



## Call for papers

# Vulnerabilities from liquidity mismatch in open-ended funds and policies to address them

Research conference on 16 and 17 June 2022

The FSB and IOSCO invite submissions of papers for a conference on the financial stability risks arising from liquidity mismatch in open-ended funds (OEFs) and on policies to address them. The conference, which forms part of the FSB's work programme to enhance the resilience of non-bank financial intermediation, will provide selected stakeholders an opportunity to exchange views on the findings of recent FSB-IOSCO work on the experience of OEFs in the March 2020 market turmoil as well as provide input to ongoing work by the FSB and IOSCO to assess their respective recommendations in this area.<sup>1</sup>

The conference will be held in a virtual format and feature presentations of analytical and policy research that advances the understanding of vulnerabilities from liquidity mismatch in OEFs and of specific policies and approaches that may be used to address them. The first session on 16 June will focus on the economic significance and materiality of the contribution of liquidity mismatch to redemption pressures in OEFs and stress in underlying asset markets, drawing on the March 2020 experience. The second session on 17 June will focus on factors contributing to liquidity mismatch and the effectiveness of liquidity management practices and tools to address associated risks, as well as discussing policy implications.

## Topics

### 16 June conference session

This session will cover the economic significance and materiality of the vulnerabilities from liquidity mismatch in OEFs and their contribution to stress in underlying asset markets.

- The type and importance of different motivations for redemption decisions by investors in OEFs – especially those holding corporate bonds - in periods of stress, in particular during March 2020.
- Assessment of methods commonly used by researchers to isolate the contribution of liquidity mismatch or first-mover advantage to OEF outflows, including through

---

<sup>1</sup> IOSCO is reviewing implementation of its [2018 Liquidity Risk Management Recommendations in OEFs](#) and the FSB is assessing the effectiveness of its [2017 recommendations](#) on liquidity mismatch in OEFs from a financial stability perspective.

comparisons of OEFs to other ownership structures (e.g. exchange-traded funds, separately managed accounts); and potential enhancements to such methods.

- The degree to which OEF managers' liquidity management decisions or use of liquidity management tools mitigates stress in asset markets or contributes to it, and the impact of asset sales of OEFs holding corporate bonds during March 2020 on the underlying market and the wider economy as compared to other asset owners.
- The role that central bank interventions played in stabilising investor flows in the March 2020 turmoil, including the scale of potential redemptions by OEF investors and asset sales by OEFs in the absence of such interventions.
- Additional disclosures or data sources to better assess the contribution of vulnerabilities associated with liquidity mismatch to redemption pressure in periods of stress.

## 17 June conference session

This session will cover the effectiveness of policies adopted to address vulnerabilities from liquidity mismatch in OEFs.

- Factors contributing to liquidity mismatches in OEFs (e.g., asset liquidity and redemption terms) and the degree to which liquidity management practices and the implementation of additional liquidity management tools (and other policy measures) have reduced the likelihood of material liquidity mismatches.
- Barriers to the use of liquidity management tools (e.g. swing pricing, redemption fees and other anti-dilution methods) to reduce first-mover advantage, and the extent to which authorities' actions have enabled OEFs to use liquidity management tools.
- The degree to which stress testing at the level of individual OEFs has supported their liquidity risk management to mitigate financial stability risk.
- Additional policy measures that could be considered to address the financial stability risks related to liquidity mismatch in OEFs.

## Submission of papers

Papers on the above topics should be submitted to [OEF.Conference@fsb.org](mailto:OEF.Conference@fsb.org) by **6 May 2022**. Authors of accepted papers will be notified by **20 May 2022** and will receive a more detailed background note to assist their preparations. Accepted papers will be assigned discussants.

## About the FSB

The FSB coordinates at the international level the work of national financial authorities and international standard-setting bodies and develops and promotes the implementation of effective regulatory, supervisory, and other financial sector policies in the interest of financial stability. It brings together national authorities responsible for financial stability in 24 countries

and jurisdictions, international financial institutions, sector-specific international groupings of regulators and supervisors, and committees of central bank experts. The FSB also conducts outreach with approximately 70 other jurisdictions through its six Regional Consultative Groups.

The FSB is chaired by Klaas Knot, President of De Nederlandsche Bank. The FSB Secretariat is located in Basel, Switzerland, and hosted by the Bank for International Settlements.

## About IOSCO

IOSCO is the leading international policy forum for securities regulators and is recognized as the global standard setter for securities regulation. The organisation's membership regulates more than 95% of the world's securities markets in some 130 jurisdictions, and it continues to expand.

The IOSCO Board is the governing and standard-setting body of IOSCO and is made up of 34 securities regulators. Mr. Ashley Alder, the Chief Executive Officer of the Securities and Futures Commission of Hong Kong, is the Chair of the IOSCO Board.

IOSCO aims through its permanent structures:

- to cooperate in developing, implementing and promoting internationally recognized and consistent standards of regulation, oversight and enforcement to protect investors, maintain fair, efficient and transparent markets, and seek to address systemic risks;
- to enhance investor protection and promote investor confidence in the integrity of securities markets, through strengthened information exchange and cooperation in enforcement against misconduct and in supervision of markets and market intermediaries; and
- to exchange information at both global and regional levels on their respective experiences to assist the development of markets, strengthen market infrastructure and implement appropriate regulation.

## Background<sup>2</sup>

In March 2020, many OEFs faced liquidity pressures, dealing with large outflows and deterioration in market liquidity. Some fixed income OEFs, in particular corporate bond funds, experienced large outflows in nearly all jurisdictions, triggered by the flight to safety and 'dash for cash'. Overall OEFs experienced only modest levels of fund suspensions, which were restricted mainly to those funds invested in real estate. Fund managers actively managed their liquidity risk and decided how best to meet investor redemptions through the use of cash, the sale of underlying assets and the deployment of LMTs. At the same time, OEFs' sales of assets to meet redemptions may have produced negative spillovers. OEFs holding corporate bonds in particular, along with other market participants, sold assets into markets with deteriorating liquidity and hence may have added to existing selling pressure. Central bank intervention and government and regulatory action stabilised and restored confidence in markets, reducing investor redemption and selling pressures from OEFs and other market participants.

The FSB's 2017 report<sup>3</sup> and some studies suggest that vulnerabilities can arise from liquidity mismatches in some OEFs. In stressed market conditions, investors might have an additional incentive to redeem if they expect to receive funds that exceed the value of their claims on underlying portfolio assets. To the extent that proper valuation or liquidity management tools (LMTs) do not remove this expectation, this first mover advantage could enable redeeming investors to benefit at the expense of remaining investors. In addition, in stress, as some assets become harder to value, the reported net asset value of the fund may incorporate stale asset prices which have not been adjusted to their implied market value, adding to incentives to redeem fund shares. Lastly, as outflows increase, managers need to decide whether to sell assets and/or build up cash to meet future redemptions. This approach, albeit a rational portfolio management decision, could have implications for financial stability by adding to selling pressures in stressed markets.

While the dash-for-cash was the main driver of OEF redemptions and manager decisions to sell assets in March 2020, determining the materiality and economic impact of the liquidity mismatch vulnerability in contributing to the market stress is difficult. This is due to lack of sufficient data and methodological challenges in isolating excess redemptions caused by liquidity mismatch versus redemptions caused by other drivers during the March 2020 stress. Although it is difficult to directly observe the vulnerability arising from liquidity mismatch, some external analysis of the March 2020 market turmoil (which may be subject to methodological and data limitations) links a substantial proportion of outflows from US corporate bond OEFs to liquidity mismatch. Furthermore, to the extent that OEFs were not able to meet redemptions through new inflows or free cash flow, there is evidence that some funds deployed a horizontal slicing approach – selling the most liquid assets and using cash first. This may have helped funds to meet redemptions and proved less costly in the short-term. Managers may have also decided to take this approach to strategically rebalance their portfolio or to take advantage of short-term opportunities. However, this approach would have increased the liquidity mismatch for OEFs with existing low levels of cash or less liquid portfolio holdings had the stress endured

---

<sup>2</sup> Excerpt from the FSB's *Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report* (November 2021).

<sup>3</sup> See [Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities](#) (January 2017).

for longer. Other OEFs deployed a vertical slicing approach – selling a pro-rata representative slice of assets to maintain the shape of the portfolio.

Swing pricing and other LMTs may have helped to reduce liquidity mismatches and reduce first mover advantages. The use of swing pricing increased in March 2020 and larger swing factors were generally observed. However, such LMTs were not used consistently within or across jurisdictions and evidence of their effect on fund outflows is inconclusive.<sup>4</sup> Swing pricing is not currently available or used in all jurisdictions. Some jurisdictions do permit other anti-dilution measures that seek to achieve the same economic effect.

On spillovers, there is also evidence that asset sales by OEFs and other market participants contributed to stress in certain underlying markets. For example, based on one study, to meet redemptions US OEFs first sold US Treasuries, which are generally more liquid. US OEFs were the second largest sellers of Treasuries in March 2020, not far behind the aggregate sales of overseas central banks, governments and hedge funds. While evidence on spillovers to corporate bond markets is mixed, work looking at the March 2020 turmoil found evidence that US OEFs' asset sales led to further reductions in corporate bond prices. The scale of any spillovers from OEFs will depend on the size and scale of the vulnerability and relative importance of OEFs in the underlying asset markets. Spillovers may also be present within the fund industry due to interfund lending and borrowing from affiliates. However, there is little evidence that OEFs used interfund lending significantly during March 2020.

This analysis will inform additional work being conducted by the FSB and its members. The work includes IOSCO's review of the implementation of its 2018 *Recommendations on Liquidity Risk Management for OEFs* and the FSB's assessment of its 2017 *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities*, which are planned for 2022. These two exercises, which will be based on a coordinated analytical framework, will assess the effectiveness of existing policy recommendations to mitigate vulnerabilities in OEFs and their impact on the broader economy, and could facilitate the development of further policy recommendations, where appropriate, to mitigate liquidity mismatches and improve liquidity management tools. Additional work may also be undertaken to further assess the economic significance and materiality of the impact of OEF vulnerabilities on underlying asset markets to support IOSCO's review and the FSB's assessment.

---

<sup>4</sup> For example, swing factors differed markedly across UK funds with similar exposures.