

## How to improve the resilience of short-term funding markets

### Introduction

The dramatic increase in the demand for cash during the COVID-19 crisis caused acute strains in the short-term funding markets (STFMs) prompting calls for further reforms to MMFs to enhance their resilience. For such reforms to be fully effective in improving market stability, it is vital to consider, in parallel, how the functionality of the underlying STFMs could be strengthened. It is also important to recognise that functionality affects a broad range of actors in the money markets ecosystem, of which MMFs form only one part.

The crisis highlighted characteristics of the markets, such as fragmentation, which impede liquidity during a stress event. Some of these areas were addressed in the 2021 ICMA white paper on the Euro Commercial Paper and Euro Certificates of Deposit markets to which IMMFA and many of its members contributed. In this paper we have endeavoured to bring a different perspective, one specific to MMFs. In our view it is important that the STFMs continue to function not only during a stressed event, but optimally all year round. In recent years, balance sheet pressure around reporting dates has become more and more acute, creating additional stresses in the system and making it increasingly challenging for MMFs to invest their liquidity in line with their objectives.

Potential reforms to MMFs continue to focus on the levels and composition of liquidity held and to question whether these are adequate. Holding more liquidity or cash as a result of higher liquidity requirements could help MMFs be more resilient in times of stress. However, measures advocating higher liquidity need to consider the challenges related to the scarcity of Daily Liquid Assets (DLA) (and to some degree Weekly Liquid Assets (WLA)) eligible investments both generally and, more specifically, around reporting dates, as noted above. This is less of a risk for USD markets as the Federal Reserve's Overnight Reverse Repo (RPP) facility meaningfully absorbs excess liquidity (indirectly helping EU domiciled USD MMFs). Currently, there is no such facility in EUR or GBP. We would recommend that the creation of one be seriously considered.

Similarly, proposals to increase the levels of liquidity or holdings of public debt securities need to take into account the structural constraints in the market. These constraints, which are the result of previous regulatory reforms and policy decisions, placed limitations on banks who are the traditional providers of liquidity and market intermediation, thereby indirectly causing significant capacity constraints in both the secured and unsecured markets. This can result in severe price dislocations at quarter and year ends, the cost of which is ultimately borne by the MMF investor. The lack of capacity for the placement of cash creates a dynamic which forces MMFs to position themselves in a less liquid manner, thereby taking on unnecessary risk.

### Summary

- Reforms to MMFs will be much more effective if the resilience and functionality of short-term funding markets are also improved. Without this, some proposed reforms may be hard to implement.
- Markets are currently subject to material disruptions around key reporting dates. Programmes or facilities should be made available to allow short-term markets to function properly under normal circumstances (i.e., in non-stressed markets), otherwise there is a salient possibility that MMFs

take on unnecessary risks and potentially breach regulatory requirements (such as maximum cash left uninvested at custodians).

- We recommend the creation of a facility/facilities in Europe for the placement of excess cash, such as exists in the US.
- Reforms which require MMFs to hold substantially more liquidity or more public debt must take account of bank balance sheet constraints limiting the availability of DLA investments over key reporting dates combined with a limited supply of eligible assets in certain jurisdictions.
- If MMFs are forced to refuse subscriptions around key reporting dates, money market investors have to find an alternative home for their cash which may be very difficult given constraints in the deposit market.
- Given market constraints, we strongly recommend that fund managers be given flexibility as to how they fulfil their liquidity requirements in the best interest of shareholders, rather than working to a fixed quota of public debt assets.
- Underlying liquidity is impeded by the fact that the existing CP/CD landscape is characterised by a high degree of fragmentation, with differing practices and conventions in the various jurisdictions. This creates illiquidity and should be addressed by measures to enhance harmonisation.
- A significant part of the market suffers from a lack of transparency due to the absence of a holistic overview.
- Enhanced use of technology and automation would help transparency and price discovery.
- Policy makers should consider making high quality CP count towards HQLA.
- Eligibility for asset purchase programmes should be consistent and coherent. Although in theory STEP labelled financial paper should have been eligible during the COVID-19 crisis, this principle was not applied consistently. The majority of assets owned by private debt MMFs were financial paper in the form of CP and CDs which was the one of very few fixed income sectors not directly supported, unlike corporate, sovereign, covered bonds and securitised products. This created a very different outcome for an MMF compared to, for instance, a short-term bond fund, where the underlying liquidity of the assets would have reflected eligibility for asset purchase programmes, rather than market liquidity.
- Efforts should be made to encourage a repo market which would facilitate the funding of secondary positions held by banks.
- Policy makers should consider the use of MMFs as collateral for margin purposes.

## 1) Structural Constraints

***Banking regulation has significantly reduced the demand for short term deposits. This has had a very significant impact on the ability of both money market investors and MMFs to invest their cash. Additionally, Central Bank actions have created imbalances between supply and demand in the STFM's. In particular, the reduction in the supply of collateral has created pressure in the secured repo market. Mitigating the impact of these conditions would improve market functionality. Key reporting dates, exacerbated by factors such as the bank levies in the UK and elsewhere in Europe, have now become systemic stress points when MMFs have difficulty in placing cash. Authorities should consider the creation of a facility for the placement of excess liquidity to correct the dislocations caused by such imbalances. This exists in the US market in the form of the Federal Reserve's Overnight Reverse Repo Facility (RRP) which is heavily used by MMFs. The presence of such a programme would not create moral hazard since it would be***

***designed to absorb excess cash. The impact of balance sheet constraints and the cost of market dislocations are being borne by the MMF investor.***

Proposals to reform MMFs continue to question whether the levels of liquidity held are adequate. Whilst the delinking of liquidity thresholds from the potential imposition of suspensions, fees or gates has gained widespread support, the absolute levels and the composition of liquidity buffers remain the focus of debate.

The recent SEC proposals<sup>1</sup>, the ESRB Report<sup>2</sup> and the ESMA Opinion<sup>3</sup> recommend delinking but would also require certain MMFs to hold higher liquidity.<sup>4</sup> We have argued that the delinking of liquidity thresholds from the fees and gates will substantially improve resilience by improving access to liquidity buffers. In the case of stable NAV MMFs, these buffers are already high, but were effectively unusable due to 'bright lines'. We reiterate that MMFs did not lack the liquidity to meet redemptions and, in those cases where they were forced to sell assets, were doing so in order to maintain liquidity buffers above the thresholds, not to meet redemptions.

Given the lack of appetite in both the secured and unsecured bank markets, significant increases in liquidity levels could create new challenges for MMFs in having to place larger amounts of cash on reporting dates when capacity is finite. A similar constraint applies to the ability to fulfil prescriptive quotas for public debt proposed by the ECB and the ESRB.<sup>5</sup> Not only is the outright supply of high-quality paper limited in certain jurisdictions<sup>6</sup>, the balance sheet availability to support additional secured repo is also severely constrained on reporting dates. **Given these capacity constraints it is vital that MMFs have flexibility as to how they fulfil their liquidity requirements according to market conditions.**

The various asset purchase programmes among central banks have resulted in a substantial amount of available collateral being pulled out of the system. The resulting problems of excess cash and lack of government collateral are solved in the US market by the presence of the Federal Reserve's Overnight Reverse Repo Facility (RPP). Usage of this has exceeded USD1trillion since August 2021 and at year-end reached USD1.9trillion, or 38% of the USD5trillion MMF assets under management.<sup>7</sup> This collateral shortage exists despite the US Treasury market being the deepest government debt market in the world. No comparable facility exists in Europe and MMFs do not have the ability to place cash with central banks, meaning that they must locate capacity in the private market. Given the lack of appetite in the secured and unsecured markets this can be extremely challenging. In our opinion, ongoing market functionality could be enhanced by similar facilities in Euros and Sterling.

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<sup>1</sup> [https://www.sec.gov/files/mmfs-reforms-fact-sheet\\_1.pdf](https://www.sec.gov/files/mmfs-reforms-fact-sheet_1.pdf).

<sup>2</sup> [https://www.esrb.europa.eu/pub/pdf/reports/esrb.ascreport220125\\_economic\\_rationale\\_MMfs\\_Recommendation~dbd5e76776.en.pdf?8a309b1310559a270fdf626b4b07f5e5](https://www.esrb.europa.eu/pub/pdf/reports/esrb.ascreport220125_economic_rationale_MMfs_Recommendation~dbd5e76776.en.pdf?8a309b1310559a270fdf626b4b07f5e5)

<sup>3</sup> [https://www.esma.europa.eu/sites/default/files/library/esma34-49-437\\_finalreportmmfreview.pdf](https://www.esma.europa.eu/sites/default/files/library/esma34-49-437_finalreportmmfreview.pdf)

<sup>4</sup> Levels for PDCNAV MMFs do not change and ESMA do not at this stage recommend higher levels for LVNAVs.

<sup>5</sup> The prescriptive requirement relates to ESRB Recommendations. ESMA do not propose a mandatory public debt addition for various reasons including that this could in some circumstances lead to downward pressure on sovereign debt prices.

<sup>6</sup> This is particularly the case in Sterling for instance, where the stock of UK T bills is currently only £37.6bn relative to a Sterling denominated MMF size of £234bn as of 11 Feb 2022.

<sup>7</sup> <https://www.newyorkfed.org/markets/desk-operations/reverse-repo>

Lack of balance sheet capacity in the secured repo market can lead to severe price distortions, particularly at year ends. MMFs can be forced to either turn down investor subscriptions, to invest at negative rates or to invest in longer maturities when this is not in the best interest of shareholders. The cost of this dysfunctionality is being borne by the MMF investor. These challenges would be exacerbated by proposed prescriptive liquidity requirements which would limit the manager's ability to mitigate the associated risks.

Supply and demand imbalances create similar price dislocations in the outright market, meaning that public debt securities can display extraordinary price volatility. In a scenario where MMFs were required to hold prescriptive levels of public debt, this would expose the fund to material interest rate risk unnecessarily. Unless the public debt quota were fungible with DLA, funds may have to reduce overnight deposits or secured repo to fulfil the requirement which would reduce liquidity. MMFs may also be forced to buy paper going into year-end at negative levels which would correct to 'normal' pricing once the turn effect had dissipated, leaving them to carry a mark-to-market loss until maturity.

We would therefore argue that proposals to increase liquidity levels either directly or indirectly through the holding of more public debt, require complimentary measures to resolve these structural capacity constraints before they could be effective. They should also allow for flexibility as to how the MMF fulfils its liquidity requirement, i.e. DLA and public debt holdings should be interchangeable, so that fund managers can ensure liquidity is invested in the best interest of MMF investors.

## **2) Market Fragmentation is an Impediment to Liquidity**

Many of the problems with the underlying short-term funding markets derive from the fact that the market for issuing short term debt in Europe is highly fragmented and opaque. This means that there is no single pan-European product or marketplace.

### **The commercial paper markets - ECP/NEU CP/STEP/Domestic**

The market for issuing currently consists of the long established, London based and internationally focused Euro Commercial Paper ('ECP') market. At almost USD1,000bn, ECP accounts for the largest sector, alongside the significant but domestically based French NEU CP market (EUR260bn) which is organised and regulated by the Banque de France. The size of the NEU CP market reflects the very substantial investor base of French MMFs. Accordingly, 85% is issued in Euro. In addition to these two dominant sectors, there are other smaller, local markets where trading is primarily domestic. The ECP market, rather like the Eurobond market, serves a global base of issuers and investors. This is reflected in the variety of currencies which include large amounts of US Dollar (33%) and Sterling (18%) in addition to Euros (42%) as well as other less widely traded currencies (7%). The more domestic markets, on the other hand, largely consist of Euro denominated issuance. Most bank issuers also issue certificates of deposit (CDs), including CDs issued under ECP programmes which allow for CD issuance, direct issuance not under programmes and /or CD issuance in the local domestic markets. CDs were historically far more liquid than CP, but CP practices of issuing to meet specific investor demand, rather than issuing in large tradeable tranches, have subsequently absorbed much of the CD market. There remain important

differences in selling restrictions between programme and non-programme CDs, with the latter generally saleable into the USA.

Although these individual CP and CD markets have differing currencies, legal frameworks, market practices, participants, selling restrictions, conventions and even settlement, there is overlap between them and in some cases the distinctions become blurred. **The absence of standardised practices and consequent market fragmentation is a significant impediment to liquidity.** The more standardised the product, the deeper the market and the easier it is for dealers, who want to deploy their balance sheets as efficiently as possible, to make markets.

There can be further cross-over between the European Treasury bill and Commercial Paper markets since some sovereign states also issue 'bills' under CP programmes, typically ECP, issuing to meet investor demand rather than auctioning paper in the more usual treasury bill convention.<sup>8</sup>

### STEP Paper

The Short-Term Euro Paper (STEP) label initiative was an attempt to create a more standardised market by encouraging convergence of market standards and practices. The STEP label acts somewhat like a listing in that issuers are required to adhere to given criteria and requirements for the disclosure of information, the format of documentation, settlement and the provision of data for the production of STEP statistics. The STEP label can apply to any European CP or CD programme. A stock exchange listing, which is standard practice for Euro medium term notes, has not been a practical option for CP given the costs relative to the frequency (the paper has a short maturity) and size of issuance. One significant difference is that CP is 'continuously offered', meaning that multiple pieces of paper with varying characteristics are issued as part of an ongoing process which matches issuer requirements to investor appetite. Issuing larger tranches of fungible paper, as happens in the bill markets, might appear to be an answer to this, but would run counter to the way in which CP has evolved.

It is worth considering what might be achieved by expanding the principle of labelling to achieve standardisation and what the obstacles to wider take up of the STEP label have been. There are both up-front and ongoing costs to the issuer to which issuers, particularly smaller ones, may be very sensitive to, given the economics of issuance is a key driver. Issuers may feel that they themselves do not derive a benefit from the label or that other routes to improve the liquidity of their paper are easier, establishing a NEU CP programme, for instance. It is also very important to note in this context that STEP labelling did not ensure consistent treatment as to eligibility for the ECB's asset purchase programmes during the crisis. Listing on a regulated market was an eligibility criterion but, despite the label, not all STEP paper qualified. The other obvious drawback is that STEP only applies to paper issued in Euro. STEP labelled paper is estimated to account for only 25-30% of the Euro denominated market.

### Capital Markets Union (CMU)

The creation of a unified capital market is a key objective of CMU. For this to be achieved in the short-term funding markets, the fragmentation of the CP and CD markets needs to be addressed.

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<sup>8</sup> Auction would often be via a platform with limited number of primary dealers. Fungible issuance, to certain set dates, encourages two-way liquidity.

Measures to support a more genuinely pan-European CP market would support the objectives of CMU.

### **3) Transparency**

Large parts of the European CP and CD markets lack transparency. This again relates to market fragmentation and is an impediment to liquidity. Local regulators can only track issuance in their domestic markets. So, for instance, the Banque de France (BdF) provide ample data on the French NEU CP market; the European Money Market Institute and the ECB publish data on Short-term European Paper (STEP) labelled paper and the Bank of England publish data on the sterling CP market. Although there are some commercial data providers, such as Euroclear, Dialogic and CMD Portal, providing statistics, the overall market lacks a holistic overview. This means that it is very difficult for market participants or public authorities to have a definitive view of the market or even to ascertain its size and composition. More centralised information on primary issuance would allow for an accurate assessment of issuer outstandings and total market size which are important metrics for both investors and regulators. More information on both primary and secondary trading levels would also help with price formation in the secondary markets.

The September 2021 ICMA white paper which IMMFA contributed to and supports, suggested a consolidated tape for short term markets as one measure which might help transparency.

### **4) Automation/ Technology**

Mature liquid markets normally include the use of electronic trading platforms which can help transparency and liquidity by providing an efficient way for investors to transact both in terms of price discovery and execution. Automation in the short-term markets remains sub optimal relative to other markets. This may be a function of the lack of standardisation but is also likely to reflect a relative lack of investment in new technology. A move away from an OTC market to greater use of all-to-all platforms for both primary and secondary trading could possibly deepen the pool of liquidity providers by encouraging a wider range of investors. These comments apply particularly to the ECP sector whose size, settlement conventions and multiplicity (which are advantages to issuers) mean that arguably it lends itself less readily to electronic trading than more homogenous domestic markets may do.

Technology is a key part of CMU and a top priority to the European Commission. As suggested in the September 2021 ICMA white paper on the European commercial paper and certificates of deposit markets, it is 'important to encourage initiatives that help to promote standardisation of data representation and processes as well as market interoperability.'

### **5) Consideration of Bank Capital and Liquidity**

#### **Bank intermediation**

Bank intermediation is crucial to the successful functioning of capital markets, including the short-term market. The CP and CD markets are bank intermediated in that paper is typically placed by bank dealers who serve both issuers and investors. Additionally, larger bank issuers often issue direct to investors, on the same understanding that liquidity may be provided. The market is characterised by high volume and very low margins, making dealers particularly sensitive to balance sheet utilization. Secondary trading and support are sufficient during normal times, but



during the crisis the ability of bank dealers to intermediate reflected the ubiquitous lack of liquidity. Banks had additional balance sheet demands as they anticipated drawdowns on revolving credit facilities and balance sheet became a scarce resource. It should be noted that it would have been incompatible with the key objectives of MMFs, namely the preservation of capital and the provision of liquidity, to continue to purchase assets in the face of such systemic illiquidity. Ensuring that markets continue to function is therefore vital to securing the funding capacity of MMFs.

### **Prudential Rules**

In our view, the Basel III prudential rules on bank balance sheets, although clearly positive for bank financial stability, may have had unintended consequences in the form of a procyclical impact on market functionality during the crisis. Consideration of how to improve liquidity should include a discussion of whether some short term highly rated paper should be eligible as HQLA. We also support the suggestion in the ICMA white paper that capital relief at times of stress be used to as a tool to encourage or enable banks to make markets in high quality assets. Such relief can be exceptional and temporary. The announcement of temporary capital and operational relief measures on 12 March<sup>9</sup> 2021 may have helped some banks buy back their own paper (thereby providing liquidity to investors). Coupled with the series of non-targeted 'pandemic emergency longer-term refinancing operations (PELTROs) from the end of April, it eased restraints on dealer banks which enabled them to resume their bidding in secondary markets.

### **Intervention, Dealer Capacity and Consistency**

Balance sheet capacity is widely recognised as a major factor in constraints around reporting dates and in the lack of appetite for deposits. As noted, this has driven growth in MMFs as investors sought alternatives. The COVID-19 crisis coincided with quarter end, exacerbating the pressure on liquidity. Dealers are under no obligation to support the secondary markets and do so on a best-efforts only basis.

There has been significant debate around the question of central bank intervention which varied significantly between the US and Europe during the crisis. There is an argument that if dealers are to be relied upon to support the secondary market during times of stress, they may at times need access to a 'buyer of last resort' in the form of an asset purchase programme. Whilst asset purchase programmes in Europe were helpful in easing pressure on corporate issuers, the fact that corporate paper is a relatively small share of the market limited the overall impact of these interventions. We see them as having been effective in maintaining funding to the real economy, rather than resolving the pervasive problem of market illiquidity. It has also been argued that dealers cannot be expected to support markets during a liquidity shock when flows are one-way.<sup>10</sup> The ESMA and the FSB reports concluded that the assets held by MMFs are fundamentally illiquid, a point with which we strongly disagree.<sup>11</sup> This assumption is based on the premise that short-term money market instruments do not trade very often, which is true, but does not mean they are intrinsically illiquid.<sup>12</sup>

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<sup>9</sup> These allowed banks to operate temporarily below the level of capital defined by the Pillar 2 Guidance on capital conservation buffers (CCB) and liquidity coverage ratios (LCR). Countercyclical buffers were also relaxed.

<sup>10</sup> FSB Policy Proposals to Enhance Money Market Fund Resilience, June 2021, p.19.

<sup>11</sup> ESMA Consultation on Framework for EU Money Market Funds, p.21; FSB, as above, p.4.

<sup>12</sup> See IMMFA Response to ESMA and FSB consultations. <https://www.immfa.org/publications/consultations-and-responses.html>

Perhaps the most pertinent point in this context is that due to an absence of standardisation, different paper had different outcomes when it came to eligibility for asset purchase programmes. Eligibility varied significantly leading to very different results for paper of similar quality and even for paper issued by the same issuer in different jurisdictions. Credit quality was not the key criterion for eligibility – so agency paper could be ineligible whereas lower rated non-financial paper was. This raises the issue of how to ensure a coherent approach in which issues are treated consistently and liquidity is targeted the right way.

## **6) Dealer Funding – Developing a Repo Market**

In the US, dealers fund CP inventory externally through the use of repo, but this is not established practice in Europe. This reduces the ability and willingness of dealers to hold paper on their books. Access to repo funding would help the capacity of dealers to provide more liquidity, although reporting dates would be likely to remain constrained.

Repo clients typically need daily marks which rely on external pricing sources for valuation of the assets. The challenges associated with such valuation are currently an obstacle to broadening the repo market for CP. Improved post trade transparency or independent CP repo curves, such as those provided by the Fed in US, would support accuracy and increase confidence in pricing.

Broader central bank eligibility for CP in money market operations would significantly enhance the repo-ability of paper, particularly of financial paper and Asset Backed CP.

## **7) MMFs as Collateral for Margin Purposes**

One of the key drivers of the heightened flows observed by MMFs during the turmoil in March was investors responding to increased margin calls caused by the extreme market volatility. The implications of the rise in margin requirements for the broader system, not just MMFs, have since been analysed in more depth.<sup>13</sup> The impact was most noticeable for MMFs denominated in Euro and Sterling which are often used by liability driven investment (LDI) investors to manage the liquidity component of their portfolios. In order to meet margin calls, investors withdrew cash from MMFs, although when markets (and therefore margin levels) normalised, these flows returned. Receivers of the cash collateral, such as central counterparty clearing houses (CCPs), had to reinvest the additional cash collateral into securities similar to those owned by MMFs.

We have encouraged policymakers to give further consideration to the use of MMFs for the purposes of collateral for bilateral margin requirements. In this context, we also welcome the ESMA consultation, announced in November 2021, on CCP investment practices which included the question of whether MMFs should be included as eligible investments for the reinvestment of cash collateral.<sup>14</sup> Allowing CCPs to reinvest their cash collateral into Public Debt MMFs would assist CCPs in reinvesting cash collateral and improve resilience.

ESMA proposed that MMFs continue to be excluded citing the reason that further reforms are under consideration. IMMFA responded to the consultation recommending that PDCNAV MMFs

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<sup>13</sup> ECB Financial Stability Report, 2.4, May 2020, 'Higher margin calls for derivative contracts added to the strong demand for cash'; FIA 'Revisiting Procyclicality: The Impact of the COVID Crisis on CCP Margin Requirements' Oct 2020.

<sup>14</sup> <https://www.esma.europa.eu/press-news/esma-news/esma-consults-ccp-investment-practices-highly-liquid-financial-instruments>



be included on the basis that the underlying investments in a PDCNAV MMF already meet the existing strict liquidity criteria applied to other financial investments, i.e., they are ‘highly liquid, bearing minimal credit risk and market risk’.<sup>15</sup> PDCNAV MMFs also successfully demonstrated their resilience during the crisis when they received substantial inflows. European PDCNAV MMFs are denominated almost exclusively in USD and account for 32% of the USD520bn total in USD denominated MMFs.<sup>16</sup> IMMFA further recommended that other AAA<sup>17</sup> rated MMF types, which would include the dominant LVNAV fund type in EUR and GBP, be considered once any potential reforms have been finalised.

Looking at a more far-reaching solution, a more holistic approach would be for policymakers to further facilitate MMF units being posted directly as margin. Whilst this is permitted under EU regulatory requirements, in practice, margin is predominantly posted (and collected) in the form of cash, particularly with regards to variation margin. Similarly, the ability to avail of the use of MMFs to be posted as an alternative to cash would be helpful in the context of Uncleared Margin Rules (UMR) – particularly as Phases 5, already live, and 6, in future, significantly broaden the scope of counterparties subject to regulatory initial margin, thereby increasing the industry demand for collateral.

## Conclusion

The STFM's are a vital source of financing to a wide range of issuers including banks, non-financials, governments and other public authorities. On the asset side a wide range of investors also use the short-term markets as a home for their liquidity. Addressing the structural issues which contributed to the withdrawal of market intermediation during the March 2021 crisis would enhance market resilience and benefit all participants, including MMFs, and should be considered concurrently with other potential reforms.

We would also emphasise that measures which seek to improve MMF resilience by increasing liquidity levels should first take structural market issues into account. Capacity constraints which cause significant price dislocations should be addressed with a view to optimizing ongoing market functionality.

We recommend that regulators convene a group of all the key stakeholders, including dealers, issuers and MMFs providers, to consider reforms to the CP markets. Possible reforms could include greater harmonization of the various CP markets; increased transparency; encouragement of automation such as all-to-all trading platforms, and development of a repo market for CP. More broadly, we urge policymakers to consider the role of prudential regulation and how banks could be encouraged to make markets even at times of stress. Improving the functionality of the short-term funding markets would contribute to the goals of Capital Markets Union.

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<sup>15</sup> Article 47 of EMIR.

<sup>16</sup> As of 7 January 2022, sources iMoneyNet and IMMFA. EUR PDCNAVs are only EUR0.05bn and GBP are GBP2.4bn.

<sup>17</sup> The AAA is an MMF rating, AAAMmf (Fitch Ratings), Aaa-mf (Moody's Investors Service) or AAAM (S&P Global Ratings).