated prices, e.g. prices calculated from yield curves. It is unclear to us why evaluating a price on this basis should be supposed superior to evaluating a price on the basis of amortised cost accounting. Indeed, evaluating prices from yield curves is unhelpfully pro-cyclical during a financial crisis, when dislocation at the far end of the curve impacts the short end, and consequently contaminates prices. We understand both the SEC and the AMF approved amortised cost prices as appropriate estimates of fair value during the financial crisis in 2007/8, subject to various constraints.

LIQUIDITY AND REDEMPTIONS

QUESTION ONE

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?

Under the current regulatory framework for UCITS investing in money market instruments, there are no detailed liquidity requirements, which we believe are necessary to minimize "liquidity bottlenecks".

A loss of confidence in the banking system may cause some investors to 'fly to quality', including by switching their investments from prime to treasury MMFs. The only credible way of stopping that flight to quality is to restore confidence in the banking system, and

quickly. In the intervening period and in the absence of a functioning secondary market, we believe that the primary objective of MMF reform should be to ensure that funds have sufficient natural liquidity to meet redemption payments. We do however recognise that there are certain challenges or drawbacks to imposing minimum liquidity requirements, which are discussed at the bottom.

We recommend that:

- minimum liquidity levels should be a requirement for MMFs, 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.
- 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.

Funds governed by the IMMFA code are already required to meet certain liquidity standards set out in the code as follows:

- Para 3.1 An IMMFA fund must have a formal liquidity management policy to allow it to meet reasonably foreseeable liquidity demand, having regard to normal market liquidity. The liquidity management policy should be approved by the fund's board of directors and should be reviewed no less than annually.
- Para 3.2 Notwithstanding the generality of Article 3.1, an IMMFA fund must maintain no less than ten percent of net assets in investments which mature the following business day and no less than twenty per cent of net assets in investments which mature within five business days. For these purposes, Members may determine the treatment of any sovereign debt by taking into account the liquidity of each investment rather than its final maturity.
- Para 3.3 If liquidity levels of an IMMFA fund fall below the minima in Article 3.2, the relevant Member must require the investment managers of the fund to use best efforts to ensure the fund complies with the minima as soon as reasonably practicable thereafter, having regard to market conditions and the best interests of all shareholders in the fund.
- Para 3.4 An IMMFA fund's liquidity policy must address concentration risk, including any concentrations arising within shareholders or sector specific issuance.
- Para 3.5 An IMMFA fund's prospectus and constitutive documents must permit an in specie transfer of assets of the fund to satisfy all or part of a material redemption request. Any proposal to use such a power must be both approved by the IMMFA fund's board of directors and be in the best interests of all shareholders in the fund.

We also acknowledge two challenges/drawbacks of imposing minimum liquidity requirements:

- Minimum liquidity requirements cause funding by MMFs of financial institutions, businesses and governments to 'compress' at the short end of the curve. As ever, securities regulators need to strike a balance between the needs of investors and the needs of the real economy. In this context, we do not think it would be necessary or helpful to specify any additional minimum liquidity 'buckets' (e.g. two

weeks, one month, three months...) otherwise there would be insufficient diversity in the tenor profile of MMFs as a whole, and their collective funding might present 'cliff edge' problems to issuers.

- The definition of overnight cash may prove contentious. Specifically, it is often supposed that government paper is a liquid asset, and in this context it should count toward overnight cash. We agree that paper issued by some governments is very liquid, and becomes more so during a financial crisis as investors fly to quality. But paper issued by other governments is not particularly liquid, nor used as haven asset by the risk averse. Therefore IMMFA has issued a Statement of Clarification to our Members noting: "It is not prudent to consider all government debt as maturing the next day."

QUESTION TWO

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?

We believe minimum liquidity requirements and 'know your client' rules represent an appropriate and sufficient regulatory response to the events of 2008, and regulation applied to MMFs should focus on these aspects.

However, we recognise that some regulators have taken the narrative further. They have observed that redemptions from prime MMFs necessarily caused a reduction in short term funding to banks, businesses and governments. Therefore, they recommend that MMF reform should not merely focus on ensuring that funds have sufficient liquidity to meet redemption payments, but also should actively disincentivise investors from redeeming.

We are concerned that this recommendation could undermine investors' confidence in MMFs and force them into alternative wrappers/structures. Nevertheless, in the interest of engaging regulators, we have assessed the effectiveness of various reform proposals in disincentivising redemptions. We believe that a trigger-based liquidity fee would be the most effective in disincentivising redemptions.

During a financial crisis, the options facing an investor in a prime MMF which had decided to impose a liquidity fee would be:

- To remain in the prime MMF, in which case there is a remote chance of a loss if one of fund's assets defaults; or
- or redeem from the prime MMF, in which case the investor would suffer the liquidity fee.

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

We believe it would normally be inappropriate to disincentivise redemptions from MMFs (or any other investment fund) – after all, investors are entitled to redeem from a MMF if they have legitimate concerns about the creditworthiness of one of its underlying issuers. However, we do recognise that high levels of redemptions from a MMF during a financial crisis can, in a self-fulfilling fashion and in extremis, cause redeeming investors to disadvantage remaining investors. On that basis, we cautiously recommend that regulatory reform should further investigate the viability and consequences of liquidity fees.

If a liquidity fees were to be introduced, we recommend that they should be conceived as a “power” that can be invoked by MMFs in extreme circumstances by the board of directors or management of the fund.

QUESTION THREE

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?

We agree that the boards of MMFs should be empowered to make redemptions-in-kind (in specie) to redeeming investors. We acknowledge that redemptions-in-kind could not be ‘industrialised’ but only made to large investors, i.e. because of limits on the horizontal division of a MMF’s assets; the need to deliver those assets into a securities account; and the need to appoint an account custodian. We also acknowledge the challenge of treating the redeeming and remaining investors fairly, for example in the case of non-transferrable or indivisible assets. Notwithstanding these challenges, we think empowering the boards of MMFs to make redemptions-in-kind is a sensible part of the ‘tool kit’ for managing redemptions.

The principal argument made in favour of a minimum amount balance requirement is that it would disincentivise investors from redeeming. We disagree with this argument. During a financial crisis, the options facing an investor in a prime MMF which imposed minimum balances would be:

- To remain in the prime MMF, in which case there is the chance of a loss if one of fund’s assets defaults; or
- To redeem from the prime MMF, in which case [say] 5% held back in the fund for 30 days. In the event of a loss, if one of fund’s assets defaults, the investor’s pro-rata share of those losses would be deducted from the held back 5% amount.

Faced with these options, we believe a risk averse investor would redeem, since this limits potential losses pro rata to the held back amount, whereas remaining in the fund limits potential losses pro rata the entire investment.

Indeed, a recent survey³ of US corporate treasurers indicated that if US MMF were required to holdback 3% of redemptions proceeds for 30 days, then:

³ “Liquidity fees: a proposal to reform money market funds”, HSBC, November 2011, www.hsbc.com

- None would increase their level of investments in money funds;
- 10% would continue using funds at the same level; and
- 90% would either decrease use or discontinue altogether.

The survey estimated that imposing minimum account balance would result in 67% decrease in MMFs by corporate, government and institutional investors. Since those investors would continue to require management of credit risk, we believe they would simply switch from MMFs to an alternative collective investment wrapper. On the balance of these arguments, we are opposed to minimum account balances.

QUESTION FOUR

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?

As noted under question one of the “Liquidity and Redemptions” section, we believe that adding liquidity constraints would be useful. At present IMMFA funds must maintain no less than ten per cent of net assets in investments which mature the following business day and no less than twenty per cent of net assets in investments which mature within five business days. In addition, funds may determine the treatment of any sovereign debt by taking into account the liquidity of each investment rather than its final maturity.

In the USA, liquidity requirements have already been implemented by the SEC. In a recent⁴ update from the Investment Companies Institute in the US, they noted in particular that the liquidity standards worked well in helping funds manage through periods of market stress during the summer of 2011, when Prime MMFs saw outflows of USD 172bn or 10% of total assets in the period from early June to early August.

In summary, we believe that liquidity requirements should be included in regulation, and would have positive consequences for both investor confidence and fund stability.

QUESTION FIVE

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

As elaborated on in questions 1-4 above, we support the introduction of reform proposals that enhance MMFs ability to provide liquidity to its investors. These include requiring funds to hold minimum liquidity requirements in overnight and one week maturity buckets and funds should be required to know their clients to be able to manage risks from client concentrations. With regard to other reform proposals focused on liquidity, our position is as follows:

⁴ ICI, Money market funds in 2012 “SEC’s 2010 Money Markets are Working”, July 17, 2012.

We take a cautious stance on liquidity fees, as we do not think it is normally appropriate to disincentivise investors to redeem if they have legitimate concerns, but recognise that this option may reduce run risk and reduce the disadvantage faced by remaining investors.

We do not support redemption restrictions as we do not believe they would have the desired effect and would precipitate a significant divestment from MMFs by investors.

Many IMMFA funds already have the ability to apply redemption restrictions. For example, many funds have the ability to restrict redemptions to a maximum of 10% of the NAV of the fund per day. Many funds also have the ability to temporarily suspend the NAV of the fund, thus suspending redemptions and subscriptions, if this is deemed in the best interest of shareholders by the fund's Directors. IMMFA funds often have the power to make redemptions-in-kind (in-specie) to redeeming investors. We support all these types of redemption restrictions.

As noted in question 3, we do not support the concept of a "minimum account balance" for the reasons provided.

It would be possible for the options of liquidity constraints and liquidity fees to be adopted together.

INVESTMENT CRITERIA AND RATING

QUESTION ONE

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?

We believe that the definition of money market instruments in the UCITS Directive is suitable, but to think that it could more clearly reflect an appreciation that the majority of money market instruments are not traded on an exchange, but are traded between regulated entities in regulated markets.

QUESTION TWO

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

Investors value MMF ratings for a number of reasons:

First, rated MMFs are subject to additional risk constraints. That has been of particular benefit to investors in the EU where, until recently, there was no pan-European regulatory definition of a MMF, and investors had to rely on national definitions which often imposed relatively weak constraints on credit, market or liquidity risk. That's why, when IMMFA was founded in 2000, its Code of Practice required Member funds to be rated, i.e. in an effort to

build investor confidence in the product. (France is an exception to this rule: its MMF sector has long been carefully defined by the AMF, and the product widely used. It never required fund ratings to establish investor confidence.)

Second, rated MMFs are subject to additional oversight by the CRAs.

Third, some investors are themselves rated and, as a consequence, are only allowed to invest in co-rated products. For example, securitisations often invest in MMFs as cash collateral; but if a securitisation is rated, then it is usually only permitted to invest in MMFs that are also rated by the same CRA.

Notwithstanding the fact that investors value MMF ratings, we acknowledge three risks:

First, we believe MMF ratings remain poorly understood. Investors appear to assume that the ratings of different agencies are interchangeable, whereas in fact they are increasingly diverse. Broadly speaking, Standard & Poor's rating relates to credit risk; Moody's to credit and liquidity risk; and Fitch's to credit and liquidity risk, and to an assessment of the likelihood of sponsor support. Investors also appear to assume the highest MMF ratings can be 'read across' to a long-term triple-A rating. That is understandable given the symbology the CRAs have used: AAAM in the case of Standard & Poor's; Aaa-mf in the case of Moody's; and AAAMmf in the case of Fitch. The suffix (m, mf, mmf) is intended to distinguish the rating as a MMF rating, and not a long term rating, but that subtlety seems to be lost of most investors who instead prefer to focus on the prefix (AAA). IMMFA and the CRAs have sought to address these issues by educating investors about differences in ratings methodology and symbology.

Second, many investors' treasury policies specify that a MMF must be rated. Therefore, if funds are put on ratings watch or downgraded, it can precipitate significant redemptions. For example, between 8th -22nd December 2011 Fitch Ratings placed three of Prime Rate Capital Management's (PCRM) MMFs on Rating Watch Negative (RWN). During that period PCRM's funds experienced very significant redemptions: 50%, in the case of its Sterling fund⁵.

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

Various proposals have been made to mitigate those disadvantages. For example:

- It has been proposed that there should be greater differentiation between MMF ratings, and funds should be encouraged to regularly migrate up and down the ratings scale. This is intended to desensitise investors to changes in MMF ratings,

⁵ PCRM's funds remained fully compliant with ESMA's definition of a 'short term money market fund' throughout the period. This suggests – disappointingly – that investors place greater confidence in fund ratings than in regulation.

and make them less likely to redeem in large numbers if a fund is put on ratings watch or downgraded. We disagree with this proposal. We think it is implausible to suppose investors could be desensitised to ratings actions in this way, particularly during a financial crisis which would tend to heighten their risk aversion.

- It has been proposed that MMFs should not be permitted to accept a rating from a CRA whose methodology includes an assessment of the ability or willingness of a sponsor to support its MMFs. This is intended to reduce investors' expectations of sponsor support and reinforce their sense of ownership of the risks and rewards of their decision to invest in a MMF. We strongly agree that MMF ratings ought not to include an assessment of sponsor support, since this is likely to confuse investors and may result in risk being mispriced.
- It has been proposed that MMFs should not be permitted to request a rating from a CRA whose methodology does not permit a reasonable 'cure' period in relation underlying investments which are no longer eligible because of ratings actions. This is intended to reduce the impact such ratings actions can have on the funding of issuers. We agree that CRAs ought to allow funds which unintentionally breach ratings restrictions because of ratings actions in relation to their underlying issuers, ought to be allowed to cure the breach taking account of the best interest of investors. This is critical to breaking the mechanical processes that are increasingly evident when a rating agency puts underlying securities on watch and then challenge MMFs with the 'threat' that they may also be put on watch if they don't immediately dispose of the securities in question. This kind of behaviour, while not universal, can disadvantage investors by forcing MMFs to 'fire sell' securities and/or transmit instability through the financial system.

Whilst we recognise the risks of ratings, we do not think that MMFs should be prohibited from being rated. However, we do support proposals to mitigate problems posed by MMFs fund ratings, detailed above. In addition, broadening and strengthening regulation of MMFs and increased transparency to investors on the investments made by MMFs would reduce investor reliance on a fund rating.

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.

QUESTION THREE

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

Credit quality is largely a measure of the creditworthiness of an issuer, which might depend on a large number of quantitative and qualitative factors. Although it might be possible to develop a simple definition of creditworthiness (for example, in terms of investments which meet certain balance sheet ratios, or satisfy certain backward-looking tests) such definitions are unlikely to be broad or flexible enough to encompass the large range of issuers that a MMF might invest in.

Therefore it is not unreasonable that regulators have come to define 'high quality' in terms of the external ratings of CRAs. However, this approach has its drawbacks. In particular, if an issuer is downgraded to the point that it no longer meets the definition of 'high quality', then it can experience a sudden and dramatic withdrawal of funding by MMFs. Thus defining high quality in terms of external ratings:

- May cause ratings actions to have self-fulfilling and destabilizing consequences for issuers;
- May preclude a MMF from investing in an issuer which its own independent credit process judges to be creditworthy; and
- Changes the 'nature' of the external rating from being the mere opinion of a CRA, into a formal measure of creditworthiness.

These issues might be dealt with in a number of ways. For example, MMFs could be permitted to invest [x%] of their portfolio in fixed income instruments which are not high quality; or could be permitted to invest in such instruments subject to making appropriate disclosure to their investors.

We do not support such proposals, because they would undermine investor confidence in the ability of a MMF to meet its investment objective. Ultimately, we do not believe there are any credible alternatives to defining 'high quality' other than by referring to CRA ratings. If those references were removed, it would cause great uncertainty to investors.

QUESTION FOUR

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.

We suggest that 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, but these should form part of a providers' internal investment guidelines, or at a minimum regulatory requirements.

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.

APPENDIX A

The pricing mechanism of CNAV and VNAV funds

In most respects, CNAV and VNAV MMFs are indistinguishable. Both are collective investment schemes, whose objective is to provide investors with security of capital and high levels of liquidity, and which seek to achieve that objective by managing a portfolio of high quality, low duration money market instruments. There is no guarantee they will achieve that objective, and so investors in either fund face a number of risks, including the risk of loss due to default in a fund's portfolio.

However, there are differences in the way those funds price their shares and value their portfolio, which has given rise to a convention of distinguishing 'CNAV' funds from 'VNAV' funds. Those differences comprise:

- Differences in share price rounding;
- Differences in the use of amortised accounting; and
- The impact of accumulating and distributing shares.

Differences in share price rounding

Like any other investment fund, the share price of a MMF is calculated by dividing its net asset value by the number of shares in issue: therefore increases or decreases in the net asset value of the fund, will cause increases or decreases in its share price. The precise relationship between the net asset value and the share price of a fund is determined by the *degrees of significance* to which its shares are priced. This is best illustrated by way of example.

Assume at T1 a newly formed MMF issues 100m shares upon receipt of an initial subscription of EUR100m, and invests the subscription in a diversified portfolio of short term, high quality money market instruments. Assume the NAV of the fund changes over time as shown below. Assume the fund receives no further subscriptions or redemptions during that period, and ignore income and expenses. Then depending on whether the fund prices its shares to six, four or two decimal places, and assuming they round to the nearest number, then they would increase/decrease as follows:

	NAV (EUR)	Price per share, calculated to...		
		6dps	4dps	2dps
T1	100,000,000	1.000000	1.0000	1.00
T2	99,999,990	1.000000	1.0000	1.00
T3	99,999,950	0.999999	1.0000	1.00
T4	99,995,000	0.999950	0.9999	1.00
T5	99,500,000	0.995000	0.9950	0.99

CNAV funds price their shares to two decimal places – a practice known as 'penny rounding'. As can be seen from the above example, penny rounded shares are sensitive to movements in the funds' NAV of 0.5% (or 50bps). Because it is rare for the NAV of a MMF to move by as much as 50bps, the share price of a CNAV fund *tends* to remain constant, hence the description of the fund as *tending* to have a 'constant' NAV. CNAV funds that fail to maintain a constant price are described as having 'broken the buck', as occurs at T5.

VNAV funds price their shares to more than two decimal places, and for that reason are more sensitive to movements in the funds' NAV. As can be seen from the above example,

each additional decimal place causes a ten-fold increase in the sensitivity of the share price to changes in the NAV. This increased sensitivity means that the share price of a VNAV fund *tends*, other things being constant, to be more variable.

In the case of both CNAV and VNAV funds, the tendency of their shares to be constant or variable depends on movements in the NAV.

Differences in the use of amortised accounting

Like any other investment fund, the NAV of a MMF is calculated on the basis of the mark-to-market value of its portfolio, which comprises high quality, short dated money market instruments. As money market instruments edge toward maturity, there is little-to-no profit to be made from trading them, and they are largely held to maturity. Consequently, whereas equity and fixed income markets provide a wealth of mark-to-market prices, money markets do not. The lack of market prices is more pronounced in Sterling markets than Euro markets, and in Euro markets than US Dollar markets.

In the absence of regular and reliable mark-to-market prices, MMFs make use of 'amortised accounting' to estimate market prices. Amortised accounting assumes that money market instruments will mature at par, and any difference between their acquisition cost and par value should be realised on a straight-line basis between acquisition and maturity.

Amortised accounting generally produces a reasonable estimate of market price, except in two circumstances:

First, sudden movements in interest rates can cause changes in the market price of money market instruments. MMFs manage interest rate risk by limiting the weighted average maturity (WAM, calculated as the weighted average interest rate reset period) of their portfolio and/or by using interest rate swaps to neutralise the impact of movements in interest rates on the market price of their portfolio. In addition, some VNAV funds use interest rate swaps to mitigate the impact of movements in interest rates.

Second, changes in the credit quality – or the perceived credit quality - of issuers can result in changes in the market price of instruments they have issued. MMFs manage credit risk by employing credit analysts to distinguish relatively strong from relatively weak issuers. In addition, MMFs limit the weighted average life (WAL, calculated as the weighted average legal maturity) of their portfolio, and the final legal maturity of each instrument. By limiting their portfolio to instruments with a very short legal maturity, it is more likely that MMFs' holdings will mature at par – unlike investors who have longer-dated holdings, and are more fully exposed to credit risk.

Notwithstanding their best efforts to manage interest rate and credit risk, there remains a risk that amortised price may not be an accurate estimate of market price. Therefore, the use of amortised accounting is conditional. For example, CESR's Guidelines Concerning Eligible Assets for Investment by UCITS says:

With respect to the criterion "value which can be accurately determined at any time", if the UCITS considers that an amortization method can be used to assess the value of a MMI [Money Market instrument], it must ensure that this will not result in a material discrepancy between the value of the MMI and the value calculated according to the amortization method. The following UCITS/MMI will usually comply with the latter principles:

- *MMI with a residual maturity of less than three months and with no specific sensitivity to market parameters, including credit risk; or*
- *UCITS investing solely in high-quality instruments with as a general rule a maturity or residual maturity of at most 397 days or regular yield adjustments in line with the maturities mentioned before and with a weighted average maturity of 60 days. The requirement that the instruments be high-quality instruments should be adequately monitored, taking into account both the credit risk and the final maturity of the instrument.*

These principles along with adequate procedures defined by the UCITS should avoid the situation where discrepancies between the value of the MMI as defined at Level 2 and the value calculated according to the amortization method would become material, whether at the individual MMI or at the UCITS level. These procedures might include updating the credit spread of the issuer or selling the MMI.

The first bullet in CESR's Guidelines accommodates the pricing practices of French VNAV funds, which apply amortised accounting to instruments with less than three months residual maturity. If the fund manager has any concerns about the credit quality of an issuer of an instrument with less than three months residual maturity, then some other estimate of its market price should be used.

The second bullet accommodates the pricing practices of CNAV funds, which apply amortised accounting to instruments with less than 397 days residual maturity, subject to ensuring this does not result in a 'material discrepancy'. In practice, a material discrepancy is assessed by comparing the amortised price of the portfolio with an alternative estimate of its market price. That alternative estimate comprises actual market prices where they are available, and model prices where they are not - for example, prices modelled off of an issuer's interest rate curve. That alternative estimate of the market price is called the 'shadow price'. If the shadow price differs by more than 0.5% (or 50bps) from the amortised price, then the CNAV fund abandons amortised pricing in favour of the shadow price. This is consistent with pricing its shares to two decimal places, as described above.

Research by the Investment Company Institute⁶ shows that the average shadow price of CNAV funds between 2000-2010 was well within the 0.5% (50bps) limit for using amortised accounting – even during the darkest days of September 2008.

Therefore, CNAV and VNAV funds both make use of amortised accounting to calculate their NAV, due to the lack of market prices at the very short end of the yield curve. The use of amortised accounting is subject to certain reasonableness checks, including the calculation of a shadow price in the case of CNAV funds. However, and due to the lack of market prices, the shadow price is partly made up of model prices.

The impact of accumulating and distributing shares

Like any other investment fund, MMFs can offer either accumulating or distributing shares. Distributing shares in MMFs make daily declarations of net income (and, usually, make monthly distributions) whereas accumulating shares retain net income within the fund, which manifests as an increase in its NAV and therefore in its share price.

Investors' preference for distributing or accumulating shares is driven by a combination of taxation issues (i.e. whether investors have a tax-driven preference for income or for capital

⁶ http://www.ici.org/pdf/ppr_11_mmf_pricing.pdf

gains, and whether funds are required to distribute income for tax anti-avoidance purposes) and operational issues (i.e. whether investors find it convenient/inconvenient to process the receipt of income). EU-domiciled⁷ CNAV and VNAV funds may offer both distributing and accumulating shares.

The accumulation of income impacts the constancy or variability of a MMF's share price.

In the case of a CNAV fund, assume it offers both distributing and accumulating shares, and has 100m shares in issue. Assume that the annualised yield of the fund is 2%, which results in *net* income of EUR5,000 per day. Assume that the NAV of the fund (gross of income) changes between T1 and T5 as shown below, i.e. since the NAV never changes by as much as 0.5% (50bps), the share price of the CNAV fund is based on amortised pricing throughout. Then the price of the shares will be:

	NAV	CNAV fund price per share...		VNAV fund price per share...	
		Distributing	Accumulating	Distributing	Accumulating
T1	100,000,000	1.00	1.000050	1.000000	1.000050
T2	99,999,000	1.00	1.000100	0.999990	1.000090
T3	99,950,000	1.00	1.000150	0.999500	0.999650
T4	99,940,000	1.00	1.000200	0.999400	0.999600
T5	99,980,000	1.00	1.000250	0.999800	1.000050

The first point to note, is that accumulating shares in a CNAV fund do not maintain a constant price – rather, the price increases each day by virtue of the daily accumulation of income. Of course, investors do not ‘read’ such volatility in the share price as indicative that the fund has failed to maintain its objective of providing security of capital. That is because the volatility is always positive, since it is caused by the mere accumulation of income.

The second point to note, is that accumulating shares in a VNAV fund exhibit less ‘downside’ volatility than distributing shares, because the daily accumulation of income offsets (wholly or partially) reductions in the NAV. For example, at T2, daily mark-to-market losses cause a fall in the price of distributing shares, but, since those losses are wholly offset by the daily accumulation of income, the price of accumulating shares increases. Again, these differences do not impact an investors’ ultimate economic experience, and so ought not to impact their reading of constancy or volatility. However, and as described below, when one looks at actual differences in the share prices of CNAV and VNAV funds, the accumulation of income may in practice have a bearing on investor experience.

⁷ US-domiciled MMFs only offer distributing shares, due to taxation issues.