International
Capital
Market
Association

ICMA

## ASSET MANAGEMENT AND INVESTORS COUNCIL

# Money Market Funds in Europe[1]

## Introduction

The International Capital Market Association (ICMA) is one of the few trade associations with a European focus having both buy-side and sell-side representation. Buy-side and sell-side members within ICMA are both entitled to have their views represented separately (e.g. to the European Commission and CESR), where they wish to do so. ICMA is also keen to encourage dialogue between the buy-side and sell-side, where both sides consider this appropriate.

The purpose of the ICMA Asset Management and Investors Council is to represent the views of the buy-side members of ICMA and to add value for them by discussing asset management issues of common interest, reaching a consensus and recommending any action that ICMA should take. This may include proposing market-led initiatives and market practice guidelines, where these are appropriate, and responding to consultation papers from regulators. The focus will be on asset management in Europe, while recognising that asset management is a global business.

The aim of this second report on Money Market Funds is to present data on this type of financial instruments in Europe as a continuation of and supplement to the Money Market Funds – Draft Report from December 12, 2008 (herewith 'the first report'). This report offers data as indicators on recent developments of Money Market Funds (MMFs) as a basis for interpretation and further discussion in the Asset Management and Investors Council.

The first report gave an overview of Money Market Funds in Europe. Moreover, the paper discussed regulatory developments, notably steps forward to an integrated market. Possible introduction of standardisation and, more importantly, clarification the definition of MMFs were considered. Recent events have highlighted that investors should be made aware of the quality of their investments and should not worry about differences between rating agencies. The first report called for a pan-European regulatory framework, specific to money market funds, which would have paralleled the United States approach, to ensure a high degree of transparency and consistency. This second report provides data to assess these issues.

After presenting in brief the data sources and methodology, the paper illustrates the development of the volume of liquidity funds over time followed by the movement of the net assets of enhanced cash funds over time and then compares them. The paper also considers the trend in liquidity fund portfolio composition over the past 19 months and portfolio composition data on enhanced cash funds.

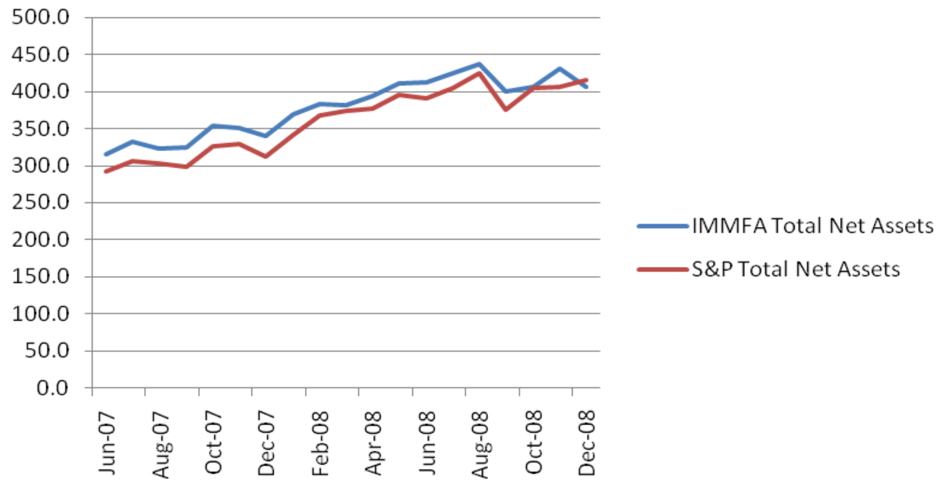
[1] This report has been prepared by Research Intelligence (Christiane Haberl) and ICMA.

## Data Sources and Methodology

The presentation of data in this report is constrained by the availability of meaningful data. The first report identified three categories of MMFs: liquidity funds, cash plus funds and enhanced money market funds. This report is based on two categories: liquidity funds and enhanced cash funds. Whilst the data on liquidity funds is quite comprehensive and representative, the data on enhanced cash funds is less detailed[2].

The two data sources concerning liquidity funds are Standard & Poor's and IMMFA (iMoneyNet)[3] provided in January and February 2009. Specifically, IMMFA provided data for funds under management by them. This represents more than 90% of the liquidity funds under management in Europe. At the same time, the IMMFA funds are the sum of AAAm[4] rated funds by S&P, AAA/V1+ rated funds by Fitch and AAA/MR1 rated funds by Moody's. S&P provided data on all of its AAAm rated MMFs, which account for over 130 of approximately 150 MMFs in total. The funds by S&P are part of the iMoneyNet data and S&P data should represent around 85-90% of the iMoneyNet data. This can be illustrated with Figure 1:

*Figure 1: Comparison of Data on Liquidity Funds by IMMFA and S&P – Net Asset Value in EUR bn*
***Source: iMoneyNet and S&P, Time frame: Monthly from June 2007 to December 2008***




Since the liquidity fund data provided by S&P is more detailed and represents almost the entire IMMFA data, S&P data are used for all graphs below. In order to compare S&P data with IMMFA data, the original data were adjusted in two ways. Firstly, S&P net assets in GBP and USD were converted into EUR and, secondly, instead of using IMMFA's weekly data, only the last week of each month was used. In some instances S&P funds are as high as or higher than IMMFA data, this might be due to the fact that the day chosen from IMMFA's weekly data is compared to S&P's monthly data. The fact that S&P AAAm rated money market funds experienced significant inflows

[2] All graphs and calculations in for this report were completed in Excel and based on the data sets provided by iMoneyNet and S&P. All currency conversion is based on historic interbank exchange rate data by the Federal Reserve Bank of St. Louis (https://research.stlouisfed.org).

[3] ICMA is grateful for the help of Andrew Paranthoiene at Standard & Poor's and Nathan Douglas at iMoneyNet.

[4] **S&P definition**: AAAm = extremely strong capacity to maintain principal stability and to limit exposure to principal losses due to credit, market and/or liquidity risks. "AAAm" is the highest Principal Stability Fund Rating assigned by Standard & Poor's.

in September and December 2008 can be the reason for that.

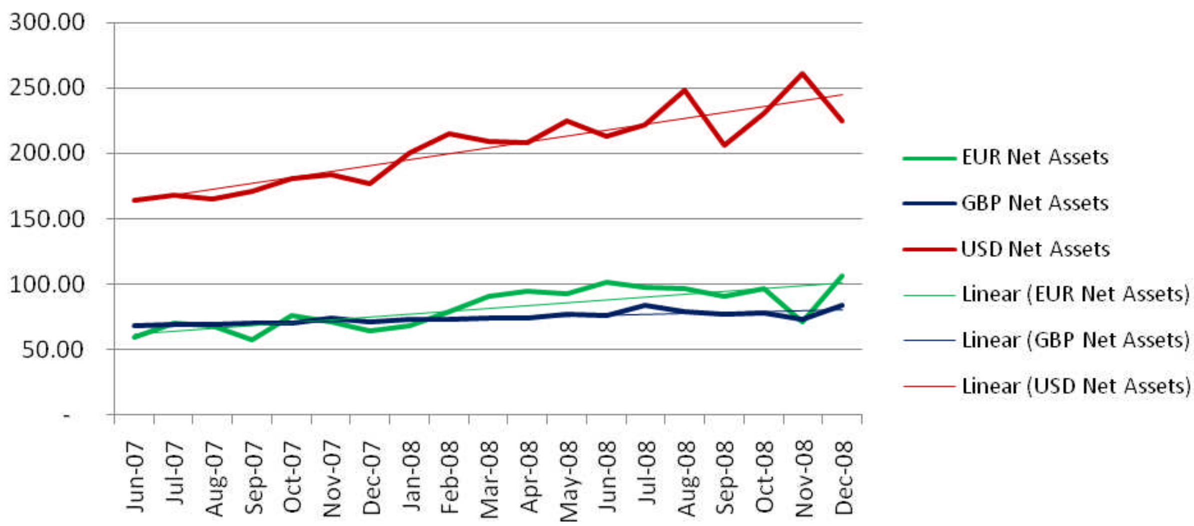
Regarding enhanced cash funds, the only data source used in this report comes from S&P data sets. In comparison to the definition of the first report, these do not differentiate between cash plus and enhanced money market funds. In S&P terms, they include all funds rated AAAf through to AAf[5] rated funds with a volatility rating of S1+. Just as the data on liquidity funds, they were analysed in January/February 2009. The S&P data set includes 55 funds, which represents at least half of all rated European managed enhanced cash funds. USD funds domiciled in United States have been removed from the original data set since they are also managed in the U.S.

## Trends in Liquidity Funds during the Crisis

In order to illustrate the trends of liquidity funds during the crisis, total S&P-rated net assets and yields are presented. The data regarding net assets shows (see Figure 2) an overall upward trend in all AAA-rated liquidity funds over the 19-month period, with USD-denoted liquidity funds recording strongest growth. However, net yields experienced a significant downward trend over the 19-month period with the strongest decrease after August 2008 (see Figure 4).

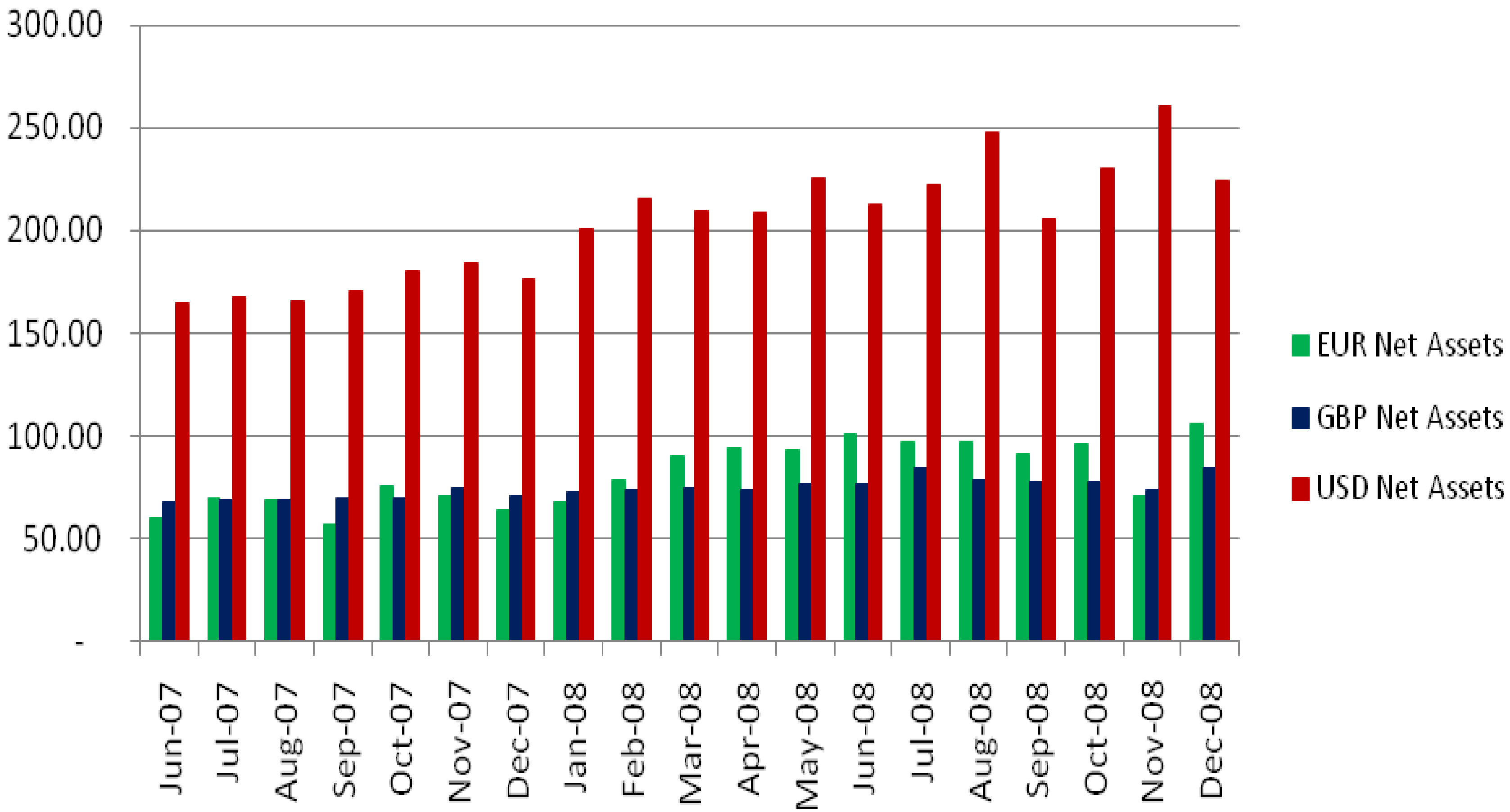
The following two Figures (Figures 2 and 3) display the amount of monthly net assets over the 19-month period between June 2007 and December 2008 in billions of EUR divided into the currency of the fund. The original S&P data showed the funds denoted in EUR, GBP and USD in the corresponding currency. Figure 2 and Figure 3 display the same three categories of funds recalculated into EUR in two different graph types. After correcting for exchange rates, the highest net amount was invested in USD denoted liquidity funds over the entire period of time. The net assets invested in EUR and GBP liquidity funds were more or less the same.

*Figure 2: Line Chart of AAAm-rated Liquidity Funds Net Assets in EUR bn*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***



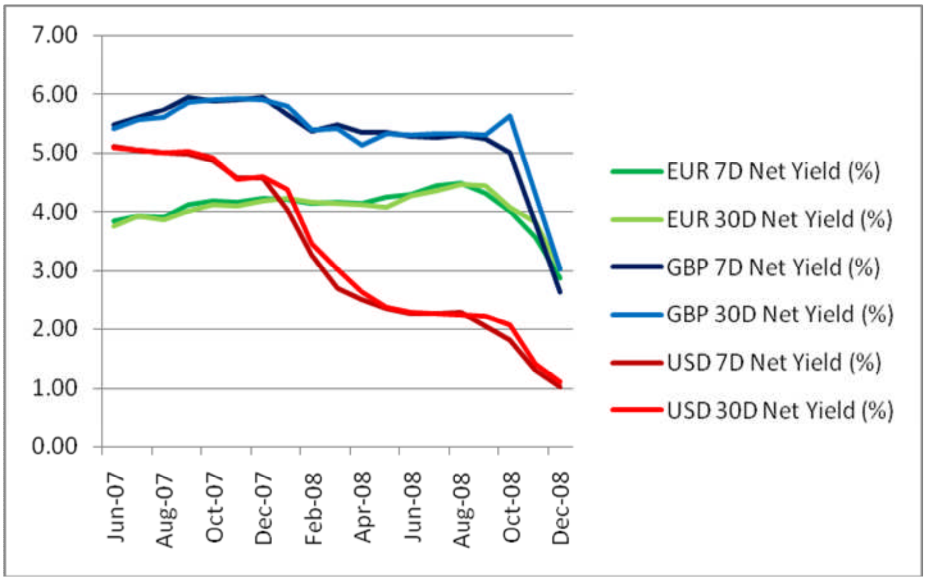

[5] **S&P definition:** AAAf = The fund's portfolio holdings and counterparties provide extremely strong protection against losses from credit defaults; AAf = The fund's portfolio holdings and counter parties provide very strong protection against losses from credit defaults.

*Figure 3: Bar Chart of AAAm-rated Liquidity Funds Net Assets in EUR bn*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***



The subsequent Figure 4 illustrates the development of the monthly percentage net yields on EUR, GBP, USD 7-day and 30-day liquidity funds over a 19-month period starting with June 2007 and ending with December 2008. There are several interesting patterns. First, 7-day and 30-day yields on the funds in the same currency largely follow the same trend. Second, for each currency, the 7-day yields (dark colour line) and 30-day yields (light colour line) take turns in being highest until around September 2008, when 30-day yields start being higher than 7-day-yields. Third, all yields plummet towards the end of 2008. Fourth, there is an order in the sense that USD funds decline first, then GBP followed by EUR funds. Fifth, GBP liquidity funds have the highest yield.

*Figure 4: Net Yields for 7-day and 30-day AAAm-rated Liquidity Funds in %*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***




## Trends in Enhanced Cash Funds during the Crisis

As aforementioned, enhanced cash funds include funds rated AAAf through AAf by S&P with an S1+ volatility rating. This includes both cash plus and enhanced money market funds in terms of the first report and represent around 50% of the rated European cash plus and enhanced money market funds market.

Figure 5 depicts the net assets of EUR, GBP and USD denoted ECF rated by S&P that are managed in Europe all mentioned in EUR bn. Net assets data is available over a two-year period starting in January 2007. There is substantial additional amount of USD funds rated by S&P managed from the U.S. This data is not included in this graph. The highest amount of net assets is invested in EUR funds that peaked in July 2007 and declined since then. Also, USD ECFs decline starting with the end of 2007. GBP ECFs increase with the exception of February 2008 and after October 2008. Comparing the trend lines, it seems that EUR-denoted ECFs experienced the strongest negative trend in the two-year period followed by USD ECFs. Yet, GBP-denoted ECF net assets display stability over the 2-year period.

*Figure 5: Line Chart of AAAf and AAf- / S1+ rated Funds Net Assets in EUR bn*
***Source: S&P, Time frame: Monthly from January 2007 to December 2008***

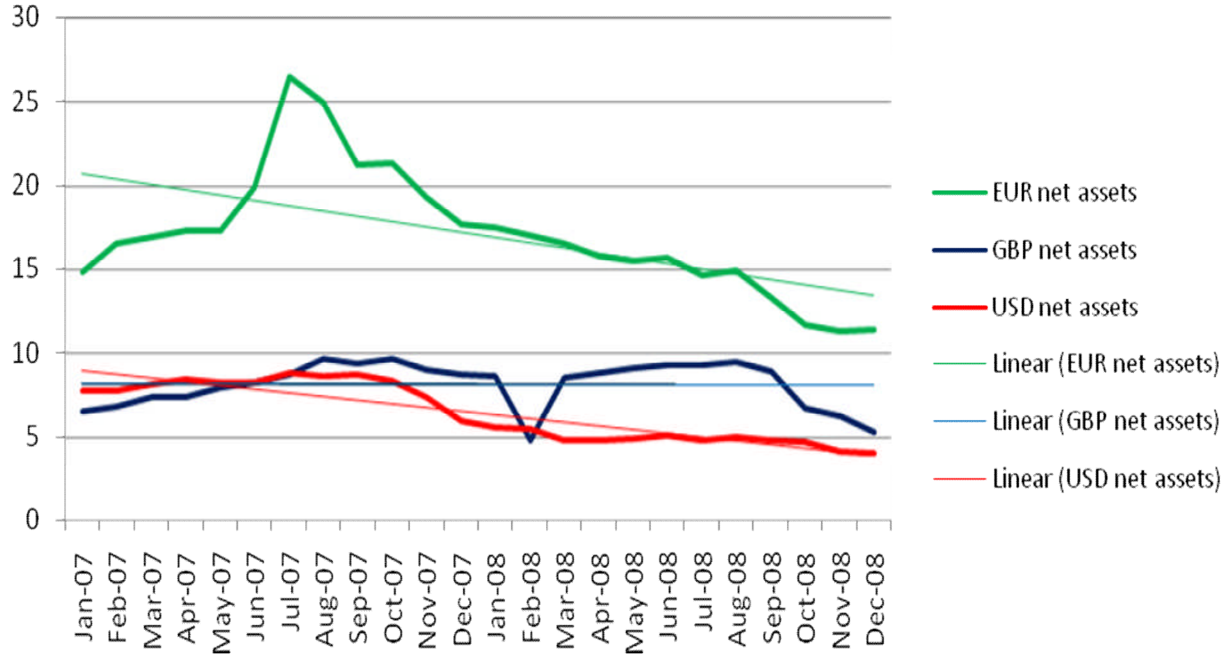
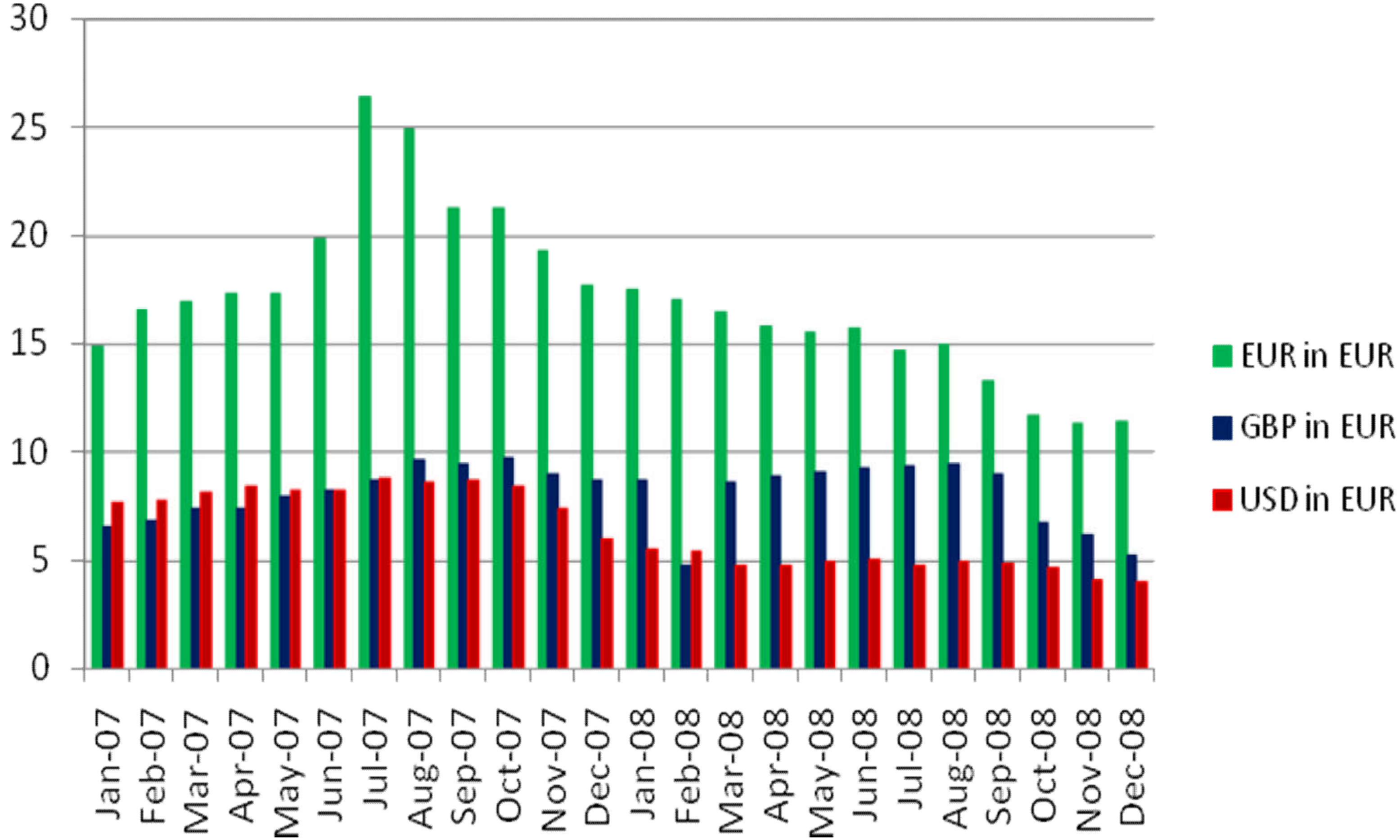


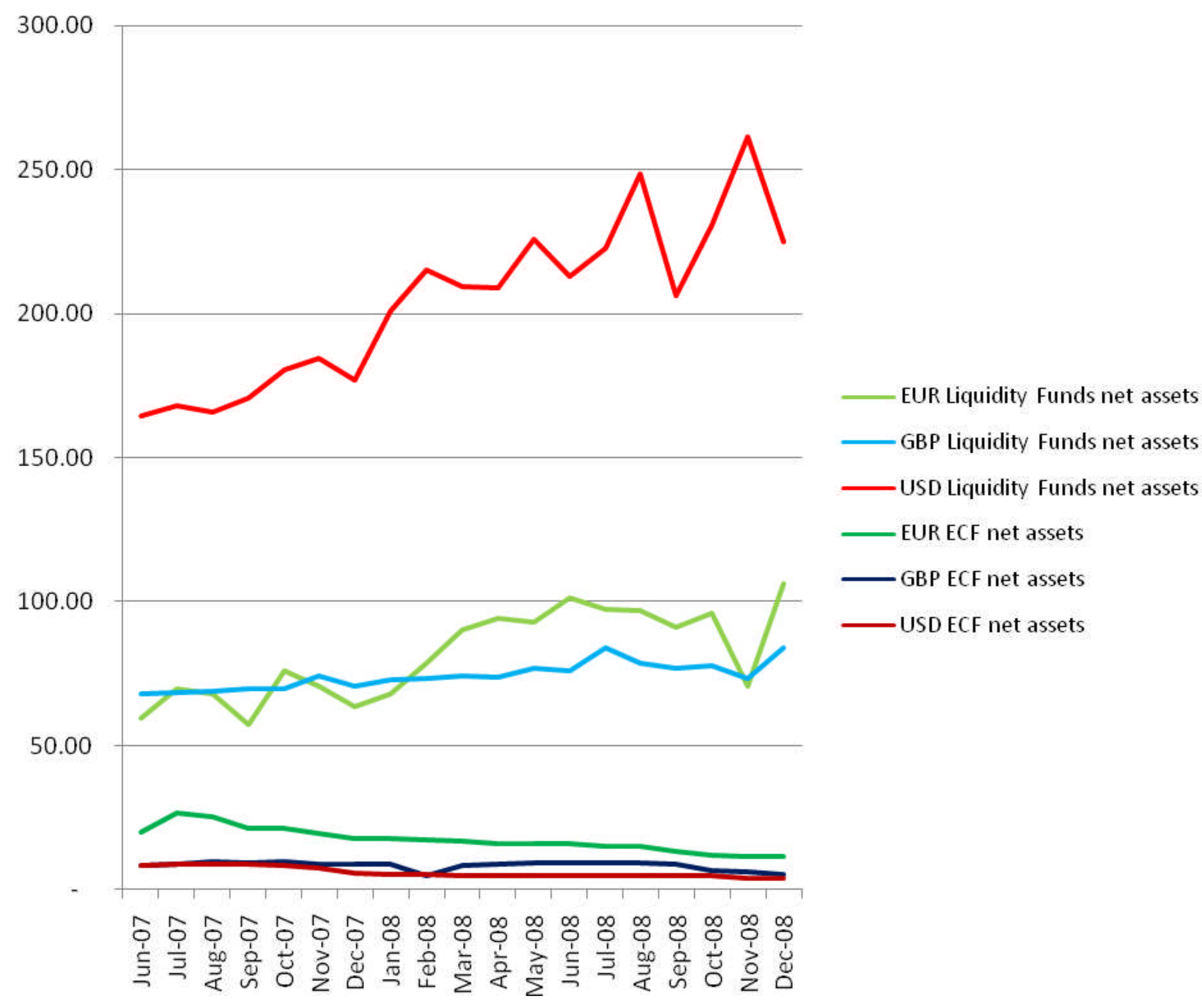
*Figure 6: Bar Chart of AAAf and AAf- / S1+ rated Funds Net Assets in EUR bn*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***



### Comparison of Trends in Liquidity and Enhanced Cash Funds

Figure 7 compares the volume of net assets invested in liquidity funds to the volume invested in enhanced cash funds. The main caveat involved in this comparison is that the portfolios of liquidity funds and ECFs have different maturity profiles. Taking into account this limitation, it can be stated the the greatest level of assets under management are within USD offshore and European managed liquidity funds followed by EUR and GBP liquidity funds. Whereas liquidity funds experienced an upward trend over the second half of 2007 and all of 2008, ECFs followed an overall negative trend, as investor appetite for this product diminished.

*Figure 7: Comparison of Net Asset Volume of AAAm-rated vs. AAAf and AAf-rated Funds in EUR bn*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***



## Trends in Liquidity Fund Portfolio Composition during the Crisis

Changes in portfolio composition of the S&P rated liquidity funds over the crisis period are quite interesting. Figure 8 illustrates the development of the portfolio composition of all AAAm-rated MMFs over the same 19-month period in terms of percentage of each financial instrument that constitutes the portfolio[6]. Whilst commercial paper seemed to be by far the most important asset at the beginning of the period, it lost its position towards the end of 2008. However, due to the increased importance of government funds, securities showed the opposite movement and moved from the sixth ranked to the fifth ranked position within the 19-month period. The second most important assets were certificates of deposit making up more than 25% of the portfolio between April and August 2008. Corporate free floating notes continuously lost importance over the 19-month period from covering over 20% in June 2007 and only slightly over 5% at the end of 2008. Repos and TDs competed with corporate FRN for the third rank in portfolio composition. Whilst TDs stayed relatively stable, Repos, typically used in government liquidity funds recorded an overall positive trend. ABCPs occupied the seventh rank over almost the entire period and BOND, ABS and cash only a very minor proportion of the portfolios. From June 2008, no investments were made in EXTABCP.

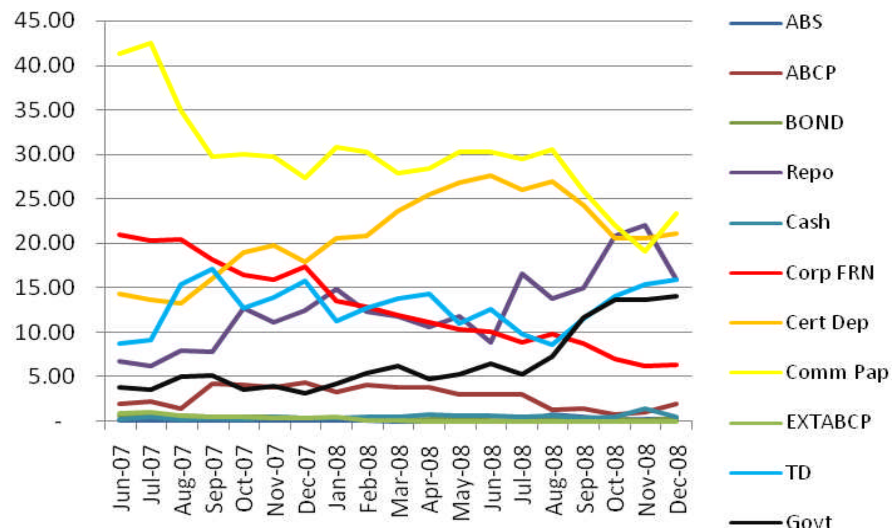
*Table1: AAAm-rated MMFs % Portfolio Composition*

***Source: S&P, Time frame: Monthly from June 2007 to December 2008***

| EUR | ABS | ABCP | BOND | Repo | Cash | Corp FRN | Cert Dep | Comm Pap | EXTABCP | TD | Govt |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Jun-07 | 0.17 | 2.02 | 0.65 | 6.84 | 0.30 | 20.95 | 14.31 | 41.30 | 0.84 | 8.80 | 3.82 |
| Jul-07 | 0.16 | 2.22 | 0.67 | 6.25 | 0.58 | 20.25 | 13.61 | 42.46 | 1.01 | 9.18 | 3.60 |
| Aug-07 | 0.16 | 1.45 | 0.66 | 7.90 | 0.34 | 20.42 | 13.20 | 34.93 | 0.57 | 15.36 | 5.01 |
| Sep-07 | 0.14 | 4.31 | 0.55 | 7.90 | 0.37 | 18.19 | 16.07 | 29.76 | 0.47 | 17.14 | 5.09 |
| Oct-07 | 0.16 | 4.07 | 0.52 | 12.67 | 0.32 | 16.47 | 19.02 | 29.98 | 0.45 | 12.75 | 3.60 |
| Nov-07 | 0.12 | 3.89 | 0.50 | 11.14 | 0.52 | 15.98 | 19.81 | 29.76 | 0.39 | 13.97 | 3.91 |
| Dec-07 | 0.14 | 4.38 | 0.41 | 12.48 | 0.47 | 17.42 | 17.88 | 27.41 | 0.38 | 15.88 | 3.15 |
| Jan-08 | 0.13 | 3.38 | 0.35 | 14.86 | 0.40 | 13.56 | 20.60 | 30.75 | 0.45 | 11.31 | 4.22 |
| Feb-08 | 0.10 | 4.18 | 0.46 | 12.39 | 0.51 | 12.90 | 20.85 | 30.26 | 0.11 | 12.81 | 5.43 |
| Mar-08 | 0.07 | 3.87 | 0.21 | 11.84 | 0.51 | 11.91 | 23.60 | 27.93 | 0.13 | 13.76 | 6.17 |
| Apr-08 | 0.07 | 3.86 | 0.23 | 10.62 | 0.78 | 11.16 | 25.58 | 28.45 | 0.05 | 14.41 | 4.79 |
| May-08 | 0.03 | 3.11 | 0.52 | 11.85 | 0.65 | 10.37 | 26.86 | 30.30 | 0.01 | 11.05 | 5.24 |
| Jun-08 | 0.03 | 3.03 | 0.21 | 8.94 | 0.62 | 10.07 | 27.67 | 30.32 | - | 12.65 | 6.46 |
| Jul-08 | 0.02 | 3.07 | 0.15 | 16.56 | 0.60 | 8.90 | 26.10 | 29.48 | - | 9.81 | 5.31 |
| Aug-08 | 0.71 | 1.35 | 0.18 | 13.73 | 0.67 | 9.77 | 27.04 | 30.57 | - | 8.62 | 7.35 |
| Sep-08 | 0.49 | 1.41 | 0.39 | 14.98 | 0.42 | 8.82 | 24.36 | 25.91 | - | 11.61 | 11.63 |
| Oct-08 | 0.24 | 0.81 | 0.31 | 20.72 | 0.55 | 7.10 | 20.53 | 22.02 | - | 14.04 | 13.67 |
| Nov-08 | 0.31 | 1.12 | 0.15 | 21.98 | 1.38 | 6.26 | 20.56 | 19.16 | - | 15.37 | 13.70 |
| Dec-08 | 0.21 | 2.04 | 0.43 | 15.93 | 0.50 | 6.36 | 21.07 | 23.41 | - | 15.96 | 14.10 |

[6] **ABS** = asset-backed security; **ABCP** = asset backed commercial paper, **BOND** = corporate bonds, **Repo** = repurchase agreement, **Cash** = cash, **Corp FRN** = Corporate floating rate note, **Cert Dep** = Certificate of Deposit, **Comm Pap** = Commercial paper, **EXTABCP** = Extendible asset-backed commercial paper, **TD** = Time deposit , **Govt**: a significant number of government liquidity funds have opened - portfolio compositions have changed to include direct government investment

*Figure 8: AAAm-rated MMFs % Portfolio Composition*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***




After presenting the cumulative portfolio composition trends in EUR of all S&P rated liquidity funds in USD, GBP, and EUR together, it is interesting to look at the % portfolio composition for each of group of funds in the denoted currency, which is illustrated in Graphs 6 to 8.

For USD liquidity funds in Figure 9, in percentage terms, commercial paper constituted most of USD liquidity funds' portfolio until October 2008. The second most important MMFs were repos and CDs. Interestingly, corporate FRNs significantly lost importance whilst investment in government securities increased over the 19-months period. The second most important investments were repos and certificates of deposit. Corporate FRNs significantly and steadily declined from the second rank with over 20% to the sixth rank with slightly above 5%. Time deposits ranked fifth at the beginning as well as the end of the 19-month period. Yet, this investment was quite volatile in % of the portfolio. Although lower in ranking, ABCP gained in September 2008, sank towards October 2008 and moved up again towards the end of 2008.

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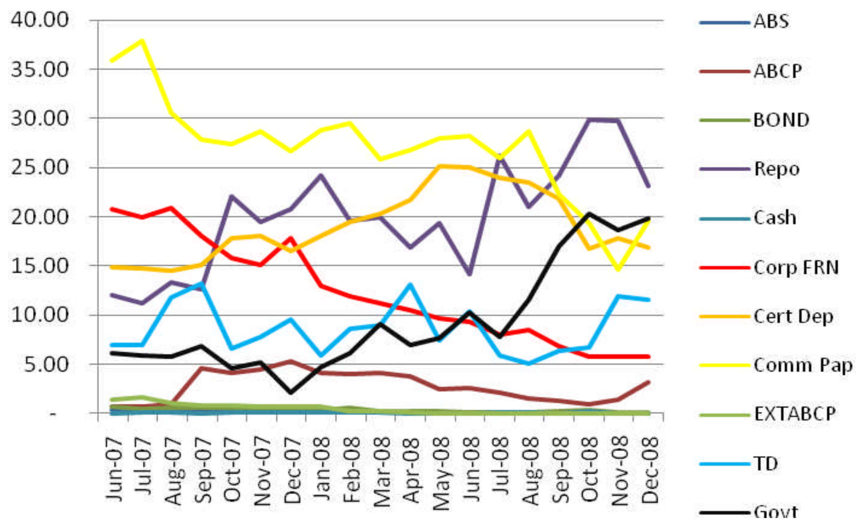
*Figure 9: USD AAAm-rated MMFs % Portfolio Composition*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***




For GBP liquidity funds of Figure 10, just as USD liquidity funds, commercial paper was the most important portfolio investment proportionally, despite its decline in importance over the 19-month period. Interestingly, asset-backed securities only entered portfolios in August 2008. CDs and government securities increase towards the end of 2008. Other than USD, GBP do not include EXTABCPs. The main four portfolio investments are commercial papers, certificates of deposits, TDs and Corporate FRNs. All other portfolio assets are significantly lower in importance and quite stable. Commercial paper significantly declined in importance in September 2007 whilst certificates of deposit steadily increased. TDs displayed a wave-like movement with low points in June 2007 and August 2008 and peaks in September 2007, December 2007 and October 2008. Corporate FRNs followed a steady slow downward trend.

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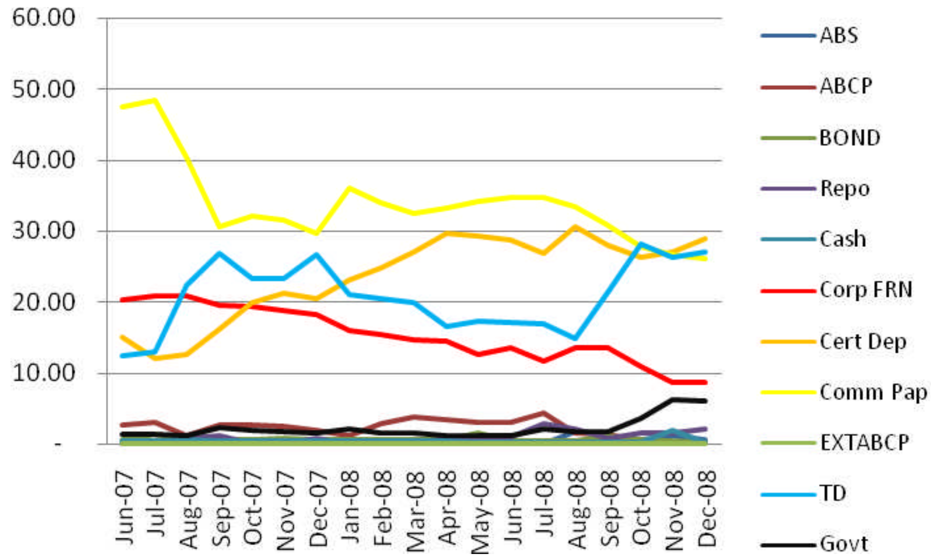
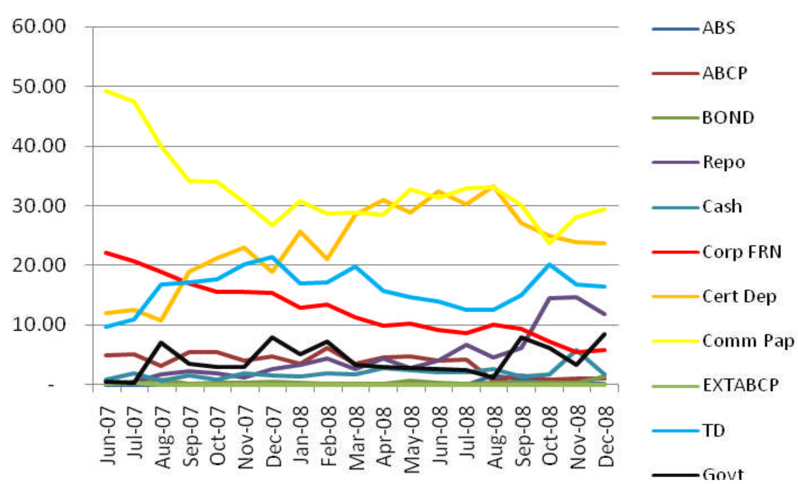
*Figure 10: GBP AAAm-rated MMFs % Portfolio Composition*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***




Concerning EUR liquidity funds in Figure 11, as for USD and GBP liquidity funds, commercial paper accounted for most of the investments and was partly replaced by certificates of deposit in 2008. Time deposits played an important role over the entire period occupying the third or fourth rank. Corporate floating rate notes steadily lost relative importance for the portfolio composition. In comparison to USD and GBP portfolios, government securities seemed to play a more important role over the 19 month period. Repos steadily gained importance throughout the second half of 2008. Each of the other assets stayed below or only slightly above 5% over the entire period.

*Figure 11: EUR AAAm-rated MMFs % Portfolio Composition*
***Source: S&P, Time frame: Monthly from June 2007 to December 2008***



### Enhanced Cash Fund Portfolio Composition

According to S&P, enhanced cash funds seek to achieve higher returns by investing in longer dated instruments and a broader array of securities, in terms of both ratings and type than traditional liquidity funds. Typically, individual investments can have maturities as long as five years, while the duration of the portfolios will range from three months to 18 months. Althoughthe portfolio composition of ECF largely equals the portfolio composition of liquidity funds, historically the difference in portfolio composition has related to ECFs having exposures to Asset Backed Securities. Also iMoneyNet divides money funds into top institutional money funds and enhanced cash funds.

Whereas for cash plus funds, the stability is most important followed by the yield and then liquidity, enhanced cash funds aim at maximum return then stability and liquidity. The return of cash plus funds is slightly higher than liquidity funds with the former aiming at a stable NAV whereas enhanced cash funds allow minor fluctuations in NAV. In terms of portfolio duration, cash plus funds reach up to 180 days and enhanced cash up to 1 year. Yields are 15-25bps above liquidity funds for cash plus funds and 25-75bps above liquidity funds for enhanced cash funds. Whereas derivatives are used for both cash plus and enhanced cash funds, leverage is only used for enhanced cash funds.

### Conclusion

The first report recognised steps towards the goal of an integrated market. However it also considered regulatory developments that would introduce standardisation and, more importantly, clarify in the definition of MMFs. The data of this report further emphasises such a need.

Recent events, and the data gathered in this report, have highlighted that investors should be made aware of the quality of their investments Moreover the European scope of the regulation may have to include harmonised application across countries, consistency with existing European regulations and a thorough impact assessment. The differences in definitions and regulatory treatments need to be addressed.

This second report reiterates the need for standardising definitions of money market funds and clearer identification of different types of money market funds should be looked at. Moreover a pan-European regulatory framework, specific to money market funds, which would have measured the United States approach, should be considered to ensure a high degree of transparency and consistency.