





Effect of March 2020 on Fixed-Income Markets and Open-End Funds: Holistic Review and Policy Implications

Investment Company Institute Roundtable

(with the participation of the Organisation for Economic Co-operation and Development)

May 25, 2021

Summary of Proceedings and Key Points

The Investment Company Institute (ICI), with the participation of the Organisation for Economic Cooperation and Development (OECD), organized a roundtable to examine how the March 2020 market turmoil affected the fixed-income markets and open-end bond funds. The purpose of the roundtable was for regulators and market practitioners to detail the events of March 2020, identify the factors leading to the stress in the markets during that time, and analyze performance of open-end funds' liquidity risk management programs.

More than 200 industry stakeholders attended the roundtable, and attendees had the opportunity to submit questions for each panel.

The roundtable was organized into four segments:

- An opening address by Greg Medcraft, director of the OECD Directorate for Financial and Enterprise Affairs and former chair of the International Organization of Securities Commissions (IOSCO).
- A panel of regulators and market participants discussing the March 2020 market events with a
 particular focus on fixed-income markets. The panel identified the significant participants in the
 market during that period and considered how those participants contributed to, or affected,
 events. The panel also discussed the origin and spread of market stresses.
- A panel of current fund risk and portfolio managers discussing fund liquidity risk management.
 Panelists described their liquidity management programs and how liquidity is managed during normal market periods as well as stressed periods.
- A commentary on the panel discussions by Eric J. Pan, president and CEO of ICI, Robert Ophèle, chairman of the Autorité des marchés financiers, and Greg Medcraft. The conversation centered on the possible policy implications of the March 2020 market events.

A recording of each segment is available at www.ici.org/events/ici_oecd_conf_052521, and a summary of the key points of the roundtable is presented below.

Segment 1: Keynote Address by Greg Medcraft, Director of the OECD Directorate for Financial and Enterprise Affairs

- March 2020 was a real-life stress test, occurring after the post–global financial crisis period in
 which there were considerable changes to the financial system. Central bank interventions in
 March 2020 were necessary for the markets and market participants but were guaranteed to
 prompt reflection on whether current rules provide sufficient resilience in times of stress.
- The starting point for that analysis—outside of the banking sector—is that market-based finance is good at price discovery and thus reacts quickly to negative news. A long-debated question is whether this is a virtue or vulnerability. or both.
- Sufficient liquidity buffers in investment funds are already, and will continue to be, very useful
 precautionary measures, particularly where funds are investing in less-liquid markets. That said,
 the Financial Stability Board (FSB)/IOSCO principles for liquidity risk management that were
 launched in 2018¹ may not have been fully operationalized across jurisdictions, and this is
 something IOSCO is currently assessing. There may be room for market regulators to further
 clarify the use of certain liquidity risk management tools and ensure that they accomplish their
 intended effects.
- Policymakers should be conscious of any gap between how funds operate and how investors view these products in terms of risk and structure.
- In evaluating the events of March 2020, there are other elements that should be considered, including greater scrutiny of high-frequency and algorithmic trading, which are more likely to malfunction during periods of acute market stress.

Segment 2: Panel Discussion One Year On: A Retrospective on Market Turmoil in March 2020

Jay Clayton, Former Chairman, US Securities and Exchange Commission

Anne Wrobel, Manager, Markets Policy, Financial Conduct Authority

Andreas Lehnert, Director, Division of Financial Stability, Federal Reserve Board

Robert Patalano, Acting Head of the Financial Markets Division, OECD

Libby Cantrill, Managing Director, PIMCO

Shelly Antoniewicz, Senior Director, Industry and Financial Analysis, Investment Company Institute, Moderator

¹ See IOSCO, Recommendations for Liquidity Risk Management for Collective Investment Schemes (February 2018), available at www.iosco.org/library/pubdocs/pdf/IOSCOPD590.pdf.

- The March 2020 crisis in financial markets, sparked by the massive uncertainties associated with a global pandemic, was unprecedented in both speed and magnitude.
 - The March 2020 turmoil stemmed from concerns in February and March about a worsening global pandemic, a world historic moment, and uncertainty about its economic impact.
 - In March, stresses became evident in a variety of markets as market participants sought to have sufficient cash on hand for a variety of different contingencies as they "didn't know what was coming."
 - The March period was so extraordinary that "the GDP expectation as of February of 2020 for the US in 2020 was plus 2 percent. In March, the GDP expectation for 2020 was negative 15 percent."
 - "We were facing complete shutdowns of certain industries, commercial life as we knew
 it was going to change completely, and of course, job losses...were already being felt
 and were falling hardest on those least able to bear it."
- In March 2020, the liquidity squeeze originated in the Treasury market and threatened other asset classes.
 - Market liquidity should viewed in terms of concentric circles, with the most-liquid part
 of the market—"right in the 'bullseye'"—being on-the-run Treasury securities and
 circles radiating out to other types of increasingly less-liquid assets. If there are liquidity
 challenges in Treasuries at the center, then those stresses would resonate in assets
 farther out in the concentric circles.
 - At the outset of the turmoil, there was a dash for cash. Large institutional investors
 internationally and in the United States, as well as corporates and banks, did not want
 cash alternatives but wanted cash itself.
 - In March 2020, the dash for cash resulted in sell-offs in the center circle itself (i.e., Treasuries) rather than further out the risk spectrum. Treasuries are "where people store their short-term needs...[and] when people needed more cash they went to the most cash-like instrument to get cash." By providing liquidity to the Treasury market, central banks aimed to stabilize the Treasury market, which, in turn, helped alleviate some of the stress on other fixed-income markets.
 - These observations are consistent with the preliminary findings of the IOSCO Financial Stability Engagement Group (FSEG) diagnostic exercise on the resilience, microstructure, and liquidity in the corporate bond market. One such finding is that liquidity challenges were found to be in the shorter end of the corporate bond market. During March 2020, it appears to have been easier to trade longer-term securities—an inversion of what is normally expected in the credit markets.

- The March 2020 crisis was different from 2008, but regulators relied on lessons learned from the global financial crisis to swiftly calm financial markets.
 - In contrast to the March 2020 market turmoil that originated from a global pandemic,
 the global financial crisis originated from within the financial system itself, took place in
 an era with different vulnerabilities, and was triggered by counterparty credit risk.
 Despite the differences between the two periods, regulators were able to draw on the
 lessons and tools of the global financial crisis to facilitate a swift response to the March
 2020 turmoil and stabilize key markets.
 - Regulators' concerns were for the broader economy and the possibility that the financial system would amplify those stresses. As a result of the response by central banks and other regulators, markets calmed rapidly. In particular, primary issuance of corporate bonds rebounded quickly after the intervention of the central banks. Once the markets understood that the governments would step in on this new type of risk—an external pandemic—the core of the financial system—financial markets and intermediaries—responded well.
 - The markets as a whole benefited from wide-ranging central bank intervention, including the rollout of 13 emergency lending programs "entirely motivated by the real economy strains that were threatening the [US Federal Reserve Board's] dual mandate."
- In reviewing the effects of the March 2020 market turmoil, policymakers should understand the connections among markets and market participants.
 - Given the interconnections among the spectrum of fixed-income markets (from Treasury to longer-dated corporate bonds), policymakers should assess the Treasury market, the commercial paper market, and other markets as a whole and analyze the interconnections among them.
 - At the end of February 2020 and beginning of March 2020, all market participants demanded liquidity in the face of uncertainty. The demand came from a variety of different sources, including foreign institutions and global reserve managers, spilling over to levered players unwinding their positions via basis trades, as well as companies drawing on their bank lines.
 - One panelist thought principal trading firms and use of algorithmic trading also played
 prominent roles in some markets during the period of the March 2020 turmoil.
 Policymakers should conduct additional research on how such participants and activities
 may affect liquidity during initial periods of stress, how they may interact with the
 actions taken by traditional dealers, and whether such firms and activities propagate
 risk, particularly in the short-term markets.
 - It is important to recognize the interconnections among the different types of participants. To do so, policymakers will need to ensure that they have data from all major market participants, which currently is not the case.

- The March 2020 events exposed broader long-standing market structure issues in the fixed-income markets.
 - Given that fundamental differences exist among fixed-income markets in various jurisdictions, the IOSCO FSEG is analyzing different jurisdictions separately.
 - Some parts of the fixed-income markets experienced challenges well before COVID. In September 2019, for example, the short-term markets had faced such a challenge, resulting in Federal Reserve liquidity intervention during a period of relative economic calm. This experience may have been a prelude to the challenges seen in the fixedincome market during March 2020.
 - During early March 2020, the demand for intermediation exceeded the supply of
 intermediation. In the Treasury market, dealers were simply not making markets.
 Market participants confronted challenges in both selling and buying Treasuries and
 simply could not get an offer or bid from a dealer. It was as if "the store was closed." It
 was particularly difficult to trade large blocks.
 - In some corners of the fixed-income market, there have not been developments in trading technology for decades. Although there is electronic trading in some parts of the corporate bond market, in other areas of the fixed-income market, such as mortgages, trading is still conducted over the phone in many cases. This can lead to operational challenges, particularly in stress times.
 - Market participants continue to be beholden to dealers to provide liquidity in the fixed-income markets. One panelist analogized the role of dealers during stress times to a big ballroom where everyone is dancing, but when somebody hits the fire alarm there is only one very small door through which to exit. Other panelists echoed this description in their own remarks. Another panelist considered whether the focus should be on reducing the number of market participants who need to use the emergency exit at the same time. A different panelist suggested proposing ways to increase the number of exits, including by considering central clearing of Treasuries, allowing for more capacity on dealer balance sheets, permitting funds to participate directly in the emergency facilities, expanding all-to-all trading platforms, or increasing transparency in markets.
- Panelists offered differing views regarding the level of redemption activity in US bond funds during the March 2020 turmoil, but funds successfully managed redemptions in line with their liquidity risk management programs.
 - US open-end bond funds experienced 5 percent outflows overall during the March 2020 crisis, which were concentrated in a short period. There were differences in views on whether the level of outflows was of a size to raise concerns for the bond markets or within expectations given the level of the crisis.
 - One panelist characterized these outflows as being unexpected, posing a challenge to funds as well as to market confidence, and leading to "broader spillovers." The panelist suggested that there is an "open question" as to whether those outflows were

- magnified by investors acting on the desire to be the first person out the door rather than exiting later or remaining in the fund.
- ICI research shows that bond mutual fund investors behaved much as they always have
 in response to a financial market shock: redeeming moderately and in proportion to the
 size of the shock they face. In March 2020, those investors redeemed proportionally to a
 massive and unprecedented shock with declines in bond prices shattering records from
 over the past three decades.
- During the market crisis, the liquidity management programs of funds held them in good stead. One panelist thought that the Securities and Exchange Commission (SEC) Liquidity Risk Management Rule² codified a framework for funds' liquidity risk management programs and best practices, which for their firm include regular stress testing and ongoing liquidity management to uphold the integrity of the fund's portfolio even in periods of heavy redemptions. Funds use a variety of tools to manage their liquidity, including using unlevered derivatives to maintain exposure in some cases.

Segment 3: Panel Discussion on Open-End Fund Liquidity Management Practices

Michael Huang, Managing Director, BlackRock

Tilak Lal, Senior Vice President, Franklin Templeton Investments

Arthur Leiz, Chief Risk Officer for Asset Management Public Markets, GSAM

Ray Uy, Global Head of FIC Trading, Invesco

Heidi Hardin, Executive Vice President and General Counsel, MFS, Moderator

- Funds' liquidity risk management begins not during period of stress but when a product is being designed, prior to being launched, and then continues with the ongoing liquidity management program.
 - Some panelists noted that for their funds, liquidity risk management starts when a product or strategy is just an idea. Funds are designed to align the redemption terms offered to investors with the fund strategy.
 - As part of that design, portfolios—including types of assets and holding sizes—are
 constructed in such a way that there will be liquidity to meet a fund's estimated
 turnover and potential redemptions. A pre-launch assessment determines whether a
 strategy is appropriate for daily dealing and whether it is appropriate for the liquidity
 management tools that are available in the fund's jurisdiction.

6

² See Investment Company Liquidity Risk Management Programs, Release No. IC-32315 (2016), available at www.sec.gov/rules/final/2016/33-10233.pdf.

The proactive, pre-launch liquidity assessment is then supplemented by ongoing aspects
of a fund's liquidity risk management program, including the use of tools, alerts, or
escalations, which can respond to different situations.

Funds have robust, multifaceted liquidity risk management practices in both normal and stressed times.

- Fund managers rely on various practices and processes to actively monitor liquidity profiles. One panelist described, for example, proprietary asset liquidity models used for the funds he supports to calculate the liquidation time horizon. Fund risk managers look for meaningful changes in fund liquidity day-over-day and week-over-week as well as projecting and estimating fund redemptions.
- Panelists described their approaches during normal times. Some funds may maintain a cash buffer to minimize the effects of daily flows and avoid liquidating assets as small amounts of cash come in or go out. Some portfolio managers may have a preset plan to invest when a cash buffer reaches a ceiling or liquidate assets when the buffer reaches a floor. Other portfolio managers may manage their cash buffer on discretionary basis. One panelist stated that "the idea is to dampen the impact of flows and to be minimally disruptive to the portfolio."
- Some managers may set cash equivalent thresholds for funds that have derivative positions with margining or other potential liabilities that are monitored on a daily basis.
- One panelist noted that managing liquidity during stress times, such as March 2020, requires adjusting model assumptions, reassessing the liquidity of assets, and stress testing those assumptions in real time. Liquidity models for fixed-income markets broadly worked well but required adjustments for rapidly dissipating liquidity in some sectors. Managing liquidity during stress times also requires updated internal fund reporting to notify risk managers of events like large redemptions so that those funds can be systematically monitored.

Funds differ across jurisdictions in many ways and have available different liquidity management tools.

- One panelist shared highlights from his firm's study of their fund range, noting that
 product lineups, investor bases, and fund assets under management (AUMs) differ
 among funds in the United States and the European Union.
- Some panelists discussed how funds across jurisdictions also differ in terms of the
 availability of different liquidity management tools, including the availability or
 operability of swing pricing, and the ability to invoke some tools without seeking
 permission from regulators in different jurisdictions.

- Funds actively prepare for the use of liquidity management tools, understanding that tool availability differs by jurisdiction.
 - Fund managers actively considered and managed the use of liquidity tools during the March 2020 crisis.
 - One panelist noted the importance of having liquidity risk management tools, including bank lines of credit and interfund lending for his US funds, available and operational; these are extraordinary tools that are used sparingly, if at all.
 - One panelist discussed having robust playbooks for his funds to ensure understanding of all the liquidity management tools that can be used in each jurisdiction, how to procedurally enact those tools, and the escalation protocols for the use of those tools.
 Through these playbooks, this manager ensures tools are operational and tested and that funds have sufficient liquidity during stressed environments.
 - As noted above, the availability of tools differs for US funds versus UCITS. Swing pricing
 is one type of tool that is permitted in both jurisdictions and may be effective in certain
 circumstances but is not feasible to use in the United States because of the current
 distribution structure. A number of the panelists noted that making swing pricing
 effective would require fund administrators to enact significant changes to the
 "plumbing" of fund distribution to obtain aggregate flows for all intermediaries.
 - Notably, some fund managers consider swing pricing to be an anti-dilution tool rather
 than a liquidity management tool. Those fund managers perceive investors who remain
 in a fund as bearing the cost of redemptions from the fund. Swing pricing calculates that
 cost of redemption so that redeeming investors would bear that cost. Thus, it may be an
 effective tool for ameliorating disadvantage to remaining shareholders in cases of heavy
 redemption.
 - One panelist noted that the volume of swing pricing activity in his UCITS funds increased substantially during the turmoil.
- The March 2020 turmoil presented a variety of challenges that funds largely were able to meet due to their proactive liquidity risk management programs.
 - Some panelists found investor redemptions in March 2020 to have been rational as asset owners sought to de-risk and raise cash. Other factors affecting bond fund outflows during that time included multi-asset funds rebalancing to achieve their target asset allocations and investors redeploying capital to buy in the equities market during that market's lows.
 - Although March 2020 outflows from US bond funds may appear large in dollar terms, one panelist noted market growth post-2008 meant that the impact of those outflows was smaller. Many funds found that, percentage wise, outflows were not particularly large even for corporate bond funds.

- One panelist whose UCITS used swing pricing during March 2020 noted challenges in price transparency at that time to calibrate swing pricing effectively as well as challenges in keeping up with changes as central banks or governments announced interventions.
- Commentators have identified meeting increased margin calls as another potential challenge during the March 2020 turmoil. Panelists generally found the heightened margin calls to be large but manageable.
- Some panelists felt that their proactive, ex ante liquidity risk management programs were sufficient to meet any redemptions or margin calls. Funds planned for stress environments and already had the proper protocols, procedures, and escalations in place.
- Across the spectrum, panelists thought they effectively applied their liquidity risk
 management programs for their funds. Some funds met redemptions with their cash on
 hand, others by selling assets or taking other steps. Some funds proactively raised cash
 in funds that they predicted could come under stress to provide a buffer to meet
 redemptions or margin calls.
- The SEC Liquidity Risk Management Rule and other regulatory guidance buttressed US funds' liquidity management practices and programs.
 - By codifying fund best practices around liquidity risk management, some panelists found
 the SEC's rule and other regulatory guidance to have been helpful in ensuring that funds
 are prepared for periods of stress, including bolstering the escalation and mitigation
 protocols in funds' liquidity risk management best practices.
 - During March 2020, one panelist found the SEC rule to be helpful for his fund because it sent a clear signal about the important role of liquidity in fund management.
 - Under the SEC rule, funds are required to determine whether the "reasonably anticipated trading" size of a position in a particular portfolio investment would be indicative of the liquidity of that investment. One panelist found, however, that the exercise of making that determination during March turmoil was a distraction and was not helpful in managing liquidity because certain assets during that time were illiquid regardless of trade size.
- Data on trading activity during March 2020 reveal that funds are highly interconnected with other players in the markets.
 - Asset managers of open-end funds control approximately a quarter of financial assets.
 SEC data regarding March 2020 noted that fund outflows were approximately \$255
 billion during that time whereas there was more than \$1 trillion in trading activity that
 happened in the corporate bond market alone. The difference between those numbers
 reveals the presence of many other market players who may be less transparent than
 open-end funds.

Segment 4: Commentary on Panel Discussions and Potential Reforms

Greg Medcraft, Director of the OECD Directorate for Financial and Enterprise Affairs Robert Ophèle, Chairman, Autorité des marchés financiers

Eric J. Pan, President and CEO, Investment Company Institute

- Medcraft stated that March 2020 was an extraordinary event—analogous to a war where basically everything shuts down. Central bank intervention is appropriate "where everything melts down." Ophèle noted that, as a result of central bank intervention, the turmoil came to a rapid conclusion.
- Ophèle stated that regulators react to crises that require government intervention, such as the March 2020 events, by assessing the lessons learned.
- Panelists discussed that although policymakers may endeavor to increase the resilience of openend funds, that must be calibrated appropriately as over-regulation risks killing the product.
 Medcraft observed that policymakers want investors to have some level of confidence within a reasonable level of resilience for funds and for expectations of investors to match what is being offered.
- Ophèle remarked that swing pricing is a first-level liquidity management tool and gating and suspensions of redemptions are more drastic. Regulators using a macroprudential approach in applying tools to nonbank financial intermediaries, however, may be highly counterproductive because the application of those tools itself could trigger outcomes that regulators want to avoid.
- Medcraft posited that transparent markets and investor trust and confidence are twin objectives in market regulation, while mitigating systemic risk.
- Medcraft observed that fixed-income markets function differently and are more fragmented than equity markets. Fixed-income markets more typically may face challenges in crises in liquidity and pricing, but the Treasury markets facing liquidity challenges is a rare event.
- Ophèle discussed how funds are interconnected across the global financial industry and across jurisdictions. He provided the example that, in the European Union, funds may perform different functions in several countries but distribute their products worldwide. Policymakers must observe the full picture of not just funds but also other market participants to implement congruent financial oversight. Ophèle believed that having a broader look at financial markets does not necessarily lead to regulating each part of the markets, but regulators must be aware of and measure the risks for the whole community.
- Ophèle also discussed his view of the boundaries of transparency and regulation that apply to different products. From his perspective, regulated funds are on one side of those boundaries, and other players, such as nonregulated funds, on the other.

- Panelists cautioned that although nonbank financial intermediaries may consider whether to advocate for policy changes that would allow direct access to central bank funding, those changes may come along with the consequence of central bank regulation.
- Although market commentators have discussed how global financial crisis regulations may have
 affected the ability of dealers to intermediate in the markets in March 2020, Ophèle thought
 that banking authorities would not be inclined to reopen the Basel III framework that underlined
 bank resilience during the turmoil.