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Macroprudential Tools for Regulated Investment Funds

An Assessment of Suitability[1]

May 2024

I. Introduction

A number of central banks in the European Union (EU) are calling for the development of a new layer of regulatory macroprudential tools to address risks in non-bank financial intermediation (NBFI). These central banks argue that macroprudential tools could supplement existing regulatory frameworks and address perceived shocks and contagion stemming from NBFI. While NBFI comprises a vast landscape of heterogenous actors, in recent papers EU central banks have focused on investment funds and asset managers.[2]

At the same time, a group of EU securities regulators have offered an alternative assessment that adding a new layer of macroprudential regulation to funds is not necessary or desirable. They note that the best way forward for addressing challenges in the funds sector is to use the already existing combination of ex ante requirements on liquidity and leverage and the available toolkit of liquidity management tools (LMTs).[3]

The European Commission is also examining the ideas of central banks and securities regulators and consulting this year on the potential application of macroprudential tools to NBFI.

ICI has prepared this paper to help frame the debate on the utility of macroprudential tools for NBFI. This paper focuses only on one part of NBFI, the regulated investment funds sector (hereafter "funds"), which we define as pooled and highly regulated investment products

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[1] Prepared by Sean Collins, Chief Economist; Shane Worner, Senior Economist; Michael Pedroni, Chief Global Affairs Officer and Head of ICI Global; and Matthew Mohlenkamp, Managing Director for Asia and Global Analytics.

[2] One paper is "Discussion Paper: An approach to macroprudential policy for investment funds," Central Bank of Ireland, July 2023, available at https://www.centralbank.ie/docs/default-source/publications/discussion-papers/discussion-paper-11/dp-11-an-approach-to-macroprudential-policy-for-investment-funds.pdf?sfvrsn=23059f1d_3. The other paper is unpublished and therefore we have not cited it, but use it as a basis to understand the concepts that several EU central banks are considering.

[3] See "A macro-prudential approach to asset management," Autorité des Marchés Financiers (AMF), Comisión Nacional del Mercado de Valores (CNMV), Commissione Nazionale per le Società e la Borsa (CONSOB), Austrian FMA-Financial Market Authority, April 2024, available at https://www.amf-france.org/sites/institutionnel/files/private/2024-04/position-paper-a-macro-prudential-approach-to-asset-management_0.pdf (EU Securities Regulators Report). They also note that EU authorities already have existing emergency powers to step in during the direst circumstances.

such as Undertakings for the Collective Investment in Transferable Securities (UCITS), mutual funds, exchange-traded funds, money market funds, or similarly regulated fund products around the globe. This definition excludes hedge funds, private equity funds, and alternative funds (e.g., AIFs), which are not addressed in this memo.

While existing microprudential regulatory tools are typically applied at the level of an individual fund, macroprudential tools are typically envisioned as bank-like measures and bank-like supervision that public authorities could apply at their discretion to a group of investment funds and/or their asset managers. For example, central banks have promoted concepts such as discretion for regulators to adjust liquidity or redemption rules across a range of funds, or to impose capital requirements. We assess the suitability of each of these ideas, with a comparison of banks and funds in Section II of this paper and a tool-by-tool analysis in Section III.

At the outset, it is important to highlight factors policymakers should bear in mind as they consider the applicability of macroprudential tools to funds, including:

- The funds sector has already been subject to substantial review and new regulation over the last decade to address policymakers' concerns with potential risks related to liquidity and leverage. For example, recent work in the European Union and from international bodies such as the Financial Stability Board (FSB), International Organization of Securities Commissions (IOSCO), Basel Committee on Banking Supervision (BCBS), and Committee on Payments and Market Infrastructures (CPMI-IOSCO), have addressed concerns around fund liquidity.[4]
- Funds are highly regulated products and many of the concerns voiced about funds—e.g., liquidity mismatch—are already addressed by existing regulations. UCITS, for example, have minimum liquidity requirements, and can use a range of liquidity management tools, such as swing pricing, anti-dilution levies, or gating/suspension of redemptions. Further, in certain circumstances, Article 84 of the UCITS Directive allows for national competent authorities (NCAs) to require a UCITS to suspend

[4] See Directive (EU) 2024/927 of the European Parliament and of the Council of 13 March 2024, amending Directives 2011/61/EU and 2009/65/EC, March 26, 2024, available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202400927 (AIFMD/UCITS Review); "Consultative report Transparency and responsiveness of initial margin in centrally cleared markets – review and policy proposals," Basel Committee on Banking Supervision (BCBS), Committee on Payments and Market Infrastructures (CPMI), and Board of the International Organization of Securities Commissions (IOSCO), January 2024, available at https://www.bis.org/bcbs/publ/d568.pdf; "Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds," Financial Stability Board (FSB), December 20, 2023), available at https://www.fsb.org/wp-content/uploads/P201223-1.pdf; and "Anti-dilution Liquidity Management Tools – Guidance for Effective Implementation of the Recommendations for Liquidity Risk Management for Collective Investment Schemes," IOSCO, December 2023, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD756.pdf (IOSCO 2023 LMT Report); and "Recommendations for a Framework Assessing Leverage in Investment Funds," IOSCO, December 2019, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD645.pdf (IOSCO 2019 Leverage Report).

redemptions.[5] With respect to leverage, UCITS are subject to restrictions that limit borrowing.[6]

- Most macroprudential tools are designed for banks, not investment funds. There are fundamental differences between banks and funds, as such, these tools can be inappropriate for, and detrimental to, funds—as detailed in the next section.

- Some of the macroprudential measures proposed by central banks assume public authorities are better placed than fund managers to make judgements about timing of the activation of tools in response to market and liquidity conditions on behalf of fund shareholders. The risk of unintended consequences, as we explain below, is large.

II. Differences Between Banks and Regulated Investment Funds

The types of macroprudential tools recently proposed for funds generally originate from tools developed to address systemic risk concerns related to banks. Banks and funds are, however, fundamentally different, indicating it is a mistake to project macroprudential tools designed for banks onto funds. Any thoughts of applying macroprudential tools to funds must start with a recognition of key differences between banks and funds. Among these are:

- **Asset Liquidity:** Banks and funds both hold assets, but funds' assets are, and by regulation must be, much more liquid. Consistent with banks' business mandate, they may own assets (e.g., whole loans, real estate) that are not necessarily traded in financial markets. UCITS are legally required to hold a high proportion of liquid assets in their portfolio. Additionally, the vast majority of a typical fund's assets are tradeable in equity, bond, money, or derivatives markets, and accordingly are highly liquid.

- **Leverage:** Balance sheet leverage is fundamental to banks. Banks take on liabilities (e.g., deposits) and use them to make loans or buy securities. In contrast, regulations place strict limits on funds' ability to borrow and most regulated funds have little or no balance sheet leverage.

- **Equity Capital:** To protect their creditors (e.g., depositors), banks must hold significant equity capital; European and UK G-SIBs have recently reported ratios of

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[5] Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009, on the Coordination of Laws, Regulations, and Administrative Provisions Relating to Undertakings for Collective Investment in Transferable Securities (UCITS), as amended (UCITS Directive). Recently adopted text for changes to the AIFMD and UCITS directive modify Article 84 slightly and allows the NCA to require a UCITS to suspend purchases and redemptions in the interest of investors, in exceptional circumstances and after consulting the UCITS, where the risk to investor protection or financial stability (on a reasonable and balanced view), necessitates such action. See revisions to Article 84(2)(b) in AIFMD/UCITS Review.

[6] Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011, on Alternative Investment Fund Managers. See Article 25, which requires the NCA to assess the risks posed by an AIFM's use of leverage with respect to the AIFs it manages and to impose limits on the level of leverage where deemed necessary in order to ensure the stability and integrity of the financial system.

common tier 1 equity capital to risk-weighted assets of about 13 percent.[7] Funds, however, have much higher ratios of shareholder equity capital to assets, generally about 100 percent. This is because funds take little balance sheet leverage and thus the right side of their balance sheets is usually nearly all equity (i.e., the equity of fund shareholders).

- **Mark-to-Market Accounting:** Banks value their assets using either book value or mark-to-market value depending on the type of asset. Banks value their deposit liabilities at par. Faced with a financial market shock, a bank's assets should fall in value, but its liabilities cannot, potentially creating an asset-liability mismatch. In contrast, funds that offer daily redemptions value virtually all their assets and their shareholders' equity by marking-to-market daily. When a shock occurs, a fund's assets and its shareholders' equity fall in tandem, creating a natural shock absorber for the fund (the fund's shareholders automatically absorb losses on the fund's assets). Another shock absorber is funds' cash assets: all else equal, the proportion of a fund's assets in cash (which holds its value in a downturn) rises as the overall market falls.

- **Insolvency:** A significant market or idiosyncratic shock can lead a bank's assets to fall short of its liabilities, as we saw for example with Silicon Valley Bank (SVB) in March 2023. With mark-to-market accounting and little to no leverage, the likelihood that a fund will become insolvent (i.e., its liabilities exceeding its assets) is extremely unlikely even during large market downturns.

- **Asset Managers Are Agents:** Unlike a bank, an asset manager is an agent (a manager), not an owner, of its funds' assets. Moreover, the funds' assets are held separately from those of the asset manager and are still available to fund investors even if the asset manager became insolvent.

- **Customer Expectations:** Customers expect banks to repay their deposits fully, while fund investors bear a proportionate share of a fund's gains or losses.

- **Access to Safety Nets:** Given their key role in payment systems, deposit-taking activities, and the inherent liquidity mismatch present on their balance sheets, banks may have direct access to safety nets, such as deposit insurance (or other government guarantees) and ability to borrow directly from the central bank. These features help protect the payment system and a bank's creditors (i.e., depositors) from the bank's insolvency. In contrast, funds do not have government guarantees against capital losses, and unlike banks, have no history of receiving government capital injections during times of stress.

[7] See IMF G-SIB Monitor, January 2023, available at https://www.imfconnect.org/content/dam/imf/News%20and%20Generic%20Content/GMM/Special%20Features/3Q22%20GSIB%20Monitor.pdf

III. The Problems with Applying Proposed Macroprudential Tools to Regulated Investment Funds

As indicated above, banks and funds are very different. Consequently, tools that may make sense for banks are often inappropriate for funds. This section assesses eight of the macroprudential tools being discussed by policymakers and whether they are appropriate for regulated investment funds.

1. More stringent liquidity requirements

Key Findings:

- European central banks are considering increased liquidity requirements for funds, but funds are already subject to liquidity requirements, and the recent changes to the UCITS directive are expected to further enhance resilience in these areas.
- Providing discretion to public authorities to adjust liquidity requirements across funds introduces uncertainties and assumes that authorities can effectively manage such measures without creating unintended consequences.
- New centrally managed liquidity add-ons would require policymakers to make judgments about unknown elements such as the appropriate level or calibration, the potential market reactions, and could introduce procyclical redemption incentives. Fund managers are better placed to make these judgements.

European central banks discuss the possibility of increased liquidity requirements, including the use of liquidity "add-ons" for funds. These liquidity requirements would be tightened during times of ample liquidity and released during periods of extreme stress, depending on the decision of a competent public authority.

Funds are already subject to various regulations designed to protect investors and address financial stability risks, including significant liquidity management rules and regulations. At the international level, IOSCO has issued two papers in the last six years on liquidity risk management, with the recommendations targeted specifically at funds.[8] Moreover, these recommendations have fed into several regional and local reforms specifically related to liquidity risk management—for example, the EU's AIFMD review, which also led to changes in the UCITS directive. These regulations include diversification requirements and limitations on leverage, which aid in the internal liquidity management of the fund.

Additionally, recent regulatory reforms in both the money market funds (MMFs) sector and in central counterparty (CCP) margin transparency should increase resiliency in those two areas. For MMFs, reforms are in progress that remove the regulatory link between weekly liquid assets and liquidity management tool implementation. This link acted as a constraint in March 2020, locking up liquid assets that MMFs could otherwise have used to meet

[8] See IOSCO 2023 LMT Report and IOSCO 2018 Leverage Report.

redemptions. Furthermore, the regulatory link accelerated redemption requests, thus *amplifying* stresses. Similarly, proposed changes to margin transparency by the BCBS, CPMI, and IOSCO should allow for investment funds (and all market participants more generally) to better prepare for margin calls, thereby reducing procyclical liquidity demands on the system.

We further question the effectiveness of liquidity add-ons that are centrally managed by authorities over market cycles. To be effective, regulators would have to choose the right level of add-on and then, in real time, be able to identify the need to release the add-on, and then actually release it. Regulators would also have to decide when funds would be required to rebuild their add-ons; this would have been a tricky proposition in the aftermath of the March 2020 crisis. Regulators should also be cognisant that releasing the add-ons could trigger heavier redemptions because investors might view releasing add-ons as a signal of deeper distress. Further, the decisions by authorities related to the use of such add-ons could have a procyclical effect, leading to the unintended consequence of inducing additional purchases of liquid assets during market upswings and additional sales during market downturns.

Moreover, regulators would need to avoid a one-size-fits-all approach, such as one in which all funds must hold an add-on of some pre-specified amount, regardless of a fund's underlying assets, investor redemption history, etc. Regulators would have to decide what kinds of assets could be used as add-on liquidity. This is not necessarily simple. Presumably, leading into March 2020, regulators would have deemed US Treasury securities highly liquid and thus appropriate for the add-on liquidity. And, in fact, funds held large amounts of US Treasury securities going into March 2020. But Treasury market liquidity turned out to be challenged that month.

Funds are already subject to significant liquidity rules and regulations. Providing discretion to public authorities to tighten or loosen requirements across a range of funds would introduce new uncertainties and relies on the questionable assumption that public authorities would be positioned to effectively time when and how to introduce or release across-the-board liquidity buffers.

2. Liquidity management tools controlled by authorities

Key Findings:

- While central banks suggest that authorities could play a useful role in centrally managing funds' use of LMTs, such as redemption gates or fees, swing pricing, and anti-dilution levies, giving authorities sweeping macroprudential control over these tools could create negative signalling effects, would require extremely strong cross-border cooperation, and would not be in the best interest of investors.
- A group of major EU securities regulators recognized that introducing new centralized macroprudential tools would pose risks and that existing LMTs are adequate.

Given the wide diversity of funds, there is no one-size-fits all approach to liquidity management, and the primary responsibility of liquidity risk management should always lie with the fund manager. ICI and its members have regularly communicated this position to policymakers over many years.[9] This view is shared by IOSCO,[10] and also was reflected in the recently adopted text for changes to the AIFMD and UCITS directive.[11]

To this point, funds and fund managers already have a range of LMTs that they can use as conditions warrant. In many jurisdictions, UCITS have been able to use swing pricing, dual-pricing, anti-dilution levies, redemption fees, and redemption gates or suspensions. The recent amendments to the UCITS directive require a UCITS (other than a money market fund) to select at least two suitable LMTs from an enumerated list.[12] And in a recent paper,[13] several EU securities regulators convincingly argue that "a combination of ex ante requirements on liquidity and leverage and a wide availability of LMTs to be used by asset managers to act in the best interest of investors, with authorities stepping in only in the direst cases, seems, therefore, the best way forward."

Regardless of the toolkit available to funds to help them manage internal liquidity, some central bank policymakers suggest authorities can play a useful role in centrally controlling the use of LMTs across groups of funds or all funds. However, even if central management of such tools was desirable, authorities using such macroprudential control over liquidity management would not be practical. The tools would have to be designed in a way that would not create signalling effects that could trigger further distress. The design of such measures and the conditions for their timely and effective activation are very challenging from a macroprudential standpoint. Finally, authorities would need strong and timely cross-border cooperation, given the international nature of capital markets.

3. Adjusted redemption terms, minimum notice periods or redemption duration restrictions

Key Findings:

- Granting public authorities the ability to centrally adjust redemption terms and notice periods for groups of funds during market turmoil would distort the market and disadvantage fund investors.

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[9] See Comments on IOSCO's CIS Liquidity Risk Management Recommendations and Open-ended Fund Liquidity and Risk Management—Good Practices and Issues for Consideration, available at https://www.ici.org/doc-server/pdf%3A30875a.pdf.

[10] See "Recommendations for Liquidity Risk Management for Collective Investment Schemes," IOSCO, February 2018, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD590.pdf and "Open-ended Fund Liquidity and Risk Management—Good Practices and Issues for Consideration—Final Report," IOSCO, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD591.pdf.

[11] The adopted text calls on ESMA to develop guidelines on the selection and calibration of liquidity management tools by management companies. Further, the text goes on to clearly state that "Those guidelines should recognise that the primary responsibility for liquidity risk management remains with the UCITS." See AIFMD/UCITS Review.

[12] See Directive 2024/927, amending Directive 2011/61/EU on Alternative Investment Fund Managers (AIFMD) and Directive 2009/65/EC on UCITS, available at https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202400927.

[13] See EU Securities Regulators Report.

- While such measures may mitigate liquidity risks within specific funds during specific circumstances, centrally imposing them on groups of funds could exacerbate rather than relieve market stresses.

Some central banks have suggested giving public authorities the ability to tighten redemption terms, notice periods, and redemption durations in response to sudden market tensions in an effort to align funds' redemption policies with a change in the market liquidity of funds' assets.

Adjusted redemption terms and/or notice periods can act as a tool to mitigate liquidity risks within a specific fund and can be a valuable tool for certain types of investment funds, particularly those holding less-liquid assets. For example, with respect to open-end property funds (those that invest directly in property), significant regulatory reforms to better align the redemption terms with the liquidity of the underlying property assets have already taken place organically.[14] Tools such as notice periods are already in place and are used in some jurisdictions, most notably in Spain.[15] In addition, NCAs already have the power to impose suspension of redemption of units of a UCITS.[16]

Taken at a sector-wide level, however, the ability of central banks or other authorities to limit or stop fund redemptions in real-time during a crisis could easily backfire, adding to stresses rather than reducing them. For example, if fund shareholders sense that authorities are considering imposing widespread redemption restrictions, shareholders will redeem in advance, creating precisely the kind of first-mover effects regulators seem so intent on preventing. Consider, for instance, what would happen if during a stress period the public believed bank regulators were considering limiting or stopping bank depositors from withdrawing. That belief would almost surely spark widespread bank runs.

Additionally, the possibility that authorities might impose longer notice periods on funds at the authorities' discretion may have significant substitution effects that could arguably be worse for investors and for financial stability. Funds that could suddenly have stricter

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[14] For example, in Germany, which is domicile to the vast majority of EU property funds, the legislature introduced a minimum holding period of two years and a notice period to redeem of one year, applicable to all new investors. For existing fund investors, daily redemption is still possible, but limited to a maximum of €30,000 per calendar half-year.

[15] IOSCO highlights an example of how notice periods in Spain operate. The report states that the Spanish legal framework for investment funds permits notice periods, which can be utilised by open-ended mutual funds if specified in the fund rules and prospectus. Asset managers have the authority to establish a 10-day notice period for redemption requests exceeding €300,000 from a single investor, as outlined in the fund's constitutional documents. In such cases, the net asset value per unit applicable to these redemptions will be based on the tenth working day following the investor's notification of their intention to redeem. Typically, the prospectus outlines the potential for shortening this notice period if the asset manager can liquidate sufficient assets to fulfil redemption orders before the expiration of the 10-day period. In instances where the notice period is abbreviated, the net asset value per unit paid to redeeming investors will reflect the date on which the necessary assets were sold by the fund. While this is the general regime, in extraordinary circumstances, managers also have the ability to establish notice periods for any amount and period. Moreover, the CNMV is also empowered to impose the use of these notice periods to asset managers, in general or in particular cases.

[16] See UCITS Directive, Article 84. While applicable to a single fund, such action could conceivably be taken across a segment of funds, in effect elevating an NCA tool to the macro level.

government-mandated redemption terms might be less appealing to some investors seeking to maintain liquidity. Consequently, investors seeking exposure to property assets, for example, could shift their focus to futures contracts on property indices – products that can be significantly leveraged, are highly volatile (requiring the posting of initial and variation margin) and may not be best suited to the risk profile of certain categories of investors.

Finally, because funds are only one part of the market, imposing unilateral restrictions on fund redemptions would be unlikely to achieve the policy goal of stabilising the market, as other market participants would remain free to trade. Instead of stabilising the market, such a restriction affecting some, but not all, investors would distort the market, while disadvantaging investors who use funds.

4. More stringent leverage limits

Key Findings:

- Regulated investment funds, such as UCITS, already operate under strict regulatory constraints regarding leverage.

Some policymakers have suggested that more stringent limits on leverage are needed.[17] In the case of regulated investment funds, however, many regulatory bodies already impose strict limits on such funds' use of leverage. For example, UCITS are generally restricted to borrowing no more than 10 percent of their assets and only temporarily. Additionally, global exposure factoring in derivatives and after netting cannot be higher than the fund's net asset value (i.e., 2 times leverage).[18] UCITS are also subject to binding asset concentration limits, further limiting UCITS leverage.[19]

Aside from the regulatory constraints on leverage, there are practical investment strategy and liquidity management reasons for funds to avoid leverage. For example, funds aim to provide investors with diversified exposure to a basket of assets, following a specific investment strategy. Leverage introduces additional risk and complexity that might deviate from the fund's core objectives or cause tracking errors. Additionally, funds generally accommodate redemption requests daily. Leverage can complicate liquidity management, especially if the leveraged positions involve holding less-liquid assets.

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[17] Some of the discussion of additional limits on leverage have focused on hedge funds, which are not addressed in this note.

[18] A method available in some jurisdictions is the Value-at-Risk (VaR) technique for assessing broader exposure in intricate strategies. In the VaR methodology, global exposure is evaluated through the market risk of the UCITS, representing the maximum anticipated loss within a specified timeframe at a certain confidence level. It is important to note that the "market risk" differs from the "leverage" of a UCITS. Consequently, a UCITS employing the VaR method is not constrained to a global exposure capped at 100% of its net asset value.

[19] See UCITS Directive, Article 52. No more than 10% of a UCITS's net assets may be invested in transferable securities or money market instruments issued by the same body. Moreover, the total value of the securities of issuers in which a UCITS has invested more than 5% of its assets cannot exceed 40% of its assets (otherwise known as the "5/10/40" rule).

The data on this issue is clear. As highlighted by IOSCO, at the global level, leverage in open-end and closed-end funds is negligible.[20] Narrowing the focus to European funds, the IOSCO data is also instructive—European open-end and closed-end funds exhibit extremely low levels of leverage.[21]

Policymakers should undertake a thorough analysis of leverage in regulated European funds before concluding that macroprudential tools are needed to address this issue for regulated funds. Toward this end, they should engage with the full set of data at their disposal, which can include AIFMD data, trade repository data, and data reported to individual central banks and national competent authorities.

5. Redemptions-in-kind

Key Findings:

- While redemptions-in-kind can be a useful mechanism for individual funds to manage liquidity in certain circumstances, implementing this approach at a system-wide level during times of market stress would be operationally challenging and would shift liquidity pressures from funds to end investors.
- Although redemptions-in-kind might be acceptable for some institutional investors in certain circumstances, they will almost always be impractical for retail investors

Redemptions-in-kind refers to a mechanism wherein redeeming investors receive some of the funds' assets instead of cash. Some policymakers have suggested that greater use of redemptions-in-kind during stressed periods could help to mitigate liquidity pressures by reducing the need for funds to sell assets to meet redemptions.

Many funds already have the ability to use redemptions-in-kind, and such in-kind redemptions can and do help individual funds manage liquidity in certain circumstances. But using this approach at a system-wide level and in response to market stress comes with several practical limitations that would make it both difficult to use and ineffective as a macroprudential tool.

First, redemptions-in-kind ultimately do not address the core issue of market-wide liquidity. If an investor receives a redemption-in-kind but needs liquidity in a time of stress, the investor may simply turn around and sell those assets into the stressed market. In other words, all that

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[20] IOSCO, "Investment Funds Statistics Report, FRJAN/24."

[21] For European funds, the data presented in the IOSCO report is based on data from the AIFMD reporting framework. Concerns about leverage in European funds are more likely to centre around AIFs, which are regulated differently to UCITS from a leverage perspective. This lack of leverage is also borne out in data collected by the CSSF, domicile to 32% of UCITS funds on a net asset basis. According to the most recent CSSF UCITS Risk Reporting Dashboard, under the commitment method, 95% of UCITS assets have a realised leverage level of between 0-25%, with remaining assets subject to a leverage level between 25-100%. Under the VaR method, roughly 85% of assets report having a realised leverage level between 0 and 250%. See "UCITS Risk Reporting Dashboard," Commission de Surveillance du Secteur Financier, December 31, 2022, available at https://www.cssf.lu/wp-content/uploads/UCITS_Risk_Reporting_dashboard_31122022.pdf.

the redemption-in-kind would do in this case is shift the selling pressure from the fund to the end investor.

Second, system-wide redemptions-in-kind have unintended consequences that can transfer stresses to other parts of the financial market. For example, suppose during a stress period an institutional investor who wishes to redeem learns it will have to accept a redemption-in-kind. Rather than accepting securities in kind, the institution may seek liquidity elsewhere, such as by withdrawing bank deposits or tapping bank lines of credit. It is unclear that this would be a better outcome for financial stability purposes.

Third, it is not a tool that can be turned on and off easily. Funds would typically redeem in-kind only under certain circumstances, such as if an institutional investor with a large balance wishes to move its assets elsewhere. Even these limited uses may involve costly operational issues regarding the transfer of ownership of underlying portfolio assets for both the fund and the end investor. A fund and redeeming institutional investor may need weeks to agree to and coordinate a redemption-in-kind, including negotiating precisely what assets are transferred, particularly in the likely event that assets cannot be evenly split based on the number of shares owned. In selecting assets to be delivered, funds must be careful not to disadvantage non-redeeming shareholders, for example by unfairly delivering to the redeeming shareholder the fund's most liquid assets. Intermediation and use of omnibus accounts in some jurisdictions also add layers of complexity for redemptions-in-kind.

Fourth, although redemptions-in-kind might be acceptable for some institutional investors in certain circumstances, they will almost always be impractical for retail investors.[22] For example, if a retail investor wanted to sell €500 of a fund, it would be difficult if not impossible for the fund to deliver an in-kind vertical slice of the fund's portfolio. A well-diversified fund might have hundreds to thousands of positions and delivering even a few shares of just one or two holdings might exceed the investor's €500 redemption request.[23] For seamless delivery, the redeeming investor also would need a pre-established brokerage account into which the in-kind securities could be transferred, and some retail investors may not have such accounts.

6. Capital-based measures aimed at absorbing losses

Key Findings:

- Implementing capital-based measures as a tool for funds to absorb losses would be inappropriate and unnecessary due to funds' "capital-at-risk" balance sheet structure.
- Funds are effectively 100 percent capital.

[22] We discuss the challenges redemptions-in-kind pose for retail investors to emphasise that redemptions-in-kind simply will not work for a large fraction of the assets invested in funds.
[23] Even for a more sizable redemption request, a vertical slice might be difficult for an index fund to meet without delivering fractional shares.

Some policymakers have suggested considering requiring funds to use capital-based measures to help absorb losses. However, while capital-based measures might be effective for banks, equity and bond funds do not have the same balance sheet structure nor do they face the same risks and capital vulnerabilities as banks.

Unlike banks, in which depositors can withdraw their deposits at par value at any time, and in which the bank maintains a much smaller share of equity capital to offset potential losses to it assets (e.g. loans made with those deposits), fund investors each hold a pro rata capital-at-risk equity claim against the fund's portfolio. Consequently, an equity or bond fund can effectively be viewed as 100 percent capital. While investors have the ability to redeem that capital (often daily in many asset management products), unlike banks, assets are segregated and held separately from the fund manager. These features allow a fund to absorb losses on assets seamlessly into the fund's NAV, and thus pass them on to fund shareholders, without any need for a "capital buffer." Therefore, it is doubtful that capital buffers and minimum balance at risk tools would serve any useful purpose with equity and bond funds.

Placing capital requirements on asset managers themselves and requiring asset managers to use such capital to absorb losses of their funds would create its own problems. Asset managers operate an agency business: assets are owned by the client, not the asset manager. Imposing capital requirements on a fund adviser would fundamentally change the nature of a fund by interposing the adviser between the fund and its investors, shifting investment risk from the fund shareholders to the adviser. This approach would create new risks for the system, for instance, the potential to create shareholder run risk over concerns about the failure of the fund manager. Further, imposing capital requirements on asset managers for risks associated with client assets introduces moral hazard. An asset manager that is required to hold capital and make good on investors' losses provides an incentive for investors to pay less attention to risk. Consequently, linking the balance sheets of asset managers with those of their funds could raise system-wide risks.

7. Asset management "skin in the game"

Key Findings:

- The concept of "skin in the game" is already prevalent within the asset management industry.
- Centrally mandating specific levels of investment by the asset management company or the fund manager is potentially redundant and is unnecessary to align incentives.

"Skin in the game" typically refers to having a personal stake or investment in a venture or decision. Central banks have suggested that asset managers need to have skin in their funds (i.e., having to invest and retain participation in the funds they manage) to better align their incentives with those of their funds' investors, which they argue could help promote sound risk management practices.

Asset managers already have considerable skin in their funds. Most fundamentally, funds generally compensate their asset managers with asset-based fees, such as a fixed percentage fee based on the fund's assets. This means that as a fund's assets grow, revenues of the fund's asset manager will also grow. Funds that are poorly or imprudently managed will lose assets because of poor returns and/or investor outflows, depressing the asset manager's revenues. This aligns the interests of asset managers and their funds' shareholders.

Another approach to ensuring "skin in the game" is through remuneration. Some asset managers may offer fund portfolio managers compensation tied to the fund's or the asset manager's performance, aligning the interest of portfolio managers with those of fund shareholders. From a reputational standpoint, few things are worse for a fund than poor performance due to the portfolio manager's decisions which in turn forces the closure of a fund.

In addition, fund portfolio managers sometimes invest their own money in their funds. This approach aims to ensure that asset managers are motivated to make sound investment decisions that benefit both themselves and their clients. However, the extent to which asset managers have "skin in the game" can vary based on factors such as the firm's compensation structure, regulatory requirements, and individual investment strategies. In addition, funds with boards may have policies requiring or encouraging board members to have a stake in the funds they oversee, which is intended to align their interests with those of the fund's shareholders. Portfolio managers and fund directors of mutual funds must disclose their ownership of the fund's shares.[24]

Given the above existing situation, mandating specific levels of investment by the asset management company or the fund manager is unnecessary to align incentives.

8. System-wide stress testing

Key Findings:

- The potential utility of system-wide stress testing requires further analysis and consultation, given the complexity of the market dynamics and potential for misleading results.
- ICI is tracking the Bank of England's System-Wide Exploratory Scenario (SWES) and will examine the outcomes, particularly with regard to system-wide liquidity and counterparty findings.

Banks are subjected to stress tests in part to ensure they have sufficient capital to meet hypothetical stress events. Stress tests tend to focus on a selected number of hypothetical scenarios, such as sudden market downturns or liquidity crises. However, these hypothetical scenarios may not capture the spectrum of stresses banks might face. For instance, prior to the demise of SVB, US bank regulators did not propose scenarios wherein monetary policy tightened rapidly, reducing the value of banks' holdings of US Treasury securities. As a result,

[24] See Items 17 and 20 of Form N-1A under the Investment Company Act of 1940.

stress testing apparently provided insufficient early warning about SVB's vulnerabilities or potential contagion to other mid-sized US banks.

Funds often voluntarily conduct internal stress testing around fund liquidity, which can help a fund gauge how it might prepare for various types of shocks. However, requiring funds to conduct bank-like stress testing exercises to ensure adequate capital is inapt because funds are already essentially 100 percent capital. The data collection, modelling, and analysis processes would be time-consuming and financially burdensome and would likely be of little value to gauging liquidity adequacy. Moreover, the stress testing procedure itself could disrupt financial markets, potentially eroding investor confidence and tightening credit conditions if, for instance, negative test results were leaked or misinterpreted.

As ICI outlined in responses to consultations from the FSB in 2016,[25] system wide tests conducted by regulators should not focus on only one part of the market, and even when done carefully, outputs can be heavily dependent on the underlying assumptions. For this reason, it is premature to talk about stress-testing as a basis for new regulatory changes.

The Bank of England is currently conducting a system wide stress test with voluntary participation, including by several asset managers. The test and its results will provide an opportunity to assess whether such exercises can be a useful contribution to understanding system-wide strains.

Conclusion

ICI shares a common goal with policymakers of fostering well-functioning capital markets that are resilient in both normal and stressed conditions. Funds are a core pillar of such well-functioning markets, helping individuals to invest and save for their futures and serving as effective and efficient channels for capital to flow to economically productive uses.

As policymakers consider the application of macroprudential tools to funds, it is important to remember that banks and funds are fundamentally different. Due to a variety of existing regulations, regulated investment funds typically have minimal leverage, hold assets that are highly liquid, and are required to place those assets in accounts that are walled off (in custodian or segregated accounts) from the asset manager's own balance sheet.

Funds already have a range of liquidity risk management tools available, including UCITS' ability to use swing pricing, gating, suspension, and so on. Moreover, funds have certain key protections which help address central banks' concerns: (i) funds that offer daily redemption mark-to-market all of their assets daily; and (ii) funds are, in effect, entirely equity capital which is also revalued daily.

A one-size-fits-all approach to funds through macroprudential tools is not only unnecessary, it also would be ineffective in achieving policymakers' financial stability goals. In some cases, the application of macroprudential tools could even be counterproductive, introducing new

[25] See Letter from Paul Schott Stevens, President & CEO, ICI to Secretariat, Financial Stability Board, responding Consultative Document; Proposed Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities, , September 21, 2016, available at https://www.ici.org/system/files/attachments/16_ici_fsb_ltr.pdf.

risks to the system. Further, macroprudential tools that place restrictions on funds' ability to invest and trade on equal terms with other market participants would distort the market, disadvantaging some investors based on the choice of product, while creating incentives for capital to flow though other potentially less well-regulated channels.

Rather than continue to pursue an ill-suited macroprudential approach to regulated investment funds, we encourage policymakers to work together with the funds industry to further deepen and build capital markets—in Europe and around the globe—in order to provide greater opportunities for individual investors to prosper and for economies to grow.