September 21, 2016

Secretariat of the Financial Stability Board
c/o Bank for International Settlements
CH-4002
Basel, Switzerland

Re: Consultative Document; Proposed Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities

Dear Sir or Madam:

The Investment Company Institute, on behalf of its entire fund membership, appreciates the opportunity to comment on the Financial Stability Board’s consultation regarding activities in the asset management sector. ICI and its members have a keen interest in a strong and resilient global financial system that operates on a foundation of sound regulation. We seek to provide meaningful input on global financial regulatory policy initiatives, such as this one, that may have significant implications for investment funds that are comprehensively regulated and eligible for public sale (“regulated funds”), their investors and the broader financial markets.

Sixteen months ago, in responding to FSB’s second NBNI G-SIFI consultation, we pointed out a series of fundamental problems with FSB’s approach to asset

1 The Investment Company Institute (ICI) is a leading, global association of regulated funds, including mutual funds, exchange-traded funds (ETFs), closed-end funds, and unit investment trusts (UITs) in the United States, and similar funds offered to investors in jurisdictions worldwide. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. ICI’s US fund members manage total assets of US$18.4 trillion and serve more than 90 million US shareholders. Members of ICI Global, the international arm of ICI, manage total assets of US$1.5 trillion.


3 The term “regulated funds” includes “regulated US funds” (or “US mutual funds,” where appropriate), which are comprehensively regulated under the Investment Company Act of 1940 (“Investment Company Act”), and “regulated non-US funds,” which are organized or formed outside the US and substantively regulated to make them eligible for sale to retail investors (e.g., funds domiciled in the European Union and qualified under the UCITS Directive (“UCITS”)). We concur with the FSB’s decision to exclude money market funds from the scope of this work, given the considerable reforms in process. Consultation at 1 n.2. Our comments accordingly focus on regulated stock and bond funds and their managers.
management. We provided extensive data, analysis and commentary demonstrating that neither regulated funds nor their managers pose risks to global financial stability. And we reiterated our view that an activity-based approach to regulation would be a better way to address any identified risks to global financial stability posed by the asset management sector, given the agency nature of the business and the high degree of substitutability of investment funds and asset managers.

We welcomed, therefore, the FSB’s subsequent announcement that it had set aside the NBNI G-SIFI project while conducting a review of asset management activities. This consultation begins, quite correctly, by acknowledging “that asset managers and their funds pose very different structural issues from banks and insurance companies” and that “[t]his different structure of the asset management sector offers some important stabilizing features to the global financial system.” It then proceeds to consider four areas that, in the FSB’s view, pose potential financial stability risks: liquidity and redemptions in investment funds offering daily redeemability (“open-end funds”); leverage within investment funds; operational risk and the transfer of investment mandates; and securities lending.

The consultation discusses the posited “structural vulnerability” in each area, describes in broad terms the way in which existing regulation and practices already address the vulnerability, and proposes policy recommendations to address any “residual risk” in that area.

By and large, we have few objections to the proposed policy recommendations. They generally envision that IOSCO and authorities in each jurisdiction will review existing disclosure and reporting requirements, the availability of risk management tools, and potential enhancements to data collection and regulatory monitoring. The recommendations further envision that, on the basis of their findings, IOSCO and the authorities will make enhancements to existing regulation and guidance where appropriate. This approach, consistent with our long-held view, properly directs these important responsibilities to the regulators that have the requisite expertise and hands-on experience with respect to asset management activities and the capital markets. It also contemplates taking into account existing regulation and relevant circumstances in each jurisdiction.

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5 ICI Statement on FSB Postponing Work on Asset Management SIFI Designation Methods (press release, July 30, 2015), available at https://www.ici.org/financial_stability/statements/news/15_news_fsb_asset_management_sifi_postpone. We also emphasized the need for regulators with deep expertise in capital markets to play a leading role.

6 Many of these same areas currently are under review by the US Financial Stability Oversight Council (FSOC), the US Securities and Exchange Commission (SEC), and the International Organization of Securities Commissions (IOSCO).
Regrettably, however, the justifications underlying the FSB’s policy recommendations suffer from some of the same flaws we cited in the FSB’s G-SIFI work. These flaws are particularly evident in the FSB’s consideration of “liquidity mismatch” in open-end funds, the area of greatest focus in the consultation. In conclusory terms, the FSB describes the potential mismatch between the liquidity of individual fund portfolio holdings and daily redeemability of fund shares as a “key structural vulnerability” raising concerns for global financial stability. In support of its contention, however, the FSB, as it has in the past, resorts to conjecture and assumptions about the potential for destabilizing impacts from fund redemptions, while discounting abundant empirical evidence to the contrary and the actual experience of open-end funds and their investors in times of market stress.

To have any credibility, much less to serve as a compelling basis for regulatory action, the FSB’s work product must have some reasonable evidentiary basis and be grounded in actual experience. We accordingly urge the FSB to consider formal adoption of more exacting principles and standards to govern its work. Similarly, as the focus shifts to IOSCO to “operationalise” the FSB’s final recommendations on asset management activities, we hope that IOSCO’s work will reflect the exhortations of its former Chairman:

- An issue “which IOSCO is flagging and will continue to flag through discussions with the FSB . . . is being careful in jumping to conclusions about the nature and extent of risks [in the asset management sector]—and the need to act.”

- “[W]e should only progress [to] thinking about solutions once we are satisfied there is strong evidence that there is a problem.” (emphasis in original)

- Such evidence “should not be theoretical” but rather “should be based on what we are currently seeing and what we think might be happening in the markets we regulate—our real experience.”

These same cautions should guide any future work on the NNBNI G-SIFI methodologies. The consultation makes clear that the FSB intends, jointly with IOSCO, to “revisit” these methodologies “after the recommendations in this document are finalized.” It further states that, in the case of asset management, the focus of the NNBNI G-SIFI work will be “on any residual entity-based sources of systemic risk from distress or disorderly failure that cannot be effectively addressed by market-wide activities-based policies.”

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8 Consultation at 2.
in this consultation of the prospect of potential distress “across [the] funds” managed by a particular asset manager underscore just how important it is for the FSB to set aside its theoretical concerns and ground any final G-SIFI methodologies in “strong evidence” based on “real experience.” As explained in this letter, should the FSB do so, we believe it will conclude—at a minimum—that there is no basis upon which to include regulated funds or their managers within the scope of such methodologies.9

We begin with a summary of our comments on the consultation (Section I). Next, we explain that the FSB has failed to substantiate its concerns regarding the potential for destabilizing redemptions from open-end funds, and comment on the FSB’s proposed recommendations in this area (Section II).10 We then provide our views on the issues of leverage (Section III), operational risk and the transfer of investment mandates (Section IV), and securities lending (Section V). At the end of this letter, we offer suggestions for next steps, including reforms to improve FSB’s processes, further delegation to IOSCO of work relating to this review of asset management activities, and the exclusion of regulated funds and their managers from any final assessment methodologies for the designation of NBNI G-SIFIs11 (Section VI).

I. Summary of Comments

A. Liquidity and Redemptions

1. For regulated funds, existing requirements and practices aimed at ensuring sufficient liquidity to meet redemptions already are robust. But ICI welcomes efforts to promote a “high bar” across jurisdictions, including recent work by the International Organization of Securities Commissions (IOSCO).

2. The consultation proposes nine policy recommendations focusing on disclosure and reporting, liquidity management tools, and stress testing. The recommendations generally envision that IOSCO and national authorities will review existing requirements and guidance and, on the basis of their findings, consider enhancements where appropriate. This approach properly directs these important responsibilities to the regulators with requisite expertise and experience in asset management and the capital markets.

3. As a threshold matter, however, ICI takes strong exception to the premise upon which the FSB has chosen to base these recommendations. We note the FSB’s continuing failure to substantiate its concerns that there could be destabilizing redemptions from open-end funds, including those invested in less-liquid assets.

9 Although our comments focus on regulated funds and their managers, we do not mean to imply that other types of investment funds or managers should come within the scope of any final assessment methodologies.

10 In an appendix to this letter, we provide empirical evidence from recent experience in high-yield bond markets that counters the FSB’s concerns.

11 See supra note 9.
4. The FSB’s analysis has parallels to its flawed work on proposed methodologies to identify individual investment funds for possible designation as global systemically important financial institutions (G-SIFIs). In detailed responses to both G-SIFI consultations, ICI and other commenters explained at great length that the FSB’s concerns simply are not valid in the context of regulated funds.

5. ICI’s past submissions also sought to address many of the FSB’s concerns about open-end funds invested in less liquid assets. Our May 2015 comment letter provided the FSB with a range of empirical data about US high-yield bond funds and their recent experience during significant periods of market stress—data that raise serious doubts about the validity of the FSB’s hypotheses concerning the behavior of regulated fund investors, fund managers, and other market participants.

6. This letter contains an appendix that responds more directly to the FSB’s hypothetical scenarios about open-end funds invested in less liquid assets. The appendix considers what happened with US high-yield bond funds from November 2015 to February 2016, a time of significant stress in the US high-yield bond market that also featured the high-profile announcement by a US high-yield bond fund that it would suspend investor redemption rights (a very unusual and rare event). The empirical data demonstrate that fund investors in aggregate reacted quite modestly during this period of market stress. The appendix also provides data on the experience of European and Canadian funds during recent periods of market stress—illustrating that the behavior of fund investors in these two markets is quite similar to investor behavior in the United States.

7. As to the FSB’s recommendations regarding disclosure and reporting, ICI generally supports (1) appropriate reporting requirements that will enhance regulatory oversight without imposing undue burdens on funds and (2) disclosure requirements to ensure sufficient information for investors about a fund’s management of its liquidity. We agree with the FSB that any such requirements should be “proportionate to the risks” of the funds. We also advise that it may be appropriate for some information to be provided confidentially to regulators and, as a related matter, that public disclosure of certain kinds of information could be harmful or counterproductive.

8. As to the FSB’s recommendations regarding liquidity management tools, we observe that seeking to widen the availability of such tools and reduce barriers to their use is a worthwhile endeavor—and that the ultimate goal should be how best to serve the needs, expectations and interests of investors. We suggest that national authorities give thoughtful and thorough consideration to augmenting the range of available liquidity risk management tools in their respective jurisdictions, while considering the relative costs and benefits of alternative approaches.
9. We generally have no objections to the recommendation that authorities and IOSCO should promote clear decision-making processes for open-end funds’ use of “extraordinary” liquidity risk management tools and related transparency for investors and the relevant authorities. We strongly object, however, to the FSB’s apparent presumption that the use of such tools can or will have spillover effects on other funds. In fact, evidence (including from recent case studies by IOSCO) indicates that when funds have invoked the use of even the most extraordinary liquidity management tools in times of market stress, spillover effects have not ensued.

10. As to the FSB’s recommendations regarding stress testing, ICI is open to the consideration of appropriate stress testing protocols for regulated funds as a potentially useful risk management tool. We likewise have no quarrel with having IOSCO review its existing guidance on how stress testing should be conducted and enhance it as appropriate. Our letter outlines a number of important considerations for authorities seeing to determine whether (or how) to pursue stress testing requirements or guidance for regulated funds, including that (1) such requirements or guidance must be very different from those applicable to banks; (2) stress testing should be done at the individual fund level; and (3) stress testing should be used as a complement to other risk management tools.

11. As to the FSB’s recommendation to consider “system-wide” stress testing involving regulated funds, the FSB is presupposing the existence of systemically large spillover effects from large-scale fund redemptions and related sales of portfolio assets. In fact, we know of no compelling evidence to this effect and much to the contrary. Moreover, the recommendation gives few details on how system-wide testing would be done. We highlight several concerns with such testing, the results of which could in fact be quite harmful if their underlying assumptions are misguided and policymakers give them undue weight.

B. Leverage

1. ICI’s letter disagrees with the FSB’s recommendations that IOSCO develop a “simple and consistent” measure of leverage—and notes that the FSB itself acknowledges that such an approach may fall short in measuring actual risk.

2. The letter indicates that, at a minimum, leverage metrics must be risk-based and consistent with the diversity seen across different fund types and jurisdictions.

C. Operational Risk and Transfer of Investment Mandates & Client Accounts

1. Like all financial firms, managers of regulated funds face—and are accustomed to managing and mitigating—reputational and operational risks. As fiduciaries, they must have robust policies, procedures and systems covering their operations and those of significant service providers.
2. ICI previously has addressed several points that are relevant to the FSB’s concerns regarding transfers of investment mandates or client accounts. Most notably, we have explained why: (1) regulated funds and their managers do not experience disorderly failure; (2) regulated funds and their managers routinely exit the market with no systemic impact; and (3) manager transitions are unlikely to present financial stability concerns.

3. We object to the fact that the FSB bases its policy recommendation concerning operational risk on unsupported claims about financial stability risks—echoing concerns the FSB articulated in its G-SIFI work. In both cases, the FSB has provided neither supporting data nor real-world examples.

4. Although we object to the FSB’s premise, ICI agrees that there could be benefits to investors and markets from regulatory requirements or guidance that encourage asset managers to take reasonable steps—proportionate to their business operations and actual risks presented—to plan in advance for potential business interruptions and possible transition issues. Such requirements or guidance should be applied across the sector and not just to the largest asset managers.

5. ICI recommends that capital markets authorities and IOSCO handle any follow-up work in this area.

D. Securities Lending

1. The FSB focuses on indemnifications provided by asset managers acting as securities lending agents—and contends without substantiation that this activity is a potential source of global financial stability risk. In the regulated fund context, there are a number of reasons to believe otherwise, including the limited scope of such indemnifications, the fact that defaults requiring indemnification are rare, and the effects of collateralization practices if a default did occur.

2. ICI generally supports targeted collection of securities lending data, to better inform authorities’ understanding of this practice.

E. Suggestions for Next Steps

1. ICI believes that multilateral organizations like the FSB can serve important policy purposes and should conduct their work so as to yield results that are as useful as possible. Flawed processes can lead to bad policy outcomes which, in turn, may harm the economy, growth, markets, and real people’s financial well-being.

2. The processes the FSB follows in conducting its work also have important implications for its efforts to promote broad implementation of harmonized regulatory standards. For example, US regulators have no authority to adopt rules—including those designed to implement policies developed by multilateral bodies such as the FSB—that are inconsistent with US administrative law.
3. The FSB should consider formal adoption of more exacting principles and standards to govern and enhance its processes, such as requirements addressing the need to: (1) examine all of the relevant evidence; (2) define clearly the problem to be addressed; and (3) provide reasoned explanations, supported by a balanced reading of evidence in the record, for any recommended policy approaches. The FSB also should consider more robust rules designed to bring greater transparency to the input that shapes FSB policy initiatives.

4. In this consultation, the FSB took a step in the right direction by assigning a significant role to IOSCO and capital markets authorities. Going forward, IOSCO should take charge of further work on asset management activities at the global level.

5. The FSB has expressed its intention to return to its prior work on methodologies to identify G-SIFIs outside of the banking and insurance sectors. If the FSB engages in an evidence-based analysis, ICI believes the FSB will conclude—at a minimum—that there is no basis for considering regulated funds and their managers for possible G-SIFI designation.

II. Liquidity and Redemptions

US mutual funds and many regulated non-US funds offer their investors the ability to redeem shares on a daily basis. This is a defining feature of these funds. And it is one around which many of the regulatory requirements and portfolio management practices for these funds are built—including requirements that such funds have sufficient liquidity to meet redemptions. In the 2015 ICI Letter, we outlined in detail the various tools and techniques used by regulated fund managers to provide sufficient fund liquidity, in light of the specific characteristics of each fund, and during both normal and exceptional market conditions. The consultation acknowledges many of these same tools and techniques in its discussion of “existing mitigants” to liquidity risk.

Existing requirements and practices are robust, and have proved highly successful over many years. But given the critical importance of sound liquidity management, ICI and its members welcome efforts to promote a “high bar” for regulated funds across jurisdictions. Within the last year, IOSCO and authorities in several jurisdictions have engaged in such efforts. For example:

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13 Consultation at 11-12.
• IOSCO has analyzed funds’ use of existing liquidity management tools\(^{14}\) and has prioritized the collection of enhanced data about the liquidity profiles of open-end funds.\(^{15}\)

• In the United States, the SEC is working to finalize its rule to require that all regulated open-end funds have formal liquidity management programs and provide more detailed disclosures to the SEC and the public.\(^{16}\)

• The Bank of Canada issued a report on the Canadian financial system that included an assessment of potential vulnerabilities in Canadian open-end mutual funds and found that these funds “appear to be managing . . . liquidity risks effectively.”\(^{17}\)

• The Bank of England’s Financial Policy Committee (FPC) commissioned a survey analyzing the risks associated with “open-end funds offering short-notice redemption” in the context of “potentially more fragile market liquidity.” According to the FPC, the survey results suggest that “funds operating under UCITS ensure that remaining investors are not disadvantaged when redemptions occur. This reduces incentives for investors to redeem if they suspect others will do the same. These funds also operate with minimal amounts of borrowing.”\(^{18}\) Following up on this work, the UK Financial Conduct Authority later issued a summary of good practices in the management of liquidity by UCITS.\(^{19}\)

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15 See IOSCO Outlines its Priorities Regarding Data Gaps in the Asset Management Industry (media release, 22 June 2016) (“IOSCO Data Gaps Release”) (noting that only a few jurisdictions currently collect detailed data and that enhanced data on fund liquidity profiles “would provide securities regulators with a more in depth understanding of these vehicles’ operations and improve risk monitoring on an aggregate basis). The release is available at [https://www.iosco.org/library/pubdocs/pdf/IOSCOPD533.pdf](https://www.iosco.org/library/pubdocs/pdf/IOSCOPD533.pdf).


17 See Bank of Canada, Financial System Review (June 2015), available at [http://www.bankofcanada.ca/wp-content/uploads/2015/06/fsr-june2015.pdf](http://www.bankofcanada.ca/wp-content/uploads/2015/06/fsr-june2015.pdf), at 46-54. With regard to fixed income funds, the report attributed this finding to various factors including: (1) funds hold sufficient cash to meet large redemptions; and (2) funds have a stable investor base—as demonstrated by the fact that Canadian fixed income flows have been stable during past periods of stress. Id. at 50.


• In Hong Kong, the SFC conducted a liquidity risk management review of selected SFC-authorized funds, covering such topics as product design and disclosure, ongoing liquidity risk assessment, stress testing, and liquidity risk management tools. The SFC later issued guidance to fund management companies based on good practices that it identified during its review.20

In its consultation, the FSB is recommending just such consideration of existing requirements and guidance, as well as possible “enhancements.” We see the FSB’s movement in this direction as a positive development, and we discuss our more specific views on the FSB’s recommendations later in this section. We take strong exception, however, to the premise upon which the FSB has chosen to base its recommendations, and we explain our objections below.

A. The FSB Has Failed to Substantiate Its Concerns About Destabilizing Redemptions From Open-End Funds

The consultation acknowledges at the outset that there is “little historical evidence of systemic risks arising from investment funds,” and it cites absolutely no examples involving stock and bond open-end funds.21 Undeterred, the FSB proceeds to suggest that open-end funds facing significant redemptions could be forced to sell portfolio holdings that in turn could result in “spillover effects” to other market participants and the broader markets. Specifically, the consultation asserts that in a stressed market environment, funds could experience high costs or difficulties in exiting their positions or rebalancing their portfolios.22 As a result, it contends, unanticipated large losses could lead to significant investor redemptions. And finally, according to the consultation, the sale of portfolio assets “required to meet these redemptions” could result in greater market volatility and the “potential” for “negative spillovers.”23

Parallels to the FSB’s G-SIFI work are notable

This discussion is reminiscent of the FSB’s G-SIFI work, in which the FSB raised concerns that there could be destabilizing redemptions due to the distress or failure of a large, individual investment fund. In its initial consultation in January 2014, the FSB expressed concern that investment funds—particularly mutual funds—could transmit stress to financial markets through “forced” asset sales prompted by high levels of


21 Consultation at 8.

22 Id. at 10.

23 Id.
It described an “asset liquidation/market channel” in which an investment fund, as a significant investor in some asset classes, may be forced to liquidate positions. The consultation posited that, in times of stress, such liquidations “could cause temporary distortions in market liquidity and/or prices that cause indirect stress to other market participants.” It further suggested that such effects may occasion a loss of investor confidence in a specific asset class, causing “runs” on other investment funds presenting similar features or conducting a similar strategy.

In its second G-SIFI consultation in March 2015, the FSB acknowledged that commenters “generally disagreed” with the above analysis. Yet the FSB continued to maintain that individual investment funds, in certain conditions, could experience “forced sales” of their portfolio assets that could have negative spillover effects on other investment funds, fund counterparties, or particular markets. The second consultation introduced several additional theories as to why forced sales might occur and additional circumstances that, the FSB hypothesized, might create cause for concern about transmission of risks.

In detailed responses to both G-SIFI consultations, ICI and other commenters explained at great length that the FSB’s concerns simply are not valid in the context of regulated funds. In the 2014 ICI Letter, for example, we advised that across the 75-year history of regulated fund investing in the US, the evidence is consistent and compelling: regulated US stock and bond funds have not reacted as envisioned by the FSB, not even during the global financial crisis. Indeed, the historical data paints a remarkably consistent picture: (1) net redemptions from most individual mutual funds, and from mutual funds collectively, are modest even during times of severe market stress; (2) fund sales of portfolio securities during such periods also are modest; and (3) contrary to the view that funds “herd,” funds are generally in the market both selling and buying securities, even when markets are stressed.

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25 Id.

26 Id.

27 Id. at 33-34.

28 Id. at 33-34.

29 2014 ICI Letter, supra note 4, at 27-28 and Appendix F. That letter largely focused on the experience of regulated US funds because the FSB’s proposed threshold for evaluating investment funds—US$100 billion in assets under management—would have targeted 14 regulated US funds for examination for possible G-SIFI designation.

30 Id.
In our submissions, we also sought to explain to the FSB the reasons why regulated funds, in jurisdictions across the globe, have a consistent history of success in meeting investor redemptions. These reasons are grounded in the structure of regulated funds, their existing regulatory framework, the management of fund portfolios, and the motivations and actions of fund investors. The present consultation acknowledges some of these reasons (e.g., multi-faceted liquidity management practices, availability of various policy measures and tools). Three others deserve brief mention here, because they respond directly to the FSB’s underlying assumption that significant redemptions necessarily require “fire sales” of portfolio assets:

- Regulated funds have sources of cash to meet redemptions, other than through sales of portfolio assets. These include cash or cash-equivalents on hand, proceeds from the sale of new shares, interest and dividends received on securities held, proceeds from maturing debt instruments, and re-investment by fund shareholders of distributions or dividends.

- Regulated funds also can accommodate redemptions by reducing their purchases of portfolio securities, as opposed to selling off their existing holdings.

- In the case of regulated US funds (the universe for which the relevant data is available), even in periods of net outflows, some investors continue to purchase shares in almost all funds.

Our submissions also emphasized that, should a regulated fund experience unexpectedly high redemptions, there are liquidity management tools that fund managers can utilize to meet their obligations both to redeeming investors and those remaining in the fund (acknowledged in the present consultation as “post-event measures” used to “address unforeseen liquidity challenges”).

The FSB now focuses on funds invested in less liquid assets

In the present consultation, the FSB suggests that redemptions from open-end funds more broadly—rather than redemptions sparked by “distress” of an individual fund—could have destabilizing impacts. Although acknowledging the lack of systemic

31 Id. at 19-22; 2015 ICI Letter, supra note 4, at 26-30.
32 See 2015 ICI Letter, supra note 4, at Appendix B (which is a copy of ICI’s letter responding to FSOC’s request for comment regarding asset management products and activities, cited as Letter to FSOC from Paul Schott Stevens, President & CEO, ICI, dated March 25, 2015) (“Appendix B to 2015 ICI Letter”).
33 This behavior is consistent with the consultation’s observation regarding “many investors’ long-term investment horizon and relatively firm asset allocations.” Consultation at 10.
34 IOSCO’s recent survey shows that, regardless of whether used in response to a market-wide event or an issue specific to one or more individual funds, those tools have been used in the large majority of cases without causing broader effects beyond the fund(s) involved. IOSCO Liquidity Management Tools Report, supra note 14.
risk in investment funds to date, the FSB observes that “concerns about such risks have been growing given the increasing investment in less liquid assets held by investment funds.”\(^{35}\) The FSB observes that some open-end funds have “increased their exposures to a broader range of asset classes in response to investor demand, including some found in less actively traded markets” and such funds also have “increased investment in asset classes that, while liquid under current market conditions, may become less liquid as risk perceptions and underlying credit conditions change.”\(^{36}\) The consultation then asserts that “[t]hese developments may amplify fragilities that, if left unaddressed, may in turn amplify market stress as funds sell across asset classes to meet unanticipated large redemptions.”\(^{37}\) In support, the consultation cites two papers by IMF staff members and one by researchers at the World Bank. This is surprising because in our May 2015 letter, we discussed that these same three papers in fact provide some evidence that funds and their investors are a stabilizing factor.\(^{38}\)

To be sure, the consultation later acknowledges that “a number of contingencies” would need to occur in order for open-end fund redemptions to have an “amplifying effect on risks to financial stability.”\(^{39}\) These include (1) significant redemptions from funds and (2) significant asset sales by those funds, particularly of less liquid assets and (3) material price declines or material increases in price volatility in the secondary market, as a result of such sales, “that would be serious enough to impair market access by borrowers.”\(^{40}\) The FSB provides no evidence to suggest that these hurdles are likely to be met, or ever have been met, even under extreme market conditions. Nonetheless, the consultation then abruptly pivots back to the notion of open-end fund redemptions as an “amplifier”—one that “can become more acute when it also prompts leveraged investors (e.g., hedge funds, banks, broker-dealers) to unwind risk positions in markets.”\(^{41}\) The FSB offers absolutely no support for this statement.

\(^{35}\) Consultation at 10.
\(^{36}\) Id.
\(^{37}\) Id.
\(^{38}\) See Appendix F to the 2015 ICI Letter, supra note 4. We further noted that the FSB failed to cite other papers that reach essentially the opposite conclusion from the FSB’s interpretation of the cited papers’ results.
\(^{39}\) Consultation at 11.
\(^{40}\) Id. See also 2014 ICI Letter, supra note 4, at 27 (responding to the FSB’s concern about an investment fund having to “liquidate its assets quickly, [which] may impact asset prices and thereby significantly disrupt trading or funding in key markets” and noting that three conditions must exist for such a situation to arise: (1) unusual circumstances, such as higher than expected redemption requests; (2) funds selling assets quickly; and (3) sales representing a large enough fraction of total trading to substantially move prices).
\(^{41}\) Consultation at 11. The consultation then posits that, if this amplification occurs, it could affect other market participants and could spill over into the real economy. It further asserts that, “[w]hile in most cases price disruptions in the secondary market are short-lived, under some circumstances abnormal flows can cause a long lasting price impact.” As evidence it cites two papers related to regulated funds. These papers, however, provide no evidence that regulated funds’ sales of bonds impair fixed income markets.
The FSB’s conclusion that “liquidity mismatch” in open-end funds is a “key structural vulnerability” also rests, in part, on its view that such funds are operating in a “changing market environment.” The FSB states that such funds “now play a relatively larger role in financial intermediation in some particular markets, such as US corporate bonds.” According to the consultation:

In the US, the share of corporate bonds owned by mutual funds has grown from less than 8% to 24% over the past decade. But in fact, the share of the corporate bond market held by U.S. mutual funds is substantially smaller (in 2015, just 15 percent of the market) and has remained nearly unchanged since 2012 (Figure 1). The US Federal Reserve Board’s Flow of Funds statistics for June 2016, which revised down by $855 billion US funds’ holdings of corporate bonds for 2015, reflect the correct data.

The first paper—Joshua Coval and Erik Stafford (2007), “Asset Fire Sales (and Purchases) in Equity Markets,” *Journal of Financial Economics*, 86(2), 479-512—is about equity funds and their sales of stock, not bonds. Moreover, as we pointed out in our recent letter to FSOC, the paper shows that while funds’ “forced sales” of individual stocks may have effects lasting a few months, because “forced sales” are minimal, the overall effects on a given fund or its shareholders are expected to be trivial. The second paper—Andrew Ellula, Chotibhak Jotikasthirab, Christian T. Lundbladb, “Regulatory Pressure and Fire Sales in the Corporate Bond Market,” *Journal of Financial Economics*, 101(3), 596-620—has nothing to do with regulated funds; instead, it measures the price effects on downgraded corporate bonds that insurance companies are required to dispose of pursuant to applicable regulations. The FSB at this point cites a third paper: Simon Glichrist and Egon Zakrajišek (2012), ”Credit Spreads and Business Cycle Fluctuations,” *American Economic Review*, 102(4): 1692-1720. This paper provides an interesting assessment of the effects of a shock to excess bond premiums on credit and macroeconomic conditions, but it has nothing to do with regulated funds. It never mentions the terms “mutual fund” or “UCITS.” Instead, to the extent that the paper discusses the role of institutional investors in the corporate bond market, it focuses on banks and broker-dealers.

42 Consultation at 11.
43 Consultation at 5 (citation omitted).
ICI applauds the Federal Reserve Board for improving the quality of these data. The revised data shows that the FSB’s concerns about open-end funds (at least those that invest in corporate bonds) relied upon the faulty predicate that US mutual funds’ share of the corporate bond market is large and growing rapidly. Given the corrected data and the significant changes it represents, it is incumbent on the FSB to step back and reexamine its conjectures concerning bond funds and systemic risk.

More importantly, we already have addressed many of the FSB’s concerns about open-end funds invested in less liquid assets. The 2015 ICI Letter contained a robust discussion about how regulated funds—investing across all asset classes—manage their liquidity needs. As part of that letter, we provided the FSB with a range of empirical data about the experience of US high-yield bond funds, in order to illustrate our points about liquidity management. The data generally covers the years 2000-2014, a period including not only the global financial crisis but also the 2013 “taper tantrum.”

This consultation,

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45 The FSB’s 2nd NBNI G-SIFI Consultation (supra note 27) first mentioned potential concerns about open-end funds invested in less liquid assets, in part by reference to the US FSOC’s request for comment on asset management activities in December 2014. Given the FSB’s familiarity with the FSOC request for comment (covering largely the same issues as the present consultation), ICI included its response to FSOC...
however, shows that the FSB has not truly taken on board this empirical data and its implications. For example, as we have noted above, it presents the same hypothetical scenarios the FSB advanced in its prior G-SIFI work.

In an appendix to this letter, we attempt a more direct response to the FSB’s hypothetical scenarios about open-end funds invested in less liquid assets, using recent market experience. It begins with some brief background on the US high-yield bond market and the state of that market prior to November 2015. It then considers what happened with high-yield bond funds from November 2015 to February 2016, a time of significant stress in the high-yield bond market that also featured the high-profile announcement by a US high-yield bond fund that it would suspend investor redemption rights. Based on empirical data regarding the behavior of investors in high-yield bond funds, the managers of those funds, and other participants in the high-yield market, we find that fund investors in aggregate reacted quite modestly during this period of market stress. We also provide data on the experience of European and Canadian funds during recent periods of market stress—illustrating that the behavior of fund investors in these two markets is quite similar to investor behavior in the United States.

These findings, in addition to decades of experience among funds in the United States and in other markets, raise serious doubts about the validity of the hypotheses underpinning the FSB’s perception of the behavior of regulated fund investors, regulated fund managers, and other investors. Quite simply, the models and their underlying hypotheses that the FSB is relying on do not explain actual investor or fund behavior. We urge the FSB—as well as other regulators and academics—to step back and reexamine whether these hypotheses are consistent with empirical evidence. Failure to

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as an appendix to the 2015 ICI Letter. The FSOC letter contains 15 separate charts, tables and graphs illustrating, among other things, that most US high-yield bond funds routinely experience and manage both investor redemptions and purchases of new shares and that the cash holdings of those funds remained well in positive territory and relatively stable, even during periods of net redemptions.

46 Equally modest impacts can be seen in recent modeling by economists at the US Federal Reserve Bank of New York, which sought to quantify the potential “spillover effect” from large-scale redemptions in US high-yield bond funds. Such impacts are simply too small to create the kinds of problems that the FSB envisions. See Nicola Cetorelli, Fernando Duarte, Thomas Eisenbach, and Emily Eisner, Quantifying Potential Spillovers from Runs on High-Yield Funds, Liberty Street Economics, Federal Reserve Bank of NY (Feb. 19, 2016), available at http://libertystreeteconomics.newyorkfed.org/2016/02/quantifying-potential-spillovers-from-runs-on-high-yield-funds.html#.V08s83T2aUJ. For a more detailed discussion of our views regarding this research, see Chris Plantier and Sean Collins, New Research by New York Fed Confirms: Bond Funds Don’t Pose Systemic Risks, Viewpoints, ICI, Feb. 23, 2016, available at https://www.ici.org/viewpoints/view_16_nyfed_bond_flows.

47 We recently made the same request to the FSOC, whose conclusions to date about liquidity and redemption risk in US mutual funds are based on similar hypotheticals. See Letter to the FSOC from Paul Schott Stevens, President & CEO, ICI, dated July 18, 2016, available at https://www.ici.org/pdf/16_ici_fsoc_ltr.pdf; see also FSOC, Update on Review of Asset Management Products and Activities (April 18, 2016) (“FSOC Update”), available at https://www.treasury.gov/initiatives/fsoc/news/Documents/FSOC%20Update%20on%20Review%20of%20Asset%20Management%20Products%20and%20Activities.pdf.
do so could result in the development of regulatory policies that are misguided or even harmful to investors and the broader markets.  

B. Comments on Proposed Recommendations

The FSB indicates that “there are residual risks associated with open-ended fund liquidity mismatch,” and the consultation sets forth a series of proposed policy recommendations intended to address those risks. Despite our strong disagreement with the FSB’s premises, we have few objections to most of the proposed recommendations.

As a general matter, ICI is pleased to see that the FSB envisions a lead role for IOSCO in many instances, and is recommending that “authorities” (which we take to mean capital markets regulators) and/or IOSCO have responsibility for additional work on liquidity and redemptions in open-end funds. We strongly support the FSB’s movement in this direction, because securities regulators not only have relevant regulatory powers but also requisite expertise with respect to asset management activities. In addition, several of the proposed policy recommendations refer to possible “enhancements” to existing requirements and guidance. We agree with this approach, because it appropriately allows for recognition that existing requirements already are strong and properly reflect the nature of capital markets and asset management.

Below we provide our views on the proposed policy recommendations, grouped according to the categories set forth in the consultation.

Recommendations intended to address “lack of information and transparency”

Recommendations 1 and 2 address enhanced transparency for authorities and investors concerning open-end fund liquidity profiles. ICI generally supports appropriate reporting requirements to provide regulators with useful information that will enhance their ability to fulfill their oversight responsibilities, without imposing undue burdens.
on funds.\textsuperscript{53} We further support ensuring sufficient information for investors about a fund’s management of its liquidity. We also agree that any such reporting or disclosure requirements should be “proportionate to the risks” of the funds.\textsuperscript{54}

An important consideration when determining whether enhancements to transparency about liquidity risks are needed and, if so, what form such enhancements should take, is the different purposes that regulatory reporting and investor disclosures serve. In particular, IOSCO and capital markets authorities should be mindful that it may be appropriate for some information to be provided confidentially to regulators and, as a related matter, that public disclosure of certain kinds of information could be harmful or counterproductive.\textsuperscript{55} To the FSB’s credit, the consultation appears to acknowledge distinctions between regulatory reporting and investor disclosures regarding fund liquidity profiles (\textit{e.g.}, with regard to content and frequency). In our view, the most effective way to inform investors about a fund’s liquidity risk management practices and its overall liquidity profile is through narrative disclosure, complemented by objective

\textsuperscript{53} The consultation suggests that where possible, “efforts should build on existing data gathering.” Consultation at 15. We agree.

\textsuperscript{54} The consultation states that this information should be proportionate to the risks that open-end funds “may pose from a financial stability perspective.”

\textsuperscript{55} ICI made this same point in a recent supplemental letter on the SEC’s pending liquidity risk management proposal, in which we stated: “We urge the Commission to distinguish between information needed to regulate, which need not be made public (\textit{e.g.}, reporting in response to a uniform asset classification requirement), and information that would be useful for investors, which should be publicly available.” Letter to SEC from David W. Blass, dated May 18, 2016, available at https://www.ici.org/pdf/29920.pdf (providing supplemental comments on the SEC Liquidity Risk Management Proposal, \textit{supra} note 16) (“May 2016 SEC Liquidity Letter”), at 6. We pointed to the FSOC Update, (\textit{supra}, note 47). In addressing steps to consider for mitigating liquidity and redemption risk, FSOC distinguished between (i) “[\textit{a}]dditional reporting requirements” that would “allow regulators to better understand how funds are assessing liquidity” and (ii) “public disclosure of funds’ liquidity and their liquidity risk management practices” that could “help improve liquidity risk management standards across the industry and enhance market discipline with respect to how funds manage and measure liquidity risk.” FSOC Update at 12.
data that balances meeting investors’ needs for information against the confidentiality funds need to protect their investment strategies.\textsuperscript{56}

We note that the FSB’s proposed policy recommendation on data collection is directed only to “authorities” and not to IOSCO. In discussing the recommendation, however, the FSB references IOSCO’s current initiative to address data gaps (which includes data gaps in relation to liquidity risk of funds), and also encourages IOSCO “to develop a set of data points . . . that can serve to provide transparency to the relevant authorities with respect to funds’ liquidity risk.”\textsuperscript{57} Given IOSCO’s ongoing work in this area, we suggest expressly incorporating IOSCO’s role into the recommendation. We also agree that IOSCO also can make important contributions as regards appropriate disclosure that will be meaningful to investors, as the FSB appears to contemplate.

\textit{Recommendations intended to address “gaps in liquidity management both at the design phase and on an ongoing basis”}

As with the proposed recommendations around transparency, we generally agree with the FSB’s suggestions for IOSCO and capital markets authorities to review the areas covered in Recommendations 3-6 and propose enhancements where they deem appropriate, subject to the cautions and suggestions discussed below.

More specifically, we support consideration of requirements or guidance (or enhancement of IOSCO guidance) stating that funds’ assets and investment strategies should be consistent with the terms and conditions governing fund unit redemption, both at fund inception and on an ongoing basis.\textsuperscript{58} In this regard, we agree that it is essential for funds to evaluate and monitor not only the liquidity of their assets (based on internal risk management and measurement practices, including asset classification, liquidity targets, and limits on illiquid assets, as appropriate) but also investor behavior during normal and stressed periods. We believe that fund managers (subject to oversight by fund boards of directors, where applicable) are in the best position to evaluate all of these factors together and make these decisions in the interests of fund investors.\textsuperscript{59}

As for liquidity risk management tools, seeking to widen the availability of such tools and reduce barriers to their use is a worthwhile endeavor. Indeed, we agree that it is appropriate for national authorities to give thoughtful and thorough consideration to augmenting the range of available liquidity risk management tools in their respective

\textsuperscript{56} See May 2016 SEC Liquidity Letter, \textit{supra} note 55.

\textsuperscript{57} Consultation at 15.

\textsuperscript{58} Requirements along these lines (or requirements with the same practical effect) already are in place in many jurisdictions. For instance, under the 2010 directive implementing the UCITS IV Directive (“UCITS Implementing Directive”), the management company of a UCITS is required to ensure that the liquidity profile of the UCITS’ investments is appropriate to the redemption policy as specified in the fund rules, the instruments of incorporation, or the prospectus. Article 40(4) of UCITS Implementing Directive.

\textsuperscript{59} Of course, regulators would have the ability to step in if there are problems.
jurisdictions. In doing so, authorities should take time to consider the relative costs and benefits of alternative approaches. But the ultimate goal of this exercise should be how best to serve the needs, expectations, and interests of investors.\textsuperscript{60} A related point is that, while having appropriate tools available is important, different jurisdictions should retain authority to make judgments about which tools best fit their particular circumstances \textit{(e.g.,} based on the nature of the markets and characteristics of regulated funds and their investors—including investor expectations that have developed over time—in a particular jurisdiction). For example, in the US, ICI has maintained that stock and bond funds should not have the ability to suspend redemptions without first seeking permission from the SEC.\textsuperscript{61} Operational considerations also can vary among jurisdictions, rendering certain tools less feasible in certain jurisdictions. Such differences should be respected and accommodated.\textsuperscript{62}

The consultation suggests that authorities should consider potential spillover effects if use of a tool by one fund “is interpreted by investors as a signal of broader stress” and sparks redemptions in other funds.\textsuperscript{63} While we agree that it should be left to local authorities to determine how effective specific tools are, it is worth noting that evidence indicates that when funds have invoked the use of even the most extraordinary liquidity management tools in times of market stress, spillover effects have not ensued.\textsuperscript{64} Recent work by IOSCO’s Committee on Emerging Risks (CER), as described in IOSCO’s 2016 Securities Markets Risk Outlook, is instructive. The CER conducted a

\textsuperscript{60} By contrast, “slowing redemptions” \textit{(as opposed to meeting redemptions in accordance with the fund’s terms and investor expectations)} does not strike us as an appropriate goal of liquidity management tools.

\textsuperscript{61} See Letter to SEC from David W. Blass, dated January 13, 2016 (“January 2016 SEC Liquidity Letter”), available at https://www.ici.org/pdf/16_ici_sec_lrm_rule_comment.pdf, at 46-47 (explaining that the right of shareholders to redeem US open-end fund shares at any time and receive their proceeds within seven days is a hallmark of those funds and a core element of the value proposition that they offer to their investors). We understand that other jurisdictions have taken different approaches. See IOSCO Liquidity Management Tools Report, \textit{supra} note 14.

\textsuperscript{62} The SEC’s proposal to permit regulated US mutual funds to utilize swing pricing serves as a good example. While already operationalized in some jurisdictions, swing pricing historically has not been permitted in the US. For most US funds, current operational obstacles to implementing swing pricing effectively would be significant. \textit{See}, e.g., January 2016 SEC Liquidity Letter, \textit{supra} note 61, at pages 57-61 and Appendix D. Our experience with the SEC’s proposal to permit swing pricing in the US also underscores that operational considerations should be in the forefront of regulators’ minds as they conduct work on liquidity management tools \textit{(or any other work, for that matter).}

\textsuperscript{63} Consultation at 17. Similarly, the consultation indicates that liquidity management tools “could potentially have spillover effects, particularly if they contribute to liquidity strains for investors or give rise to speculation of further measures and contribute to runs from other funds.” \textit{Id.} at 13.

\textsuperscript{64} A recent example, discussed in detail in the Appendix to this letter, involved the unexpected closure of the Third Avenue Focused Credit Fund in December 2015.
series of case studies involving open-end funds. Findings that are particularly relevant here include:

As to open-end mutual funds, jurisdictions reported very few incidents, over the past decade, of funds having insufficient capacity to meet redemptions. This finding is important if one takes into account that the period of inquiry covers instants of several sharp market corrections. For example, funds in the United States did experience an increase in redemption requests following a stress event, but these were not large enough to halt redemptions altogether or lead to systemic events. Of the funds that did face problems meeting redemptions, all had invested in assets with limited liquidity, across a wide range of asset classes.

A similar conclusion can be drawn from case studies for Australia, the Netherlands, and Spain. The common denominator in these case studies was real estate, an illiquid asset class. Even in the absence of a housing market downturn, the open-end investment funds in these countries holding substantial real estate investments ran into liquidity problems during periods of high redemptions. In these cases, problems with meeting redemption demands were addressed with a suspension of redemptions and required coordination with the supervising regulator. There was no sign of spillovers or any other symptoms that could indicate systemic risk.

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One notable way funds could adversely impact financial stability is through the mismatch between portfolio asset liquidity and investor redemption rights. For example, the 2008 global financial crisis, along with the introduction of bank deposit guarantees by the government, resulted in heavy investor outflows from mortgage funds to lower-risk

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65 IOSCO explained the CER’s work as follows: “With the goal of finding empirical evidence of fund dynamics in times of stress, including the effects of market stress on investor behaviour, fund manager actions, regulatory responses, contagion across funds, and post-stress outcomes, the CER produced a set of case studies on the basis of information that a number of countries had provided. Reviewing episodes of severe market stress and taking stock of actual ‘incidents’ at the fund level assists in gauging the scope of possible vulnerabilities and also informs as to how fund outflows may manifest themselves in the future.” IOSCO 2016 Securities Market Outlook, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD527.pdf, at 80.

66 The same was true of UK property funds in the wake of the Brexit vote. See FCA issues guidance following property fund suspensions (press release dated 8 July 2016) (explaining that “the ability to suspend is built into the structure of these funds . . . [in order] to create a pause to allow an orderly process of revaluation to happen without differential treatment of investors” and, further, that “[t]he FCA has been in close contact with these funds for some time. The decisions to suspend have been taken by the fund managers in accordance with their internal governance arrangements and in close cooperation with their depositaries.”). The press release is available at https://www.fca.org.uk/news/press-releases/fca-issues-guidance-following-property-fund-suspensions.
guaranteed bank deposits in Australia. Several mortgage funds experienced issues with fulfilling the increased number of redemption requests, given the mismatch between the very illiquid underlying investments and the redemption terms offered to fund investors, occasionally resulting in a suspension of redemptions. However, no systemic event resulted from the fund incidents analysed in the case studies for Australia or other countries, which suggests that the sector is generally resilient.67

The FSB suggests that there may be cases in which investors in some open-end funds may have incentives to redeem their shares ahead of other investors (a so-called “first-mover advantage”), which “may exacerbate the level of redemptions that funds experience in stressed market conditions.”68 Yet it quickly acknowledges that there are “several countering factors that may mitigate any first-mover advantage,” including ones that ICI and other commentators have highlighted in previous submissions: the long term investment horizons of many fund investors; their use of funds as part of a broader asset allocation strategy; the use of various tools to mitigate the impact of redemptions on remaining shareholders; and fund managers’ fiduciary obligations.69 The FSB also correctly observes that, “in practice, it is difficult to disentangle investors’ various motivations for redeeming from funds.”70 Within this context, we view Recommendation 5 as seeking to strike the right balance, by acknowledging the possibility that first-mover advantage may not be present.71 In particular, we support the FSB’s suggestion that IOSCO develop a liquidity risk management toolkit and incorporate the toolkit into its liquidity risk management principles.

Recommendation 6 calls for authorities to require and/or provide guidance on stress testing at the individual fund level “to support liquidity risk management to mitigate financial stability risk.” ICI is open to the consideration of appropriate stress testing protocols for regulated funds. Consistent with our comments earlier in this letter and our general views on liquidity risk management requirements, however, we view stress testing as a potentially useful risk management tool. We note that stress testing

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67 Id. at 80-81 (footnotes omitted).

68 Consultation at 10 and 14 (asserting that a first-mover advantage may exist only for some open-end funds). In support, the consultation cites to Goldstein, Jiang and Ng (May 2016). ICI has pointed out that the effects found by the authors are so small that they likely are immaterial for investors. See Sean Collins, “Comments on Goldstein, Ng, and Jiang: Investor Flows and Fragility in Corporate Bond Funds,” presented at Federal Reserve Bank of Atlanta’s 21st Annual Financial Markets Conference—Getting a Grip on Liquidity: Markets, Institutions, and Central Banks, May 2016, available at https://www.frbatlanta.org/-/media/Documents/news/conferences/2016/0501-financial-markets-conference/presentations/collins.pdf.

69 Consultation at 10.

70 Id. at 14.

71 Recommendation 5 indicates that authorities “should make liquidity risk management tools available to open-ended funds to reduce first-mover advantage, where it may exist.” Id. at 18. We note that even if first-mover advantage “may exist,” it could be immaterial.
requirements already apply to regulated funds in certain jurisdictions. In addition, some regulated funds voluntarily employ stress testing as a risk management tool, with considerable variation in how they do so.

ICI likewise has no quarrel with the FSB’s recommendation that IOSCO should review its existing guidance on how stress testing should be conducted and enhance it as appropriate. As in other areas, IOSCO can be instrumental in developing a baseline of standards that can serve as a useful resource for national authorities examining this issue. We also agree that IOSCO should consider proportionality—i.e., the idea that requirements may vary based on individual fund characteristics. But we disagree with the suggestion in the consultation that proportionality considerations are or should be linked with unsubstantiated financial stability risks.

For authorities seeking to determine whether (or how) to pursue stress testing requirements or guidance for regulated funds, a number of important considerations should guide the analysis. First and foremost, stress testing requirements for regulated funds must be very different from those applicable to banks. Evaluation of capital adequacy is inapt for funds, and any stress testing requirements or guidance for funds should focus on whether funds can meet redemptions (or other obligations such as margin calls) in response to relevant market stresses. More broadly, we strongly urge authorities considering stress testing requirements or guidance for regulated funds to keep in mind the following general principles:

- Stress testing should be flexible, and responsive to changing risks. Funds vary widely in their investment strategies, permitted investments, and risks, and any set of stress testing requirements must accommodate these differences.

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72 For instance, under the UCITS Implementing Directive, the management company of a UCITS is required to conduct, where appropriate, stress tests that enable assessment of the liquidity risk of the UCITS under exceptional circumstances. Article 40(3) of UCITS Implementing Directive. In the US, the Dodd-Frank Wall Street Reform and Consumer Protection Act requires the SEC to adopt stress testing requirements for regulated funds and investment advisers with more than $10 billion in total consolidated assets. The SEC has indicated that it is working on a proposal. See, e.g., Chairman’s Address at SEC Speaks, Chair Mary Jo White, “Beyond Disclosure at the SEC in 2016,” (Feb. 19, 2016), available at www.sec.gov/news/speech/white-speech-beyond-disclosure-at-the-sec-in-2016-021916.html.

73 Related to this, as a general principle (noted below), we believe that any stress testing requirements for regulated funds should apply on a fund-by-fund basis, in recognition of the fact that funds are discrete legal entities, with discrete assets and liabilities, and unique liquidity profiles and investor bases.

74 The consultation states that “IOSCO should consider proportionality from a financial stability perspective, such that stress testing requirements may vary depending on the relative size of individual funds, their investment strategies, and particular asset class holdings.” Consultation at 19 (emphasis added).

75 For example, a US bond fund might test against deterioration of credit quality and/or an increase in government bond yields, whereas an emerging markets equity fund investing primarily in the Asia-Pacific region might test against changes in economic growth in the relevant equity markets, currency fluctuations, or even specific geo-political developments in that region.
• Investment losses are not *per se* problematic, and should not be the focus of stress testing requirements.

• Stress testing complements other risk management tools—but should not be used in isolation by funds or regulators.

• Stress testing results (or interpretations of results) should not dictate particular portfolio management responses (*e.g.*, increases in cash holdings). Rather, stress testing should *inform* portfolio management.

• As with liquidity management more generally, any reporting of stress testing methodologies or results should differentiate between reporting to regulatory authorities (more comprehensive reporting may be appropriate) and reports available to the public (more general reporting generally would be appropriate).

• Stress testing should not be reduced to a simple “pass/fail” dichotomy. Liquidity risk—about which stress testing may shed light—more appropriately should be viewed as spanning a continuum.

• Stress testing should cover a single entity only (*i.e.*, a single fund). Funds are discrete legal entities, with discrete assets and liabilities, and unique liquidity profiles and investor bases.

This last point ties into the suggestion in the consultation that fund stress tests should take into account the expected behavior of other market participants. To a significant degree, the stressed scenarios themselves will account for activities of other market participants.76 But a fund should not be responsible for modeling how those other market participants will respond in stressed scenarios.77 For a fund to project how it, and its investors, will respond to hypothetical scenarios already presents challenges and requires the fund to make a number of assumptions. To expand the requirements beyond the fund’s (and its investors’) own response would greatly increase the complexity and subjectivity of the exercise, rendering the results far more speculative. We also address this point in our comments on Recommendation 9, below.

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76 For example, a corporate bond fund might envision a stressed scenario in which it would experience outflows at a time when credit spreads are widening. It is reasonable to assume that the posited widening of credit spreads implicitly reflects the actions of all market participants.

77 Using the example in note 76 *supra*, the fund should not be required to disaggregate and assign to market participants expected selling activity and the extent to which those sales would affect bond yields.
Recommendations intended to address “adequacy of liquidity risk management tools to deal with exceptional circumstances”

ICI generally has no objections to the FSB’s Recommendation 7, which urges authorities and IOSCO to take action to promote clear decision-making processes for open-ended funds’ use of “extraordinary” liquidity risk management tools and related transparency for investors and the relevant authorities. We strongly object, however, to the FSB’s apparent presumption that the use of such tools can or will have spillover effects on other funds. As discussed above in our comments on “Recommendations intended to address gaps in liquidity management both at the design phase and on an ongoing basis,” evidence indicates that when funds have invoked the use of even the most extraordinary liquidity management tools in times of market stress, spillover effects have not ensued. This evidence raises questions as to the validity of the FSB’s hypothesis that such effects will materialize in the future.

We similarly have no objection to Recommendation 8, suggesting that authorities and IOSCO devote additional attention to providing guidance or direction regarding open-ended funds’ use of extraordinary liquidity risk management tools. We agree that the decision to use such tools generally should remain with the manager, with one exception. As mentioned above, it is ICI’s long-held view with regard to regulated US stock and bond funds that a decision to suspend redemptions should require advance permission from the SEC.

Recommendation intended to address “additional market liquidity considerations”

Recommendation 9 states that “authorities should give consideration to system-wide stress testing that could potentially capture effects of collective selling by funds and other institutional investors on the resilience of financial markets and the financial system more generally.” The consultation further suggests that a number of “macroprudential authorities” and the IMF are conducting, or seeking to conduct, system-wide stress tests that include asset managers, and that such tests “may provide useful insights that could

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78 As examples, the consultation mentions suspensions of redemptions, gates, in-kind redemptions, and side pockets. Consultation at 19.

79 As regards transparency for investors, we would caution that any process-related disclosure to investors will have to be general, and should not require cataloguing every potential contingency that could give rise to use of a tool.

80 For example, the consultation states that “[s]pillover effects to other funds may . . . be mitigated if investors are able to understand the specific reasons why certain funds have to use extraordinary measures.” Id. at 19.

81 See supra note 61.

82 Consultation at 20.
help inform both regulatory actions as well as funds’ liquidity risk management practices.”

As an initial matter, the FSB’s recommendation to consider system-wide stress tests presupposes the existence of systemically large spillover effects from large-scale fund redemptions and related sales of portfolio assets. In fact, we know of no compelling evidence to this effect and much to the contrary. The behavior of funds and their investors is heterogeneous, and they do not respond to shocks (or any other market event, for that matter) “collectively.” Thus, we first question the basis for Recommendation 9.

Even if the FSB offered a reasonable basis for system-wide stress testing, the consultation provides essentially no details on how system-wide stress testing would be done. Thus, this recommendation is difficult to evaluate in full. Notwithstanding the limited detail provided in the consultation, from what we know about current attempts at system-wide stress tests, we are deeply wary of stress testing’s heavy reliance on assumptions and models and the confidence that regulators may place in them. The use of these tests (and their results) in regulatory or policymaking action could in fact be quite harmful, for example, if their underlying assumptions are misguided or erroneous. Further, if permitted or required, public disclosure of stress testing also carries serious potential risks. Lastly, we doubt that any results would help inform funds’ liquidity management practices. Indeed, it is not difficult to imagine that the results could be highly misleading, both for regulators and investors.

The recommendation contemplates capturing the “effects of collective selling by funds … on the resilience of financial markets and the financial system more generally.” We see two issues with this. First, as noted above, the behavior of funds and their investors is heterogeneous, and funds do not act “collectively.” Second, it is unclear whether these tests are meant to supplant, or merely complement in some modest way, the voluminous real-world evidence from recent market stress events about how funds and their investors react.

A related concern is that system-wide stress tests, by their nature, will be based on hypothetical and assumed market stresses that in reality may be entirely implausible. Yet another concern is that system-wide stress tests also are likely to be heavily model-dependent. Simple and transparent models—such as models which assume that all fund investors are alike and behave identically—are less likely to provide “useful insights that could help inform both regulatory actions.” Complicated models likely would be opaque and difficult for outside observers to evaluate. Irrespective of whether the stress-testing

83 Id.


85 Consultation at 20.
models used are simple or complex, the results they produce likely will depend critically on model assumptions or parameters.\textsuperscript{86}

In our view, regulators are much more likely to gain insights by studying how regulated funds and their investors have responded to real-world stress events, such as during the 2008 financial crisis. Studying these episodes has the advantages of involving plausible scenarios (by definition, because they actually happened); revealing actual behavior of market participants (including funds) and the effects of that behavior on markets; and eliminating the complexity, subjectivity, and opacity likely to accompany model-dependent exercises.

We also are concerned that the proposal does not provide any detail on how regulators would use the results of system-wide stress tests. For example, if authorities decided to recommend prescriptive and uniform changes to fund liquidity management based on the results of system-wide testing, that would make fund portfolios more similar—and therefore more likely to be affected in a similar way in a future shock.

While not directly addressed, there is also the issue of whether the results would be publicly disclosed. It would be one thing for regulators to use them purely as thought-experiments intended to generate internal discussions, in which experts can explain to policymakers the strengths and weaknesses of the models and assumptions underlying the tests. Public disclosure of such results, however, could be confusing (and thus potentially harmful) to most retail investors, who could misconstrue the tests for forecasts—conducted by, and with the implicit imprimatur of, regulators—which could provide a faulty impetus for investors to exit markets or funds.

Finally, this recommendation, unlike most of the others on “liquidity mismatch,” does not envision a role for IOSCO. If “system-wide” stress testing involving the asset management sector is going to be considered, it most emphatically should be considered by IOSCO, and not by bank regulators largely unfamiliar and inexperienced with the asset management sector.

### III. Leverage

This section of the consultation begins by observing that “[i]nvestment funds’ use of leverage is another potentially important structural vulnerability in the asset

\textsuperscript{86} For stress tests involving bond funds, regulators will need to make a key assumption about the extent to which investors will redeem their bond fund shares following an adverse event (\textit{e.g.}, an increase in interest rates). If, in the aggregate, bond fund investors redeem only modestly, system-wide effects of these redemptions on other market participants should be limited. Another key assumption regulators must make is how responsive bond prices are to market participants’ sales of bonds (\textit{i.e.}, “price impact effects”). As regulators have pointed out, reliable estimates of these effects are not available for most of the assets bond funds hold. See \url{http://libertystreeteconomics.newyorkfed.org/2016/02/are-asset-managers-vulnerable-to-fire-sales.html#.V9LeZfZefd5}. Thus, system-wide stress tests of bond funds may simply become an exercise in guesswork.
management sector." As we have noted on several occasions, virtually all past systemic crises have arisen when a financial institution (or group of institutions) has taken on excessive leverage. Leverage provides the “grease” that makes modern financial systems an efficient engine for economic growth, but it also can act as a multiplier in times of market stress, posing difficulties for institutions that are highly leveraged—and for their counterparties and other market participants. Former US Federal Reserve Board Chairman Alan Greenspan has offered a similar assessment, observing that serial contagion during the global financial crisis stemmed not from subprime mortgages per se but rather from the high degree of leverage of the institutions holding those assets.

The consultation acknowledges a range of “existing mitigants”—some of which have been adopted or strengthened since the financial crisis—that address risks associated with leverage in investment funds. These include, among others, limits on leverage, collateralization requirements, disclosure and regulatory reporting requirements, central clearing of derivatives, and margin requirements for non-centrally cleared derivatives.

With regard to regulated funds, the FSB has observed that such funds “currently have legal and regulatory limitations on their ability to use leverage (either balance-sheet leverage or synthetic leverage).” These limitations, together with other structural and regulatory features, make it unlikely that a regulated fund would transmit risk to its counterparties.

Limitations on synthetic leverage should give due consideration to the particular risks that derivatives pose as part of a fund’s portfolio. As the consultation correctly observes, the uses for derivatives are “numerous” (e.g., for hedging, or as a cost-effective substitute for direct investment). ICI and its members firmly believe that regulated funds must be able to engage in derivatives transactions for a wide variety of purposes, consistent with their investment objectives and guidelines and taking into account current market conditions. We likewise support sensible and appropriate regulation in this area. Adequate risk management (with respect to, e.g., counterparty risk), accurate disclosure about a fund’s use of derivatives and their attendant risks, and regulations to ensure that

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87 Consultation at 22.


90 Consultation at 22-23.

91 2nd NBNI G-SIFI Consultation, supra note 27, at 32 and n.45.

92 See 2015 ICI Letter, supra note 4, at 22-24 (where ICI urged a more nuanced understanding of derivatives use).
funds have sufficient assets to meet their obligations all are critical to protecting investors, as well as to mitigating risk to the broader financial system. In fact, securities regulators in various jurisdictions are examining their regulation and oversight to ensure that they keep pace with current uses of derivatives.  

Following the consultation’s discussion of existing mitigants, the FSB acknowledges that “most jurisdictions have regulatory and supervisory measures that set limits on leverage for certain types of funds, or disclosure and reporting requirements to monitor the risks for investors generated by leverage in individual funds.” The consultation then claims, however, that “these regulatory limits and requirements may not always serve to mitigate risks from a financial stability perspective.” We note that the FSB offers no support for this conclusory statement. And, in the case of regulated funds, we believe that the FSB would be hard pressed to find any.

The consultation then moves to a discussion about “the lack of consistent and accessible data on leverage,” asserting that the lack of such data “acts as a significant barrier to assessing the extent to which funds’ use of leverage could contribute to global financial instability and whether existing mitigants are appropriate in addressing such financial stability risks.” In fact, the Board of IOSCO already has prioritized work on enhanced data collection in asset management, including with regard to leverage metrics. The Board recently stated that a “key priority is to encourage IOSCO members to collect data with a view to better identify systemic risk” and that “[t]o ensure greater consistency in data collection and definitions in the asset management sector, IOSCO will seek to coordinate the enhanced data collection for better cross-border comparability.”

We strongly urge the FSB to reshape its recommendations in this area to defer to the IOSCO effort. Securities regulators are in the best position to assess existing data relating to leverage within investment funds and to determine how to augment it. Further, to help ensure that any data collected and its eventual use by regulators is meaningful and appropriate, we offer IOSCO the following suggestions:

- First, any leverage metrics at a minimum must be risk-based, appropriately adjusting a fund’s derivatives positions for (a) netting agreements; (b) hedging;

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94 IOSCO Data Gaps Release, supra note 15.
(c) collateral, margin, and asset segregation; and (d) duration and riskiness of underlying assets.\textsuperscript{95}

- Second, any leverage metrics must be consistent with the diversity seen across different types of investment funds and across jurisdictions.

- Third, IOSCO should refer to the principles articulated in the consultation with respect to synthetic leverage, netting and hedging, directionality of positions, and model risk.\textsuperscript{96}

- Finally, IOSCO should engage with industry stakeholders throughout this process.

We disagree, however, with the FSB’s recommendations that IOSCO develop a “simple and consistent” measure(s) of leverage (“Simple Measure”) and that IOSCO, in coordination with the FSB, collect national/aggregated data based on the Simple Measure across its member jurisdictions.\textsuperscript{97} The consultation indicates that the FSB is expecting the Simple Measure “to enable aggregation and direct comparison across most/all funds and at global level” and, further, that it would be helpful if the Simple Measure is “comparable to those used by other types of financial entities (e.g., banks), taking into account differences in regulatory settings, business models and activities.”\textsuperscript{98}

With these recommendations, the FSB is aspiring to put an assortment of square pegs—investment funds, with all of their diversity—into a single round hole (a bank-like measure of leverage). This is quite impossible, assuming there is an even remotely honest effort to “account for differences in regulatory settings, business models and activities.” Moreover, a Simple Measure inevitably will be simplistic and therefore highly inappropriate as a tool for regulatory monitoring. The FSB concedes as much, acknowledging that a Simple Measure “may have limitations in measuring actual risk associated with funds’ leverage.” But *actual risk*—at a global, systemic level—should be the FSB’s sole focus. On this basis, we urge the FSB to drop these recommendations.

**IV. Operational Risk and the Transfer of Investment Mandates and Client Accounts**

Like all financial firms and other organizations, managers of regulated funds face reputational and operational risks. As we pointed out in the 2015 ICI Letter, effectively managing and mitigating these risks (e.g., through succession and business continuity

\textsuperscript{95} This suggestion is consistent with the FSB’s call in Recommendation 10 for IOSCO to “consider developing more risk-based measure(s) to . . . enhance the monitoring of leverage across funds at a global level.” Consultation at 25.

\textsuperscript{96} *Id.* at 25-26.

\textsuperscript{97} *Id.* (Recommendations 10 and 12).

\textsuperscript{98} *Id.* at 25.
planning) is part and parcel of running a successful business. And as fiduciaries to regulated funds, these managers are required to have robust policies, procedures and systems covering not only their operations but also those of their significant service providers.\(^9\)

On previous occasions, we have explained in detail how regulated funds and their managers manage operational risks.\(^1\) In addition, of particular relevance to the FSB’s current focus on transfers of investment mandates or client accounts, we have enumerated the reasons why regulated funds and their managers do not experience disorderly failure. We have presented data showing that regulated funds and their managers routinely exit the market, even during periods of stress, with no systemic impact. And we have discussed why manager transitions—including those occasioned by reputational events—are unlikely to present financial stability concerns, even in circumstances of financial market stress.\(^2\)

At the same time, we have supported appropriate regulatory requirements to enhance existing regulation and strong industry practices. In the US, for example, ICI recently expressed general support for an SEC proposal to require US registered investment advisers to adopt and implement written business continuity and transition plans and review them annually.\(^3\) We think that having principles-based business continuity and transition planning requirements for asset managers (including managers of regulated funds), commensurate with their operations and actual risks presented, is sensible for investor protection purposes and for the broader marketplace.\(^4\) We discuss our specific views on the FSB’s proposed policy recommendation in this area further below.

\(^{9}\) In the case of UCITS, any outsourced function remains the responsibility of the outsourcing manager.

\(^{10}\) See Appendix B to 2015 ICI Letter, supra note 32, at 58-72. This discussion focused on regulated US funds and their managers.

\(^{1}\) See 2015 ICI Letter, supra note 4, at 44-45.


\(^{3}\) Concurrent with the SEC’s issuance of the Adviser BCP Proposal, the staff of the SEC’s Division of Investment Management issued guidance addressing business continuity risks for regulated US funds. See Business Continuity Planning for Registered Investment Companies, SEC Division of Investment Management Guidance Update No. 2016-04 (June 2016) (“Fund BCP Guidance”), available at https://www.sec.gov/investment/im-guidance-2016-04.pdf. The staff recognized that “[f]or decades, fund complexes and their service providers have continued to build and improve practices to create resiliencies designed to mitigate the consequences of disruptive events,” adding that business continuity plans “are important tools used by fund complexes and other service providers to prepare for significant business disruptions and to address fund compliance obligations during such disruptions.” Fund BCP Guidance at 2.
But first, we must express our objection to how the FSB has couched its recommendation. As with liquidity and redemptions, the FSB bases its policy recommendation concerning operational risk on unsupported claims about financial stability risks.

A. The FSB Makes Unsupported Claims About Financial Stability Risks From Asset Manager Transitions

The consultation correctly observes that operational challenges from transferring investment mandates (or client accounts) among asset managers “have been infrequent in the past and have not raised financial stability issues.” \[104\] The FSB also acknowledges that “[h]istorically, there have not been serious operational issues during stressed conditions.” \[105\] In connection with its recent business continuity and transition planning proposal, the SEC likewise stated: “In the normal course of business, it is our understanding that [US registered] advisers routinely transition client accounts without a significant impact to themselves, their clients, or the financial markets.” \[106\] The SEC added that it also is “aware of instances of non-routine disruptions at large advisory businesses that have resulted in transitions to new advisers or new ownership without appearing to have a significant adverse impact on clients, fund investors, or the financial markets.” \[107\]

The FSB nevertheless contends that “operational difficulties [associated with transferring investment mandates or client accounts] potentially could become a financial stability concern” or “may . . . have systemic implications” in certain circumstances. \[108\] These suppositions are sadly familiar; they echo concerns the FSB articulated in seeking to justify its proposed assessment methodology to evaluate large asset managers for possible designation as G-SIFIs. \[109\] And here, as there, the FSB provides neither data nor examples to support its hypotheses. Some of the FSB’s stated concerns are based on the very same unsupported conjectures we addressed in Section II above. In particular, the FSB claims that operational difficulties (or associated reputational damage) could result in unusually high levels of redemptions in managed funds, which in turn could have spillover effects on market prices, particularly if the difficulties materialized during a period of stress and involved large and/or complex asset managers.

The FSB also hypothesizes about “systemic implications” if an asset manager that experiences operational difficulties provides a “range of critical services”—services other

\[104\] Consultation at 28.
\[105\] Id. at 30.
\[106\] Adviser BCP Proposal, supra note 102, at 43535.
\[107\] Id. at 43535-36.
\[108\] Consultation at 28.
\[109\] See 2nd NBNI G-SIFI Consultation, supra note 27, at 48-49.
than traditional asset management—to other financial institutions. Along the same lines, the FSB highlights the possibility of operational challenges in replacing various “ancillary services” in stressed conditions, such as pricing and valuation services, portfolio risk model and compliance platforms, trade order managing and trading platforms, securities lending agent services, and custodial services. This discussion closely resembles the narrative in the FSB’s second NBNI G-SIFI consultation regarding how the distress or failure of an asset manager might propagate systemic risks through the “critical function and service/substitutability” channel. We reiterate the suggestion we made in our 2015 letter that if activities such as those listed above are the cause of the FSB’s concern, the appropriate course of action would be to look at those activities broadly across financial institutions.\(^\text{110}\)

The FSB admits that the lack of serious operational incidents during stressed conditions to date makes it “difficult to assess the potential materiality of such operational difficulties.”\(^\text{111}\) The FSB further observes that for systemic implications to develop from operational difficulties, “it likely would require the simultaneous occurrence of both stressed market conditions and operational difficulties at large and/or complex asset managers.”\(^\text{112}\) But even if these circumstances converged, we would not expect “systemic implications” to develop. The main reason, which the FSB itself has highlighted before, is that the asset management business is very competitive and managers are substitutable.\(^\text{113}\)

ICI does not dispute that transfers of investment mandates or client accounts between managers involve operational considerations. But, as both the comment record and the industry’s historical record show, to the extent that challenges may arise in connection with a manager transition, regulated funds and their managers generally are well-positioned to respond, due to their structure, regulation, and established industry practices.\(^\text{114}\)

\(^\text{110}\) The 2015 ICI Letter (supra note 4) stated on p. 43: “If these activities in fact are the cause of the FSB’s concern, we respectfully suggest that the FSB should be looking at these activities broadly across financial institutions, and not through an entity-based methodology focused only on the largest asset managers. As we and other stakeholders repeatedly have emphasized, a market-wide or activity-based review is a more appropriate way to identify and address any areas of undue risk.” We appreciate that the FSB subsequently did decide to conduct an activity-based review of the asset management sector, which led to the current consultation. To follow up on concerns about “ancillary services,” however, a broader scope is required so as to capture the universe of service providers engaged in the activities in question.

\(^\text{111}\) Consultation at 31.

\(^\text{112}\) Id.

\(^\text{113}\) See, e.g., 2nd NBNI G-SIFI Consultation, supra note 27, at 49.

\(^\text{114}\) The widespread use of external custodians to hold client assets is but one example. In its second NBNI G-SIFI consultation, the FSB recognized that “[a]sset managers generally use third-party custodians to hold investor assets, as required by regulation [such as in the case of regulated funds] or as a best practice.” Id. at 47.
To its credit, the FSB acknowledges certain regulatory tools and market practices that are currently in place. While very important, the FSB’s consideration of risk “mitigants” does not “cure” the problems we see with the FSB’s continuing habit of conjecturing about the nature and severity of the risks at issue.

B. ICI Supports the FSB’s Proposed Policy Recommendation, Subject to Modifications

The FSB concludes that there are residual risks associated with operational risk and challenges in transferring investment mandates or client accounts, and offers the following policy recommendation to address them:

Authorities should have requirements or guidance for asset managers that are large, complex, and/or provide critical services to have comprehensive and robust risk management frameworks and practices, especially with regards to business continuity plans and transition plans, to enable orderly transfer of their clients’ accounts and investment mandates in stressed conditions.

As discussed above, ICI takes issue with the premises underlying the FSB’s policy recommendation. Nevertheless, we agree that there could be benefits to investors and the broader marketplace from instituting regulatory requirements or guidance that encourage asset managers (including managers of regulated funds) to take reasonable steps—proportionate to their business operations and actual risks presented—to plan in advance how they will respond to potential business interruptions. Further, some advance consideration of possible transition issues also seems appropriate. Any such requirements or guidance should have a principles-based design, in order to permit managers to tailor their plans to the risks associated with their particular operations.

We have two additional comments on the proposed policy recommendation. First, we believe that its narrow focus on asset managers that are large, complex, and/or provide critical services is misplaced. If business continuity planning is good for investors, that is so regardless of the size or complexity of, or particular services offered.

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115 Consultation at 30. As noted above, in the US, the SEC has proposed new requirements for registered investment advisers to have written business continuity and transition plans. *See supra* note 102.

116 Consultation at 31.

by, the manager.\footnote{As noted above, any such requirements or guidance should be proportionate and principles-based.} Moreover, as ICI and other commenters have discussed in previous letters, size is not an indication of risk,\footnote{See 2014 ICI Letter and 2015 ICI Letter, \textit{supra} note 4.} and—as the FSB previously recognized—asset managers are highly substitutable.\footnote{For these and other reasons, we strongly disagree with the suggestion in footnote 56 of the consultation that “[t]he relevant national/regional authority . . . should define asset managers that are ‘large, complex, and/or provide critical services’” and that as a “simple point of reference, authorities could, for example, focus on size indicators for asset managers (in terms of AUM and their own size) as well as the aggregate OTC derivative transactions relative to the global total.” See 2015 ICI Letter, \textit{supra} note 4.}

Second, consistent with the FSB’s apparent intent, we agree that capital markets authorities should handle any follow-up work in this area. We note that the proposed recommendation currently does not contemplate a role for IOSCO, but we think that it should, given that the subject matter of the recommendation appears to fall squarely within IOSCO’s expertise. IOSCO’s involvement in a coordinating capacity, for example, could be helpful in promoting a baseline of standards across jurisdictions.

Although not styled as a formal recommendation, the consultation also suggests that “[t]o further their understanding of the financial stability risks at stake,” the relevant authorities should have “access to aggregated data/information on the OTC derivatives positions of funds . . . (e.g., notional amount outstanding, gross mark-to-market) in order to understand the potential impact to the global financial system from operational risk and challenges associated with termination of derivatives contracts when transferring client accounts.”\footnote{Consultation at 31-32.} It states that “[w]hen client accounts (funds and SMAs) are transferred from one asset manager to another, the derivatives contracts associated with these accounts are typically terminated and replaced with new contracts.”\footnote{\textit{Id.} (footnote omitted).}

To the contrary, it is our understanding that, at least in the case of regulated funds, a change in managers normally would not result in the termination of managed funds’ OTC derivatives contracts. We addressed this issue with respect to regulated US funds in our March 2015 letter to FSOC which, for reasons discussed above, we appended to the 2015 ICI Letter.\footnote{Appendix B to 2015 ICI Letter, \textit{supra} note 32, at 77.} It is disappointing to find no indication that the FSB took notice of this pertinent information. To reiterate, in the case of regulated US funds, it is customary for a counterparty to require funds to accept termination rights granting the counterparty or clearing firm a right to terminate, accelerate and engage in close-out netting against the fund counterparty if the manager is no longer able to act for the fund (regardless of the reason for the manager’s inability to act). These provisions typically include reasonable cure periods (e.g., 30 days) under which the fund can appoint a new manager. Under Investment Company Act Rule 15a-4, a fund’s board can appoint a new manager.
expeditiously, if necessary. We understand that the process generally would be similar for UCITS.

V. Securities Lending

A. As in Other Areas, the FSB Has Not Justified Its Contentions Regarding Financial Stability Risks from Providing Indemnification to Securities Lenders

The consultation’s discussion of securities lending activities begins broadly but quickly zeroes in on a narrow aspect: indemnifications provided by asset managers acting as lending agents. While admitting that “very few asset managers seem to be currently involved in providing such indemnifications,” the FSB views this activity as a “potential vulnerability that may have systemic implications . . . especially if done on a large scale.”

The consultation states:

If most securities lenders would not engage in securities lending absent such a guarantee, an impairment of the value of this indemnification commitment could lead lenders to withdraw suddenly from the market, forcing securities borrowers to exit their positions or find another lender of securities, possibly affecting asset prices and market liquidity. A defaulted indemnification commitment could lead to widespread concern about the ability of other agent lenders to meet their indemnification commitments.

This is not the first time the FSB has flagged asset managers’ provision of indemnification for securities loans as a potential source of financial stability risk—without substantiation. For example, the FSB’s 2015 NBNI G-SIFI consultation stated:

An asset manager may also act as an agent lender for securities lending transactions and in that role may provide indemnification against a borrower’s failure to return lent securities. If the failure of the asset manager to make payments on this indemnification could affect global financial stability, it also merits consideration.

In the regulated US fund context, any required payment by the lending agent actually would be quite limited. This is because the indemnification does not cover losses on investments of cash collateral (a risk borne solely by the lending funds).

124 Consultation at 33.
125 Id. Notwithstanding the small number of asset managers engaged in this activity, the FSB asserts that “the scale of exposures can be as large as that of some global systemically important banks (G-SIBs).” Id.
126 2nd NBNI G-SIFI Consultation, supra note 27, at 53.
127 The FSB and others have expressed concerns about risks associated with investment of cash collateral involved in securities lending. Conservative investment of cash collateral, such as is required for regulated US funds, can mitigate such risks. Consistent with SEC guidance, regulated US funds invest cash collateral only in highly conservative and liquid investments, such as money market funds.
does it typically cover the full amount of the securities on loan. Instead, it covers only a “collateral shortfall,” i.e., if the value of the collateral is insufficient to replace lent securities, the difference in value (delta). The indemnification would be triggered only if: (1) the borrower fails to return the lent securities; and (2) the value of the collateral is insufficient to replace those securities—circumstances that are unlikely to materialize.

It is our understanding that defaults requiring indemnification generally are rare. Moreover, even if a default were to occur, the amount of the indemnified loss (the “shortfall”) is likely to be only a small fraction of the value of the securities the borrower failed to return. The main reason is that securities loans typically are over-collateralized and required to be marked-to-market daily. The upshot of all this is that the potential that a lending agent—whether an asset manager or not—will suffer significant losses on indemnifications is remote.

B. ICI Supports Targeted Collection of Securities Lending Data to Inform Authorities’ Understanding

The FSB asserts that “[t]he timely adoption of FSB policy recommendations should address most of the potential residual risks to financial stability associated with securities lending activities of asset managers and funds.”128 But it claims that a gap will remain with respect to the treatment of agent lender indemnities and therefore recommends that authorities “monitor indemnifications provided by agent lenders/asset managers to clients in relation to their securities lending activities.”129 Stating that authorities currently lack sufficient information/data to “monitor trends and potential risks to financial stability”130 associated with asset managers’ indemnification of lending clients, the FSB suggests that authorities collect relevant data/information. A possible way to facilitate such data collection, the FSB indicates, would be for the FSB, through its Data Experts Group, to consider adding relevant data elements to the proposed standards for global securities financing data collection and aggregation.

ICI (through its international arm, ICI Global) previously expressed general support for the FSB’s global securities financing data collection and aggregation effort.131 We noted that data collection is an area in which we favor a globally harmonized

128 Consultation at 34. The FSB points to its proposed standards and processes for global securities financing data collection and aggregation, proposed regulatory framework for haircuts on non-centrally cleared securities financing transactions, and proposed minimum standards for cash collateral reinvestment. 129 Id. 130 Here again, the FSB’s reference to financial stability risks seems gratuitous. 131 See Letter from Dan Waters, Managing Director, ICI Global, to the Secretariat of the FSB, dated February 12, 2015, available at https://www.iciglobal.org/pdf/28734.pdf. We note that national authorities already are working to collect additional data. See, e.g., supra note 52 (regarding the SEC’s proposed enhanced data collection initiative in the US); Securities Financing Transactions Regulation (EU) 2015/2365, available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015R2365 (EU legislation establishing new recordkeeping and reporting requirements for securities financing transactions).
approach through which regulators could gain access to consistent and comprehensive data without imposing duplicative or incompatible reporting obligations on market participants. At the same time, we highlighted our serious concerns with certain aspects of the proposal, including its overly ambitious scope and inadequate consideration of the costs imposed on reporting entities (costs which, in the case of regulated funds, are borne by investors) relative to anticipated benefits. These same concerns would apply to any potential expansion of the proposed data collection effort to include information/data about asset managers’ indemnification of securities lending clients.

As regulators consider the parameters of appropriately targeted data concerning indemnification, we suggest that to get a balanced picture, along with information about the value of loans receiving indemnification regulators should collect information about the value of collateral held against those loans. Alternatively, to gain more understanding of the likelihood that such indemnities would affect the lending agent’s balance sheet, regulators could collect data about the value paid to clients when an indemnification is triggered.

VI. Suggestions for Next Steps

In this section, we discuss what the FSB’s next steps should be—both with respect to its work on asset management and more generally. Our recommendations address: (1) the process by which the FSB conducts its work; (2) the appropriate role for IOSCO going forward; and (3) the FSB’s announced plan to finalize its NBNI G-SIFI assessment methodologies.

A. The FSB Should Hold Itself to Higher Standards of Analytical and Procedural Rigor

In the course of our ongoing engagement with the FSB on asset management issues, ICI and ICI Global have highlighted significant concerns with how the FSB conducts its work. Here, we elaborate on why this matters. We then suggest how the FSB could improve its processes.

As a general matter, we believe that multilateral organizations like the FSB can serve very important policy purposes, and the way in which they conduct their work should be calculated to yield results that are as useful as possible. Flawed processes have the potential to lead to bad policy outcomes—for example, the imposition of ill-suited, harmful and/or costly regulatory requirements that lack a sound, evidence-driven policy basis.132 Bad policy outcomes, in turn, may have harmful implications for the financing of the economy, for growth, for markets, and for the lives of real people whose financial wellbeing is at stake—hardly the results a “financial stability” policy body should be seeking.

132 As we discussed in our letters on the FSB’s NBNI G-SIFI consultations, these unfortunate consequences would befall any US mutual fund designated as a G-SIFI. See 2014 ICI Letter, supra note 4, at 29-34 and Appendix G; 2015 ICI Letter, supra note 4, at 40-41.
The processes the FSB follows in conducting its work also have important implications for the FSB’s efforts to promote broad implementation of harmonized regulatory standards. In particular, a lack of analytical rigor or due process has the potential to disqualify the FSB’s work product from serving as a basis for regulatory action to implement FSB recommendations in individual jurisdictions. In the US, for example, the law establishes certain predicates that financial regulators must observe in developing new regulations. The US Administrative Procedure Act (APA) requires that US regulators examine relevant data and articulate a satisfactory basis for their actions, including a rational connection between the facts found and regulatory choices made. Conclusory statements and unsupported conjectures are not sufficient, nor may regulators ignore contradictory evidence in the record before them. Regulators may not impose substantial new burdens on regulated entities to guard against illusory or wholly improbable risks.

US regulators have no authority to adopt rules—including those designed to implement policies developed by multilateral bodies such as the FSB—that are inconsistent with applicable administrative law substantive or procedural standards. This is true irrespective of any political mandate to which the multilateral body may lay claim (e.g., the decisions of G-20 finance ministers). Likewise, it makes no difference whether or not senior US regulatory officials were themselves involved in developing those policies. Moreover, US law provides for judicial challenges where regulators fail to meet applicable legal standards.

Understanding the nature, and taking better account of, these standards in the course of its work would serve the FSB well as it strives to promote the implementation of agreed policies. Proposals that suffer from the defects we identified in Section II of

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133 Public notice and the opportunity for public comment are cornerstones of the US APA.

134 See, e.g., MetLife, Inc. v. Financial Stability Oversight Council, C.A. No. 15-0045 (D.D.C. Mar. 30, 2016). In MetLife, the court rescinded the FSOC’s designation of MetLife, Inc. (identified by the FSB, in consultation with the International Association of Insurance Supervisors and national authorities, as a global systemically important insurer in July 2013) as a systemically important financial institution under US law. The court found that FSOC violated its own analytical framework for assessing nonbank financial companies for possible SIFI designation by (1) failing to assess MetLife’s vulnerability to material financial distress, and (2) assuming that MetLife’s material financial distress would inflict significant damage on the US economy. The court also found that FSOC failed to consider the costs of designation to MetLife, in violation of recent US Supreme Court precedent. FSOC is appealing the court’s decision.

135 Although the FSB has no legal authority to compel member jurisdictions to implement its recommendations, we note that under the FSB’s Charter, member jurisdictions make certain commitments, including to implement international financial standards. We also are aware of FSB Chairman Mark Carney’s exhortation that “full, consistent and prompt” implementation of the standards developed under the FSB “remains essential in order to maintain an open and resilient global financial system.” Letter from Mark Carney, Chairman, FSB to G20 Finance Ministers and Central Bank Governors, dated 9 April 2015 (“Carney Letter”), available at http://www.financialstabilityboard.org/wp-content/uploads/FSB-Chairs-letter-to-G20-April-2015.pdf, at 3.
this letter—such as relying on academic theories and unsupported conjectures while ignoring empirical data and actual experience that do not support those theories and conjectures—simply cannot serve as a valid predicate for regulatory action in the United States.\textsuperscript{136}

More broadly, the importance and potentially far-reaching impact of the FSB’s work—whether on asset management or in other areas—provide ample reason for the FSB to hold itself to high standards of procedural rigor. Development of policy recommendations should occur through a process that is thorough, objective, fair, and transparent, and that provides ample opportunities for public input and dialogue. To these ends, we urge the FSB to consider formal adoption of more exacting principles and standards to govern and enhance its processes.

The FSB, for example, should consider adopting requirements addressing the need to (1) examine all of the relevant evidence,\textsuperscript{137} (2) define clearly the problem to be addressed, and (3) provide reasoned explanations, supported by a balanced reading of evidence in the record, for any recommended policy approaches. The FSB also should consider more robust rules designed to bring greater transparency to the input that shapes FSB policy initiatives and related deliberations, some of which currently escapes public scrutiny.\textsuperscript{138} Efforts along these lines could include, for example, holding public forums or roundtables in various geographic locations and encourage participation by a broad cross-section of stakeholders from different countries and regions in policy discussions.\textsuperscript{139} Requirements and initiatives like those described above would enhance the quality of regulatory policymaking and improve prospects for widespread implementation of FSB standards or policy recommendations.


\textsuperscript{137} We suggest that, as part of such a requirement, the FSB should be obligated to respond to relevant commentary it has received before finalizing its proposals.

\textsuperscript{138} For example, upon request, the FSB will hold comments on its consultations in confidence, raising the possibility that the process may be heavily influenced by submissions that are kept from public view. In addition, of particular concern to US asset managers, there is no public information about what position(s) US regulators participating in the process have advocated in the course of the FSB’s work on asset management.

\textsuperscript{139} As one possible model to consider, the US Financial Crimes Enforcement Network (“FinCEN”), an office within the US Department of the Treasury, in 2012 held public hearings in five US cities on proposed customer due diligence requirements for financial institutions. Interested parties were invited to attend and/or provide oral comments (subject to space considerations) or to provide written comments. FinCEN published the agenda on its website in advance (for the first hearing in the series); made a general summary of the discussion available to the public afterwards; and, in the case of the first hearing in the series, webcast the proceedings and made a recorded version available online afterwards. See, e.g., Summary of Public Hearing: Advance Notice of Proposed Rulemaking on Customer Due Diligence (July 31, 2012), available at \url{http://www.regulations.gov/#/documentDetail;D=FINCEN-2012-0001-0094}. 
B. The FSB Should Delegate Further Work on Asset Management Activities to IOSCO

In this consultation, the FSB took a step in the right direction by assigning a significant role to capital markets regulators (i.e., IOSCO and other “authorities”) to implement the FSB’s proposed policy recommendations. The consultation indicates, however, that “[a]fter considering responses on this document, the FSB intends to finalise the recommendations by the end of 2016, some of which will then be operationalised by IOSCO and the relevant FSB working groups.” It further states that “[t]he FSB will regularly review progress in the operationalisation of the recommendations.”

Given our objections to the FSB’s stated premise for some of its policy recommendations, and because the recommendations address matters that are squarely “in the wheelhouse” of capital markets regulators, we believe IOSCO should take charge of further work on asset management activities at the global level. We recommend, therefore, that the FSB delegate to IOSCO the responsibility for finalizing the policy recommendations (as appropriate after IOSCO gives due consideration to public comments) and monitoring progress in their operationalization.

But regardless of whether IOSCO takes over the reins or not, in its future actions, IOSCO, too, should take account of our comments above regarding the importance of operating under high standards of procedural rigor. If adopted, our recommendations, which echo the statements of former IOSCO Chairman Greg Medcraft, would benefit IOSCO and all of its constituencies, including investors.

C. Any Final NBNI G-SIFI Assessment Methodologies Should Exclude Regulated Funds and Their Managers

The consultation indicates that the FSB intends to “revisit[] the scope of NBNI G-SIFI assessment methodologies,” jointly with IOSCO, after the recommendations in this consultation are finalized. It states that for asset management, the focus “will be on any residual entity-based sources of systemic risk from distress or disorderly failure that cannot be effectively addressed by market-wide activities-based policies.”

Based on the extensive record before the FSB, including our comments in this letter and in our previous letters on the proposed assessment methodologies, the FSB has not established any basis for including regulated funds and their managers within the scope of any final NBNI G-SIFI assessment methodologies. Should the FSB continue to pursue the project, it should base any final methodologies not on theoretical concerns but

140 Consultation at 2.
141 See supra note 7 and accompanying text.
142 Id. (footnote omitted).
on strong evidence and real-world experience. We believe doing so will lead the FSB to conclude—at a minimum—that there is no basis for including regulated funds and their managers within the scope of such methodologies, and we recommend that the FSB expressly exclude them.\textsuperscript{143}

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We appreciate the opportunity to comment on this consultation. If you have any questions regarding our comments or would like additional information, please contact me at (202) 326-5901 or paul.stevens@ici.org, Brian Reid, ICI Chief Economist, at (202) 326-5917 or reid@ici.org, or Dan Waters, Managing Director, ICI Global, at (011) 44-203-009-3101 or dan.waters@iciglobal.org.

Sincerely,

/s/ Paul Schott Stevens

Paul Schott Stevens
President & CEO
Investment Company Institute

Appendix

\textsuperscript{143} See supra note 9.
Testing the Hypotheses of Stability Risks in Open-End Funds: Empirical Evidence from US, European and Canadian Funds

Policymakers and academics have advanced a variety of hypotheses for why there could be financial stability risks associated with redemptions from mutual funds, particularly funds investing in less liquid asset classes. One hypothesis attributes these risks to a “first-mover advantage”—the idea that fund investors may have unique incentives to redeem ahead of other investors to avoid possible future transaction costs or a possible future decrease in portfolio liquidity. Another hypothesis anticipates that funds may need to sell assets more quickly than expected in a stressed or illiquid market, particularly after an extended period of “highly accommodative monetary policy,” putting additional downward pressure on asset prices and leading to additional outflows. Yet another hypothesis envisions increased, possibly panic-driven, selling by fund investors in response to a triggering event (e.g., sudden or unexpected closure of a single fund) that then transmits stress to additional funds and the broader market.

These hypotheses share four testable predictions:

- **Prediction 1**: Mutual fund investors will redeem heavily across most funds within the affected asset class.

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1 This appendix is an expanded version of an appendix in ICI’s submission to the US Financial Stability Oversight Council (“FSOC”) on July 18, 2016. The analysis in the current appendix has been broadened to include data about European and Canadian funds. We also have included additional data for US high-yield funds groupings, shareholder redemptions and purchases by fund performance in November and December 2015 (Figure 4) and grouping fund purchases and sales of portfolio securities by fund performance in November and December (Figure 7). In Figures 8 and 9, we have expanded the analysis to include US high-yield structured bond products in market trading volume data, and US floating-rate bond fund purchases and sales of corporate bonds (Figure 9). The additional US data provide a more complete picture of how investors, fund managers, and markets behaved during the decline in the US high-yield market in 2015 and early 2016.


3 Id. at note 13 and accompanying text (citing Paul Hanouna, Jon Novak, Tim Riley and Christof Stahel, Liquidity and Flows of U.S. Mutual Funds, US Securities and Exchange Commission Division of Economic and Risk Analysis white paper (Sept. 2015)).


5 See FSOC Statement at 5.

6 Id. at 8.
• **Prediction 2**: During this period of heavy redemptions, investors will refrain from purchasing new shares of funds within the asset class, creating a one-way market of sellers of fund shares.

• **Prediction 3**: Fund managers as a group will be forced by the heavy redemptions to sell portfolio assets and will not be in a position to buy assets, with the result that managers will be on one side of the trade in a down market.

• **Prediction 4**: Other investors will not enter the market to buy the portfolio assets that fund managers are trying to sell.⁷

In Section I of this appendix, we test these four predictions using publicly available data. We begin with some brief background on the US high-yield bond market and a description of the state of that market prior to November 2015. Then, to test the predictions, we look at the experience of US high-yield bond mutual funds from early 2014 to early 2016, with particular attention to the period from November 2015 to February 2016, a time of significant stress in the high-yield bond market.⁸ This period included the December 2015 announcement by Third Avenue Focused Credit Fund (FCF), a US high-yield bond mutual fund, that it had suspended investor redemption rights. We provide empirical data regarding the behavior of investors in US high-yield bond funds, the managers of those funds, and other participants in the high-yield market.

Contrary to Predictions 1-4 above, the data show that investors were purchasing (as well as selling) shares in US high-yield bond funds during this period of market stress. Similarly, fund managers and other investors not only sold but also purchased high-yield bonds. The net result was that trading volumes of high-yield bonds actually *rose* during December 2015—when the high-yield bond market was under the greatest degree of stress.⁹

In Sections II and III, we provide data on the experience of European and Canadian funds during recent periods of market stress. The data we provide illustrate that the behavior of fund investors in these two markets is quite similar to investor behavior in the US. This is significant for two reasons.

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⁷ *Id. at 9* (citing Fang Cai, Song Han, Dan Li, and Yi Li, *Institutional Herding and Its Price Impact: Evidence from the Corporate Bond Market*, Federal Reserve Working Paper (Mar. 1, 2016)).

⁸ ICI data on high-yield bond funds includes two types of bond funds: (1) funds that primarily invest in high-yield fixed-rate bonds, and (2) high-yield floating-rate funds that largely invest in high-yield floating-rate loans and other floating-rate debt securities. In May 2014, for example, $293 billion was held in funds that primarily invest in high-yield fixed-rate bonds, and $147 billion was held in high-yield floating-rate funds (for a total of $440 billion in high-yield bond funds).

⁹ Some may find it counterintuitive that trading volumes in the high-yield bond market rose during a time of severe market stress, expecting instead that trading would freeze up. Mortgage-backed bonds collateralized with US home mortgages, for example, often are identified as an instrument that ceased to trade during the financial crisis. In the case of mortgage-backed bonds, however, investors were unable to value the pool of mortgages backing many of these bonds. The opacity of the bonds obscured their risk features and even the nature of bondholders’ claims on the underlying pool of loans. In contrast, a high-yield bond is issued by a single company, which makes it easier for investors or analysts to evaluate the likelihood of default.
First, financial markets in the United States, Europe and Canada all have experienced sizeable shocks since the global financial crisis. Second, the funds in these three jurisdictions hold nearly 85 percent of the global regulated open-end fund assets.

We conclude our discussion by urging policymakers and academics to reexamine their hypotheses, in accordance with these findings.

I. Test of the Predictions in the US High-Yield Bond Market

A. An Initial Word on the US High-Yield Bond Market

The US high-yield bond market is generally considered less liquid than US Treasury and agency bond markets.\textsuperscript{10} Companies that issue below investment grade bonds have weaker balance sheets and, during periods of slower economic growth, are more likely to default on their bonds than are investment grade issuers. For example, more than 10 percent of high-yield debt in the United States is issued by oil and gas producers and distributors, firms that are vulnerable to fluctuations in oil and gas prices. As a result, yields on below–investment grade bonds are more volatile, creating larger potential capital gains and losses for investors relative to investment grade bonds. For this reason, investors in high-yield bonds, including those who invest through funds, can and do experience sizeable monthly fluctuations in total returns (Figure 1).

\textsuperscript{10}See e.g., FSOC Statement, supra note 2, at note 21 (citing Barclays, Liquidity Cost Scores Report (Mar. 2016)).
Figure 1
Monthly Total Returns of US High-Yield Bonds* Are Volatile
Percent; monthly, January 2000–March 2016

*Index represents the BofA Merrill Lynch US High Yield Total Return Index Value®, retrieved from FRED, Federal Reserve Bank of St. Louis.

Note: The variation (standard deviation) in monthly returns for US high-yield bonds was 2.81 percent over the given period. Investment-grade bonds experienced less volatility, with a variation of 1.51 percent over the same period.

Source: Investment Company Institute tabulations of Federal Reserve Bank of St. Louis data

B. State of the US High-Yield Bond Market Prior to November 2015

Corporate revenues and profits rose in the aftermath of the global financial crisis. As expected, default rates on below-investment grade bonds declined, bond prices rose, and yields fell sharply. By the end of June 2014, effective yields on high-yield bonds had fallen to 5.28 percent, nearly an 18 percentage point drop from their peak in late 2008.11 Yields on debt rated CCC or below had declined 37 percentage points to 8.0 percent.12

The falling yields and rising prices of bonds produced substantial capital gains for investors and attracted investors to high-yield bond funds. Beginning in early 2009, high-yield bond funds began to experience net inflows as investor purchases outpaced investor redemptions (Figure 2). From January

11 BofA Merrill Lynch, BofA Merrill Lynch US High Yield Effective Yield®, retrieved from FRED, Federal Reserve Bank of St. Louis, at https://research.stlouisfed.org/fred2/series/BAMLIH0A0HYM2FY.

12 BofA Merrill Lynch, BofA Merrill Lynch US High Yield CCC or Below Effective Yield®, retrieved from FRED, Federal Reserve Bank of St. Louis, at https://research.stlouisfed.org/fred2/series/BAMLIH0A3HYCEY.
2009 through May 2014, high-yield bond funds received $162 billion in net inflows, and assets in these funds reached a record $440 billion by the end of May 2014.\(^{13}\)

Beginning in mid-2014, yields on high-yield bonds began to rise on expectations that falling oil prices, slower global growth, and a rising dollar would slow issuers’ revenue and profit growth and increase the default rate on these bonds. Effective yields on high-yield debt rose more than 2 percentage points during the second half of 2014, reaching 7.28 percent by mid-December. Bond yields declined in the first part of 2015, but resumed their rise during the summer and early fall as investors became increasingly concerned that slower global economic growth could lead to higher default rates.

From June 2014 through October 2015, high-yield bond funds in the aggregate fluctuated between modest net outflows (i.e., redemptions exceeded purchases) and weak net inflows (i.e., purchases exceeded redemptions).\(^{14}\) Averaged over the period, high-yield bond funds had net outflows of about

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\(^{13}\) Out of concern about the volume of these flows, some in the policy community flagged the growth of high-yield bond funds as a potential source of risk for the economy, based on fears that when yields rose and these funds suffered losses, investors would react by quickly redeeming their fund shares. See, e.g., International Monetary Fund, *Global Financial Stability Report*, Ch. 1: Improving the Balance Between Financial and Economic Risk Taking (Oct. 2014).

\(^{14}\) We note that net outflows were elevated in December 2014. One explanation for this may be that investors were redeeming shares to realize losses under US tax law.
1 percent of assets per month. The share of outstanding high-yield bonds held by high-yield bond funds declined slightly, from 21.3 percent in June 2014 to 19.9 percent in October 2015.\textsuperscript{15}

C. Test of Predictions 1 and 2: Fund Investor Behavior from November 2015 to February 2016

All of the hypotheses of investor behavior that regulators and academics have put forth predict that fund investors will redeem heavily from an asset class during a period of market stress affecting those assets (Prediction 1). According to these hypotheses, fund investors may redeem to avoid losses or transaction costs or because they fear a contagion. Similarly, during this period of heavy redemptions, investors will refrain from purchasing new shares of funds within the asset class (Prediction 2).

The fourth quarter of 2015 provided an opportunity to test these predictions. Sentiment among investors in the high-yield bond market had turned noticeably more negative in November 2015. Declining oil and commodity prices along with further signs of slower growth in Brazil, China, and other emerging market economies increased investor concerns about corporate profits and revenues. Yields on below-investment grade debt rose sharply. In early November, average yields on high-yield bonds were about 7.5 percent.\textsuperscript{16} Yields increased to 8 percent by the beginning of December, and to nearly 8.5 percent by December 9. For bonds rated CCC or below, yields rose from 14 percent in early November to 17 percent by December 9.\textsuperscript{17}

Net outflows rose in early December. For the week ending December 2, 2015, outflows totaled $850 million, or about 0.2 percent of these funds’ assets. The next week, ending December 9, net outflows increased to $4.6 billion, or 1.3 percent of fund assets (see Figure 3).

\textsuperscript{15} We use as the measure of outstanding high-yield bonds the market value of the bonds in the BofA Merrill Lynch US High Yield Index. Our calculation of high-yield bond funds’ market share excludes high-yield floating-rate funds. These funds predominantly hold bank loans and are not included in the BofA Merrill Lynch US High Yield Index.

\textsuperscript{16} See supra note 11.

\textsuperscript{17} See supra note 12.
Figure 3
US High-Yield Bond Mutual Fund Net Outflows Deepened, but Quickly Tapered Off In December 2015

Millions of US dollars; weekly, November 4, 2015–March 30, 2016

Source: Investment Company Institute

Late on December 9 came the announcement that FCF, a US high-yield bond fund, had suspended investor redemption rights and would liquidate.\(^\text{18}\) News services carried the story of this very unusual event on December 10,\(^\text{19}\) and it made the front page in some major newspapers on December 11.\(^\text{20}\)

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\(^{18}\) US mutual funds routinely liquidate for a variety of reasons (e.g., investment strategy no longer in favor, insufficient interest from investors, departure of portfolio manager), but they very rarely suspend redemptions. Rather, consistent with their obligations under the Investment Company Act of 1940 and applicable state law, a fund announces its plan to liquidate on a certain date, and investors are able to redeem some or all of their shares in the fund at any time before the liquidation date. Only six times in the history of the modern US mutual fund industry has the US SEC issued orders permitting one or more long-term mutual funds to suspend redemptions. This includes FCF’s suspension of redemptions in December 2015. See Letter to Brent J. Fields, Secretary, SEC, from David W. Blass, General Counsel, ICI, dated January 13, 2016 at 46-47 (discussing the SEC’s authority in this area) and Appendix B (summarizing each of the six instances). The letter is available at [https://www.ici.org/pdf/16_ici_sec_lrm_rule_comment.pdf](https://www.ici.org/pdf/16_ici_sec_lrm_rule_comment.pdf).


Some market commentators anticipated significant fallout from the fund’s closure during a period of heightened pressure in the high-yield bond market.\textsuperscript{21}

FCF’s problems did not arise suddenly. Over the prior 18 months, the fund’s cumulative return was \textit{minus 34 percent}, and the fund experienced outflows, according to Morningstar, during much of this period. In four of those months, the fund had outflows exceeding 10 percent of fund assets \textit{in each month}. By November 2015, FCF’s assets were $942 million, down from $3.5 billion at its peak (a decrease in assets of 73 percent).\textsuperscript{22}

Certainly, all the elements for the type of fund investor-driven contagion that academics and regulators have hypothesized were in place:

- The US high-yield bond market was under stress;
- US high-yield bond funds were experiencing moderate outflows even prior to FCF’s announcement;
- FCF suspended investor redemptions—a rare occurrence for a US mutual fund;\textsuperscript{23} and
- News reports were predicting further fallout in the US high-yield bond market.

According to Predictions 1 and 2, net outflows from high-yield bond funds should have grown substantially, amplifying pressure in the high-yield bond market. As it happens, in the week ending December 16, net outflows picked up a bit as investors redeemed, on net, $5.8 billion or 1.7 percent of high-yield bond fund assets. But despite continued pressures in the US high-yield market, net outflows from high-yield bond funds quickly tapered off in the second half of the month, totaling $4.2 billion or 1.2 percent of fund assets over this two-week period (see Figure 3). Net outflows from US high-yield bond funds remained subdued through February 2016, averaging less than $1 billion a week.

One reason for the slowdown in net outflows is that, while some high-yield bond fund investors were redeeming their shares in December, other investors were purchasing shares of high-yield bond funds to such an extent that the total dollar volume of investor purchases of high-yield bond funds increased (see


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\textsuperscript{23} See, \textit{e.g.}, SEC, \textit{Open-End Fund Liquidity Risk Management Programs}, 80 Fed. Reg. 62274, 62283 at n.82 (Oct. 15, 2015) (“The Commission has rarely issued orders permitting the suspension of redemptions for periods of restricted trading or emergency circumstances but has done so on a few occasions.”); see also \textit{supra} note 18.}
Figure 2). Some of these purchases may be attributable to investor flows from defined contribution plans. But such plans account for only a small percentage of the assets in high-yield funds, and accordingly other investors were an important source of fund share purchases.24

Investors weren’t just buying shares of a few high-performing funds. In December 2015, 98 percent of US high-yield bond funds received new investor purchases. As Figure 4 shows, the purchases (solid blue

**Figure 4**
US High-Yield Bond Mutual Funds Had Investor Purchases and Redemptions in December 2015 Regardless of Performance

*Gross purchases and redemptions as a percentage of assets*, by December fund return

<table>
<thead>
<tr>
<th>Monthly return in December (percentage points)</th>
<th>12</th>
<th>15</th>
<th>42</th>
<th>40</th>
<th>39</th>
<th>30</th>
<th>35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of funds:</td>
<td>12</td>
<td>15</td>
<td>42</td>
<td>40</td>
<td>39</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>Assets* (Billions of US dollars):</td>
<td>$17.4</td>
<td>$10.2</td>
<td>$91.6</td>
<td>$40.8</td>
<td>$69.1</td>
<td>$71.8</td>
<td>$34.3</td>
</tr>
</tbody>
</table>

*Gross purchases and redemptions as a percentage of assets*, by November fund return

<table>
<thead>
<tr>
<th>Monthly return in November (percentage points)</th>
<th>25</th>
<th>47</th>
<th>53</th>
<th>41</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of funds:</td>
<td>25</td>
<td>47</td>
<td>53</td>
<td>41</td>
<td>45</td>
</tr>
<tr>
<td>Assets* (Billions of US dollars):</td>
<td>$23.9</td>
<td>$85.1</td>
<td>$78.0</td>
<td>$99.6</td>
<td>$48.2</td>
</tr>
</tbody>
</table>

*As of November 30, 2015.*
Sources: Investment Company Institute and Morningstar

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24 Investors hold about 15 percent of US taxable bond fund assets through defined contribution plans. The share of US high-yield bond fund assets held through such plans is even less. Hence, flows from defined contribution plans typically account for a small share of US high-yield bond fund flows and assets.
bars), measured as a percentage of assets, were significant, even for those funds with the most negative returns (the horizontal axis).

Why is it that, contrary to Prediction 2, some investors were buying shares of high-yield bond funds—even as prices were falling and other investors were selling? One reason is that when bond prices fall, yields rise—compensating investors for the possibility of higher bond default rates. A related point is that if some investors sell into a down market—and help to drive bond prices below their fundamental value—investors who step in can reap the rewards when bond prices recover. Thus, investors may be attracted by depressed bond prices because of higher yields or the prospect of rising bond prices.

Irrespective of the reason, these facts—that investors increased their purchases of shares of high-yield bond funds during December 2015 and that net outflows tapered off—provide evidence that the hypotheses advanced by academics and regulators do not take into account an important component of investor behavior: that some investors step in to purchase fund shares even for funds investing in less liquid securities, and even in a highly stressed market. In effect, this two-way trading in fund shares disrupts the destabilizing spiral that the hypotheses predict.

US high-yield bond prices continued to fall in January and February. According to Prediction 1, investors should have redeemed heavily their fund shares to avoid possible future mutualized transaction costs. Instead, redemptions slowed in January and February, relative to December, near to their 7-year average (Figure 2). Investor purchases of high-yield bond fund shares dipped slightly in January but were still near their 7-year average.

**D. Test of Prediction 3: Fund Portfolio Manager Trading From November 2015 to February 2016**

According to the hypotheses advanced by regulators and academics, not only will fund investors make one-sided trades to get out of their funds, but fund managers will be forced into one side of the market, only selling portfolio assets (Prediction 3). These sales would then cause a negative feedback loop, pushing the prices of those assets lower, sparking further redemptions by fund investors, and prompting further sales of portfolio assets by fund managers. The FSB raises concerns that in the “changing market environment...open-end funds could have a greater impact on financial stability.”

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25 Some have argued that shareholders will redeem their fund shares to avoid future mutualized transaction costs, see supra note 2. If investors redeem out of funds to avoid future mutualized trading costs, however, they also forego future interest income. An investor who redeemed out of US high-yield bond funds in between December 2015 and February 2016 and moved the proceeds into a cash investment, such as a money market fund, would have foregone 60 to 80 basis points in interest income per month, based on prevailing yields on US high-yield bond funds and money market funds. A single month’s worth of foregone interest income would have exceeded the trading costs, even for the funds that had significant outflows.

26 FSB Consultation, supra note 4, at 11.
The data tell a different story. Contrary to Prediction 3, fund trading activity provides evidence that fund managers were both selling and buying portfolio assets—primarily corporate bonds—during December 2015 (Figure 5). Some funds had new cash to invest. About one-quarter of high-yield bond funds were in net inflow—meaning investors were buying more shares of these funds than they were selling (Figure 6). Even funds with modest net outflows would have had proceeds from maturing bonds and interest income to put to work in the market. As a result, 85 percent of high-yield bond fund managers were buying corporate bonds, including managers of funds that had some of the weakest performance in December 2015 (Figure 7).

Figure 5
US High-Yield Bond Mutual Fund Managers Continued to Buy Corporate Bonds Even During the 2015 Sell-Off
Billions of US dollars; monthly, January 2014–March 2016

<table>
<thead>
<tr>
<th>Corporate bond purchases</th>
<th>Corporate bond sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Average fund purchases: $13.8 billion
Average fund sales: $13.1 billion

*The shaded region represents November 2015 through February 2016.
Source: Investment Company Institute
Figure 6
Most US High-Yield Bond Mutual Funds Had Modest Net Outflows; More than One-Quarter Had Net Inflows in December 2015

Percentage of funds by net new cash flow, December 2015

<table>
<thead>
<tr>
<th>Net new cash flow as a percentage of previous-month total net assets</th>
<th>2.3</th>
<th>8.1</th>
<th>19.8</th>
<th>20.3</th>
<th>23.9</th>
<th>17.1</th>
<th>5.9</th>
<th>0.9</th>
<th>1.8</th>
<th>0.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; -20</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>10 to &gt; -20</td>
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<td>5 to &gt; -10</td>
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<td>2.5 to &gt; 5</td>
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<td>0 to &lt; 2.5</td>
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</tr>
</tbody>
</table>

Median percentage net flow: -2.6%
Asset-weighted average percentage net flow: -4.2%

Note: Data exclude mutual funds that invest in other mutual funds, funds specifically designed for frequent trading, funds without a full year of history, and any fund with a merger between November 1, 2015 and December 31, 2015. 

Source: Investment Company Institute
Figure 7
US High-Yield Bond Mutual Funds Both Purchased and Sold Corporate Bonds in December 2015 Regardless of Performance

**Purchases and sales of corporate bonds as a percentage of assets**, by December fund return

<table>
<thead>
<tr>
<th>Monthly return in December (percentage points)</th>
<th>Number of funds:</th>
<th>Assets (Billion of US dollars):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than -3.50</td>
<td>Corporate bond purchases</td>
<td>12</td>
</tr>
<tr>
<td>-3.50 to -3.01</td>
<td>Corporate bond sales</td>
<td>15</td>
</tr>
<tr>
<td>-3.00 to -2.51</td>
<td>6.6</td>
<td>42</td>
</tr>
<tr>
<td>-2.50 to -2.01</td>
<td>2.3</td>
<td>40</td>
</tr>
<tr>
<td>-2.00 to -1.51</td>
<td>2.8</td>
<td>39</td>
</tr>
<tr>
<td>-1.50 to -1.01</td>
<td>5.5</td>
<td>30</td>
</tr>
<tr>
<td>-1.00 or higher</td>
<td>5.1</td>
<td>35</td>
</tr>
</tbody>
</table>

**Purchases and sales of corporate bonds as a percentage of assets**, by November fund return

<table>
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<td>-2.50 to -2.01</td>
<td>Corporate bond sales</td>
<td>47</td>
</tr>
<tr>
<td>-2.00 to -1.51</td>
<td>7.7</td>
<td>53</td>
</tr>
<tr>
<td>-1.50 to -1.01</td>
<td>2.4</td>
<td>41</td>
</tr>
<tr>
<td>-1.00 or higher</td>
<td>4.7</td>
<td>45</td>
</tr>
</tbody>
</table>

*As of November 30, 2015.
Sources: Investment Company Institute and Morningstar
E. Test of Prediction 4: Other Investors Trading Behavior from November 2015 to February 2016

According to Prediction 4, other investors, including institutional investors, would not enter the market to buy the portfolio assets that fund managers were trying to sell. This prediction would suggest that overall trading volumes would decline as buyers failed to step into these markets during periods of stress and that bond funds’ share of the overall trading in the high-yield market would rise. Neither occurred.

As shown in Figure 8, high-yield bond trading volumes held up well in December 2015 (until the normal seasonal decline over the year-end holidays), particularly during the most stressed period in the first half of December when investors’ expectations of higher default rates were changing quickly and bond yields were rising. Trading of high-yield bonds actually rose slightly during the second week of December. In addition, during the period of greatest market pressure, secondary market trading of shares in high-yield bond exchange-traded funds (ETFs) rose, providing an additional means for market participants to buy and sell exposure to the high-yield bond market.

Trading volumes in the high-yield market during January and February 2016 were in line with their levels a year earlier. Bond prices did decline until late February, but there is nothing to suggest that this was anything more than normal market dynamics, in which buyers and sellers were repricing the default risk of these securities.

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*See supra note 7.*
Figure 8
US High-Yield Bond Trading Volume Rose in Mid-December 2015; ETFs Added Market Liquidity
Billions of US dollars; daily, November 2, 2015–March 31, 2016

Note: Data exclude high-yield bond ETFs designated as floating-rate. Data also exclude Veteran’s Day, the Friday after Thanksgiving, Christmas Eve, and New Year’s Eve.
Sources: Investment Company Institute, FINRA TRACE, and Bloomberg

The share of trading volume in the high-yield bond market attributable to high-yield bond funds also remained low (Figure 9).28 In December, bond funds’ buying and selling of corporate bonds accounted for 9.2 percent of the trading volume in the high-yield bond market, less than funds’ average share from July 2014 through March 2016. Furthermore, fund managers’ purchases and sales of high-yield bonds in January and February were nearly offsetting and below the average level of the previous two years (Figure 5), which kept bond funds’ share of the total market trading volumes during the first two months of 2016 also below their two-average average.

28 For a more complete picture of the US high-yield bond trading market, ICI has adjusted the data used in this figure when compared to previous versions. In the numerator, we have included the purchases and sales of corporate bonds by floating-rate bond mutual funds since these funds actively trade corporate bonds. In the denominator, we have included the trading volume of high-yield structured bond products from FINRA TRACE for which we previously did not have data.
II. Investors in European Funds React Similarly

Since the global financial crisis, investors in European bond funds have experienced several significant market stress events:

- **European debt crisis.** The European debt crisis in 2011 was the first significant market stress event affecting European bond funds in the post-financial crisis period. Several member states in the Eurozone had difficulty refinancing their debt in 2011, and bond yields rose sharply. Some banks within the region had heavy exposure to the debt of these countries, raising their cost of funding as some investors pulled away.

- **2013 “Taper Tantrum.”** Two years later, European debt markets were affected by the jump in US long-term interest rates. During the spring and summer of 2013, investors reacted to comments from US Federal Reserve Board officials that the US central bank likely would begin to taper its purchases of US government debt later in the year. US interest rates rose about 100 basis points from late spring through the fall. Rising US bond yields caused interest rates to rise
in other markets, including Europe. For example, the yield on the 10-year German bund rose 75 basis points.29

- **2015 sell-off in German Bund market.** In the spring of 2015, the yield on the 10-year German bund experienced a sudden reversal as the market quickly sold off during a 2-month period. This caused the yields on the bond to rise more than 75 basis points.

- **“Brexit” vote in 2016.** The fourth event was the aftermath of the UK vote in favor of leaving the European Union. The result went against pollsters’ and pundits’ expectations and shocked financial markets. The British pound fell to a 31-year low, and investors in stock markets worldwide lost more than $2 trillion on June 24—the worst overall single-day loss in global market history—and an additional $1 trillion on June 27.

According to Predictions 1 and 2, as set forth on page 1 above, investors should have significantly increased their redemptions and reduced their purchases of fund shares, causing large net outflows from funds. In each event, falling bond prices created the incentives hypothesized in these models to prompt investors to redeem shares.

Figure 10 highlights these four events using quarterly data for European bond funds.30 Contrary to these predictions, however, investor redemptions did not spike nor did investor purchases collapse, either when measured in Euros or as a percentage of bond fund assets. Net sales were either only slightly negative or positive in each of these events.

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29 The “Taper Tantrum” also was a market stress event for US funds, including US high yield bond funds. We provided data for US high yield bond funds as part of our 2015 submissions to FSOC and the FSB. See Letter to FSOC from Paul Schott Stevens, President & CEO, ICI, dated March 25, 2015, available at https://www.ici.org/pdf/15_Ici_fsoc_ltr.pdf; Letter to the FSB from Paul Schott Stevens, President & CEO, ICI, dated May 29, 2015, available at https://www.ici.org/pdf/15_ici_fsb_comment.pdf. As shown in Figure 2, above, shareholder redemptions rose in June 2013, but subsided in July. Investor purchases remained elevated throughout that summer.

30 Figure 11 represents European investors’ gross purchases and sales of UCITS. Figures 10, 12, and 13 represent data for UCITS domiciled in Europe, irrespective of whether or not the data is attributable to a European investor.
Figure 10
European-Domiciled Bond Funds: Investors Buy Funds Even in Periods of Market Stress
Total sales, total redemptions, and net sales; quarterly, March 2009–June 2016

Note: Countries include Bulgaria, Croatia, Czech Republic, Denmark, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.
Source: European Fund and Asset Management Association (EFAMA)

Monthly data for fixed-income funds and separately for high-yield and emerging market bond funds are available beginning in 2013 for funds that 50 international fund managers offer in Europe (Figure 11). These monthly data confirm the findings observed on a quarterly basis. Apart from a temporary modest rise in investor redemptions in June 2013, there was no sustained redemption pressure during any of these periods of market stress. Investors’ purchases of bond fund shares were near the average levels over this period, providing no evidence that investors stopped purchasing fund shares.

Monthly net sales also show a range of behavior across European bond funds (Figure 12). As is the case during periods of market stress in the US, some funds are in net inflow and some funds are in net

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31 Strategic Insight’s monthly data collection is available only from 2013 to the present. These data were provided for this appendix at ICI’s request.
outflow, with the overall fund flows (the solid orange line) to be quite modest. The range of behavior across funds indicates that funds experience a range of investor behavior and that investors do not move in one direction as the models predict.

In analyzing the market effects of “Brexit,” most of the focus has been on bond funds. We note, however, that the UK’s vote to leave the European Union sparked a large shock in the equity markets. In fact, global equity markets lost nearly $2 trillion US dollars in a single day, the largest one day global loss on record. Nonetheless, net outflows were modest from European-domiciled equity funds, as shown in Figure 13.

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32 In our 2015 submissions to FSOC and the FSB, ICI provided data to illustrate US high-yield bond fund investor behavior over the period 2000–2014. See supra note 29.
Figure 11
Sales and Redemptions of Cross-Border* Bond Funds Sold in Europe
Data reported by roughly 50 international fund managers, billions of US dollars;
monthly, January 2013–July 2016

\[
\text{All fixed income}
\]

- Gross investor purchases
- Gross investor redemptions

Average investor purchases: $28.0 billion
Average investor redemptions: $25.4 billion

\[
\text{High-yield fixed income}
\]

- Gross investor purchases
- Gross investor redemptions

Average investor purchases: $4.5 billion
Average investor redemptions: $4.1 billion

\[
\text{Emerging market fixed income}
\]

- Gross investor purchases
- Gross investor redemptions

Average investor purchases: $3.7 billion
Average investor redemptions: $3.4 billion

*Data exclude funds sold in only a single country.
Source: Strategic Insight
Figure 12
European-Domiciled Bond Mutual Funds Remain Stable Throughout Periods of Market Stress

Estimated net new cash flow as a percentage of total net assets in euros; monthly, January 2008–July 2016

All fixed income

High-yield fixed income

Emerging market fixed income

Note: Data exclude fund-months where a liquidation occurred, funds that invest primarily in other funds, funds not registered under the UCITS directive, and funds with average assets of less than €10 million over the January 2008–July 2016 period.

Source: Investment Company Institute tabulations of Morningstar Direct data
Figure 13
European-Domiciled European Equity Mutual Funds Remain Stable Throughout Periods of Market Stress

*Estimated net new cash flow as a percentage of total net assets in euros; monthly, January 2008–July 2016*

Note: Data exclude fund-months where a liquidation occurred, funds that invest primarily in other funds, funds not registered under the UCITS directive, and funds with average assets of less than €10 million over the January 2008–July 2016 period.
Source: Investment Company Institute tabulations of Morningstar Direct data

III. Investors in Canadian Funds React Similarly

Since the global financial crisis, investors in Canadian funds have experienced several periods of financial market stress. As with investors in US and European bond funds, investors in Canadian funds also experienced the effects of falling bond prices during the “Taper tantrum” in mid-2013. More recently, investors in Canadian global and high-yield bond funds were exposed to the stresses in the US high-yield bond market in 2015 and early 2016. Finally, from April 2015 to January 2016, Canadian stock prices fell more than 20 percent as global oil prices tumbled. The decline in Canadian stock prices overlapped significantly with period of falling high-yield bond prices in the US.

Contrary to Predictions 1 and 2 above, Canadian-domiciled bond funds did not experience a surge of redemptions or collapse of sales during these periods of market stress (Figure 14). Bond funds experienced net outflows in the summer of 2013, but had net inflows in 2015. Outflows from high-yield and global bond funds were very small in the summer of 2013—averaging only 0.1 percent of assets each month—and flows largely remained positive in 2015.
Notably, Canadian-domiciled stock funds continued to have net inflows in 2015 during the downturn in the Canadian stock market. Investors did not increase their redemptions or halt their purchases of stock fund shares, despite significant and sustained downturn in the Canadian stock market.
Figure 14
Sales and Redemptions of Canadian-Domiciled Mutual Funds
Billions of Canadian dollars; monthly, January 2008–July 2016

**Equity**

- Gross investor purchases
- Gross investor redemptions

**All bond**

- Gross investor purchases
- Gross investor redemptions

**Global and high-yield bond**

- Gross investor purchases
- Gross investor redemptions

Note: Data contains estimates from non-IFIC member companies.
Source: Investment Funds Institute of Canada (IFIC)
Conclusion

The empirical evidence presented in this appendix raises serious doubts about the validity of the current hypotheses underpinning models of behavior of open-end fund investors, fund managers, and other investors that academics and policymakers have put forth in recent years. The FSB acknowledges that the extent to which fund redemptions might contribute to potential financial stability risks depends on the behavior of various types of investors. This is an important observation, and one that the FSB and others have not sufficiently explored.

Economists seldom have the opportunity repeatedly to test the predictions of their hypotheses. Yet the market events described in this appendix—the European debt crisis of 2011, the “Taper Tantrum” of 2013, the 2015–2016 sell-offs in the US high-yield bond and Canadian stock markets, and the market turmoil following the United Kingdom’s surprising vote to leave the European Union—offer real world, post-global financial crisis opportunities to test these predictions. In each case, the data show that actual investor behavior did not match the predicted investor behavior as envisioned by various policymakers and academics. The inability of these hypotheses to capture many aspects of investor and market responses to financial shocks strongly suggests that these hypotheses will not accurately predict investor behavior in the future.

We therefore urge the policy community to step back and reexamine these hypotheses based on empirical evidence. Failure to do so could result in the development of regulatory policies that are misguided or even harmful to investors and the broader markets.

33 FSB Consultation, supra note 4, at 11.