BlackRock.

May 13, 2019

Financial Stability Oversight Council
Attn: Mark Schlegel
1500 Pennsylvania Avenue NW, Room 2208B
Washington, DC 20220

Submitted via email

Re: Comments on Proposed Interpretive Guidance, Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies; RIN 4030-AA00

Dear Mr. Schlegel:

BlackRock, Inc. (together with its affiliates, "BlackRock")[1] appreciates the opportunity to respond to the Financial Stability Oversight Council's (the "Council" or "FSOC") proposed interpretive guidance,[2] which would replace the Council's existing interpretive guidance on the Council's process for designating nonbank financial institutions as systemically important under section 113 of the Dodd-Frank Act.[3] BlackRock supports efforts to promote resilient and transparent financial markets, which are in the best interests of all market participants. We are particularly encouraged by the emphasis in the proposed interpretive guidance on assessing nonbank activities that could pose risk to the system as a whole given that asset managers do not present systemic risk at the company level.

BlackRock has a keen interest in financial stability and ensuring that markets are resilient and function effectively even during market stress events. As an asset manager, our clients are beneficiaries of well-functioning, stable, and competitive markets that encourage investment. We support FSOC's mission to protect US financial stability and believe that by prioritizing an activities-based approach, the proposed interpretive guidance will materially improve the Council's ability to monitor and mitigate potential stability risks across the US financial system.

Overall, we believe that the proposed interpretive guidance represents a very significant improvement on the existing process that will make our markets and economy safer. We note that the current guidance has a number of critical flaws which are addressed in the proposed guidance. Our comments in this letter focus on specific

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1 BlackRock is one of the world's leading asset management firms, managing assets on behalf of institutional and individual clients worldwide, across equity, fixed income, liquidity, real estate, alternatives, and multi-asset strategies. Our client base includes pension plans, endowments, foundations, charities, official institutions, insurers and other financial institutions, as well as individuals around the world.

2 Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies, 84 Fed. Reg. 49 beginning at 9028 (Mar. 13, 2019), available at https://www.govinfo.gov/content/pkg/FR-2019-03-13/pdf/2019-04488.pdf. (Hereon, references made by page number to the proposed guidance release will refer to the proposed guidance as appears in 84 Fed. Reg. 49.)

3 12 U.S.C. § 5323, available at https://www.govinfo.gov/content/pkg/USCODE-2014-title12/pdf/USCODE-2014-title12-chap53-subchapI-partA-sec5323.pdf. While the statute refers to a Council "determination", this letter will use the term "designation".

aspects of the proposed guidance that we believe could be clarified and/or formalized to ensure the proposed interpretive guidance achieves its intended objectives.

We are also supportive of a process whereby FSOC is required to provide the public with notice and opportunity for comment before amending or rescinding its interpretive guidance. As the Administration has recently affirmed, guidance can be tantamount to a rule, and should be subject to similar processes.[4] We strongly believe that notice and comment on changes to the interpretive guidance is important so that FSOC will have the benefit of industry and others' views on the impact of its proposals. We commend FSOC for having taken this approach in developing the proposed interpretive guidance.

I. <u>Executive Summary</u>

The proposed guidance represents a significant improvement to the existing designation process, which has a number of serious flaws that must be addressed. We believe the proposed revised process will improve FSOC's ability to monitor and mitigate potential threats to financial stability. We appreciate the Council's proactive efforts to improve the process and to focus FSOC's attention on mitigating risks across the financial system through emphasizing an activities-based approach. BlackRock supports the following aspects of the proposed interpretive guidance and believes they significantly improve upon FSOC's existing process:

- **Emphasis on an activities-based approach to systemic risk mitigation;**
- **Enhanced transparency and communication between the Council and any company under designation consideration;**
- **Increased role of the primary financial regulator;**
- **Pre- and post-designation off-ramps;**
- **Cost-benefit analysis of any potential designation; and**
- **Consideration of the probability of financial distress of the entity under designation consideration.**

An activities-based approach that looks across the financial system rather than narrowly at individual entities will undoubtedly improve the Council's ability to monitor and mitigate potential financial stability risks. The Council has applied an activities-based approach to asset management since 2014, given that asset managers do not present systemic risk at the company level. We are, thus, pleased to see this approach formalized in the proposed interpretive guidance. In addition, we agree with FSOC that emphasizing an activities-based approach will "reduce the potential for competitive market distortions that could arise from entity-specific determinations, and allow primary financial regulatory agencies to address identified potential risks."

We recommend formalizing certain aspects of the process to ensure that any actions taken in relation to the process are decided by FSOC principals and the primary financial regulator in a manner that provides for both transparency and ongoing dialogue. The Release makes several references to and/or implies informal actions that will take place under both activities-based approaches and designation approaches. We

[4] Executive Office of the President, Office of Management and Budget, Memorandum to Heads of Executive Departments and Agencies on Guidance with the Congressional Review Act (Apr. 11, 2019), available at https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-14.pdf.

recommend that any process designed to preserve and protect US financial stability or which may materially affect financial markets or companies should include clear policies and procedures to ensure analytical rigor, ongoing engagement, and transparency. To achieve those objectives, we recommend formalizing and/or clarifying the following procedures within the guidance:

1. **FSOC principals should vote on whether a risk identified in Step 1 of the activities-based approach poses a systemic risk (rather than a market risk) before moving to Step 2 of the activities-based approach where FSOC and/or its member agencies will seek to address the risk.**

2. **To formalize the Council's consultation process with the primary financial regulator, the guidance should apply more affirmative obligations on the primary financial regulator to acknowledge in writing that it cannot address an identified systemic risk through activities-based approaches before FSOC is permitted to vote on whether to evaluate a company for designation. This should include a list of findings to support the regulator's conclusion.**

3. **A two-thirds majority vote of FSOC principals (including the Chairperson) that a systemic risk cannot be addressed via an activities-based approach should be required before FSOC can evaluate a company under Stage 1 of the designation process.**

4. **The language as to when the Council may pursue designation of a company should be refined to ensure that designation is only utilized in the event activities-based approaches prove insufficient to address an identified systemic risk.**

5. **The final interpretive guidance should clarify that a majority vote of FSOC principals is required to move a company into Stage 2 of the designation process.**

6. **The interpretive guidance should explicitly allow for FSOC principals to meet with companies, individually and/or as a group, in Stage 2 and during any other time when they are under consideration for designation by the Council.**

7. **Once the Council has concluded collecting information from a company under Stage 2 of the designation process, the Council should be required to provide to the company under consideration the full evidentiary record that will be used by the Council to make a determination at least 30 days in advance of a Council vote on a proposed determination.**

8. **Due process should be added by permitting companies to appeal their designation to an independent authority.**

9. **The guidance should clarify that any 'departure' by the Council from the interpretive guidance should be treated as a 'modification' of the interpretive guidance, and as such, trigger a public notice and comment process (other**

than in emergency situations affecting a single company that require immediate action).

Over the past decade, in the wake of the financial crisis, a substantial body of regulation has been introduced to fill various data gaps, as well as to address specific product issues. For example, Dodd-Frank requires private fund managers to register with the Securities and Exchange Commission ("SEC"); reforms by the SEC and OCC addressed both the composition of cash portfolios and the structural design of MMFs and STIFs at federally-chartered banks; and the SEC has introduced liquidity rules for mutual funds, as well as a host of new reporting requirements for managers and funds. Exhibit 1 below lists a number of such regulations implemented post-crisis, which provides critical data for use by Member Agencies. Appendix C further describes several of these new rules and discusses how they can contribute to a products and activities approach to monitoring and addressing risk in asset management.

Exhibit 1: Data Available to FSOC Member Agencies

	In place pre-Crisis	Implemented post-2008	Proposed / implementation pending
CFTC	Large trader reports for futures Futures market trading data with participant identifiers	Form PQR for private funds Form PR for commodity futures advisors Swaps data reporting	
SEC / FINRA	Form N-1A for RICs Form ADV for advisers TRACE	Form N-CEN for RICs Form N-MFP for 2a-7 MMFs Form N-CR for 2a-7 MMFs Form PF for private funds Form ADV separate account info Form N-LIQUID for RICs Form N-PORT for RICs	Consolidated audit trail
Treasury	"Special calls" re: positions in Treasury holdings	TRACE for Treasuries	Repo transactions data to the Office of Financial Research
OCC	National Bank call reports on bank collective fund holdings by asset class	Quarterly MMF reporting for federally chartered STIFs	

For illustrative purposes only. Not intended to be all-inclusive.

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II. Support for Activities-Based Approach to Asset Management

BlackRock supports the proposed interpretive guidance's emphasis on addressing financial stability risks through an activities-based approach. We agree that this approach

will help the Council achieve its objective of "reduc[ing] the potential for competitive distortions among companies and in markets that could arise from entity-specific regulation and supervision." We also agree that it will allow "relevant financial regulatory agencies, which generally possess greater information and expertise with respect to company, product, and market risks, to address potential risks, rather than subjecting the companies to new regulatory authorities."[5]

Further, an activities-based approach is the only effective means to address potential risks that may arise in the asset management space. The relationship of an asset manager to the investment vehicles it manages is that of a provider of services to its customers – the company provides specified services and receives fees for those services. The relationship of an asset manager to the investment vehicles it manages is *not* analogous to commercial banks and other balance sheet lenders that utilize the capital and deposits of the bank or other affiliates to finance the lending or other activities of another member of the affiliated group. In other words, asset managers are fundamentally different than most other financial firms in that they act as advisors or *agents* on behalf of their clients – the assets managed by asset managers are owned by their clients, the asset owners.

Another critical difference between a bank and an asset manager is the absence of reliance on government guarantees or support. In addition, asset managers are not the counterparties to their clients' trades or derivative transactions and asset managers do not control the strategic asset allocation of their clients' assets. Asset managers' client assets are held separately from the asset manager by a custodian. Custodians facilitate changes from one manager to another and client assets are excluded from the bankruptcy estate of an asset manager and, therefore, do not impact the resolution of an asset manager, regardless of where it is domiciled.

Since FSOC began developing its designation rules and guidance in 2010, the Council has recognized that asset management presents different risks than those of non-bank financial institutions that use their balance sheet in the conduct of their business.[6] We commend FSOC for prioritizing an activities-based approach to systemic risk mitigation in the proposed interpretive guidance. In addition, we appreciate the acknowledgement throughout the proposed interpretive guidance that managing assets presents different risks than those assets may present on the balance sheet of an asset owner.[7]

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[5] Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies, 84 Fed. Reg. 49 at 9039-9040 (Mar. 13, 2019).

[6] See FSOC Final Rule and Interpretive Guidance, Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies, 77 Fed Reg. 70 at 21637-21662 (Apr. 11, 2012), available at https://www.govinfo.gov/content/pkg/FR-2012-04-11/pdf/2012-8627.pdf; codified at 12 CFR Part 1310 (Jan. 1, 2013). (FSOC Final Rule on Regulation of Nonbanks), available at https://www.govinfo.gov/content/pkg/CFR-2013-title12-vol9/pdf/CFR-2013-title12-vol9-part1310.pdf.

[7] See e.g., Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies, 84 Fed. Reg. at 9042 ("As required by statute, the Council will consider the extent to which assets are managed rather than owned by the company and the extent to which ownership of assets under management is diffuse; this recognizes the distinct nature of exposure risks when the company is acting as an agent rather than as principal. In particular, in the case of a nonbank financial company that manages assets on behalf of customers or other third parties, the third parties' direct financial exposures are often to the issuers of the managed assets, rather than to the nonbank financial company managing those assets.")

A. FSOC and Asset Management

FSOC's decision to focus on asset management products and activities rather than entity designations is the product of a multi-year effort by FSOC to evaluate the potential risks posed by the asset management industry. After several years of fact finding efforts, FSOC ultimately determined that a products and activities-based approach would be more effective at addressing risks in the asset management industry, given the agency nature of asset managers' businesses, and the lack of balance sheet exposure of asset managers to their assets under management ("AUM"). We highlight below the most relevant actions by FSOC in reaching this decision (with linked documents) and provide additional resource on our website, available at https://www.blackrock.com/financial-stability.

Initially, FSOC went through three separate notice and comment periods to develop its SIFI designation process and criteria. Each round of notice and comment acknowledged that asset managers are different than other types of nonbanks and asked questions about how these differences should be accounted for.[8] BlackRock and others in the asset management industry submitted comment letters regarding the various proposals.[9] In each of these letters, BlackRock highlighted the unique characteristics of the asset management industry that distinguish asset managers from banks and other types of nonbank financial institutions. In addition, commentators stressed the existing body of regulation and oversight at both the manager and portfolio levels, and that then pending (now enacted) provisions of regulatory reform would provide further oversight and transparency for the asset management industry.

In FSOC's final rule and interpretive guidance issued in April 2012, FSOC further acknowledged that asset managers were different and indicated that it had asked the Office of Financial Research ("OFR") to study the asset management industry in more detail.

The OFR's subsequent study on the asset management industry was widely criticized as being fraught with inaccuracies and misunderstandings of the asset management ecosystem and involving numerous suppositions rather than data-driven analysis. The problems with the OFR study were documented by the Investment Company Institute ("ICI") in a letter dated November 1, 2013.[10] These issues included a range of data errors, inaccurate assertions about redemption risk in mutual funds that appeared to demonstrate confusion between MMFs and other types of investment funds that do not have constant net asset values ("NAVs"), as well as significant overestimates of the redemptions from mutual funds actually experienced during the 2008 Financial Crisis. In addition, the OFR study made sweeping and inaccurate assertions about a variety of asset management products and activities, including separate accounts, which are accounts managed on behalf of a single institutional client. Contrary to assertions made in the OFR

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[8] See Notice Seeking Comment on Asset Management Products and Activities, 79 Fed. Reg. 247 (Dec. 24, 2014), Notices, at 77488 to 77495, available at https://www.govinfo.gov/content/pkg/FR-2014-12-24/pdf/2014-30255.pdf.

[9] BlackRock, Letter to FSOC, Request for Comment on Asset Management Products and Activities (Mar. 25, 2015), available at https://www.blackrock.com/corporate/literature/publication/fsoc-request-for-comment-asset-management-032515.pdf, ("Mar. 2015 Letter to FSOC").

[10] Paul Scott Stevens, Investment Company Institute, "Re: Public Feedback on OFR Study on Asset Management Issues (SEC File No. AM-1)" (Nov. 1, 2013), available at https://www.sec.gov/comments/am-1/am1-26.pdf.

study, separate accounts do not have redemption risk or suffer from even a theoretical first-mover advantage problem. There is only one client in a separate account, and separate account assets are held on the client's balance sheet.

The OFR Study rightly pointed out that less data on separate accounts was publicly available, but the report incorrectly presumed that the lack of available data meant that separate accounts were highly risky, replete with complex investment strategies, illiquid securities, and significant leverage. A survey of asset managers' separate accounts conducted by the Asset Management Group of the Securities Industry Financial Markets Association ("SIFMA AMG") demonstrated that this was not the case.[11] In 2014, the OFR's Annual Report acknowledged the utility of the SIFMA AMG survey and highlighted key findings, including that the vast majority of separate accounts are long-only portfolios that do not use derivatives. In addition, only 1.7% of the separate accounts surveyed reported that they used leverage.[12] Subsequently, the SEC finalized amendments to Form ADV, which require investment advisors to report aggregated information about the separate accounts they manage on behalf of clients.[13] Since Form ADV is publicly available, this effort enhanced the availability of public information on separate accounts. In addition, many of the unsupported hypotheses posited in the OFR Study were subsequently tested by real world events and disproven. We have included, in Appendix A, a list of market events in asset management, including fund and firm closures, and the outcomes of these events. Appendix B outlines a number of hypotheses about asset management and real world examples that have tested these hypotheses and found them to be false. Appendix C provides a framework for defining a products and activities approach in contrast to using 'simple' metrics like AUM.

In response to the SEC issuing the OFR report for comment, BlackRock submitted three comment letters dated November 1, 2013,[14] December 3, 2013,[15] and March 14, 2014,[16] which sought to educate about various aspects of the asset management industry and correct the record as to the misinformation included in the OFR study. In addition, the OFR Study and other initial work by FSOC[17] incorporated misunderstandings about securities lending practices by asset managers. BlackRock issued a *ViewPoint* - Securities

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[11] SIFMA AMG, "Re: 'Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions'; 'Asset management and Financial Stability' Study by the Office of Financial Research" (Apr. 4, 2014), available at https://www.sifma.org/wp-content/uploads/2017/05/sifma-amg-submits-comments-to-the-fsb-and-sec-in-response-to-ofr-study-and-in-regards-to-separate-accounts.pdf.

[12] OFR 2014 Annual Report, available at https://www.financialresearch.gov/annual-reports/files/office-of-financial-research-annual-report-2014.pdf.

[13] SEC, Final Rule, Form ADV and Investment Advisers Act Rules, available at https://www.sec.gov/rules/final/2016/ia-4509.pdf.

[14] BlackRock, Letter to the SEC, Feedback on the OFR Study on Asset Management and Financial Stability (Nov. 1, 2013), available at https://www.blackrock.com/corporate/literature/publication/study-of-asset-managers-sec-110113.pdf ("BlackRock Nov. 2013 Letter on OFR Study").

[15] BlackRock, Letter to the SEC, Feedback on the OFR Study on Asset Management and Financial Stability (Dec. 3, 2013), available at https://www.blackrock.com/corporate/literature/publication/ofr-study-addendum-sec-120313.pdf.

[16] BlackRock, Letter to the SEC, Feedback on the OFR Study on Asset Management and Financial Stability (Mar. 4, 2014), available at https://www.blackrock.com/corporate/literature/publication/am-res-sec-031414.pdf.

[17] FSOC, 2016 Annual Report, available at https://www.treasury.gov/initiatives/fsoc/studies-reports/documents/fsoc%202016%20annual%20report.pdf.

Lending: The Facts in May 2015 in an effort to provide more education about securities lending. The OFR Study has since been superseded by FSOC's own analysis of securities lending practices[18] in addition to similar efforts by the SEC, Commodity Futures Trading Commission ("CFTC"), Office of the Comptroller of the Currency ("OCC"), Financial Stability Board ("FSB"), and International Organization of Securities Commissions ("IOSCO").

Given the wide range of comments critical of the OFR Study, FSOC hosted a conference in May 2014 to improve its understanding of asset management.[19] Based on the feedback received and their ongoing evaluation of the asset management industry, FSOC reported out from its July 2014 meeting that FSOC staff was directed to analyze products and activities of the asset management industry.[20] This redirecting of FSOC's staff's efforts represented a pivot away from designations as the primary focus to a product and activities approach to asset management and financial stability risk.

In December 2014, FSOC issued a request for comment on asset management products and activities that focused on four areas of potential risk: (i) liquidity and redemption risk; (ii) leverage; (iii) operational risk; and (iv) resolution. BlackRock submitted a comment letter as did others in the industry.[21] These comment letters provided detailed information about the nature of these risks in asset management given the agency nature of the asset management business, as well as risk management practices utilized by asset managers. The letters from various asset managers and industry associations demonstrated the diversity of business models and investment strategies that are present in the asset management industry.

In April 2017, the President issued a Presidential Memorandum directing the Secretary of the Treasury to conduct a review of FSOC determination and designation processes under Sections 113 and 804 of Dodd-Frank. Industry provided its comments and in November 2017, Treasury issued a report on recommendations for improving the SIFI designation process. In addition, pursuant to EO 13772[22] on Core Principles for regulating the US financial system, the Treasury issued its report on asset management and insurance regulation.[23]

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[18] U.S. Department of the Treasury, Readout from the Financial Stability Oversight Council Meeting on July 31, 2014, available at https://www.treasury.gov/initiatives/fsoc/council-meetings/Documents/July%2031%202014.pdf ("FSOC 2014 Readout").

[19] FSOC Hosts Discussion on Asset Management (May 19, 2014), available at https://www.treasury.gov/press-center/press-releases/Pages/jl2405.aspx.

[20] "During the meeting, the Council discussed its ongoing assessment of potential industry-wide and firm-specific risks to U.S. financial stability arising from the asset management industry and its activities. The Council directed staff to undertake a more focused analysis of industry-wide products and activities to assess potential risks associated with the asset management industry." See FSOC 2014 Readout.

[21] *See* BlackRock, Letter to FSOC, Notice Seeking Comment on Asset Management Products and Activities (FSOC 2014-0001) (Mar. 25, 2015), available at https://www.blackrock.com/corporate/literature/publication/fsoc-request-for-comment-asset-management-032515.pdf.

[22] The President, Executive Order 13772, Core Principles for Regulating the United States Financial System, 82 Fed. Reg. No 25 at 9965-9966 (Feb. 8, 2017), available at https://www.govinfo.gov/content/pkg/FR-2017-02-08/pdf/2017-02762.pdf.

[23] U.S. Department of the Treasury, "A Financial System That Creates Economic Opportunities: Report on Asset Management and Insurance" (Oct. 2017), available at https://www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-That-Creates-Economic-Opportunities-Asset_Management-Insurance.pdf.

B. Examples of Activities-Based Approaches from Recent Regulatory Actions

The SEC, OCC, and CFTC have already undertaken several significant activities-based regulatory reform efforts in the wake of the 2008 Financial Crisis. Examples of activities-based approaches to addressing systemic risk in the financial market ecosystem include reforms to MMFs and federally-chartered bank short-term investment funds ("STIFs")[24] as well as reforms promulgated for the over-the-counter ("OTC") derivatives markets. The approaches taken by the SEC, OCC and CFTC, respectively, acknowledge the importance of regulating products and activities across the ecosystem rather than targeting regulatory change to individual entities. The logic and rationale for this type of approach is clear – regulating a handful of large MMFs (or STIFs) or a few brokers for derivatives differently than the rest would simply *shift risk* around the system, rather than *reduce risk*.

The need for an activities-based approach is also supported by the fact that the asset management ecosystem is broad, with multiple participants, of which third-party asset managers[25] reflect only one component. In particular, McKinsey estimates that asset managers are responsible for managing roughly one-quarter of the world's financial assets, meaning that the other three-quarters are managed directly by asset owners.[26] Even where an asset manager is involved, *asset owners* are the counterparties to derivative contracts, trades, and securities lending transactions – not the asset manager. Likewise, asset managers do not control their clients' decisions to shift assets from one asset class or fund to another, nor do they control their clients' investment objectives or constraints, or the asset owner's decision to employ leverage on their own balance sheets.

A holistic approach with a view to the entire market ecosystem is necessary to reduce risk. Because designations target individual entities in the market ecosystem, designation of individual funds or asset managers may shift risk around the system but will not reduce risk. For example, concerns about "herding" into or out of an asset class cannot be addressed by designation of certain funds or asset managers, given that asset owners control the strategic allocation of their assets and, by definition, asset owners control the flow of assets into and out of asset classes. Instead, genuine efforts to address risks to the entire financial system must at a minimum address the majority of participants within the system. This includes assets managed directly by asset owners and assets outsourced to external asset managers. In addition, the variety of investment vehicles such as registered mutual funds, bank collective trust funds, separate accounts, collective

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[24] At the recommendation of the President's Working Group (PWG) and informed by changes made by the SEC in 2010 governing the regulation of money market mutual funds, the OCC updated its rules for STIFs in 2012. *See* Short Term Investment Funds 77 Fed. Reg. 195 at 61230-61231 (Oct. 9, 2012). These changes, intended to make STIFs more resilient, imposed new portfolio composition constraints and regulatory reporting requirements. Although the FSOC Annual Report has repeated the PWG recommendation several times (see, e.g., Financial Stability Oversight Council 2012 Annual Report (Jul. 2012), available at https://www.treasury.gov/initiatives/fsoc/Documents/2012%20Annual%20Report.pdf at 11-12), similar changes have not occurred at the state level; nor has either the Federal Reserve Board used its supervisory powers over bank holding companies with state bank subsidiaries nor the Federal Deposit Insurance Corporation used its oversight of state non-member banks to require similar changes or reporting.

[25] For the remainder of this letter, we will refer to third party asset managers simply as asset managers. Importantly, the asset management ecosystem includes many asset owners who are managers of their own assets.

[26] McKinsey & Company. Performance Lens Global Growth Cube. As of 2017.

trust funds, private (hedge) funds, private equity funds, etc. – each with its own set of regulations and investment objectives – must be recognized.

III. Support for Improvements to Designation Process

In addition to our support for the proposed activities-based approach, BlackRock is supportive of the following aspects of the proposed interpretive guidance:

- Enhanced transparency and communication between the Council and any company under designation consideration;
- Increased role of the primary financial regulator;
- Pre- and post-designation off-ramps;
- Cost-benefit analysis of any potential designation; and
- Consideration of the probability of financial distress of the entity under designation consideration.

Increasing Transparency. In November 2014, the Government Accountability Office ("GAO") released a report entitled, "Further Actions Could Improve the Nonbank Designation Process."[27] With respect to transparency, the GAO reported that "FSOC's transparency policy states its commitment to operating transparently, but its documentation has not always included certain details. For example, FSOC's public documents have not always fully disclosed the rationales for its determination decisions. The lack of full transparency has resulted in questions about the process and may hinder accountability and public and market confidence in the process."[28] We agree that significant improvements are needed and we therefore commend FSOC for including additional transparency and dialogue with companies throughout the nonbank designation process.

Primary Regulator. Where applicable, the primary regulator is likely to be the regulator with the greatest amount of information and expertise on the risk and/or company in question. As such, it is prudent for the Council to rely heavily on the expert judgment of the primary regulator in making determinations that may materially affect US companies, markets, and financial stability as a result of the identified systemic risk. We support the proposed interpretive guidance's elevation of the role of the primary regulator in the Council's decisions, and in our recommendations, we seek to clarify what constitutes acceptable 'consultation' throughout the process.

Off-Ramp Mechanisms. In order to genuinely address potential financial stability risks, it is important that companies understand what risks have led to or will lead to their designation. The best approach to addressing risk is for the company itself to mitigate the risk through changes to its business practices or business model, if possible. Accordingly, we believe the addition of pre- and post-designation off-ramp mechanisms to the designation process will help FSOC more effectively mitigate financial stability risks through ongoing dialogue with companies that may pose such risks.

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[27] Government Accountability Office, Financial Stability Oversight Council: Further Actions Could Improve the Nonbank Designation Process (Nov. 2014), available at http://www.gao.gov/assets/670/667096.pdf.

[28] Ibid., "GAO Highlights".

Cost-Benefit Analysis. We believe the inclusion of a cost-benefit analysis of any designation is one of the most meaningful improvements to the process. Designation of a company can result in significant costs to the company, its clients, and potentially to markets. The inclusion of a cost-benefit analysis appropriately heightens the standard for a Council designation to ensure the benefits associated with a potential designation outweigh the costs.

Probability of Financial Distress. The inclusion of consideration of the probability of financial distress of the entity under designation consideration is also a meaningful improvement to the designation process. For companies whose probability of failure is very low – for example those companies that do not leverage their balance sheet in order to run their business – the benefit of a designation may be inconsequential because the company is unlikely to suddenly fail and create financial stability risk. Considering the probability of financial distress is an important exercise to ensure that the Council is appropriately utilizing the designation process.

IV. Recommendations for Improving and Clarifying the Proposed Guidance

As noted previously, BlackRock is generally supportive of the proposed interpretive guidance. However, we recommend that certain aspects of the Release and process be clarified or improved to ensure the final guidance will meet the Council's objectives of a transparent and analytically rigorous process, as well as ensuring that the emphasis remains on an activities-based approach and that designations are pursued only when activities-based approaches prove insufficient to address an identified systemic risk.

In particular, the Release makes several references to and/or implies relatively 'informal' actions, such as meetings with or votes by the FSOC Deputies Committee, which will take place in connection with FSOC considerations under both activities-based approaches and designation approaches, as well as various periods of 'consultation' with primary financial regulators, noting that such consultation periods have certain "goals" prior to FSOC taking any affirmative next step. We recommend that any efforts related to preserving and protecting the financial stability of the United States, or that have the potential to materially affect financial markets or companies should be treated with the utmost formality and attention by FSOC principals, rather than left to less formal processes.

To address this overarching concern, we recommend adding the following to the guidance, each of which is discussed in this section:

1. **FSOC principals should vote on whether a risk identified in Step 1 of the activities-based approach poses a systemic risk (rather than a market risk) before moving to Step 2 of the activities-based approach where FSOC and/or its member agencies will seek to address the risk.**

2. **To formalize the Council's consultation process with the primary financial regulator, the guidance should apply more affirmative obligations on the primary financial regulator to acknowledge in writing that it cannot address an identified systemic risk through activities-based approaches before FSOC**

is permitted to vote on whether to evaluate a company for designation. This should include a list of findings to support the regulator's conclusion.

3. **A two-thirds majority vote of FSOC principals (including the Chairperson) that a systemic risk cannot be addressed via an activities-based approach should be required before FSOC can evaluate a company under Stage 1 of the designation process.**

4. **The language as to when the Council may pursue designation of a company should be refined to ensure that designation is only utilized in the event activities-based approaches prove insufficient to address an identified systemic risk.**

5. **The final interpretive guidance should clarify that a majority vote of FSOC principals is required to move a company into Stage 2 of the designation process.**

6. **The interpretive guidance should explicitly allow for FSOC principals to meet with companies, individually and/or as a group, in Stage 2 and during any other time when they are under consideration for designation by the Council.**

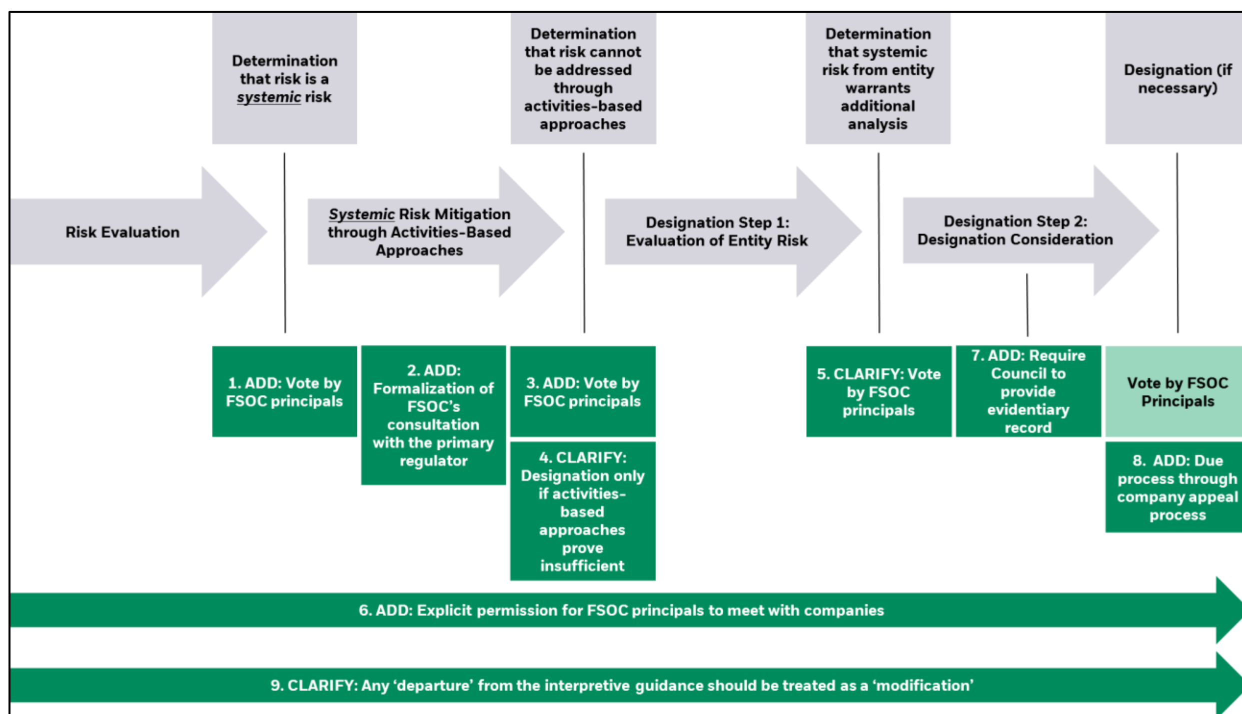
7. **Once the Council has concluded collecting information from a company under Stage 2 of the designation process, the Council should be required to provide to the company under consideration the full evidentiary record that will be used by the Council to make a determination at least 30 days in advance of a Council vote on a proposed determination.**

8. **Due process should be added by permitting companies to appeal their designation to an independent authority.**

9. **The guidance should clarify that any 'departure' by the Council from the interpretive guidance should be treated as a 'modification' of the interpretive guidance, and as such, trigger a public notice and comment process (other than in emergency situations affecting a single company that require immediate action).**

Exhibit 2 illustrates the formal elements of the process that we are suggesting adding or clarifying in the final interpretive guidance.

Exhibit 2: Recommendations for Formalizing Certain Aspects of the Proposed Interpretive Guidance



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1. ***Recommendation*****: FSOC principals should vote on whether a risk identified in Step 1 of the activities-based approach poses a systemic risk (rather than a market risk) before moving to Step 2 of the activities-based approach where FSOC and/or its member agencies will seek to address the risk.***

One of the greatest challenges faced by the Council in its efforts to monitor for and mitigate potential systemic risks is the need to differentiate potential market risks from potential systemic risks. While any number of economic risks may potentially cause price declines in a particular market or asset class (i.e., market risk), price declines (even sudden, sizeable declines) do not necessarily translate into a risk that would jeopardize liquidity or credit health amongst financial institutions or in the general markets (i.e., systemic risk). In fact, price fluctuations due to changes in market risk factors (e.g., interest rate, currency, inflation) are a sign of healthy, transparent, and well-functioning markets that incorporate new information quickly and evolve over the course of various economic cycles. Indeed, there can be a fine line between normal price fluctuations (market risk) and 'fire sales' that cause broader problems across the economy (systemic risk), particularly given that the Council is attempting to judge the risks ex ante. However, failure to properly differentiate normal market adjustments from more severe structural issues that could create systemic risk (e.g., irresponsible subprime credit creation pre-2008) could have significant negative implications for financial markets and the broader US economy. This is because unnecessary government intervention in markets can create distortions, impact investor confidence, and impede capital formation and economic growth.

Further, as noted above, given that Congress directed the Council to identify and respond to "emerging threats to the stability of the United States financial system," including "the risk of significant liquidity or credit problems spreading among financial institutions or markets," it is essential that FSOC formally establish the basis for the view that a risk is systemic prior to taking action to address that risk, especially if that action itself may have other negative impacts. Accordingly, it would be prudent for FSOC principals to determine, by way of a vote, whether they believe a risk is systemic, based on available information and analysis by the Council, prior to the Council working with member agencies under Step 2 of the activities-based approach to address the potential systemic risk. Such a process will also enhance transparency to markets as to risks that the Council believes could have financial stability implications and/or where greater regulatory scrutiny may be on the horizon.

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2. ***Recommendation*: To formalize the Council's consultation process with the primary financial regulator, the guidance should apply more affirmative obligations on the primary financial regulator to acknowledge in writing that it cannot address an identified systemic risk through activities-based approaches before FSOC is permitted to vote on whether to evaluate a company for designation. This should include a list of findings to support the regulator's conclusion.**

3. ***Recommendation*: A two-thirds majority vote of FSOC principals (including the Chairperson) that a systemic risk cannot be addressed via an activities-based approach should be required before FSOC can evaluate a company under Stage 1 of the designation process.**

The Release states that: "The Council will pursue entity-specific determinations under section 113 of the Dodd-Frank Act only if a potential risk or threat cannot be addressed through an activities-based approach."[29] However, the proposed interpretive guidance is unclear as to the process that the Council will follow in order to conclude that an identified *systemic* risk cannot be addressed through an activities-based approach. The only reference to any formal process is on page 9046 of the proposed interpretive guidance where it is stated that: "The Council or its Deputies Committee will vote to commence review of a nonbank financial company in Stage 1."

As an initial matter, consideration of a company for potential designation by the Council because an identified systemic risk cannot be addressed through an activities-based approach is a matter of material importance to the company under consideration, the industry in which the company operates, and presumably to the financial stability of the US if, in fact, the company presents financial stability risk. In our view, such a weighty consideration warrants the attention and deliberations of FSOC principals, including a more explicit and formal consultation process with primary financial regulators as discussed below.

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[29] Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies, 84 Fed. Reg. 49 at 9029 (Mar. 13, 2019), available at https://www.govinfo.gov/content/pkg/FR-2019-03-13/pdf/2019-04488.pdf.

In addition, given that the proposed interpretive guidance seeks (rightly) to elevate the role of the primary financial regulator, which is likely to have the greatest expertise and information on the particular risk in question, we believe that the primary regulator should be responsible for alerting the Council when it believes that it cannot address an identified systemic risk through an activities-based approach.

The proposed interpretive guidance suggests a consultation process with primary financial regulators, without providing extensive context as to the nature of that process. From our perspective, it would be helpful for the guidance to elaborate on a consultation procedure, which should include a requirement that the primary financial regulator acknowledge in writing that it cannot address an identified systemic risk through activities-based approaches before FSOC is permitted to vote on whether to evaluate a company for designation. This document should include a list of findings to support the regulator's conclusion, including a discussion of what activities-based approaches were considered and why they fail to address the perceived financial stability risk emanating from a particular entity. Thereafter, each member of the Council, the primary regulator and the potentially impacted companies should have the opportunity to discuss such matters before any actions by FSOC are taken.

Once the primary regulator has indicated to FSOC that it cannot address a potential systemic risk through an activities-based approach, the Council should discuss whether there are alternative means of addressing the risk, potentially through the authority of a different member agency or through the Council's authority under Section 120 of Dodd-Frank. Given the significance of considering a company for designation, we recommend requiring a two-thirds majority vote of FSOC principals (including the Chairperson) as a trigger for commencing consideration of the company under Stage 1 of the designation process if activities-based approaches prove insufficient to address the risk.

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4. *<u>Recommendation.</u> The language as to when the Council may pursue designation of a company should be refined to ensure that designation is only utilized in the event activities-based approaches prove insufficient to address an identified systemic risk.*

The Release states that: "The Council will pursue entity-specific determinations under section 113 of the Dodd-Frank Act only if a potential risk or threat cannot be addressed through an activities-based approach" (page 9029 and 9030). However, the language on page 9041 of the proposed interpretive guidance is not fully aligned with this objective and should be refined. We believe that the Council should pursue a company designation only when there is no other way to address the identified systemic risk. This would be consistent with the intention of FSOC in reforming the designation process, as laid out in the FSOC Memorandum Report. Specifically, we recommend refining the language in Section II. Part C. (page 9032) and the lead-in of Section III (page 9041) of the proposed interpretive guidance to read as follows:

> *"The Council expects to advance beyond the activities-based approach, and evaluate a nonbank financial company for a potential determination under section 113 of the Dodd-Frank Act, only in a limited set of circumstances—namely, if (1) the Council's*

collaboration and engagement with the relevant financial regulatory agencies does not adequately address the potential risk identified by the Council, or if the potential threat to U.S. financial stability is outside the jurisdiction or authority of financial regulatory agencies, and (2) the potential threat identified by the Council is one that ~~could~~ can only be adequately addressed by a Council determination regarding one or more companies. Following is a description of the substantive analysis the Council would undertake regarding any nonbank financial company under review for a potential determination." (page 9032)

"If the Council's collaboration and engagement with the relevant financial regulatory agencies does not adequately address a potential threat identified by the Council – or if a potential threat to U.S. financial stability is outside the jurisdiction or authority of financial regulatory agencies – and if the potential threat identified by the Council is one that ~~could~~ can only be adequately addressed by a Council determination regarding one or more companies, the Council may evaluate one or more nonbank financial companies for an entity-specific determination under section 113 of the Dodd-Frank Act, applying the analytic framework described below." (page 9041)

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5. ***<u>Recommendation:</u> The final interpretive guidance should clarify that a majority vote of FSOC principals is required to move a company into Stage 2 of the designation process.***

Page 9046 of the proposed interpretive guidance states that:

"Based on the preliminary evaluation in Stage 1, the Council may begin a more detailed analysis of the company by advancing the company to Stage 2, or it may decide not to evaluate the company further. If the Council determines not to advance a company that has been reviewed in Stage 1 to Stage 2, the Council will notify the company in writing of the Council's decision. The notice will clarify that a vote not to advance the company from Stage 1 to Stage 2 at that time does not preclude the Council from reinitiating review of the company in Stage 1."

This language alludes to a vote taking place to advance or not to advance a company to Stage 2, but the proposed interpretive guidance does not explicitly call for a vote in between stages. In order to avoid any potential confusion, we would suggest explicitly confirming in the guidance that a formal vote of the Council must be taken prior to proceeding to Stage 2.

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6. ***<u>Recommendation:</u> The interpretive guidance should explicitly allow for FSOC principals to meet with companies, individually and/or as a group, in Stage 2 and during any other time when they are under consideration for designation by the Council.***

The proposed interpretive guidance says that the Council expects the Deputies Committee to make itself available in Stage 2 of the designation process for a meeting with the company. We appreciate the inclusion of the ability to meet with the Deputies Committee in the proposed process, as a greater dialogue between companies under consideration and FSOC members and their staff will result in a better understanding of the company and its risks. However, as discussed previously, a designation by the Council has a material and meaningful impact on the future of a company, its shareholders, its clients, its industry, and potentially financial markets. The proposed interpretive guidance is unclear as to whether FSOC principals are permitted to meet with companies while they are under consideration. We believe it is imperative that FSOC principals are explicitly permitted to meet individually with companies while they are under consideration in Stage 1 or Stage 2 of the designation process so that FSOC principals may ask questions directly to better understand the company and its potential risks.

Of note, we understand that some FSOC principals have declined to meet individually with companies in Stage 2 and Stage 3 of the existing designation process, citing various reasons, including concerns about "ex parte" communications. If the Council believes that the designation process is adjudicatory in nature to such a level that the concept of "ex parte" communications applies, its proposed guidance needs to be substantially enhanced to assure that it meets the standards of due process required for adjudications of such import. It must also be mentioned that "ex parte" concerns as commonly understood can be addressed not by denying access to the company, but rather assuring that all appropriate parties are notified and have the opportunity to be present.

Permitting such meetings to take place would let the company educate principals about its business, regulatory framework, and risk management in addition to addressing misperceptions and factual errors, if any, so that the principals' vote will be based on an accurate understanding of the company and its risk profile. We recommend adding to the final interpretive guidance an explicit reference to the fact that FSOC principals are permitted to meet with companies under consideration for designation throughout the process.

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7. ***Recommendation:* Once the Council has concluded collecting information from a company under Stage 2 of the designation process, the Council should be required to provide to the company under consideration the full evidentiary record that will be used by the Council to make a determination at least 30 days in advance of a Council vote on a proposed determination.**

In line with the objective of increasing transparency and communication with any company being considered for designation, we believe that companies under consideration for designation should have the ability to review, correct, and comment on any materials produced about the company that will be used to form the basis for a decision as to whether the company should be designated. This ensures that the Council is making decisions based on complete and factually accurate data and information. As such, we believe it is imperative that the company in Stage 2 of the designation process be provided with the full evidentiary record that will be used by the Council to make a determination about the designation of the company prior to any recommendation being

put before FSOC for a vote. The evidentiary record should include any documents received from the company and its regulator(s), as well as any memos or documents summarizing the findings of the analytical team, and any assessments of the risks presented by the company relative to the transmission channels established in the proposed guidance.

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8. ***<u>Recommendation:</u> Due process should be added by permitting companies to appeal their designation to an independent authority.***

At present under the current guidance, as well as the proposed interpretive guidance, companies that are designated nonbank SIFIs must appeal an initial designation to the same FSOC principals who initially designated the company. The proposed interpretive guidance does not introduce a right of appeal to an independent authority. We recommend that an appeal process to an independent authority be added to the proposed interpretive guidance to ensure the designation process follows normal standards for due process.

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9. ***<u>Recommendation</u>: The guidance should clarify that any 'departure' by the Council from the interpretive guidance should be treated as a 'modification' of the interpretive guidance, and as such, trigger a public notice and comment process (other than in emergency situations affecting a single company that requires immediate action).***

The proposed interpretive guidance notes that "[i]f the Council were to depart from the interpretive guidance, it would need to provide a reasoned explanation for its action, which would ordinarily require acknowledging the change in position" (page 9039). The provision's citation for this principle is FCC v. Fox Television Stations, Inc., 556 U.S. 502, 515 (2009). The provision does not address how this concept fits within the broader Council process in the interpretive guidance.

Separately, the proposed interpretive guidance provides the following: "Furthermore, contemporaneous with the publication of this proposed interpretive guidance, the Council is separately publishing, elsewhere in this issue of the Federal Register, a final rule, RIN 4030–AA03, stating that the Council shall not amend or rescind its interpretive guidance on nonbank financial company determinations without providing the public with notice and an opportunity to comment under the Administrative Procedure Act" (page 9038).

The complexity and significance of the Council's interpretive guidance, and the importance of the Council's decisions and processes to the general financial industry as a whole is indisputable. Accordingly, notwithstanding the label, we believe that any 'departure' from the Council's guidance would have the same practical impact as a 'modification' thereto, and so any suggestion of disparate processes in respect of these actions should be eliminated. Given the fact that the Council has implemented a public notice and comment process for 'modifications', that process should similarly apply to any

action identified as a 'departure' (other than in emergency situations affecting a single company that require immediate action).

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V. Conclusion

We commend the Council for significantly improving its approach to financial stability risk monitoring and mitigation through the proposed interpretive guidance. We encourage the Council to finalize the interpretive guidance expeditiously given the importance of this process to ensuring US financial stability.

Today, FSOC and its Member Agencies have more information available than ever, which has filled critical data gaps and can be used to identify potential systemic risks arising from products and activities. The breadth of data on asset management activities reflects the fact that the asset management industry is subject to extensive post-crisis regulation, including voluminous disclosures and reporting requirements on both the asset managers themselves and the products they manage on behalf of clients. However, the availability of more information does not mean that asset managers pose greater risks to the financial system or warrant a narrow industry focus. Instead, the information provided by this data should be used to further a holistic approach that would encompass the activities of all asset owners and asset managers within the financial market ecosystem.

The statutory purpose and goal of FSOC is to avoid or mitigate a future US financial crisis. Genuine efforts towards financial stability risk identification and mitigation must consider the characteristics of the entities involved, but must do so in the context of the broader financial ecosystem in which those entities operate. As outlined in this letter, the only way to effectively address risks in asset management is to take an activities-based approach that is focused on industrywide regulation. We, therefore, believe that the proposed interpretive guidance will meaningfully improve the Council's ability to monitor and mitigate potential financial stability risks before they materialize.

Looking forward, we believe there are a number of financial stability risks emanating from activities across the financial ecosystem that merit consideration by FSOC, including: (i) preparing for the uncertain future of LIBOR, (ii) implications of a failure to raise the debt limit, (iii) central clearing counterparties' risk mitigation, disclosure and governance practices, (iv) cybersecurity of market plumbing, (v) reforming the regulation of state bank STIFs in line with post-crisis reforms implemented for other cash investment vehicles, (vi) scoping the implications for potential threats to bondholder rights on investors and capital formation, and (vii) reviewing the implications of pension underfunding on consumers and the economy. A description of each of these recommended initial focus areas is included in Appendix D.

BlackRock has a keen interest in financial stability and ensuring that markets continue to function effectively even during market stress events. As an asset manager, our clients are beneficiaries of well-functioning, stable, and competitive markets. We welcome the opportunity to provide further insight and assistance as FSOC considers its approach to financial stability risk identification and monitoring.

Sincerely,

Barbara Novick
Vice Chairman

Alexis Rosenblum, CFA
Director, Global Public Policy Group

CC:

The Honorable, Steven Mnuchin, Secretary, US Treasury Department
Craig S. Phillips, Counselor to the Secretary, US Treasury Department
Bimal Patel, Deputy Assistant Secretary, Financial Institutions, US Treasury Department
The Honorable Mark A. Calabria, Director, Federal Housing Finance Agency
The Honorable Jay Clayton, Chairman, US Securities and Exchange Commission
The Honorable J. Christopher Giancarlo, Chairman, Commodity Futures Trading Commission
The Honorable Kathy Kraninger, Director, Consumer Financial Protection Bureau
The Honorable J. Mark McWatters, Chairman, National Credit Union Administration
The Honorable Jelena McWilliams, Chairman, Federal Deposit Insurance Corporation
The Honorable Joseph M. Otting, Comptroller of the Currency
The Honorable Jerome H. Powell, Chairman, Board of Governors of the Federal Reserve System
The Honorable Thomas E. Workman, Independent Member with Insurance Expertise, FSOC
Kipp Kranbruhl, Acting Director, Office of Financial Research
Steven J. Dreyer, Director, Federal Insurance Office
Eric A. Cioppa, Superintendent, Maine Bureau of Insurance
Charles G. Cooper, Commissioner, Texas Department of Banking
Melanie Senter Lubin, Commissioner, Maryland Securities Commission

Appendix A: Firm and Fund Closures, Large Outflows, and Related Events in the Asset Management Industry over the Past 30 Years

Name	Event	Year	Outcome	AUM year of event (if known)	AUM after event (if known)
ProShares Ultra VIX Short-Term Futures ETF	Inverse VIX ETF with 80%+ losses in Feb VIX spike	2018	• Fund performed as expected based on prospectus and continues to operate	USD 1.6bn	USD 72mn
LJM Preservation and Growth Fund	Losses from options strategies due to Feb VIX spike	2018	• 80%+ losses in 2 days • Firm closed	USD 812mn	Firm closed
Franklin Templeton*	Very large outflows across variety of products, loss of investor appetite for EM funds	2016	• USD 12bn outflows since January 2016, mostly in global bond funds	USD 854.7bn (July 2015)	USD 739.9bn (July 2016)
Brevan Howard Master Fund*	Poor performance over three years. ECB action / market reaction in December 2015	2016	• ~ 3bn outflows in 2016	Data unavailable	USD 17.4bn (March 2016)
Sequoia Fund	Poor performance Key personnel departure	2016	• 7.5% loss in 2015, down 12% in 2016 • > USD300mn withdrawals early 2016 • Shareholders who withdraw > USD 250,000 fund should expect in-kind redemptions as per Sequoia policy	USD 6.7bn (December 2015)	USD 4.8bn (August 2016)
Tudor Investment Corp*	Poor performance over three years	2016	• USD 2bn outflows • Announced 15% cut of 400 strong workforce after losses	USD 21.9bn (December 2014)	USD 11bn (July 2016)
Nevsky Capital	Poor performance	2016	• Fund liquidation - USD 1.5bn fund in January 2016	USD 1.5bn (January 2016)	Fund liquidation
Tiger Global Management*	Large tech stock investment loss in first quarter of year	2016	• Losses estimated at USD 1bn in Q1 2016, but fund is continuing to operate	USD 35bn (Dec 2015)	USD 32.2bn (July 2016)

Pershing Square*	Significant investment losses	2016	• AUM down approx. 40% in one year • Cut 10% of workforce	USD 20,204.7m (August 2015)	USD 11,897m (August 2016)
Visium Asset Management	Insider trading scandal, poor performance	2016	• Visium Global Fund sold to Alliance Bernstein • Liquidating hedge funds	USD 8bn (March 2016)	Fund liquidation
BlackRock UK Property Fund	Redemptions in UK property funds triggered by EU referendum	2016	• Redemption charges increased from 2% to 5.75%	GBP 3.3bn (June 2016)	To be calculated at quarter end, after submission of this letter.
Legal & General UK Property Fund	Redemptions in UK property funds triggered by EU referendum	2016	• No suspension of redemptions, but discount imposed on cash withdrawals – fair value adjustment of 15%, reduced three weeks later to 10%	GBP 2.4bn (June 2016)	Data unavailable
Aberdeen UK property fund	Redemptions in UK property funds triggered by EU referendum	2016	• Redemptions temporarily suspended, followed by 17% fair value adjustment on cash withdrawals • Exit penalty back to 1.25% by August	GBP 3.2bn (June 2016)	Data unavailable
Aviva Investors Property Trust*	Redemptions in UK property funds triggered by EU referendum	2016	• Redemptions suspended	GBP 1.8bn (June 2016)	Data unavailable
Standard Life UK Real Estate Fund	Redemptions in UK property funds triggered by EU referendum	2016	• Redemptions suspended	GBP 2.67bn (June 2016)	Data unavailable
M&G UK Property Fund	Redemptions in UK property funds triggered by EU referendum	2016	• Redemptions suspended	GBP 4.4bn (June 2016)	Data unavailable
Columbia Threadneedle UK Property Trust*	Redemptions in UK property funds triggered	2016	• Redemptions suspended on UK Property Authorised Investment Fund (and on associated feeder fund, UK	GBP 1.3bn (June 2016)	Data unavailable

	by EU referendum		Property Authorised Trust). • Fair value adjustment of 5.3% on cash withdrawals		
Henderson Global Investors UK Property Fund*	Redemptions in UK property funds triggered by EU referendum	2016	• Redemptions suspended on UK Property PAIF (and feeder fund)	GBP 1.4bn (June 2016)	Data unavailable
Kames Property Income Fund*	Redemptions in UK property funds triggered by EU referendum	2016	• Fair value adjustment of 10% on cash redemptions	GBP 409mn (June 2016)	Data unavailable
Comac Capital	8% loss due to CHF move	2015	• Returned capital to outside investors due to CHF loss • Will continue to manage internal capital ~ USD 150mn	USD 1.2bn (January 2015)	Fund liquidation
Tiger Consumer Management	Retirement of fund manager	2015	• Fund liquidation due to retirement of manager	USD 1.4bn (March 2015)	Fund liquidation
Claren Road Asset Management (55% owned by Carlyle Group)*	Poor performance	2015	• Redemptions of USD 7.3bn since September 2014 • Operating a delayed-repayment schedule	USD 8.5bn (September 2014)	USD 1.2bn (January 2016)
Fortress Global Macro Hedge Fund	Poor performance	2015	• Liquidation of USD 1.6bn global macro hedge fund following 17% loss in 2015.	USD 1.6bn (October 2015)	Fund liquidation
LionEye Capital Management	Investment loss of 19% in 2015	2015	• Liquidation of USD 1.5bn fund following redemptions from largest investors	USD 1.5bn (December 2015)	Fund liquidation
Renaissance Technologies	Poor performance	2015	• Liquidation of USD 1.3bn underperforming fund	USD 1.3bn (October 2015)	Fund liquidation
Seneca Capital Investments	Investment loss of 6% in 2015	2015	• Liquidation of fund close due to losses – 6% in 2015	USD 500mn (December 2015)	Fund liquidation
TigerShark Management	Poor performance	2015	• Fund liquidation	USD 180mn (March 2014)	Fund liquidation

Diversified Global Asset Management Corp (DGAM), (owned by Carlyle)	Poor performance	2015	Liquidation of Carlyle's hedge-fund-of-funds unit DGAM	USD 6bn (February 2016)	Fund liquidation
Ashmore*	AUM fell by 15 per cent year on year – Emerging market volatility	2015	Met USD 9.8bn in redemptions	USD 58.9bn (June 2015)	USD 52.6bn (July 2016)
Third Avenue Focused Credit Fund	Poor performance	2015	• > USD 1bn redemptions from July-December 2015 • Redemptions frozen, fund liquidation in December 2015	USD 2.1bn (July 2015)	Fund liquidation
Bain Capital Absolute Return Capital Hedge Fund	Three years of investment losses – 13% loss in first half of 2015	2015	• Closure of USD 2.2bn Absolute Return Capital hedge fund	USD 2.2bn (October 2015)	Fund liquidation
BlackRock Global Ascent Fund	Investment losses of 9.4% in 2015	2015	• Closure of USD 1bn Global Ascent fund	USD 1bn (November 2015)	Fund liquidation
Brevan Howard Asset Management*	Investment losses	2015	• USD 3bn fall in assets in first nine months of 2015	USD 40bn (2013)	USD 20bn (May 2016)
Everest Capital	Investment losses - CHF exchange rate cap	2015	• Fund liquidation of 6 out of the firms' 7 remaining hedge funds	USD 3.0bn (December 2014)	Fund liquidation
PIMCO*	Key personnel departure	2014	• Management changes • Met $600bn in redemptions including $200bn in flagship Total Return Bond Fund • 3% reduction in workforce	USD 1.97tn (June 2014)	USD 1.5tn (June 2016)
PIMCO Total Return Fund	Key personnel departure	2014	• Management changes • Met redemptions of $200bn	USD 292.9bn (April 2013)	86.8bn (July 2016)
EII Capital Management	Key personnel departure	2014	• Departure of several key personnel • Terminate of contracts by several US pension funds • Firm continues to operate	USD 5.3bn (January 2014)	USD 1.5bn (August 2016)

SAC Capital Management	Allegations of insider trading by portfolio managers	2008-2012-	• Converted to family office, renamed Point72, no external assets • USD 1.184bn financial penalty • USD 602mn SEC settlement • USD 10mn payout to resolve shareholder lawsuit	USD 15bn (January 2013)	USD 11bn (2015)
Tradewinds Global Investors LLC	Key personnel departure	2012	• AUM fell 72% in 10 months • Triggered by announcement in March that star money manager David Iben was leaving. • Orderly wind down in progress	USD 33bn (January 2012)	USD 3bn (August 2016)
Axa Rosenberg	Concealed model error, fraud alleged	2011	• Founder barred • Management changes • Met redemptions of USD 29bn in 2010, USD 5bn in 2011, and USD 3bn in 2012 • USD 242mn settle with SEC	USD 70bn (July 2009)	USD 26.3bn (September 2014)
Gartmore Group	Key personnel departure	2010	• Sold to Henderson 2011 • Met redemptions of USD 1.29bn in just seven weeks	GBP 22bn (January 2010)	GBP 15.7bn (February 2011)
Galleon Group	Insider trading	2009	• Firm closed • Founder criminally convicted • Funds liquidated 2009	USD 7bn (October 2009)	Fund liquidation
The Reserve Primary Fund	Investment losses in Primary Fund	2008	• Primary Fund in liquidation • The Reserve firm in liquidation	USD 65bn (fund) USD 125bn (total) (August 2008)	Fund and firm liquidation
Absolute Capital Management	Securities fraud	2007	• Founder criminally charged • Multiple enforcement actions • Civil suits	USD 3bn (June 2007)	USD 885mn (June 2008)

Janus Capital Management	Market timing	2003	• Fines • Management changes • Met redemptions of USD 3.2bn in September 2003 alone	USD 147bn (May 2003)	USD 133.6bn (January 2005)
Pilgrim Baxter	Market timing	2003	• Principals barred • >20% decline in AUM from September 2003 to end December, 2003. • Old Mutual (owner since 2000) closes some funds; rebrands	USD 7.4bn (September 2003)	USD 5.4bn (January 2004)
Putnam	Market timing	2003	• USD 14bn (5%) decline in first week of November 2003 • Management changes • Fines • Sold to Great West Life in 2007	USD 277bn (October 2003)	USD 141bn (September 2013)
Strong Capital	Market timing	2003	• Principal barred • Met redemptions of USD 4.9bn (USD 1.6bn of that in one month) • Sold to Wells Fargo in 2005	Data unavailable	USD 33bn (March 2004)
Canary Capital Partners	Market timing Late trading	2003	• Fines • Principal receives 10 year bar	USD 500mn (2003)	Data unavailable
Alliance Capital Management	Market timing	2003	• Fines and Disgorgement • Management changes • USD 790m of mutual fund outflows from September to December, 2003, increase in AUM attributed to market appreciation • Renamed Alliance Bernstein in 2006	USD 434bn (February 2002)	USD 489bn (February 2004)
Advanced Investments Management	Breach of client guidelines (all separate accounts)	2002	• Firm closes 2002 • Civil litigation • Regulatory fines	USD 5.5bn (2002)	Firm closes
Long Term Capital Management	Investment losses of USD 4.6bn in four months	1998	• Creditor investments to avoid loss • Firm dissolved 2002 • Creditors make small profits when unwind completed	USD 5bn (Begin 1998)	Firm closes

Community Bankers MMF	Investment losses in structured notes	1994	• Fund liquidated September 1994	USD 82mn (1994)	Fund liquidation
TCW/Term Trusts 2000 & 2003	Investment losses-MBS	1994	• Civil litigation • Regulatory fines for fund marketers • Manager firm ownership change 1996	Two trusts: USD 1.5mn (1994)	Initial drop to USD 1.0mn Trusts liquidate at term end
Piper Jaffrey/ Institutional Government Bond Fund	Investment losses-MBS	1994	• Fund closed to new investors - assets run off • Civil litigation. • Parent of manager sells stake to ITT insurance 1997	Fund: USD 750mn (1994)	Initial drop to USD 590mn then run off to zero.
Hyperion (Term Trusts 1997,99,03)	Investment losses-MBS	1993	• Civil litigation • Regulatory fines for fund marketers	USD 1.5bn (1993)	USD 1.2bn
Barlow Clowes	Investment losses Fraud	1988	• Firm closed, funds liquidated, UK government made ex gratis payment to investors • UK Government repaid from trustees GBP120mn of GBP153mn payment-2011	GBP 188mn (1988)	Firm closed, funds liquidated

*Represents large outflows, not fund or manager closures.

Appendix B: Testing Hypotheses about Risks in Asset Management

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February 2019

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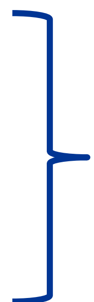
Executive Summary

A products and activities based approach in asset management is the only way to mitigate potential systemic risks

The FSB, IOSCO, and FSOC have recognized the importance of regulating products and activities across the system as entity-level SIFI designations would just move risk around.

- The initial focus on entity-level designation misapplied bank-centric metrics to asset management:
  - Size
  - Interconnectedness
  - Substitutability
  - Complexity
  - Global activities



Originally proposed metrics for identifying non-bank non-insurer SIFIs[1]

- However, the asset management business model is fundamentally different than that of a bank.
- The pivot to system-wide regulation of products and activities recognizes a different approach was necessary for asset management.
  - Money market funds (MMFs) have been reformed in the U.S. and in the EU.
  - Over-the-counter (OTC) derivatives have moved to a central clearing model.
  - FSB-IOSCO issued 14 recommendations to address vulnerabilities from asset management activities, 12 of which focus on fund liquidity and leverage.

FSB = Financial Stability Board, IOSCO = International Organization of Securities Commissions, FSOC = Financial Stability Oversight Council, SIFI = systemically important financial institutions

1) FSB-IOSCO, Consultative Document, Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions: Proposed High-Level Framework and Specific Methodologies (Jan. 8, 2014).

Asset managers act as fiduciary agents for asset owners

Asset managers do

- Act on behalf of clients
- Rely on a generally stable fee-based income stream
- Receive regulatory oversight at both the manager and portfolio levels

Asset managers do not

- Invest with their own balance sheets by engaging in principal trades with clients
- Guarantee investor principal
- Provide liquidity for funds
- Have access to central bank liquidity

Asset management business model is fundamentally different than that of other financial institutions, such as:

- Commercial banks
- Investment banks
- Insurance companies
- Government-sponsored enterprises

Several theories on asset management were based on data that was subsequently restated

The Federal Reserve restated its Z.1 data in June 2016.[1]

- The corrected data shows more muted growth of corporate bonds held by mutual funds.

The International Monetary Fund (IMF) restated data in its October 2014 Global Financial Stability Report (GFSR).[2]

- The corrected data no longer shows concentration of ownership in outstanding high yield bonds or emerging markets (EM) debt by any particular asset manager.

1) Federal Reserve's Z.1 "Financial Accounts of the United States" Statistical Release.
2) IMF, Global Financial Stability Report (Oct. 2014), available at https://www.imf.org/en/Publications/GFSR/Issues/2016/12/31/Risk-Taking-Liquidity-and-Shadow-Banking-CurbingExcess-While-Promoting-Growth (October 2014 GFSR).

Several theories reflected misunderstandings about asset management

Misunderstanding: Asset managers could decide to re-allocate assets away from emerging markets, creating disruption in these economies, as outlined in the September 2014 BIS Quarterly Review.

- Asset allocation decisions are determined by asset owners. Asset managers are required to manage each portfolio within the confines of the investment management agreement.
- As shown by Lipper and eVestment Alliance manager rankings, the "largest asset managers" have little overlap with the "largest managers of emerging markets debt."[1]

Misunderstanding: Securities lending poses a number of risks, as outlined in a New York Federal Reserve publication.

- Our *ViewPoint* Securities Lending: The Facts identifies each concern raised and explains the actual industry practices.

Misunderstanding: The Office of Financial Research study on asset management published in September 2013 identified separate accounts as potentially leveraged and loaded with illiquid assets.

- ERISA constrains the use of leverage for many large separate accounts.
- A SIFMA AMG study found that separate accounts are predominantly long-only portfolios.[2]

Misunderstanding: The use of third party service providers creates unacceptable levels of operational risks.

- Our *ViewPoints*, The Role of Technology Within Asset Management and The Role of Third Party Vendors in Asset Management, discuss the use of third party services in asset management.

1) See slide 17. Source: Lipper. Data as of Aug'14. Includes MFs across all markets worldwide. Excludes FOFs and ETFs. EM debt includes both GEM and country-specific strategies in both hard and local currencies. Countries included within EM debt are based on MSCI's current EM country coverage.
2) SIFMA-AMG in Regards to Separate Accounts (Apr. 4, 2014).

Misunderstandings about asset management (continued)

Misunderstanding: An asset manager is prone to suddenly "fail".

- Our Comment Letter to SEC, Additional Feedback on OFR Study on Asset Management and Financial Stability, addresses these concerns and explains that asset managers are extremely unlikely to "fail".
- Asset managers do not face sudden insolvency since they are not using their balance sheet.

Misunderstanding: If a fund or asset manager goes out of business, resolution could require government intervention and threaten financial stability.

- As outlined in ICI's White Paper, Living Wills and an Orderly Resolution Mechanism? A Poor Fit for Mutual Funds and Their Managers, asset managers and funds are straight-forward to resolve, often ending in a sale (i.e., Neuberger Berman from Lehman funds and Pilgrim Baxter funds).[1]

Misunderstanding: The redeemable nature of mutual fund shares makes the risks associated with them similar to runnable funding of banks.

- Redemptions from mutual funds are not the same as run risk at banks. As outlined in our *ViewPoint* Taking Market-Based Finance Out of the Shadows: Distinguishing Market-Based Finance from Shadow Banking, unlevered mutual funds do not face funding risks from material asset-liability mismatches, as the value of the shares fluctuates with that of the assets.
- In an extreme scenario where a fund is unable to meet redemptions in the expected timeframe, funds can suspend redemptions or apply gates to avoid becoming a forced seller.

1) ICI, Living Wills and an Orderly Resolution Mechanism? A Poor Fit for Mutual Funds and Their Managers (Aug. 12, 2014), available at https://www.ici.org/viewpoints/view_14_orderly_resolution.

Numerous hypotheses were tested by actual market events… and proven to be false

Hypothesis: If a large manager experiences a reputational event, all clients of the firm will redeem across its platform, resulting in massive redemptions and asset sales, creating market disruption.

- Following Bill Gross's sudden departure from PIMCO, there was an orderly process that played out over time reflecting different views and governance processes.

Hypothesis: The largest funds pose the greatest risks in asset management.

- Reserve Fund, Third Avenue Focused Credit Fund (TFCIX), and UK Property Funds were all relatively small funds in their categories sponsored by relatively small asset managers.

Hypothesis: If a fund closes suddenly, investors in similar funds will panic and selling pressures will create a downward spiral.

- When TFCIX closed suddenly, some institutional investors saw a buying opportunity and increased their high yield bond allocations.

Hypothesis: Market stress will lead to mass redemptions across all mutual funds, or across all bond funds.

- As demonstrated in our *ViewPoint*, Breaking Down the Data: A Closer Look at Bond Fund AUM, some categories of bond funds experienced net outflows while others experienced net inflows during times of market stress.
- As explained by ICI in their Viewpoint Corporate and Investment Grade Bond Funds: What's in a Name?, there are misunderstandings about the holdings of bond funds, which invest nearly half of their assets in government bonds, in comparison to less than one third in corporate bonds

Hypotheses about asset management (continued)

Hypothesis: ETF liquidity will not be available during market stress events.

- High yield ETFs demonstrated elevated trading volumes and acted as shock absorbers in December 2015 following the closure of TFCIX, following the Brexit vote in June 2016, and during the spike in volatility in February 2018.

Hypothesis: "Passive investing" has grown so large that it will create market distortions.

- Equity ETFs represent approximately 4.5% of the global equity markets, index equity mutual funds represent 3.5%, and total global equity index strategies (including ETFs, index mutual funds, and separate accounts) represent 17.4%.[1]

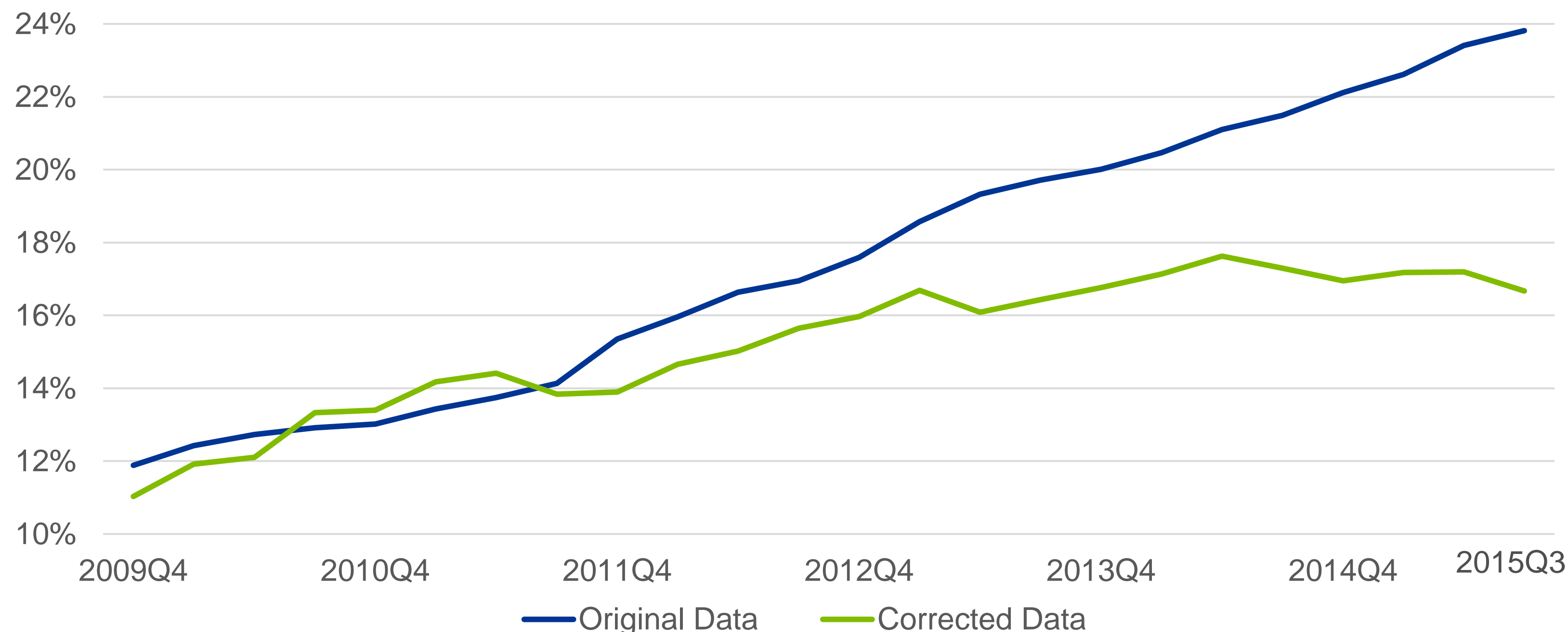
1) Sources: World Federation of Exchange Database (data as of November 2017), Simfund (data as of Nov 2017), Broadridge (data as of Nov 2017), iShares (data as of Nov 2017), McKinsey (data as of year-end 2016). 1) World Federation of Exchange Database. 2) iShares. 3) Simfund, Broadridge. 4) McKinsey, BlackRock.

Corrected Data

Federal Reserve Z.1 data on mutual fund ownership of corporate bonds

In 2016, the Federal Reserve revised their data on the holders of corporate and foreign bonds.

- The revised data shows more moderate growth and a leveling off.
- The revised data shows that mutual funds held 17% of corporate and foreign bonds in 2015, down from their original estimate of 24%.

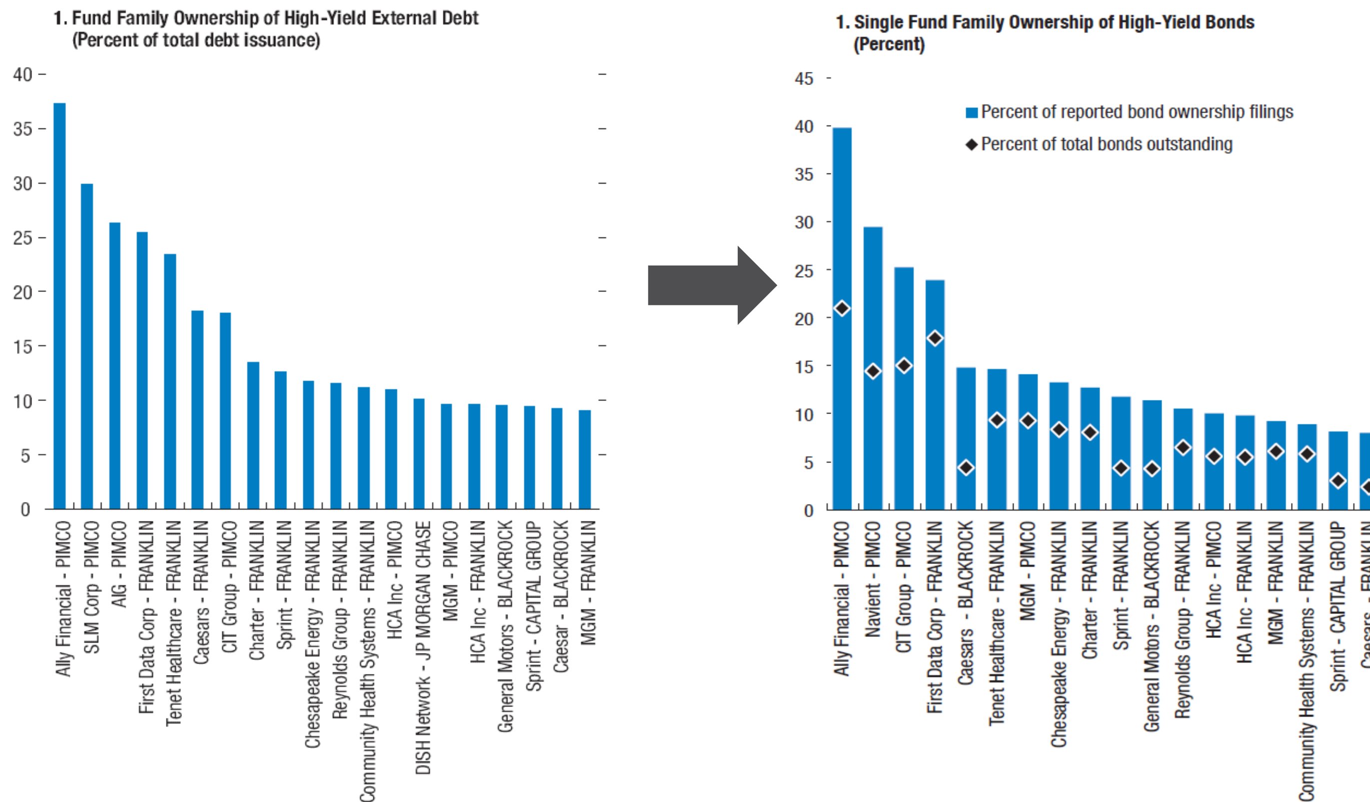


Source: Federal Reserve's Z.1 "Financial Accounts of the United States" Statistical Release. Original data from Dec. 2015 release. Corrected data from Sep. 2016 release. Chart includes quarterly data from fourth quarter 2009 through third quarter 2015 to illustrate corporate and foreign bond ownership by mutual funds following the 2008 Financial Crisis. Graphs represent total corporate and foreign bonds included in Fed Z.1 data.

IMF's GFSR on concentrated holdings in high yield

In the October 2014 GFSR, the IMF noted concentrated holdings by certain mutual fund companies as a stability issue. The data was incorrect and was restated.

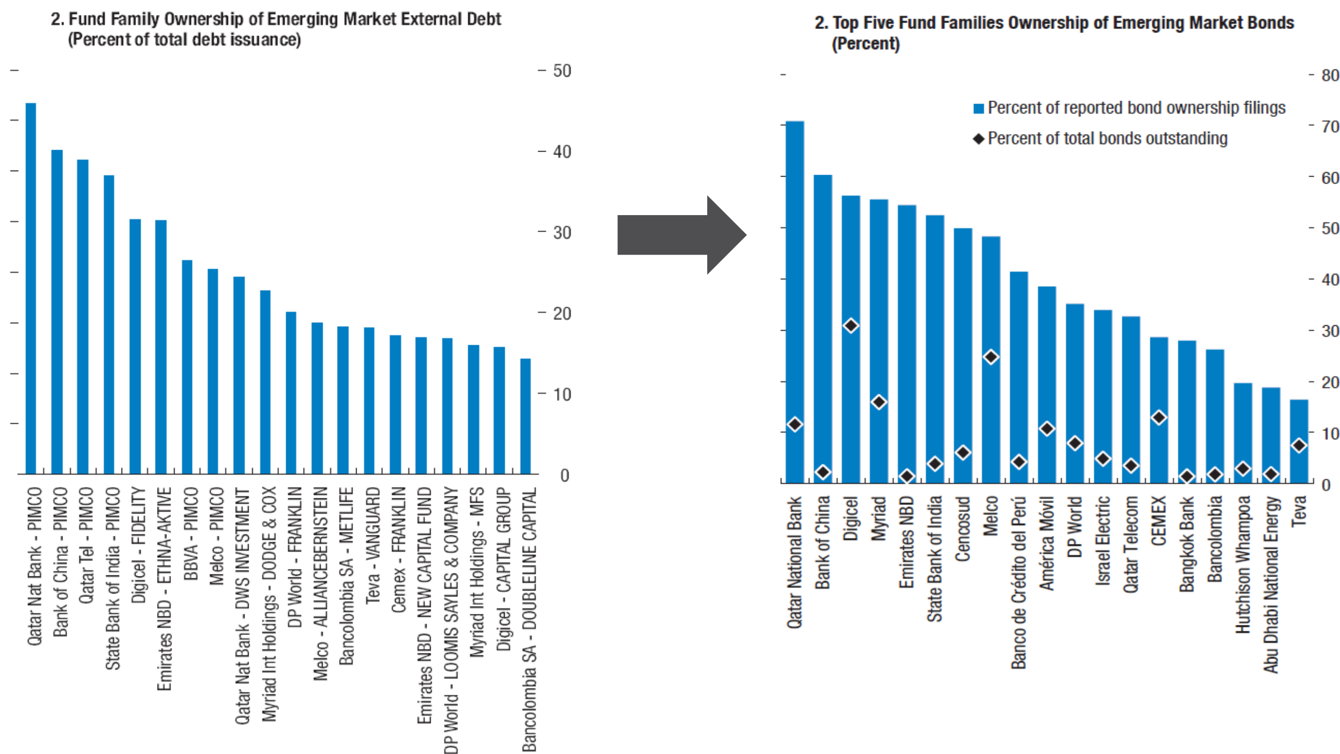
- The original chart (left) showed the holdings of certain mutual funds as a percentage of the reported holdings. Since bondholders other than mutual funds were not included in the denominator, the chart grossly over-represented the concentration issue.
- In the revised chart (right), the diamonds show the percentage of *total bonds*, which is significantly lower than the bars which continue to show percentage of *reported holdings*.



IMF’s GFSR on concentrated holdings in emerging markets debt

In the October 2014 GFSR, the IMF noted concentrated holdings by certain mutual fund companies as a stability issue. The data was incorrect and was restated.

- The original chart (left) focused on the percentage of *external debt* owned by bond funds. In many cases, external debt is a small fraction of the issuer’s total debt outstanding. As a result, the original chart grossly overstated the concentration issue.
- In the revised chart (right), diamonds indicate the percentage of total bonds outstanding.
- While the original chart used individual fund families, the restated chart aggregates the holdings of five fund families, although these are unrelated competitors.



Misunderstandings in asset management

Asset owners make significant allocations to/from emerging markets

In a September 2014 report, the Bank for International Settlements (BIS) expressed concerns about asset managers allocating assets out of emerging markets.

“The large size and concentration of AUM of asset managers in relatively small and illiquid EME asset markets are a potentially important source of concern. Any decision by asset managers with large AUM to change portfolio allocation can have a major impact on EME asset markets that are relatively small. For instance, *a 1 percentage point reallocation of AUM of the largest 500 AMCs discussed above, the total size of which amounts to about $70 trillion, would result in additional portfolio flows of $700 billion to EMEs*.” – BIS Report [1]

This language conflates asset allocation by asset owners with the agency role of asset managers.

- Asset managers are required to manage each portfolio within the confines of the investment management agreement.
- Asset owners control the asset allocation of their overall portfolio as well as manager selection.

1) BIS Quarterly Review, Asset managers in emerging market economies (Sep. 2014), available at https://www.bis.org/publ/qtrpdf/r_qt1409e.pdf.

Manager rankings for emerging markets debt funds and global bond funds

The largest managers of EM bonds only overlap partially with the largest asset managers.

Only about 20% of emerging markets debt is investable to foreign investors.[1]

EM Debt (USD $Billions)[2]

AUM Rank	Manager	AUM			Net Flows		
		Aug'14	2013	2012	YTD'14	2013	2012
1	Itau Unibanco Holding	**100**	97	101	-7	6	3
2	Banco do Brasil	**96**	84	90	1	-10	2
3	Bradesco	**56**	48	51	6	1	-1
4	Caixa Econômica Fed	**46**	42	41	-1	4	5
5	HSBC Group	**41**	37	43	1	7	-3
6	PIMCO	**39**	40	47	-4	10	-3
7	Santander Group	**38**	35	35	0	1	1
8	Stone Harbor	**22**	21	19	0	6	5
9	Citigroup	**21**	19	19	2	1	-1
10	Pictet & Cie	**18**	17	23	0	6	-3
11	JP Morgan AM	**16**	12	11	3	4	2
12	Ashmore Group plc	**15**	14	13	0	3	2
13	Fidelity	**13**	11	15	1	4	-3
14	Franklin Templeton	**11**	16	17	0	1	-1
15	Investec Group	**11**	9	11	1	2	0
16	Royal Bank of Canada	**11**	11	13	-1	3	-1
17	Goldman Sachs	**10**	9	10	1	3	0
18	MFS Inv Management	**10**	10	12	-1	4	-1
19	BTG Pactual	**10**	9	10	-1	2	1
20	BNP Paribas	**9**	9	10	0	0	0
	Total Top 20	**593**	**550**	**591**	**2**	**59**	**4**
	Grand Total	**957**	**966**	**1,006**	**5**	**135**	**32**

Global Debt (USD $Billions)[2]

AUM Rank	Manager	AUM			Net Flows		
		Aug'14	2013	2012	YTD'14	2013	2012
1	Franklin Templeton	**178**	182	160	-10	6	18
2	PIMCO	**67**	64	66	-1	22	-2
3	MassMutual Financial	**45**	44	35	-1	3	9
4	AXA Group	**42**	39	39	1	7	-1
5	Vanguard Group	**31**	24	5	6	0	20
6	Dimensional	**23**	20	16	3	2	4
7	JP Morgan AM	**23**	19	14	4	5	4
8	Goldman Sachs	**23**	19	16	3	2	3
9	Mitsubishi UFJ	**22**	22	27	-1	-7	-3
10	Crédit Suisse Group	**18**	15	13	3	1	3
11	Fidelity	**16**	16	16	0	2	0
12	UBS AG	**15**	14	16	1	0	-2
13	Schroders	**15**	14	16	0	1	-2
14	Capital Group Cos	**14**	13	15	0	0	-1
15	Unicredit Group	**14**	13	12	0	0	0
16	NN Group	**13**	10	5	2	1	5
17	Swisscanto	**11**	11	9	0	0	0
18	BlackRock	**11**	11	11	0	2	0
19	Invesco	**11**	10	10	0	0	0
20	Legg Mason Inc	**10**	9	8	1	3	1
	Total Top 20	**602**	**569**	**507**	**11**	**50**	**56**
	Grand Total	**984**	**908**	**828**	**46**	**92**	**82**

1) BlackRock, *ViewPoint*, Who owns the assets? A closer look at bank loans, high yield bonds, and emerging markets debt (Sep. 2014).
2) Source: Lipper. Data as at Aug'14. Includes MFs across all markets worldwide. Excludes FOFs and ETFs. EM debt includes both GEM and country-specific strategies in both hard and local currencies. Countries included within EM debt are based on MSCI's current EM country coverage.

Responses to concerns about securities lending

Concerns Raised[1]	Industry & BlackRock Practices
Potential Conflicts of Interest	
An asset manager can lend directly from a mutual fund for which it acts as securities lending agent to a hedge fund for which it acts as investment manager, potentially suggesting that self-dealing is occurring.	• Consistent with a combination of regional regulatory requirements, market practices, and BlackRock's policies and procedures, BlackRock does *not* arrange transactions between the lenders for which it acts as securities lending agent and entities for which it acts as investment manager.
Leverage	
Securities lending introduces a material amount of leverage into a lender's investment portfolio.	• The effective lending utilization rates are typically quite low and, more importantly, post-Crisis regulations highly constrain the economic risks allowable in cash collateral reinvestment pools. • The intent of requiring collateral for securities loan transactions is to protect against a borrower default and it is designated for that purpose. The cash is not intended as a source of funding to purchase additional assets in a portfolio.
Use of Cash Collateral[2] and Reinvestment Vehicles	
The use of cash reinvestment pools for cash collateral represents both maturity and liquidity transformation and cash collateral reinvestment pools are subject to "run risk".	• In response to issues associated with cash pools that arose during the Crisis, significant reforms have been implemented to address cash reinvestment vehicles.3 The resulting cash portfolios are comprised of short maturity and high credit quality securities, and have a high degree of liquidity. • BlackRock's reinvestment of cash for securities lending clients does not entail meaningful maturity, credit, or liquidity transformation.
Use of Non-Cash Collateral and Rehypothecation	
Non-cash collateral is re-hypothecated (e.g., used as collateral in other transactions), reflecting multiple intermediation chains.	• BlackRock does *not* rehypothecate non-cash collateral. In BlackRock's securities lending program, the borrower posts all non-cash collateral directly to a custodial account for the benefit of the lender. The collateral is not used by either the lender or lending agent, except in the event that the borrower defaults, at which time the collateral would be sold to cover the replacement cost of the securities that were on loan.

1) Federal Reserve Bank of New York, Staff Report No. 705, Hybrid Intermediaries (Dec. 2014) available at http://www.newyorkfed.org/research/staff_reports/sr705.pdf.
2) In our lending program, cash is the most common type of collateral pledged by borrowers in the US, whereas borrowers in Europe, Asia, and Canada typically collateralize their loans with high quality, liquid securities.
3) For example, in the US, SEC Rule 2a-7 Reforms in 2010 and OCC STIF reforms in 2012.

Responses to concerns about securities lending

Concerns Raised[1]	Industry & BlackRock Practices
Borrower Default Indemnification	
Borrower default indemnification represents a material balance sheet risk to lending agents that provide borrower default indemnification. While banks hold capital against borrower default indemnification liabilities, asset managers do not.	• Where "borrower default indemnification" is provided, the lender is not indemnified for investment results, such as cash reinvestment. • Borrower default indemnification is triggered only when both of the following conditions are met: (i) the counterparty defaults on the loan and (ii) the collateral is insufficient to cover the cost of replacing the securities. Each loan is over-collateralized, and the collateral is marked-to-market daily. • In the unlikely circumstance where a borrower defaults and collateral received is insufficient to cover the repurchase price of the lent securities, this shortfall would be borne by the indemnification provider. If the indemnification provider was unable to cover a shortfall, the loss would be borne by the client. • BlackRock typically requires borrowers to post collateral between 102% and 112% of the value of the securities lent. Additionally, loans and collateral are marked-to market daily. • BlackRock provides borrower default indemnification to some clients for which it acts as lending agent. The fair value of these indemnifications was not material at Dec. 31, 2017 as disclosed in BlackRock's 10-K. BlackRock (and its predecessors) has never had its indemnification agreements triggered or had to use its own monies to repurchase a security on a lending client's behalf. • BlackRock holds $2.6 billion in unencumbered liquidity against potential indemnification exposure to which it is subject and has access to an additional $6 billion of liquidity, both in the form of unencumbered cash and a $4 billion, 5-year bank credit facility as of December 2017. BlackRock does not rely on wholesale funding nor government-insured deposits to support its liquidity.
The amount of securities loans that BlackRock indemnifies grew significantly between 2012 and 2014.	• The increase observed by various commentators reflects a major organizational change during this time period. As part of the terms governing the acquisition of BGI by BlackRock, Barclays was contractually obligated to continue providing counterparty default indemnification to certain BlackRock securities lending clients through Dec. 1, 2012. BlackRock assumed these indemnification obligations prior to or upon the expiration of Barclays' indemnification obligation. • As disclosed in our 10-K, the amount of securities on loan in BlackRock's securities lending program subject to indemnification as of Dec. 31, 2014 was $145.7 billion. Borrowers posted $155.8 billion as collateral for indemnified securities on loan at Dec. 2014. The fair value of these indemnifications was not material at Dec. 31, 2014.

1) Federal Reserve Bank of New York, Staff Report No. 705, Hybrid Intermediaries (Dec. 2014), available at http://www.newyorkfed.org/research/staff_reports/sr705.pdf.

Third party services are used extensively in asset management

Numerous services with multiple vendors.

Regulators require vendor management and business continuity plans.

Pricing Services
- Interactive Data
- Markit
- Thomson Reuters

Security Data Providers
- Bloomberg
- Thomson Reuters

Custodians
- BNY Mellon
- JP Morgan
- State Street Corp.

Transfer Agents
- American Stock Transfer & Trust
- Computershare / BNY Mellon

Benchmark Providers
- MSCI
- Russell
- S&P

Intermediaries

Institutional Investment Consultants

Retail Intermediaries:
- Bank/Insurance-based Advisors
- Registered Investment Advisors
- Brokerage Platforms

Technology Platforms

Order Management Systems
- Aladdin®
- Bloomberg AIM
- Charles River
- SimCorp Dimension

Risk Systems
- Aladdin®
- Barra / RiskMetrics
- BondEdge
- FactSet

Examples provided in each box are illustrative and do not represent a comprehensive list.

Redemption risk in mutual funds is not the same as run risk in banks

Banks	Mutual Funds
Run Risk = Funding Liquidity Risk	**Run Risk = Redemption Risk**
Run risk in banks reflects the inability to produce sufficient liquid assets to pay liabilities that are coming due. This is known as funding liquidity risk, which if improperly managed can lead to insolvency.	**Redemption risk** is the risk that a fund might have difficulty meeting investor requests to redeem their shares for cash within the timeframe required by fund constituent documents and/or regulation without unduly diluting the interests of remaining shareholders.
Assets purchased by issuing short-term liabilities.	**Assets purchased with redeemable equity.**
Funding Provided by "Run" Prone Investors.	**Fund Shareholders are Long-Term Investors.**
Entity Becomes Forced Seller in Financial Distress.	**Mechanisms to Avoid Becoming a Forced Seller.**
Bank Sponsor Support.	**No Expectation of Bank Sponsor Support.**

Even in the worst case where a fund is unable to meet redemptions in the expected timeframe, funds can suspend redemptions or apply gates.

- As such, the inability to meet redemptions does not automatically trigger fire sales.
- The recent example of UK property funds using gating in the wake of the Brexit vote demonstrates the effectiveness of suspensions and other tools to manage redemption challenges in extreme scenarios.[1]

1) Since then, the UK's FCA's subsequent Discussion Paper DP 17/01 on illiquid assets and open-ended property funds included a guidance note on fund suspensions as well as a number of recommendation on the use of liquidity management tools and improved investor disclosures https://www.fca.org.uk/publication/discussion/dp17-01.pdf.

Hypotheses Tested

Market risk ≠ systemic risk

A series of market events have significantly realigned valuations.

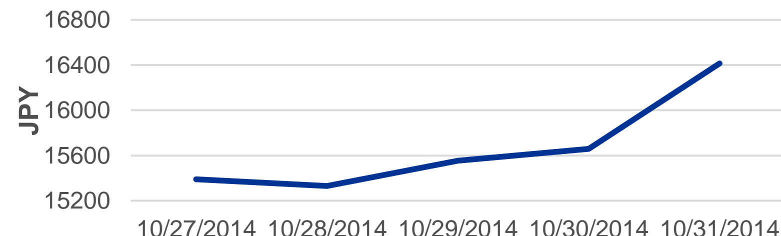
- US Treasury "Flash Rally' in Oct. 2014, while short-lived, demonstrated the potential for market volatility.
- Bank of Japan and Government Pension Investment Fund paired announcements in Oct. 2014 – led to a 7% increase in the Nikkei Index.
- Swiss National Bank lifted currency cap on Swiss franc in Jan. 2015 – led to a 15% decline in the Swiss Market Index.
- European Central Bank announced expansion of QE in Jan. 2015 – resulted in a European equity market rally of 5%.
- Equity market sell-off and volatility spike in Feb. 2018 – led to a 9% decline in the S&P 500.

Recent market events create "winners" and "losers."

- After heavy losses following removal of the Swiss franc currency cap, retail broker Alpari UK filed for insolvency and New Zealand FX dealer Global Brokers NZ closed.[1]
- Everest Capital, a hedge fund, closed Everest Global Fund ($830 Million in AUM) after losses due to Swiss Franc move.[2]

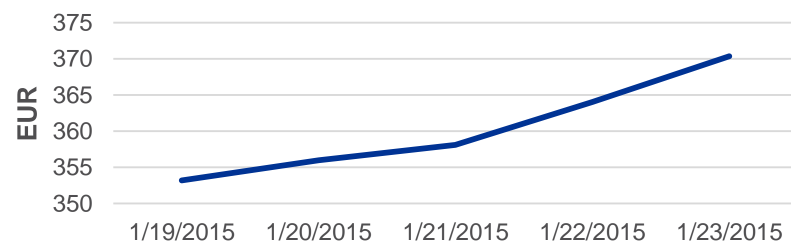
The banking system was not materially impacted by these market swings.

Nikkei 225 Index: Oct. 27-31, 2014



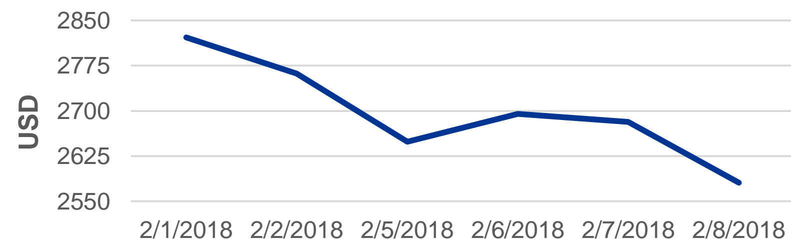
Source: WSJ, using end of day data. As of November 2014.

STOXX Europe 600 Index: Jan. 19-23, 2015



Source: WSJ, using end of day data. As of January 2015.

S&P 500 Index: Feb. 1-8, 2018



Source: S&P Dow Jones Indices, using end of day data. As of February 2018.
It is not possible to invest directly in an index.

1) See Anirban Nag and Steve Slater, "Swiss franc shock shuts some FX brokers; regulators move in", Reuters, (Jan. 16, 2015). 2) See Rob Copeland, "Everest Capital to Close $830 Million Global Fund After Losses on Swiss Franc", *Wall Street Journal,* (Jan. 17, 2015).

Size of the fund is not the key determinant of risk in asset management

The Reserve Primary Fund was approx. $65 billion[1], out of a total $3.5 trillion total in money market funds (MMFs)[2], and it was not the largest in the MMF category when it "broke the buck".

The Third Avenue Focused Credit Fund (TFCIX) was approximately $3.5 billion at its peak[3], and held under $1 billion in AUM the month before it announced its closure[4].

UK property funds represented less than 3% of UK mutual funds under management (excluding fund of funds).

High Yield Fund Comparison

Fund Name	Dec. 15 AUM (USD $bn)	YTD Performance
Vanguard High-Yield Corporate Fund	$17.7	-1.40%
BlackRock High Yield Bond Fund	$16.2	-4.04%
American Funds American High-Income Trust	$15.7	-7.11%
Fidelity Capital & Income Fund	$10.2	-0.92%
JPMorgan High Yield Fund Ultra	$9.7	-4.59%
T. Rowe Price High-Yield Fund	$9.1	-3.27%
MainStay High Yield Corporate Bond Fund	$8.7	-1.60%
PIMCO High Yield Bond Fund	$8.5	-1.87%
Ivy High Income Fund	$6.2	-7.13%
Eaton Vance Income Fund of Boston	$5.2	-1.96%
Third Avenue Focused Credit Fund	**$0.9**	**-22.4%**

Source: Morningstar. As of 12/31/2015.

Money Market Fund Complex Comparison

Fund Complex	Aug. 08 AUM (USD $bn)
Fidelity	$426.0
BlackRock	$277.6
JPMorgan	$268.1
Federated	$232.2
Dreyfus	$205.8
Schwab	$194.7
Vanguard	$191.4
Goldman Sachs	$183.1
BofA Global Capital	$147.2
Legg Mason	$120.7
Morgan Stanley	$116.7
Wells Fargo	$108.8
Reserve	**$86.5**

Source: iMoneyNet. As of Aug. 31, 2008.

1) Marcin Kacperczyk and Philipp Schnabl, Journal of Economic Perspectives, When Safe Proved Risky: Commercial Paper during the Financial Crisis of 2007–2009 (Winter 2010). 2) Tami Luhby, CNN Money, Run ends on money market funds (Sep. 29, 2008). 3) Third Avenue Form N-Q filing as of Jul. 31, 2014; Tom Aspray, Forbes, "The Week Ahead: How Long Will Junk Bonds and Crude Oil Crush Stocks?" (Dec. 12, 2015). 4) Pensions & Investments, "Third Avenue Plans to Liquidate Credit Fund After Losses" (Dec. 10, 2015); Reuters, "Third Avenue to Liquidate Junk Bond Fund that Bet Big on Illiquid Assets" (Dec. 10, 2015).

Short-term asset flows following Bill Gross's departure from PIMCO

Outflows from PIMCO funds focused on products most closely associated with Gross as the portfolio manager.

- October outflows from PIMCO totaled $48 billion[1]; 70% came from funds previously managed by Gross.[2]
- Outflows reflect decisions of both retail and institutional asset owners.
- Intermediaries (including institutional investment consultants and retail brokerages) play a key role in advising asset owners on asset allocation changes.

Resulting inflows into multiple firms, products and investment strategies reflect high level of competition in the asset management industry.

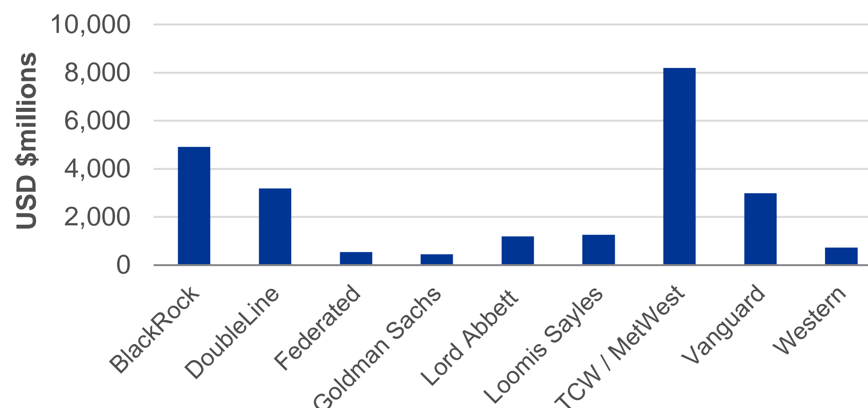
- Various asset owners chose between active, passive, and unconstrained strategies.

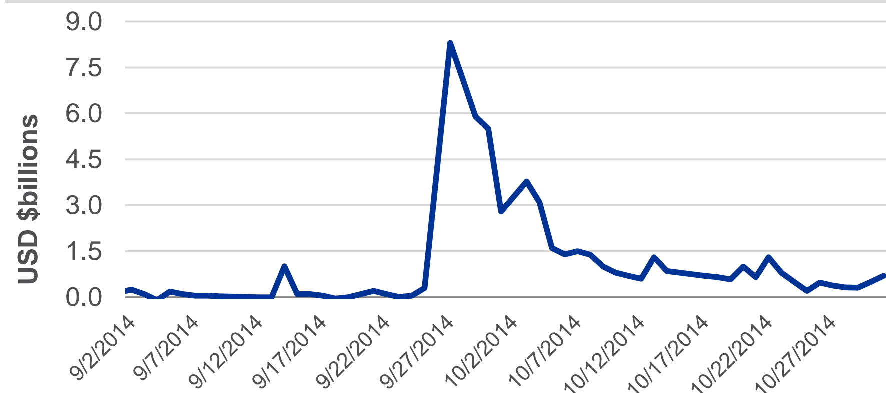
Fixed income markets including related derivative instruments continued to function in an orderly manner.

- Market performance driven primarily by geopolitical issues and economic data during this period.

FINANCIAL TIMES
September 30, 2014 | By Stephen Foley, Tom Braithwaite and Gina Chon
Mercer Strips Pimco Funds of Top Rating

REUTERS
Morningstar strips Pimco Total Return Fund of its gold rating
by Jim Young September 30, 2014





Reference to company name or fund mentioned herein is strictly for illustrative purposes only. Past performance is not a reliable indicator of future performance. The views expressed do not constitute investment recommendation or any other advice.

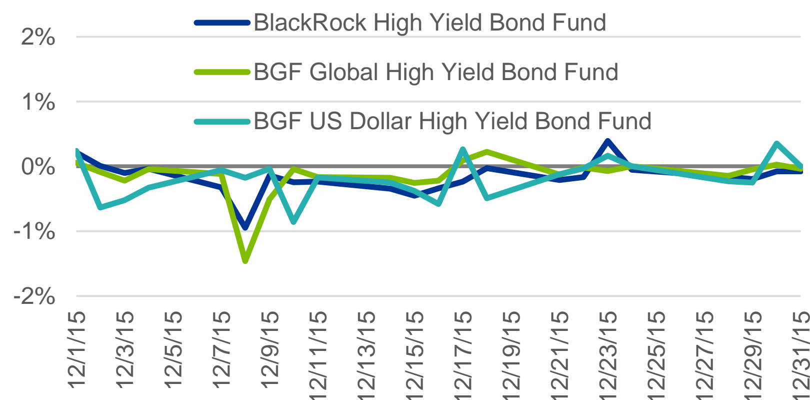
1) See Kirsten Grind, "Pimco Sees $48 Billion in Outflows After Gross Departure," WSJ (Nov. 5, 2014). 2) See Oliver Suess, "Pimco Offers Special Post-Gross Bonus to Retain Talent", Bloomberg, 7 November 2014. 3) Source: Morningstar. Includes actively managed and index intermediate-term. short-term, and unconstrained bond strategies for open-end bond funds. Excludes ETFs. 4) Source: PIMCO Statement Regarding October Total Return Fund Net Flows (Nov. 4, 2014).

High yield fund flows following Third Avenue's announcement

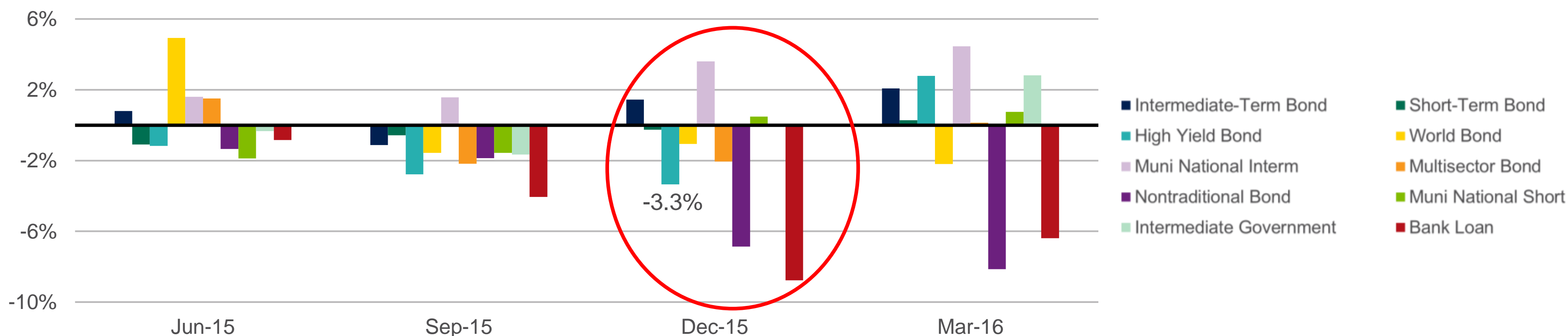
Following Third Avenue's December 2015 announcement that TCFIX would be unable to meet redemptions, high yield bond funds met elevated redemption activity.

- Institutional investors added to high yield bond allocations.[1]

While some types of bond funds saw net outflows, others experienced net inflows.



Source: BlackRock, as of 12/31/2015



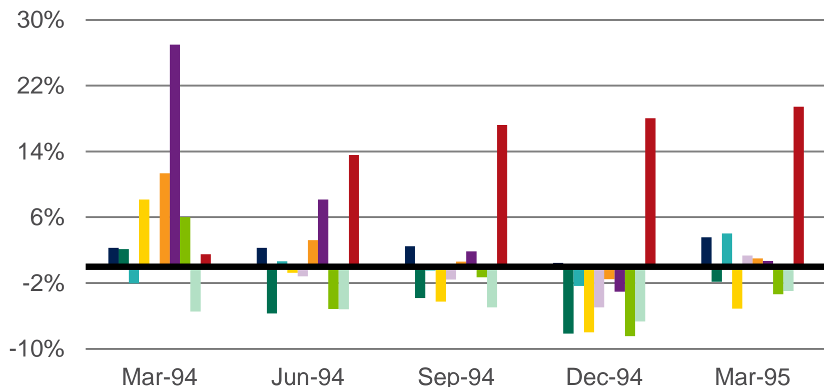
Source: Simfund, BlackRock analysis. As of Jun. 2016.

This example is provided strictly for illustrative purposes only. The data contained herein are not necessarily all-inclusive and are not guaranteed as to accuracy. Past performance is not a reliable indicator of future performance.

1) Rick Baert, Pensions & Investments, "Some see recent high-yield turmoil as buying opportunity" (Dec. 18, 2015), available at http://www.pionline.com/article/20151218/ONLINE/151219882/some-see-recent-high-yield-turmoil-as-buying-opportunity.

Bond fund flows have been varied following market stress events

1994 Rate Hike



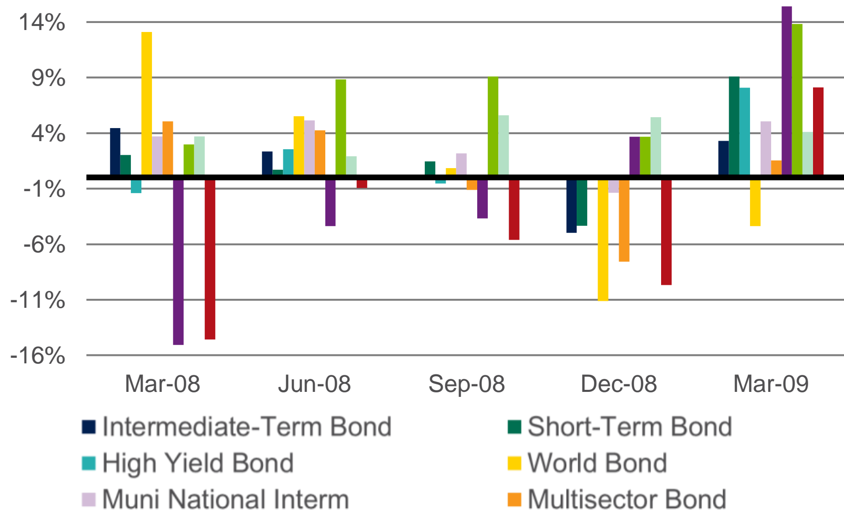
UK Property Funds following 2016 Brexit Vote

A number of UK Property Funds announced dealing suspensions or redemption deferrals.

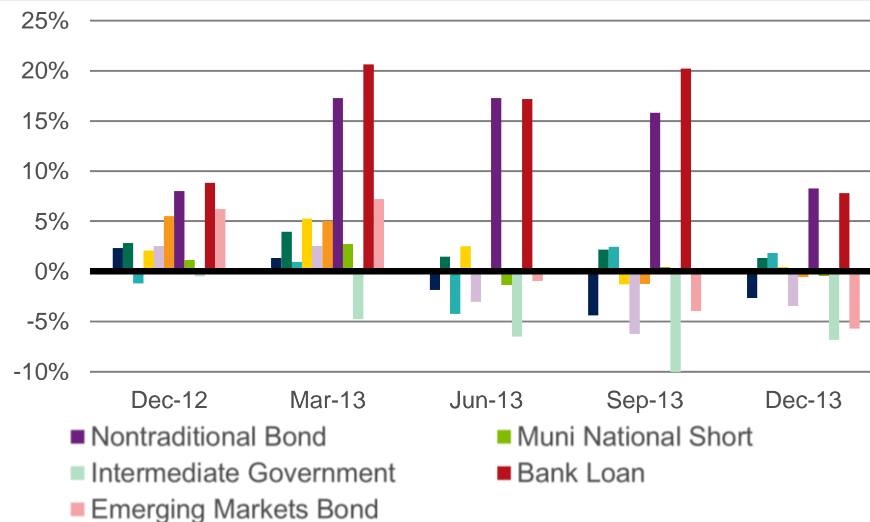
- The FCA, as primary regulator to UK property funds, reinforced their guidance on the managers' responsibility to protect investors including through the use of redemption gates.

Within a few weeks, many of these funds were able to return to normal operations.

2008 Financial Crisis



2013 Taper Tantrum



Source: Simfund, BlackRock analysis. The categories shown above are the top ten largest bond fund categories by AUM as of December 2015. Taper Tantrum chart also includes emerging markets bond funds given the focus on emerging markets during the Taper Tantrum.

ETFs have acted as shock absorbers during periods of market volatility

In stressed markets, ETFs can provide an additional source of liquidity through the exchange and away from the primary market for the underlying securities.

Given the high yield market environment and closure of TFCIX during the month of December 2015, high yield ETFs experienced significant trading volume.

- On Dec. 11, 2015, high yield bond ETFs traded in aggregate volume of $6.1 billion on exchange while high yield bonds traded $9.5 billion.[1]
- Exchange trading in high yield ETFs was nearly 65% of the size of total OTC trading in high yield bonds.[2]

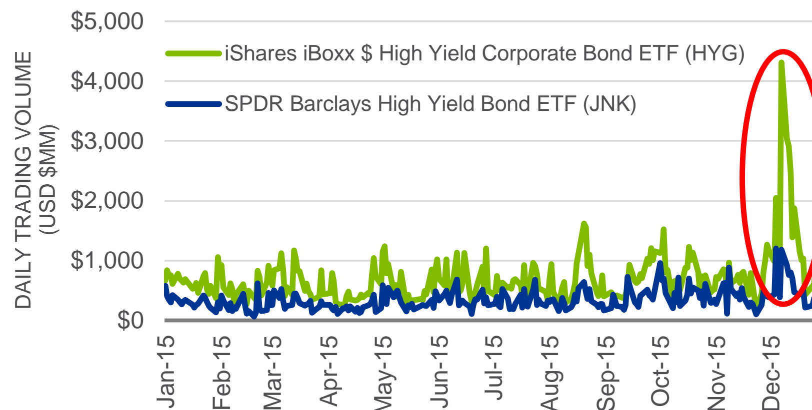
Following increased volatility during the week-ended February 9, 2018, high yield ETFs provided additional liquidity and pricing transparency for OTC markets.

- Secondary trading volume in the iShares iBoxx $ High Yield Corporate Bond ETF (HYG) was elevated in early 2018 through February 14, averaging $1.5 billion per day and reaching as high as $4 billion.
- HYG's "primary" market activity accounted for just 1.45% of total over-the-counter (OTC) high-yield cash bond volume.[3]

1) Source: MarketAxess, FINRA TRACE. Excludes144A trading volumes. Data as of 12/11/2015; accessed on 1/11/2016.
2) Does not include high yield ETF trading volume as part of OTC trading volume. High yield bond ETF trading volumes were 29.8% of total trading volumes including ETFs.

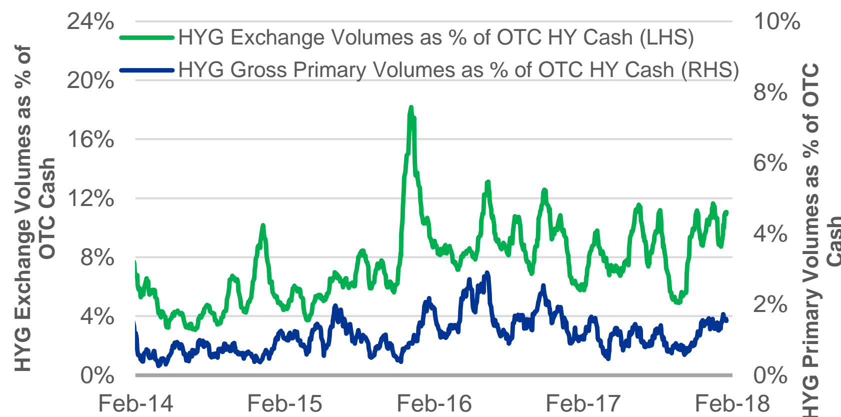
Examples provided for illustrative purposes only. The data contained herein are not necessarily all-inclusive and are not guaranteed as to accuracy. Past performance is not a reliable indicator of future performance.

High Yield ETF Trading Volume in Dec. 2015



Source: Bloomberg, BlackRock, as of 12/31/2015

HYG – 20 Day Rolling Volumes as % of OTC High Yield Cash Activity



3) Source: Bloomberg, BlackRock, SIFMA as of 2/14/2018. 144a HY OTC volumes included.

Index strategies remain relatively small compared to active strategies

Indexed assets – including mutual funds, ETFs, and institutional portfolios – account for less than 18% of all global equities.

Size of Global Equity Markets by Market Cap (US $bn) (1)	
Year-end 2016	67,905
Year-end 2017	83,290
% change Y-o-Y	*22.7%*
Global Equity ETFs as a % of Global Equity Markets (2)	
Year-end 2016	4.0%
Year-end 2017	4.5%
Global Index Equity Mutual Funds by Market Cap US $bn) (3)	
Year-end 2016	2,324
Year-end 2017	2,955
% change Y-o-Y	*27.2%*
Global Index Equity Mutual Funds as a % of Global Equity Markets (3)	
Year-end 2016	3.4%
Year-end 2017	3.5%
Total Global Equity Index Strategies (ETFs, Index Mutual, & Separate Accounts) by Market Cap US $bn) (1) (2) (3) (4)	
Year-end 2016	11,854
Year-end 2017	14,459
% change Y-o-Y	*22.0%*
Total Global Equity Index Strategies (ETFs, Index Mutual, & Sep Acc) as a % of Global Equity Markets (1) (2) (3) (4)	
Year-end 2016	17.5%
Year-end 2017	17.4%

Sources: World Federation of Exchange Database (data as of November 2017), Simfund (data as of Nov 2017), Broadridge (data as of Nov 2017), iShares (data as of Nov 2017), McKinsey (data as of year-end 2016). 1) World Federation of Exchange Database. 2) iShares. 3) Simfund, Broadridge. 4) McKinsey, BlackRock.

Misunderstandings created concerns about the impact of index investing on individual securities

The impact of ETF flows on individual securities or sectors has been cited as a contributor to volatility.

- In fact, the possible impact of flows on underlying trading specific securities is quite small.

As a case study, consider the largest market cap company, Apple Inc. (AAPL).

- In July 2017, a month which saw large inflows to ETFs, USD $65.9 billion of Apple stock was traded.
- Although Apple was held by 331 ETFs globally, we found that **at least 95% of the stock's trade volume in July 2017 was not directly related to ETF flows**.

Specifically, we reckoned the imputed impact of daily flows into all 331 ETFs over the month of July 2017, with the conservative assumption that the underlying stock was traded in proportion to its weight in each ETF that included it as a constituent. If AAPL was 3% of a fund that saw total flow of $100 million (defined the sum of absolute daily flows over the 22 trading days in July), we would impute $3 million of associated create/redeem activity. This estimate is an upper bound on the amount of primary market activity induced by flows because in reality, market makers will typically wait more than a day or so to net out buys and sells before trading the underlying. We estimate the maximum primary market create/redeem activity as 5.11% of AAPL's ADV in July 2017 using the approach outlined by Madhavan. *See* Ananth N. Madhavan, Exchange Traded Funds and the New Dynamics of Investing, Oxford University Press (2016) at Chapter 15 (discussing the approach utilized for this analysis). The top five contributing ETFs are: QQQ, with contribution of 2.52%; SPY, with contribution of 0.88%; IVV, with contribution of 0.27%; XLK, with contribution of 0.24%; and DIA, with contribution if 0.13%. The remaining 326 ETPs contribute around 1.06% to Apple's ADV. (Data from this analysis is from Bloomberg and Morningstar, as of August 1, 2017).

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Role of asset managers and asset owners

- Feb. 2018: Taking Market-Based Finance Out of the Shadows: Distinguishing Market-Based Finance from Shadow Banking
- Feb. 2017: Macroprudential Policies and Asset Management
- Sep. 2016: Consultative Document on Proposed Policy Recommendations to Address Structural Vulnerabilities for Asset Management Activities – FSB
- Mar. 2016: What is a Systemically Important Institution: Leverage and Function are more Significant than Size - MIT CFP SIFI Contest Submission
- May 2015: Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions, Second Consultation - FSB-IOSCO
- Mar. 2015: Request for Comment on Asset Management Products and Activities - FSOC
- Sep. 2014: Who Owns the Assets? A Closer Look at High Yield Bonds, Bank Loans, and Emerging Markets Debt
- May 2014: Who Owns the Assets? Developing a Better Understanding of the Flow of Assets and the Implications for Financial Regulation
- Apr. 2014: Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions – Letter to FSB-IOSCO

Market structure and bond fund liquidity

- Sep. 2016: Addressing Market Liquidity: A Broader Perspective on Today's Euro Corporate Bond Market
- Jun. 2016: Breaking Down the Data: A Closer Look at Bond Fund AUM
- Feb. 2016: Addressing Market Liquidity: A Broader Perspective on Today's Bond Markets
- Jul. 2015: Addressing Market Liquidity
- Sep. 2014: Corporate Bond Market Structure: The Time for Reform is Now

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ETFs and index investing

- Mar. 2018: February 2018 Case Study: ETF Trading in a High-Velocity Market
- Oct. 2017: Index Investing Supports Vibrant Capital Markets
- Mar. 2017: A Primer on ETF Primary Trading and the Role of Authorized Participants
- Aug. 2015: Request for Comment on Exchange-Traded Products - SEC
- Jul. 2015: Bond ETFs: Benefits, Challenges, Opportunities
- Oct. 2014: ETFs Help Improve Market Stability: A Closer Look at Fixed Income ETF Behavior During Recent Bond Market Movement
- Jun. 2013: Exchange Traded Products: Overview, Benefits and Myths

Securities lending

- May 2015: Securities Lending: The Facts

Third party services in asset management

- Sep. 2016: The Role of Third Party Vendors in Asset Management
- Aug 2014: The Role of Technology Within Asset Management

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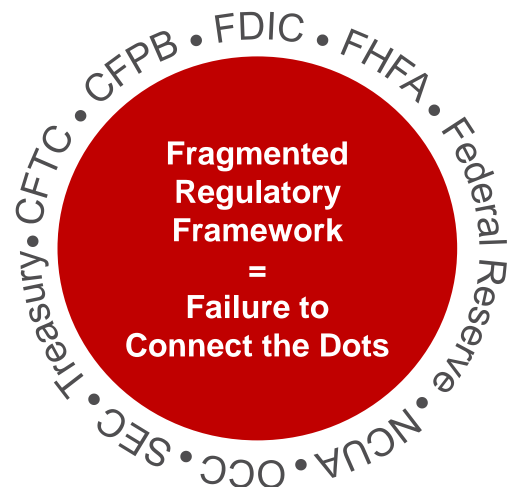
Appendix C: What is the Role of Firm-Based Regulation?

Joanne Medero, Managing Director

November 15, 2018

Systemic Risk Oversight

Where We Were



What's Changed?

Creation of FSOC

- Comprehensive oversight of the financial system
- Initial focus primarily on designations

Asset Management is Fundamentally Different

Asset Managers DON'T:

- Invest with their own balance sheets
- Act as counterparty to client trades or derivative contracts
- Guarantee investor principal
- Have access to central bank liquidity or government guarantee

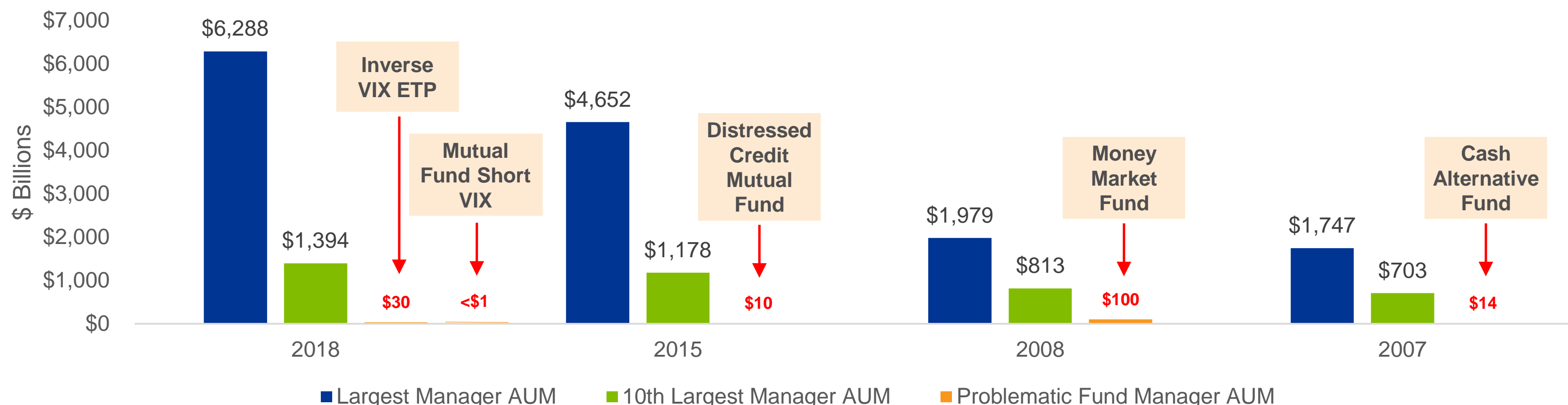
Systemwide Products & Activities Approach

- Entity-level designations in asset management will not reduce risk
- Designations of individual firms or funds will only move risk from one entity to another

> **"[FSOC] directed staff to undertake a more focused analysis of industry-wide products and activities to assess potential risks associated with the asset management industry."**
>
> – U.S. Treasury Department, *July 2014*

"Simple" Metrics, like AUM, are Unlikely to Identify Risk

AUM of Fund Managers Experiencing Problems Relative to AUM of Largest Managers



General asset manager AUM data from Pensions & Investments as of December 31 of the year prior to the event
Bars for Inverse VIX ETP, Mutual Fund Short VIX, and Distressed Credit Mutual Fund are not to scale because when drawn to scale, the bars are too small to see. Since the purpose of this graph is to show the problems that can be missed when screening by AUM, this scale issue seems particularly fitting.

Problematic Fund	Description of Issue
Inverse VIX ETP (2018)	Inverse VIX ETP designed to provide a return opposite of the VIX that experienced 80%+ losses over 2 days in Feb. 2018 as a result of historical spike in VIX Index
Mutual Fund Short VIX (2018)	1940 Act fund that experienced 80%+ losses over 2 days in Feb. 2018 as a result of losses from options strategies after historical spike in VIX Index, causing fund manager to shut down
Distressed Credit Mutual Fund (2015)	Concentrated distressed credit fund in a 1940 Act open-end structure was unable to meet redemptions due to illiquid securities
Money Market Fund (2008)	Money market fund that "broke the buck" due to investments in Lehman Brothers commercial paper
Cash Alternative Fund (2007)	Ultra-short bond fund marketed as a "cash alternative" that experienced ~30% losses in 2007-2008 due to investments in subprime mortgages

Defining a Products & Activities Based Approach

1. Primary financial regulators should develop frameworks for using the data they collect to identify potential financial stability risks
2. Each Member Agency should report to FSOC periodically on potential risks in their jurisdiction that they have identified and the tools they have to mitigate those risks
3. FSOC should identify implications of identified risks for other Member Agency jurisdictions (i.e., counterparty exposure) or similar products or activities that could face similar risks (i.e., 2a-7 MMF risks could be similar to those in STIFs)
4. Member Agencies should be required to follow up on potential implications and report back to FSOC on whether the risk is present in their jurisdiction and whether the Member Agency has sufficient tools to mitigate the risk
5. If the tools are insufficient to address a material risk to the financial system, the primary financial regulatory agency should undertake rule changes to mitigate the risk

Example of Systemwide Activity Regulation: Swaps Market

- Dodd-Frank Act established swaps market oversight
- Central clearing mandate, swap data reporting, swap dealer oversight and standards
- CFTC and SEC split jurisdiction but entire market is covered
- Swap dealers are primarily banks regulated by the Federal Reserve

Example of Systemwide Product Regulation: Money Market Funds (MMFs) and Short Term Investment Funds (STIFs)

- SEC adopted reforms for 2a-7 MMFs in 2010 to require more conservative portfolio construction
- In 2014 SEC adopted structural reforms for 2a-7 money market funds
- OCC updated rules on STIF funds for all national banks in 2012
- Primary regulator (SEC, OCC) gets detailed reporting regardless of fund size
- Gap remains for state bank STIFs

US Regulators are Collecting Substantial Data on Products & Activities

	In place pre-Crisis	Implemented post-2008	Proposed / implementation pending
CFTC	Large trader reports for futures	Form PQR for private funds	
	Futures market trading data with participant identifiers	Form PR for commodity futures advisors	
SEC / FINRA	Form N-1A for RICs	Form N-CEN for RICs	Form N-LIQUID for RICs
	Form ADV for advisers	Form N-MFP for 2a-7 MMFs	Form N-PORT for RICs
	TRACE	Form N-CR for 2a-7 MMFs	Consolidated audit trail
		Form PF for private funds	
		Form ADV separate account info	
Treasury	"Special calls" re: positions in Treasury holdings	TRACE for Treasuries	Repo transactions data to the Office of Financial Research
OCC	National Bank call reports on bank collective fund holdings by asset class	Quarterly MMF reporting for federally chartered STIFs	

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Potential Risks to US Financial System Worth Evaluating Today*

Future of LIBOR	Fallback provisions in legacy contracts, basis risks
Cybersecurity	Special focus on market plumbing
Bank STIFs	State-chartered banks should update investment guidelines using OCC framework
Bondholder Rights	Protection for individuals in mutual funds and pension plans
Pension Underfunding	Counterparty risk as well as pressure on PBGC
Brexit	Importance of a smooth transition, avoiding market fragmentation
CCPs	Resiliency, not just recovery and resolution

*Risks change over time. We recommend FSOC establish an advisory committee, similar to the Treasury Borrowing Advisory Committee (TBAC), to provide input on risks from a practitioner perspective.

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Appendix D: Potential Risks to the US Financial System worth Evaluating

LIBOR. In July 2017, the UK Financial Conduct Authority ("FCA"), the regulator of LIBOR, announced that it will no longer compel panel banks to submit to LIBOR after year-end 2021. LIBOR serves as an interest rate benchmark for hundreds of trillions of dollars of financial instruments. In addition to its use in derivatives, LIBOR is the reference rate embedded in many types of floating rate instruments, including mortgages and loans. In USD LIBOR alone, the New York Federal Reserve Bank estimates that at least $36 trillion in outstanding notional will not mature prior to 2022.[30] Regulators have focused on developing alternative reference rates, including the Secured Overnight Financing Rate ("SOFR") in the US, which the New York Federal Reserve Bank began publishing in April 2018. At present, liquidity is developing in the alternative reference rates that have been identified for the various currencies, albeit at different paces. There remain a number of unanswered questions around fallbacks and there is a serious challenge regarding how to address legacy positions. We encourage global coordination amongst regulators and industry participants to develop defined fallbacks and ensure a smooth transition. In addition, legacy positions pose many unanswered questions that must be addressed to avoid disruptions for existing contracts. We recently updated our *ViewPoint* on the LIBOR transition: LIBOR: The Next Chapter (April 2019 Update), which highlights both progress being made and areas still needing attention

Debt Limit. The US Treasury Department's existing statutory authority to incur additional debt through new issuance of US government-backed Treasury bonds (the "Debt Limit") expired on March 1, 2019, and Congress must approve legislation to raise the Debt Limit (Congress has had this authority since 1917 due to perceived excessive spending in WWI) in order to prevent a default on US debt. While Treasury may use "extraordinary measures" to finance US government operations for a period of time, such "extraordinary measures" are expected to be exhausted sometime in September 2019. Since Congress will also be ensuring that appropriations are approved by the end of the fiscal year on September 30, 2019, the Debt Limit debate could become part of the broader government funding debate. Given the risk of default in the event the Debt Limit is not raised, market participants need to prepare for a default, which requires the expenditure of significant time and resources.

CCPs. Following the 2008 Financial Crisis, regulators around the world reformed over-the-counter ("OTC") derivatives markets, moving bilateral derivatives trades to central clearing counterparties ("CCPs"). Central clearing has reduced bilateral counterparty credit risk, increased market transparency, and improved efficiency in trade execution. However, the shift to CCPs has not eliminated the risk in OTC products, but rather centralized it. This exposes the financial system to the potential failure of a CCP. The importance of CCP resilience was emphasized by the large mutualized loss experienced in the Nordic power markets in September 2018, with two-thirds of a CCP's default fund consumed by a single clearing member default. While the CCP proved resilient, the loss allocation defied expectations and provides an opportunity to learn and make adjustments. Our *ViewPoint*, An End-Investor Perspective on Central Clearing:

[30] Alternative Reference Rates Committee, Second Report (Mar. 2018) at 2, available at https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-Second-report.

Looking Back to Look Forward provides a more detailed discussion of these issues. Given this concentration, regulators must ensure CCPs are resilient and must establish guidelines for the resolution and recovery of CCPs that experience difficulties. We believe that policy makers must assure that CCP risk mitigation, capital, disclosure and governance practices are sufficient to mitigate financial stability risk. Further, intermediary risks should be addressed, including a review of the feasibility of moving customer positions from a failed clearing member. To protect the end investor from bearing losses due to the failure of CCPs, regulators should implement rules that prevent customer margin from being used as a loss allocation tool to recover a failing CCP – this should only be available to resolution authorities.

Cybersecurity in market plumbing. Cybersecurity is just one aspect of market plumbing, but we would prioritize this as one of the most important vulnerabilities that has yet to be fully studied and addressed. Whether the SWIFT network or the stock exchanges, technology is critical to the smooth functioning of our capital markets. We encourage laser focus on cybersecurity of global financial market infrastructure by regulators.

State Bank STIFs. The regulations governing short-term investment funds ("STIFs") are inconsistent and could create unintended consequences if not addressed. The SEC introduced new rules for money market funds in 2014 under Rule 2a-7, and the OCC updated its rules for STIFs offered by nationally chartered banks in 2012, including new portfolio composition constraints and regulatory reporting requirements. However, the cash reinvestment pools are associated with state-chartered banks that are not under the supervision of the OCC. We encourage similar changes at the state level to ensure a consistent framework. The Federal Reserve Board could use their supervision of bank holding companies with state bank subsidiaries or the Federal Deposit Insurance Corporation insurance oversight of state non-member banks to require changes that would address this gap.

Bondholder Rights. In recent years, there have been a number of occurrences that have raised questions about bondholder rights in situations involving bankruptcy or the resolution of an insolvent entity. In some situations, the rights of bondholders have been subordinated unexpectedly relative to other claims. For example, in the events surrounding the restructuring of Banco Espirito Santo by the Bank of Portugal in December 2015, one group of equally ranking creditors was favored over another. Given the importance of reliable outcomes for financial stability, it is imperative that bond holders understand their rights and have confidence in the regulatory framework to uphold these rights. Bonds are often held in mutual funds whose shares are in mutual funds or are sold to individual investors. Clarifying and protecting the rights of these bondholders is important to investor confidence and will avoid potential fire sales in future situations where the outcome is uncertain.

Pension Underfunding. Pension funds are one of the largest types of asset owner. Given this, the financial health of pension funds is critical to the overall health of the financial ecosystem. The low interest rate environment has created challenges for pension plans in meeting their liabilities, as they must choose between low yielding investments and riskier strategies. Many pension plans in the US are underfunded, including some

multiemployer pension plans, state plans, and municipal plans.[31] There are similar trends in Europe. The total value of unfunded or underfunded government pension liabilities has been estimated at $78 trillion.[32] Given the funding shortfall for many plans, pension funds bear significant counterparty risk, as they may not be able to pay the amount required to meet pension benefit obligations to retirees under the current framework. In the US, there is increasing pressure on the Pension Benefit Guaranty Corporation ("PBGC"), which insures the pension benefits of nearly 40 million American workers and faces its own financial deficits of nearly $80 billion.[33] We recommend that policy makers consider ways to address pension underfunding, as pension plans are a fundamental part of the financial system.

[31] Pew Trusts, "The State Pension Funding Gap: 2016" (Apr. 12, 2018), available at https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2018/04/the-state-pension-funding-gap-2016.

[32] Citigroup, "The Coming Pensions Crisis: Recommendations for Keeping the Global Pensions System Afloat" (Mar. 2016), available at https://ir.citi.com/CqVpQhBifberuzZKpfhSN25DVSesdUwJwM61ZTqQKceXp0o%2F0F4CbFnnAYI1rRjW.

[33] Government Accountability Office, "Pension Benefit Guaranty Corporation Insurance Programs", available at https://www.gao.gov/highrisk/pension_benefit/why_did_study.