A Study of the Performance of Money Market Funds and the Short-Term Funding Markets During March 2020

Investment Company Institute Roundtable
April 29, 2021

RESPONSES TO AUDIENCE QUESTIONS ASKED DURING THE ROUNDTABLE

The Investment Company Institute (ICI) organized a two-hour roundtable on April 29, 2021 to investigate the activities of money market funds, their investors, and the short-term funding markets in March 2020. A summary of the key points made during each part of the roundtable was published earlier and is available here.

Part One of the roundtable consisted of ICI economists Sean Collins and Shelly Antoniewicz presenting their research about money market funds' portfolio activities during March 2020.

Part Two of the roundtable consisted of fund managers from eight of the most significant money market fund providers describing their personal experiences managing money market funds during the March 2020 period, their interactions with investors, and the choices made regarding the portfolios.

Over 160 international regulators, policymakers, industry participants, and academics attended the roundtable. Audience members had the opportunity to ask questions, but, given time constraints, not all questions could be addressed during the roundtable. Therefore, ICI has prepared the following responses to many of the questions left unanswered in the Zoom Q&A box after having the opportunity to consult with the ICI economists and the fund managers who spoke at the roundtable.

Questions and Answers

Money Market Funds and Short-Term Funding Markets

Q: To understand the full "footprint" of money market funds in the commercial paper market, should offshore US dollar denominated (USD) money market funds' holdings be included?

A: Based on iMoneyNet data, USD money market funds registered outside of the United States held an estimated $135 billion in USD commercial paper, representing 12 percent of the $1.1 trillion in outstanding USD commercial paper at the end of February 2020. Altogether, US prime money market funds and offshore USD money market funds held $459 billion in USD commercial paper, representing 40 percent of outstanding USD commercial paper at the end of February 2020. Entities that are not money market funds held the remainder (60 percent).

Q: What is prime money market funds' share of the financial commercial paper market?

A: According to N-MFP data, US prime money market funds (public institutional, non-public institutional, and retail) held a modestly higher share of USD financial commercial paper than overall commercial paper (financial, nonfinancial, and asset-backed) in February 2020. US prime money market funds held $203 billion in financial commercial paper, representing 36 percent of the $562 billion in outstanding financial commercial paper compared with a share of 29 percent for overall outstanding USD commercial paper. There is no data available on financial commercial paper holdings of USD offshore money market funds.

Q: Should we look at offshore USD money market funds to better understand how other commercial paper holders behaved?

A: As noted above, even when offshore USD money market funds are included in the commercial paper market footprint, non-money market fund holders still account for a significant amount (60 percent) of outstanding USD commercial paper.

It would seem logical to understand what actions these other holders took during the March 2020 crisis period before proceeding to a discussion of reform options for money market funds. Otherwise, policymakers would be making the mistake of believing that their reform of money market fund regulation correctly addresses the systemic risk posed by illiquidity in the short-term funding markets.

Similar to prime money market funds, offshore USD money market funds modestly reduced their commercial paper holdings prior to the Federal Reserve's Money Market Mutual Fund Liquidity Facility (MMLF) announcement. According to iMoneyNet, commercial paper holdings of USD offshore money market funds fell by $9.7 billion from March 6 to March 13, 2020 and by an additional $7.8 billion from March 13 to March 20, 2020. It wasn't until *after* the Federal Reserve calmed and unlocked the short-term funding markets through the MMLF that USD offshore money market funds substantially reduced their commercial paper holdings—a reduction of $27 billion from March 20 to March 27, 2020.

Q: Although weekly liquid assets stayed more or less stable up to March 18, 2020, money market fund's weighted asset maturity (WAM) increased on average between 6 and 7 days. How do you explain this increase?

A: We are not seeing this pattern in the data. According to ICI's research using iMoneyNet data, the average weekly liquid asset ratio for public institutional prime money market funds declined from 45.5 percent on March 12 to 42.4 percent on March 18, while the average WAM across these funds increased from 34.7 days to only 36.2 days.

Q: How can we improve liquidity in the short-term funding markets?

A: The March 2020 volatility underscores the need to strengthen the resiliency of liquidity in the short-term funding markets. Addressing liquidity issues in these markets will take considerable time and effort, much like reforming and strengthening the repurchase (repo) market did in the aftermath of the global financial crisis. And like the process for reforming the repo market, we recommend policymakers convene a group of industry participants to study the current functioning of the short-term funding markets, including the commercial paper and CD markets.

It also is important to recognize that regulatory constraints, intertwined with the global pandemic, dramatically changed the willingness and ability of dealers to act as intermediaries in March 2020. The events of March 2020 demonstrate the importance of reliable secondary market liquidity when funds and other market participants are seeking to liquidate positions in the short-term funding markets but finding few-to-no bids for high-quality, short-term money market instruments.

Q: Did investors in the short-term funding markets behave differently in March 2020 depending on whether they were invested in money market funds or direct buyers of commercial paper?

A: Generally, no. In the face of uncertainty about the virus and the economy, *all* market participants, not just money market funds, demanded liquidity during the week of March 16. The MMLF provided a broad calming effect for all participants in the short end of the market (including participants that did not have direct access to the MMLF, such as individual investors and offshore money market funds), slowed redemptions, and allowed fund managers to refocus their attention on optimal portfolio positioning. In addition, intermediation returned, and the frozen short-term funding markets began thawing.

Liquidity Thresholds and Gates and Fees

Q: Money market funds that were not subject to fees and gates (like some variable net asset value (VNAV) money market funds in Europe) also saw very large outflows. What drove those outflows?

A: As the presentation by Antoniewicz and Collins pointed out, US-regulated institutional prime money market funds overall had outflows during the global dash for cash affecting all market participants. So, it is not surprising that European-regulated VNAV money market funds also saw outflows as investors focused on shoring up their liquidity. Our point was instead that outflows were substantially *larger* for US-regulated funds whose weekly liquid assets fell more quickly toward the 30 percent level, even though those funds still had very substantial liquid assets. This indicates that the link between weekly liquid assets and fees and gates substantially exacerbated the challenges these funds faced in March 2020.

Q: Would the MMLF have been needed without the tie between the 30 percent weekly liquid asset requirement and the prospect of fees or gates?

A: As noted during the Roundtable, it is difficult to definitively answer this counterfactual. Even absent the tie between weekly liquid assets and the option of imposing fees and gates, money market funds would have had meaningful redemptions. But without the tie, prime money market funds would have been able to access their plentiful 30 percent weekly liquid assets to meet redemptions, thus giving them considerably more time to adjust to market circumstances. *See* Investment Company Institute, "Experiences of US Money Market Funds During the COVID-19 Crisis," *Report of the COVID-19 Market Impact Working Group* (November 2020) (2020 ICI Money Market Fund Report), available at www.ici.org/pdf/20_rpt_covid3.pdf, at 35-36.

Q: Why did investors redeem? To avoid fees and gates, the need for cash, or to avoid a frozen market?

A: Investors redeemed both to obtain cash and to avoid the potential of fees and gates. We also understand that some institutional investors that invested in money market funds through portals had standing instructions to redeem if weekly liquid assets fell below 35 percent, which is further evidence that the focus of investors was primarily to avoid the 30 percent regulatory threshold.

The tying of fees and gates to weekly liquid asset levels of 30 percent by regulation greatly exacerbated outflows and, in effect, precluded funds from using 30 percent of their assets to meet redemptions, which is at odds with the intended purpose of a buffer.

Q: If the tie between a fund's weekly liquid asset and the prospect of fees and gates was removed, what, if anything, should be put in its place?

A: In addition to removing the tie between the 30 percent weekly liquid asset threshold and the potential imposition of fees and gates (***see*** **Section 3.1.1 of ICI's Comment Letter to the PWG**), ICI also believes an increase in the weekly liquid asset requirement—consistent with what most funds already maintain as a matter of conservative liquidity management—could make money market funds more resilient (***see*** **Section 3.1.2 of ICI's Comment Letter to the PWG Section**).

Q: Did ICI support the link between fees and gates and weekly liquid assets when the SEC proposed changes to the money market fund rules in 2013 prior to adopting its final rule in 2014?

A: As originally proposed by the SEC in 2013, the liquidity fee and gate provisions would have been triggered if a fund's weekly liquid assets fell below 15 percent. Explaining why it had proposed this threshold, the SEC noted that 15 percent "would indicate distress in a fund, but also [be] one that few funds would cross in the ordinary course of business, allowing funds and their boards to avoid the costs of frequent unnecessary consideration of fees and gates." Money Market Fund Reform; Amendments to Form PF, SEC Release No. IC-30551 (June 5, 2013), available at www.sec.gov/rules/proposed/2013/33-9408.pdf, at 176-177. Despite receiving general industry support for the threshold as proposed (including ICI), the SEC changed course and set the threshold level for discretionary fees and gates to the 30 percent weekly liquid asset requirement when it adopted its reforms in 2014.

Q: If gates are at the discretion of the board, why did investors treat them as binding? Did investor communications clarify this risk?

A: Money market funds' prospectuses and other disclosures state that the imposition of fees and gates are at the discretion of the board (and therefore far from certain or likely); however, investors, unfortunately, treated the 30 percent threshold as an event that would automatically trigger fees and gates. This effectively locked up 30 percent of prime money market funds' highly liquid assets, preventing fund managers from touching any of these liquid assets to meet redemptions.

Government Funds

Q: To what extent are government money market funds in the United States a source of instability for prime money market funds given that investors can seamlessly move out of prime funds and into government funds?

A: Government money market funds are not a source of instability. It is certainly true that investors in prime money market funds redeemed and moved into government money market funds. But *inflows* into government money market funds *vastly exceeded outflows from prime money market funds*, indicating that investors in general viewed government money market funds as a liquidity vehicle of choice. Understandably, investors of all kinds were seeking liquidity in March 2020 to protect themselves against the vast uncertainty.

Q: In a "dash for cash" market event like March 2020, would investors in prime money market funds still redeem if they could not switch to government money market funds?

A: Yes. If government money market funds had not existed in March 2020, investors in prime money market funds would still have redeemed and moved their proceeds to bank deposit accounts or invested directly in short-term Treasury bills, an outcome that is by no means superior.

Q: What were the outflows from other types of funds during mid-March 2020?

A: Over the two-week period from March 11 to March 25, 2020, public institutional and retail prime money market funds had outflows of $139 billion (17.6 percent of their February 2020 assets). Over the same period, bond mutual funds and ETFs had outflows of $215 billion (3.7 percent of their February 2020 assets), and equity mutual funds and ETFs had outflows of $52 billion (0.4 percent of their February 2020 assets). All data are from ICI's statistical releases which can be found at www.ici.org/statistics.

Liquidity Facilities and Central Bank Intervention

Q: What rules govern the Federal Reserve's authority to establish liquidity facilities?

A: Section 13(3) of the Federal Reserve Act authorized the Federal Reserve to establish liquidity and credit facilities during the COVID-19 crisis. For a list of those facilities, *see* www.newyorkfed.org/medialibrary/media/research/blog/2020/LSE_2020_COVID-fed-response_fleming.

Q: Did the MMLF relieve general market stress or just the stress experienced by prime money market funds?

A: As the Federal Reserve has indicated several times, all of its liquidity facilities implemented to address the March 2020 market volatility helped restore liquidity and the flow of credit to the US economy. The Federal Reserve explicitly noted that sales to the MMLF helped relieve stress. "[A]lthough the effect of the facility cannot be easily disentangled from other interventions of the Federal Reserve, conditions in money markets also improved shortly after the introduction of the MMLF." *See* M. Cipriani, G. La Spada, R. Orchinik, and A. Plesset, "The Money Market Mutual Fund Liquidity Facility," *Liberty Street Economics* (Federal Reserve Bank of New York blog) (May 8, 2020), available at libertystreeteconomics.newyorkfed.org/2020/05/the-money-market-mutual-fund-liquidity-facility.html

Q: If the MMLF was a useful facility in March 2020, should central bank liquidity support be institutionalized on a more permanent basis? How can the moral hazard issues be mitigated?

A: Moral hazard concerns were particularly relevant in the response to the 2007-2009 global financial crisis because of the fear that "government interventions were rewarding financial intermediaries that had taken on the most risk through leverage." *See* A. Kovner and A. Martin, "The Official Sector's Response to the Coronavirus Pandemic and Moral Hazard," *Liberty Street Economics* (Federal Reserve Bank of New York blog) (September 24, 2020), available at libertystreeteconomics.newyorkfed.org/2020/09/the-official-sectors-response-to-the-coronavirus-pandemic-and-moral-hazard.html. But the pandemic is "different from the usual negative shock. Clearly, the economic impact of the shutdowns related to the COVID response is [due] to the bad luck of being in a business that cannot be operated safely in a pandemic." *Id*. "As long at the U.S. financial system relies heavily on short-term wholesale funding markets, official sector intervention may be needed to prevent disruptions in these markets, because they could adversely affect the economy more broadly. Such interventions are arguably due to the structural weakness short-term wholesale funding introduces in the system, rather than traditional moral hazard. The moral hazard here arises from the system, as much as individual actors' incentives." *Id*.

Markets should under nearly all circumstances operate freely and without government or central bank intervention or support. When circumstances, like a coordinated effort by governments to shutdown economies around the globe to stem the spread of a deadly pandemic, create severe market dysfunction, the Federal Reserve should fulfill its statutory role to facilitate market liquidity. This is not a "bail out."

In addition, concerns about moral hazard appeared to be less of an issue for policymakers and regulators during the March 2020 crisis than during the global financial crisis. *See e.g.*, https://www.reuters.com/article/us-health-coronavirus-fed-moralhazard-an/seen-everywhere-in-last-u-s-crisis-moral-hazard-is-nowhere-in-this-one-idUSKCN21U0GV

Q: Was the MMLF just another "bail out" for money market funds?

A: It is not accurate to characterize the MMLF as a "bail out" for money market funds. The MMLF, which was just one among many Federal Reserve facilities and actions (and not the first), helped restore liquidity and the flow of credit to the entire short-term funding markets. In addition, the size of the facility was dwarfed by other Federal Reserve actions taken at the same time.

Cash Equivalents

Q: Should money market funds be treated as cash equivalents or investment funds for accounting purposes?

A: US Generally Accepted Accounting Principles (GAAP) defines "cash equivalents" as short-term, highly liquid investments that are both (i) readily convertible to known amounts of cash and (ii) so near maturity that they present insignificant risks of changes in value because of changes in interest rates. Generally only investments with original maturities of three months or less are considered cash equivalents. Examples of cash equivalents include Treasury bills, commercial paper, and money market funds.

The SEC's 2014 money market fund adopting release reaffirmed that under normal circumstances, a money market fund with a floating net asset value (NAV) and/or a money market fund with the ability to impose fees or gates still meets the definition of a cash equivalent. *See* Money Market Fund Reform; Amendments to Form P-F, SEC Release No. IC-31166 (July 23, 2014) (2014 SEC Reform Release), available at www.sec.gov/rules/final/2014/33-9616.pdf, at 133-135, 177-179.

Treating money market fund shares as cash equivalents for purposes of GAAP is important to fund investors because, among other things, the investors may have debt covenants that require them to maintain certain levels of cash and cash equivalents. If corporate investments in money market funds are not considered cash equivalents, they would instead be considered investment securities held for trading purposes under GAAP.

Intermediaries/Dealers

Q: If dealers turned to agency trading, who were the buyers?

A: This is an important question that regulators should ask and address because the data necessary to answer the question are not publicly available.

Q: According to the US flow of funds, at the end of 2019 dealers held 0.8 percent of the total US commercial paper outstanding and money market funds held about 23 percent. Do dealers have the capacity to provide sufficient liquidity during episodes of stress such as in March 2020?

A: This is an important question that regulators should address before deciding on reform proposals for money market funds. To the extent that dealers did face challenges in intermediating during March 2020, the most obvious approach would be to consider reforms that would facilitate dealers' ability to intermediate during periods of stress.

Q: If broker-dealers cannot find buyers for commercial paper during periods of market stress, can change to the market structure for the short-term funding markets solve this problem?

A: This is an important question that regulators should address before deciding on reform proposals for money market funds. ICI has not taken a position on any potential reforms to the structure of the short-term funding markets, but other commentators have suggested reforms such as central clearing of Treasury securities, all-to-all trading platforms for commercial paper, and additional transparency in the repo trading market.

Floating NAVs

Q: Would floating the NAV of all prime money market funds address the structural vulnerabilities of these funds?

A: Floating a fund's NAV does not reduce the likelihood of investors wanting to move away from the short-term funding markets during times of stress. Institutional prime money market funds had floating NAVs but still experienced large redemptions in March 2020. The experience in Europe of certain money market funds likewise demonstrates that floating NAV funds also can face strong investor outflows during periods of market turmoil.

Swing Pricing

Q: Is swing pricing a viable reform option for money market funds?

A: No. Money market funds would not continue to exist in their current form if they were to adopt swing pricing. Existing money market fund characteristics, such as multiple daily NAV strikes per day and same-day settlement, would not be possible. In addition, swing pricing would impose excess costs to overcome complex structural challenges, introduce complicated tax reporting issues for US money market funds, and likely cause confusion among investors in periods of stress. Furthermore, swing pricing is not necessary for money market funds because they already have the ability to impose liquidity fees, which serve a similar purpose and are a more appropriate tool for money market funds. (For a more detailed description of ICI's many concerns with swing pricing, please ***see*** **Section 3.2.1 of ICI's Comment Letter to the PWG**)

Liquidity Exchange Bank

Q: Is an "industry-wide insurance fund" (i.e., private liquidity exchange bank) a viable reform for money market funds?

A: ICI and its members oppose a reform that would require money market funds to be members of a private liquidity exchange bank. Over ten years ago, ICI developed a preliminary framework for a private liquidity facility, considering how such a facility could be structured, capitalized, governed, and operated. There were many drawbacks, limitations, and challenges to creating such a facility that we described in our framework. Each of these impediments remains today. (***See*** **Section 3.2.5 of ICI's Comment Letter to the PWG**).

Redemptions in Kind

Q: Do money market funds have the ability to pay redemptions in kind?

A: Money market funds have current authority to redeem shares in kind (*i.e*., distribute a proportionate amount of their portfolio instruments to redeeming shareholders) voluntarily, which enables them to assess the advisability of redemptions in kind under the circumstances facing the fund and the market at the time. This method of meeting redemptions places the burden for holding, valuing, and liquidating underlying portfolio securities, with all of the attendant costs, directly on the shareholder. Many investors, especially retail investors, are not prepared, as a practical matter, to address valuation obligations and other consequences of holding these instruments directly.