

BLACKROCK®

August 11, 2015

Submitted via electronic filing: <https://www.sec.gov/rules/proposed.shtml>

Mr. Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Investment Company Reporting Modernization, File Number S7-08-15

Dear Mr. Fields:

This letter responds to the request of the Securities and Exchange Commission (“Commission”) for comment on topics covered by the proposed rule regarding Investment Company Reporting Modernization (“Proposal”).¹ BlackRock, Inc. (together with its affiliates, “BlackRock”)² commends the Commission for seeking to modernize and advance registered investment company (“RIC”) reporting and other matters discussed by the Commission in the Proposal and its companion proposal regarding Amendments to Form ADV and certain Investment Advisers Act Rules (“ADV Proposal”).³ BlackRock supports the Commission’s efforts to further informed and data-driven analyses and public policy decisions regarding products and activities in the asset management industry. We agree with Chair Mary Jo White that the “oversight of funds and advisers is one of the most important functions of the Commission.”⁴ In this regard, BlackRock is very supportive of the Commission’s efforts to supplement and enhance the data available to the Commission, in line with the ongoing evolution of the industry, technology, the financial ecosystem, and the Commission’s rules and regulations. Overall, we believe that this Proposal and the ADV Proposal, together with other ongoing Commission initiatives,⁵ will help the Commission achieve its objective of enhancing its capabilities in “monitoring the fund industry in its role as the primary regulator of funds and investment advisers.”⁶

¹ SEC, Investment Company Reporting Modernization Proposed Rule, 80 Fed. Reg. 33590 (Jun. 12, 2015), available at <http://www.gpo.gov/fdsys/pkg/FR-2015-06-12/pdf/2015-12779.pdf> (“Proposal”).

² BlackRock is one of the world’s leading asset management firms. We manage 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.

³ SEC, Amendments to Form ADV and the Advisers Act, 80 Fed. Reg. 33718 (Jun. 12, 2015), available at <http://www.gpo.gov/fdsys/pkg/FR-2015-06-12/pdf/2015-12778.pdf> (“ADV Proposal”).

⁴ Chair Mary Jo White, Modernizing and Enhancing Investment Company and Investment Adviser Reporting, Speech at Open Meeting of the SEC (May 20, 2015), available at <http://www.sec.gov/news/statement/modernizing-investment-company-and-investment-adviser-reporting.html> (“SEC Chair White Speech”).

⁵ Given the ongoing work of the Commission in examining leverage, liquidity, derivatives, ETFs and other topics, we note that these data collection measures will require coordination and harmonization with those Commission initiatives and rulemaking proposals. BlackRock looks forward to continuing working with the Commission by providing support, comments and suggestions on these initiatives.

⁶ Proposal at 33593.

In this letter, we identify data that the Commission is seeking that we believe helps advance the Proposal's goals of monitoring industry trends in order to more effectively identify and monitor risks, direct examination and enforcement efforts,⁷ protect investors and ultimately inform policy and rulemaking, which creates a more efficient environment for capital formation in the securities markets.⁸ This is followed by a brief discussion of several technical comments and suggestions to improve the Proposal, and ensure the data as requested is consistent with the Commission's goals to enhance the understanding of the activities being conducted by RICs under the Investment Company Act of 1940, as amended (the "1940 Act"), while ensuring that any potential unintended consequences are understood and mitigated where necessary.

In our companion letter responding to a request for comment on the ADV Proposal ("Form ADV Letter"),⁹ we reiterate our support for enhanced data collection to inform the regulatory debate and understanding of the asset management industry, while at the same time noting several instances where we think the Commission's objectives can be met without compromising client confidentiality or requiring investment advisers to report data that is not likely to further the goals of the Commission.

I. Overall Approach to Reporting of Fund Level Data

As noted above, we are very supportive of this Proposal and the Commission's efforts to obtain more data about RICs. In the following sections, we provide a detailed discussion of the Commission's Proposals related to data on RICs including Form N-PORT, Regulation S-X, and Form N-CEN. In certain circumstances, we note that there may be a simpler approach to obtain the proposed data, particularly where there is overlap with existing forms and data already being provided to the Commission. In particular, we would suggest that the Commission leverage its previous work on Form PF and the existing industry infrastructure and expertise around Form PF instead of creating an entirely new form requesting similar data in a slightly different way.

For example, while we recognize that private funds may utilize more complex investment strategies and/or have different risk profiles than RICs, the necessary risk-related information on RICs could be obtained through the questions asked on Form PF. As such, the Commission could consider having RICs respond to relevant questions¹⁰ on Form PF and only use Form N-PORT for the disclosure of information that has an obvious benefit to and can be readily understood by investors in RICs.¹¹ Given that Form PF is a private form reported directly to the Commission, the inclusion of risk-related data on Form PF instead of the public Form N-PORT could help the Commission address concerns related to the public disclosure of this information.

As we have noted on many occasions, consistency in data collection efforts facilitates comparability of data across products, increasing the value of the data to regulators as this facilitates more comprehensive analyses than can be performed when data is collected in an

⁷ See Proposal at 33591.

⁸ See Proposal at 33593.

⁹ BlackRock, Comment Letter, Amendments to Form ADV and Investment Advisers Act Rules – SEC (Aug. 11, 2015), available at <http://www.blackrock.com/corporate/en-us/literature/publication/sec-amendments-form-adv-investment-advisers-act-rules-081115.pdf> ("Form ADV Letter").

¹⁰ In general, we believe the following Questions on Form PF would be relevant to mutual funds: 8, 9, 12, 13, 17, 24, 28, 30, 32, 33, 34, 35, 42, and 44. See Form PF, 76 Fed. Reg. 71128 (Nov. 16, 2011), available at <http://www.gpo.gov/fdsys/pkg/FR-2011-11-16/pdf/2011-28549.pdf>.

¹¹ Throughout this letter, we have articulated the information we believe would be beneficial for investors in RICs to receive. In particular, we note that data on flows, performance, and fees would be helpful in the public domain.

inconsistent manner and/or inconsistent format. We encourage the Commission to consider re-using questions from Form PF to ensure that the data collected is comparable to data collected on Form PF. We make several comments below regarding information that could be collected in a manner that is more consistent with Form PF and other existing reporting requirements.

II. Data We Support Collecting To Advance the Commission's Proposed Goals

The Commission has identified its goals to advance “a broad oversight program for asset management.”¹² An enhanced reporting regime that collects relevant data and enables the Commission to utilize the data in a streamlined manner will naturally strengthen the Commission's current capabilities in overseeing asset management products and activities. Importantly, the greater depth and frequency of information requested by the Commission will help the Commission better identify and monitor emerging risks associated with specific RICs or categories of RICs as well as asset management activities.

A. Categories of Data Promoting Effective Regulation and Risk Identification

Risk Metrics

We believe that it is important for the Commission to receive information about interest rate and credit spread risk. However, we note that similar information is requested in Question 42 of Form PF and we would suggest that the Commission consider using this question instead of creating a new set of measures in Form N-PORT.¹³ A harmonized universe of risk metrics across private funds and RICs would allow the Commission to evaluate a more uniform set of risk metrics across products. We believe this would better serve the Commission's goals of monitoring industry trends and identifying and monitoring risks. Furthermore, the Commission could analyze these risk metrics on a confidential basis, as it does for private funds, and be able to better determine what information should be made public by RICs after it has a deeper understanding of what disclosures, if any, would be helpful to investors.

Further, we believe that consistent with the approach taken in Form PF, risk metrics should be filed with the Commission on a confidential basis. After analyzing the information received, the Commission will be in a better position to determine what information is likely to be most useful to investors and can then require this information to be made publicly available. We believe RICs may be able to comply with a confidential filing more readily, especially those funds whose managers are currently filing Form PF.

Flows Information

We believe that data about flows into and out of RICs is very useful and important for the Commission to have given the increased focus globally on redemption risk in funds¹⁴ and are supportive of the inclusion of Item B.6 on Form N-PORT. Information about flows is suitable for

¹² SEC Chair White Speech.

¹³ We note that Question 42 in Form PF is more comprehensive than the question proposed in Form N-PORT given that it requests information about more than just credit spread and interest rate risk.

¹⁴ See e.g., International Monetary Fund, Global Financial Stability Report (Apr. 2015), available at <http://www.imf.org/External/Pubs/FT/GFSR/2015/01/pdf/text.pdf> (“2015 IMF GFSR”); Office of Financial Research, Asset Management and Financial Stability (Sep. 2013), available at http://financialresearch.gov/reports/files/ofr_asset_management_and_financial_stability.pdf.

public disclosure as investors and policy makers have indicated significant interest in this information.

In relation to redemption risk in funds, we noted in our March 2015 letter to the Financial Stability Oversight Council (“FSOC”) that predictive models to understand potential future redemptions could be enhanced by greater data transparency into omnibus accounts.¹⁵ Currently, complete and accurate investor-level redemption data is not readily available.¹⁶ Access to this level of investor data would require that advisers to funds have the ability to obtain such information about the underlying shareholders in omnibus accounts that hold shares of the funds. Given that this Proposal rightly identifies the importance of having data regarding investor flows into and out of RICs, we believe it would be helpful for the Commission to mandate that transfer agents, distributors or some other entity (e.g., a central data repository) aggregate information by investor types redeeming from and subscribing to funds to help forecast future redemptions.¹⁷

If this additional transparency on omnibus accounts is provided to fund managers by those entities with the underlying shareholder information, we would suggest that the Commission include a breakdown of gross subscriptions and gross redemptions by investor type and distribution platform type for the reporting period as part of Item B.6 in Form N-PORT. In particular, the investor categories that would be helpful are: (i) 401K plan / Individual Retirement Account; (ii) pension fund; (iii) insurance company; (iv) other institutional investor (e.g., sovereign wealth fund); and (v) retail investor.¹⁸

This additional data would go a long way in helping the asset management industry and the Commission develop redemption models with more predictive capacity than currently exists today given the aforementioned data limitations. This would enhance liquidity risk management by helping fund managers better model the potential redemption risks faced by funds they manage in order to ensure their funds are sufficiently liquid to meet redemptions under both normal and stressed market conditions. Further, the additional granularity would help the Commission understand not only the nature of subscription and redemption activity and how it varies across distribution platforms and market environments, but also which categories of investors exhibit purchase and sale behavior that may merit further Commission study.¹⁹

¹⁵ See BlackRock, Comment Letter, Request for Comment on Asset Management Products and Activities – FSOC (Mar. 25, 2015), available at <http://www.blackrock.com/corporate/en-us/literature/publication/fsoc-request-for-comment-asset-management-032515.pdf> (“FSOC RFI”).

¹⁶ Matthew Beaton, Ignites, *Shops Read the Tea Leaves with Redemption Modeling* (Feb. 9, 2015), available at http://ignites.com/c/1061333/110113/shops_read_leaves_with_redemption_modeling?referrer_module=emailForwarded&module_order=0.

¹⁷ In connection with the adoption of 1940 Act Rule 22c-2, RICs found that obtaining information on underlying shareholders in omnibus accounts is difficult in the absence of an express requirement that financial intermediaries supply the relevant information. We suggest that the Commission consider this experience in crafting any request for detailed omnibus account data.

¹⁸ There could be many different definitions used for retail investor. One potential approach would be to define retail investor as any investor that does not qualify as a Qualified Institutional Buyer under SEC Rule 501 of Regulation D. Qualified Institutional Buyers can be employee benefit plans, insurance companies, or other types of investors that have at least \$100 million in total assets.

¹⁹ BlackRock published a paper in 2014 that sought to identify the different types of asset owners across the financial markets. BlackRock, *ViewPoint, Who Owns the Assets? Developing a Better Understanding of the Flow of Assets and the Implications for Financial Regulation* (May 2014), available at <http://www.blackrock.com/corporate/en-us/literature/whitepaper/viewpoint-who-owns-the-assets-may-2014.pdf>. BlackRock’s research showed that drivers of asset allocation, and hence asset flows are the asset owners and their intermediaries, not the asset managers.

We believe that, over time, in addition to the information currently contemplated in Form N-PORT, such investor information on RICs could help the Commission and the industry better understand and assess liquidity as well as create better predictive models of potential future redemption behavior, including potential redemption behavior under “stressed” market conditions. Thus, the additional information we are suggesting would make the flows information being requested by the Commission more useful for its work and more meaningful to both asset managers and investors.²⁰

Derivatives and Leverage

Much of the information the Commission is requesting on derivatives and borrowings on Form N-PORT is consistent with the Commission’s desire to gain a better understanding of derivatives use by RICs. As explained in our companion letter regarding the ADV Proposal, we believe that data collection efforts related to the use of derivatives need to first define the objectives of such a data collection effort to ensure that the appropriate data is being collected in order to provide the requisite information. In particular, the Commission should clarify whether it is seeking to understand which RICs are using derivatives to achieve their objectives and what types of derivatives they are using (what we refer to as a “derivatives footprint”). Alternatively, we believe that the Commission may also be interested in understanding the degree of economic exposure being obtained through the use of structural leverage. Each of these objectives is reasonable; however, they are different and require different approaches to gather the relevant data.

A. Derivatives Footprint

It appears that the Commission seeks to collect data on a RIC’s derivatives footprint through Part C of Form N-PORT. The information requested would certainly provide the Commission with information about the use of different type of derivatives. However, we note that the proposed questions, in particular, Item C.11 introduces a significant amount of complexity and requests the reporting of different information for different types of derivatives instruments. Further, the requested data on derivatives does not appear to be consistent with existing reporting on derivatives that the Commission is receiving or with what is being requested in the ADV Proposal, which requests gross notional exposure broken out by six categories of derivatives: (a) interest rate derivative; (b) foreign exchange derivative; (c) credit derivative; (d) equity derivative; (e) commodity derivative; and (f) other derivative. We believe that the ADV Proposal uses an appropriate method to capture data about a RIC’s derivative footprint.²¹ Given that both rulemakings are occurring simultaneously, we suggest that the information on the derivatives footprint be collected consistently for both proposals. If the Commission believes more granular information on the use of derivatives is required, the Commission could also consider using Question 30 from Form PF as a model. Question 30 on Form PF includes a comprehensive breakdown of physical securities and derivatives.²² Importantly, as explained in our letter regarding the ADV Proposal,²³ although the derivatives footprint provides information about the use of derivatives, it does *not* provide information about leverage or risk. While this is certainly adequate in terms of identifying funds that are using

²⁰ We note that the additional information we are suggesting that the Commission collect would not identify individual clients, but rather just the types of clients invested in each RIC to enable the RICs to better understand redemption activities.

²¹ Form ADV Letter.

²² See Question 30 in Form PF where respondents provide market values for physical asset classes, such as listed equities, and notional values for derivatives.

²³ See Form ADV Letter at 8.

significant amounts of derivatives (signaling the degree of complexity in the portfolio) which may warrant further inquiry from the Commission, it would not be sufficient for measuring leverage or the risk associated with the funds' use of derivatives.

B. Comprehensive Measures of Leverage

As noted in our Form ADV Letter, while obtaining a comprehensive measure of leverage within the Commission's rules may be better placed in a different rulemaking²⁴, given that many policy makers, research organizations, and other commentators have cited potential risks related to the use of leverage by mutual funds,²⁵ it may be worthwhile for the Commission to consider implementing a reporting requirement to obtain a comprehensive measure of leverage used by RICs. In our response to the request for comment issued by the FSOC,²⁶ we identified a need for a consistent and comprehensive approach to measuring leverage among regulators in various jurisdictions. In particular, a comprehensive definition of leverage would include the use of borrowings and derivatives, while recognizing that derivatives used for hedging or offsetting positions do not create leverage.

This Proposal's goal of enhancing the amount of data available to the Commission on risk-related measures for RICs provides an excellent opportunity for the Commission to introduce a comprehensive measure of leverage for RICs, which could then be applied to other investment product reporting, such as that for private funds. Ideally, this could be achieved by amending Form PF to include a comprehensive measure of leverage and then requiring RICs to complete that question on Form PF. Alternatively, the Commission could add a confidential schedule to Form N-PORT that incorporates a question about the leverage used by the RIC.²⁷

In particular, we note that the Alternative Investment Fund Manager's Directive ("AIFMD") provides a workable and comprehensive framework for calculating the value of economic exposure obtained through leverage called "commitment leverage". While the rules and guidance issued by the Commission under the 1940 Act include limitations on leverage,²⁸ we believe that the streamlined approach similar to what is employed under the AIFMD is worthy of consideration.

²⁴ Given the ongoing work of the Commission in examining leverage, liquidity, derivatives, ETFs and other topics, we note that these data collection measures will require coordination and harmonization with those Commission initiatives and rulemaking proposals.

²⁵ See e.g. 2015 IMF GFSR; Bank for International Settlements, 85th Annual Report (Jun. 28, 2015), available at <http://www.bis.org/publ/arpdf/ar2015e.pdf>.

²⁶ FSOC RFI.

²⁷ As discussed above and consistent with existing Form PF information on risk metrics and leverage, we suggest that this RIC information remain confidential initially. This will enable the Commission to analyze the data collected prior to determining whether (and what) information would be useful (and not confusing) to investors and therefore should be made public.

²⁸ See e.g., SEC, Use of Derivatives by Investment Companies under the Investment Company Act of 1940, 76 Fed. Reg. 55237 (Sep. 7, 2011), available at <http://www.gpo.gov/fdsys/pkg/FR-2011-09-07/pdf/2011-22724.pdf>; BlackRock, Comment Letter, Response to the SEC's Concept Release on Use of Derivatives by Investment Companies Under the Investment Company Act of 1940 (Nov. 4, 2011), available at <http://www.sec.gov/comments/s7-33-11/s73311-39.pdf>; SEC, Securities Trading Practices of Registered Investment Companies, 44 Fed. Reg. 25128 (Apr. 27, 1979), available at <https://www.sec.gov/divisions/investment/imseniorsecurities/ic-10666.pdf>; Merrill Lynch Asset Management, L.P., SEC No-Action Letter (Jul. 1, 1996), available at <https://www.sec.gov/divisions/investment/imseniorsecurities/merrilllynch070196.pdf>; Dreyfus Strategic Investing, SEC No-Action Letter (Mar. 30, 1987), available at <https://www.sec.gov/divisions/investment/imseniorsecurities/dreyfusstrategic033087.pdf>. See also, Committee on Federal Regulation of Securities, ABA Section of Business Law, *Report of the Task Force on Investment Company Use of Derivatives and Leverage* (Jul. 6, 2010), available at <https://apps.americanbar.org/buslaw/blt/content/ibl/2010/08/0002.pdf>.

We have provided a discussion of calculating leverage in Appendix A. The framework we outline in Appendix A is conceptually consistent with the AIFMD approach to calculating commitment leverage but deviates from the specific AIFMD rules for the sake of simplicity and clarity. We believe that further engagement with the industry on various methods of calculating leverage would allow the Commission to understand the benefits and limitations of various approaches.

Securities Lending

We agree that obtaining additional information on securities lending activities conducted by RICs on each of Form N-PORT and N-CEN is important for the Commission. In particular, policy makers have raised questions regarding securities lending activities conducted by funds²⁹ and the role of securities lending agents.³⁰ Many of these questions, however, reflect misunderstandings about the practices involved in securities lending and conflate bank lending and credit transformation activities with the activities conducted by securities lending agents. Our *ViewPoint, Securities Lending: The Facts*³¹ addresses a number of these issues. Further, several other policy bodies are in the process of conducting data collection efforts related to securities lending.³² We believe that the Commission is best suited to obtain information about securities lending activities conducted on behalf of US funds, whether through affiliated or unaffiliated agent lenders, and we encourage the Commission to coordinate with other regulators to promote consistent reporting and minimize the costs associated with duplicative reporting of the same activity to multiple regulators. We believe a coordinated approach will provide the most useful information to regulators and investors without those funds incurring unnecessary costs created by similar but potentially not identical reporting regimes.

Securities lending is a long-established and common activity that provides incremental income for investors.³³ While securities lending can generate incremental investment returns to investors and augment liquidity in capital markets,³⁴ during the 2008 financial crisis, certain risks related to securities lending became apparent.³⁵ As a result, there has been significant

²⁹ See Nicola Cetorelli, 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 (“NYFRB Staff Report”).

³⁰ See FSOC RFI.

³¹ BlackRock, *ViewPoint, Securities Lending: The Facts* (May 2015), available at <http://www.blackrock.com/corporate/en-us/literature/whitepaper/viewpoint-securities-lending-the-facts-may-2015.pdf> (“Securities Lending May 2015 *ViewPoint*”).

³² See e.g., Financial Stability Board (“FSB”), Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos (Aug. 29, 2013), available at http://www.financialstabilityboard.org/wp-content/uploads/r_130829b.pdf?page_moved=1; FSB, Standards and Process for Global Securities Financing Data Collection and Aggregation (Nov. 13, 2014), available at <http://www.financialstabilityboard.org/wp-content/uploads/Global-SFT-Data-Standards-Consultative-Documents.pdf>. Additionally, we understand that the Office of Financial Research (“OFR”) and the New York Federal Reserve (“NY Fed”) are planning to conduct a pilot study and release a securities lending reference guide. See Office of Financial Research, 2013 Annual Report (Dec. 5, 2013), available at <http://financialresearch.gov/annual-reports/files/office-of-financial-research-annual-report-2013.pdf>; NYFRB Staff Report: Office of Financial Research, Repo and Securities Lending: Improving Transparency with Better Data (Apr. 23, 2015), available at <http://financialresearch.gov/briefs/files/OFRbr-2015-03-repo-sec-lending.pdf>.

³³ See ICI, *ViewPoint, Securities Lending by RICs, ETFs, and Closed-End Funds: The Market* (Sep. 16, 2014) (finding that 38 percent of the largest 500 US long-term funds lend securities), available at https://www.ici.org/viewpoints/view_14_sec_lending_02.

³⁴ Securities lending provides two principal benefits to the financial markets and to investors. First, the availability of securities through lending arrangements translates into liquidity for the settlement of transactions. See e.g., Pedro Saffi and Kari Sigurdsson, Price Efficiency and Short Selling, *Review of Finance Studies* (Aug. 30, 2010). A second key benefit comes from the income generated for investors whose securities are lent. This extra return is generated both by the “intrinsic value” of the securities as well as (primarily in the US market) by reinvesting any cash collateral received, resulting in enhanced returns to investors.

³⁵ Certain cash collateral reinvestment pools managed by some securities lending agents experience losses in value. The cash collateral pool losses resulted from exposure to certain structured investment vehicles and issuers. See NYFRB Staff Report ,

regulatory focus on securities lending from the Financial Stability Board (“FSB”), the FSOC, the Office of Financial Research (“OFR”), and the New York Federal Reserve Bank, as well as the Commission. To enhance the understanding of securities lending by both regulators and the public, BlackRock has published a number of whitepapers and has commented on a number of regulatory proposals to both increase the information available on securities lending and to suggest ways to improve securities lending practices across all market participants.³⁶ BlackRock believes that a well-designed securities lending program, including robust assessment of borrowers, independent risk management, strict collateral standards and prudent collateral management, can add significant value to clients’ investment results.³⁷ Accordingly, we are supportive of the Commission receiving additional data on securities lending activities conducted by RICs. We have several comments on the securities lending data proposals for both Form N-PORT and Form N-CEN which we will address in connection with our proposed suggestions on technical comments to the Proposal in Section III of this letter.

Exchange Traded Funds (“ETFs”)

BlackRock believes that exchange-traded products, including ETFs, are a critical product category on which the Commission should have informed views and we have contributed to the information available on this topic by filing a detailed response to the Exchange Traded Product Release No. 34-751-65 (“ETF Request for Comment”) in a letter filed on August 11, 2015.³⁸ We support the Commission’s efforts to gather more data and information about ETFs in both the Proposal and the ETF Request for Comment. BlackRock has consistently worked to enhance public understanding and awareness of ETFs, and has been at the forefront of providing analysis of the ETF market and making policy recommendations to regulators.³⁹

citing the example of American International Group, Inc. (“AIG”) and securities lending activities undertaken by its subsidiaries leading up to the 2008 financial crisis. The securities purchased by AIG using cash collateral in 2008 would not be eligible investments for securities lending activities subject to Commission or Office of the Comptroller of the Currency (“OCC”) regulation today. See OCC, Short-Term Investment Funds, 77 Fed. Reg. 61229 (Oct. 9, 2012), available at <http://www.gpo.gov/fdsys/pkg/FR-2012-10-09/pdf/2012-24375.pdf>; SEC (“Short-Term Investment Funds”), Money Market Fund Reform; Amendments to Form PF, 79 Fed. Reg. 47735 (Aug. 14, 2014), available at <http://www.gpo.gov/fdsys/pkg/FR-2014-08-14/pdf/2014-17747.pdf>.

³⁶ BlackRock has published a number of white papers on Securities Lending over the last several years. See e.g., Securities Lending May 2015 *ViewPoint*, BlackRock, *ViewPoint, Securities Lending: Balancing Risks and Rewards* (May 2012), available at <http://www.blackrock.com/corporate/en-us/literature/whitepaper/balancing-risks-and-rewards-may-2012.pdf> (“Securities Lending May 2012 *ViewPoint*”). In addition, BlackRock has commented on a number of regulatory proposals touching on securities lending. See BlackRock, Comment Letter, Borrower Default Indemnification in the Securities Lending Marketplace (May 2014), available at <http://www.blackrock.com/corporate/en-us/literature/publication/sec-lending-borrower-default-indemnification-may-2014.pdf>; FSOC RFI. BlackRock also has published brochures detailing its securities lending practices and fees. See BlackRock, *iShares Securities Lending: Unlocking the Potential of Portfolios* (2015), available at <http://www.blackrock.com/investing/literature/brochure/securities-lending-unlocking-portfolios-en-us.pdf>; BlackRock, *BlackRock Securities Lending: Unlocking the Potential of Portfolios* (2015), available at <http://www.blackrock.com/investing/literature/brochure/us-retail-securities-lending-brochure.pdf>.

³⁷ See Securities Lending May 2015 *ViewPoint* for a detailed discussion of the benefits and risks of securities lending, as well as BlackRock’s approach to managing counterparty and collateral risks using proprietary technology and the integration of lending and investment management.

³⁸ BlackRock, Comment Letter, Request for Comment on Exchange-Traded Products – SEC (Aug. 11, 2015), available at <http://www.blackrock.com/corporate/en-us/literature/publication/sec-request-for-comment-exchange-traded-products-081115.pdf> (“BlackRock ETP Comment Letter”).

³⁹ BlackRock, *ViewPoint, Exchange Traded Products: Overview, Benefits and Myths* (Jun. 2013) (“Exchange Traded Products *ViewPoint*”); BlackRock, *ViewPoint, ETFs Help Improve Market Stability: A Closer Look at Fixed Income ETF Behavior During Recent Bond Market Movement* (Oct. 2014) (“Market Stability *ViewPoint*”); BlackRock, *ViewPoint, Bond ETFs: Benefits, Challenges, Opportunities* (Jul. 2015), available at <http://www.blackrock.com/corporate/en-us/literature/whitepaper/viewpoint-bond-etfs-benefits-challenges-opportunities-july-2015.pdf> (“Bond ETF *ViewPoint*”).

As noted in our response to the ETF Request for Comment, the three basic types of publicly-offered 1940 Act funds include traditional open-end funds (or mutual funds), closed-end funds and ETFs. Each type of fund has a different mechanism for providing liquidity to investors and establishing prices at which share transactions occur. In a traditional open-end mutual fund, investors buy new shares and redeem existing shares directly from the fund at a specified time each day at a price determined by the fund that is the fund's best estimation of the net asset value ("NAV") per share. As a result, when there is a significant imbalance between buyers and sellers, an open-end mutual fund frequently must purchase or sell fund holdings in response to purchases and redemptions. By contrast, a closed-end fund has a fixed number of shares that are listed on a stock exchange, and buying and selling of closed-end fund shares occurs at a market-determined price agreed between investors. Any imbalance between buyers and sellers affects the exchange price, but does not result in purchases or sales of holdings by the closed-end fund. Since there is no mechanism for a closed-end fund to reconcile differences between the exchange price and NAV, exchange prices frequently exhibit premiums and discounts to a fund's NAV.

ETFs follow a hybrid approach to the provision of liquidity to investors and establishing prices at which share transactions occur. Like closed-end funds, ETFs can be bought or sold intraday at market prices on the exchange. Exchange transactions directly between buyers and sellers provide each with liquidity without requiring the ETF to buy or sell holdings. Unlike closed-end funds, however, ETFs have the ability to adjust the supply of available shares, which typically keeps the market price within close range of the ETF's NAV. While most ETF investors can trade shares only on the exchange, a small group of investors, known as Authorized Participants ("APs"), can trade directly with an ETF. APs are sophisticated institutional trading firms that enter into a contract with the ETF specifying rules for creating and redeeming ETF shares. APs are not agents of the ETF – they are not required to create or redeem ETF shares and only do so when it is in their interest. Some APs act only on their own behalf, while others may act as agents for a variety of clients.⁴⁰ When APs create or redeem shares of an ETF, they do so at NAV (like with an open-end mutual fund), but typically transact only for large blocks of shares in-kind rather than for cash (unlike with an open-end mutual fund).⁴¹ Because ETF share creations and redemptions are typically in-kind, which frequently involves complex transfers of hundreds or even thousands of securities, ETFs issue and redeem shares only with APs rather than the general public.⁴²

In connection with the Proposal, Form N-CEN requires the disclosure of information about ETFs, such as identifying information about the APs, the dollar value of shares purchased and redeemed, certain characteristics of the creation and redemption transactions, including the value of transactions - in kind and for cash, the number of shares required to form a creation unit, information on any fixed and variable fees applicable to creation and redemption transactions, and the tracking difference and tracking error experienced by index-tracking ETFs.

⁴⁰ APs may be designated market makers, off-exchange liquidity providers, large broker-dealers who trade with or act for institutional clients or specialized computer-based trading firms that trade in large volumes and prefer to clear their own transactions. An AP must be a broker-dealer that has access to institutional clearing systems, such as The Depository Trust Company, used to settle ETF share transactions. The relationship between an ETF governed by the 1940 Act and an AP must be consistent with the 1940 Act and exemptive relief issued by the Commission thereunder. Importantly, other exchange traded products that are not 1940 Act ETFs are not subject to such regulations.

⁴¹ ETFs may substitute cash for in-kind holdings. See BlackRock ETP Comment Letter.

⁴² AP ability to purchase new ETF shares, and redeem existing ETF shares, directly with the ETF in-kind has a variety of benefits for all investors which we discuss in detail in our response to the ETF Request for Comment. See BlackRock ETP Comment Letter.

BlackRock already reports much of this information publicly and is very supportive of such disclosures.

We believe, however, that information about the creation and redemption activity of each AP is not as helpful to investors as other information that the Commission should consider requesting from ETF providers. The Commission states that disclosure of creation and redemption activity will help the Commission to better understand and assess “the size, capacity, and concentration of the AP framework and also inform the public about certain characteristics of the ETF primary markets.”⁴³ The Commission states that this data may allow its “staff to monitor how ETF purchase and redemption activity is distributed across APs, and for example, the extent to which a particular ETF—or ETFs as a group—may be reliant on one or more particular APs.”⁴⁴ Based on informal discussions with a number of APs and market makers, we believe that this type of disclosure may be confusing to investors. For instance, investors may misinterpret information indicating that a single AP is primarily engaged in creation and redemption activity for a particular ETF. While this information may suggest that the market is reliant on only one AP, it could also be the case that one AP is offering better pricing in a particular asset class and, therefore, is dominating client trade flow. In our experience, the exit of a single AP from the market would not present risks to the market as a whole because another AP steps in to replace the AP that is no longer active. Furthermore, disclosure of activity at the individual AP level could discourage AP activity for reasons wholly unconnected to market factors, e.g., concerns about relationships with other ETF providers, competitor use of the information, or other public relations issues.

We understand the Commission to be concerned about the AP framework and liquidity in the ETF primary market if a single significant AP withdraws from this primary market.⁴⁵ However, we believe the ETF market to be highly resilient. The analysis conducted by the Investment Company Institute (“ICI”) on this issue is very informative.⁴⁶ The ICI found that 90 percent of the daily activity in all ETF shares occurs on the secondary market.⁴⁷ As exchange-traded securities, ETFs have registered market makers obligated to quote prices and provide liquidity in the secondary market. Even in situations where a particular AP did not continue to create and redeem shares or a particular market maker did not continue to quote in a particular ETF, we continue to observe that another firm will take advantage of the opportunity to fill this role. Notably, the ICI examined two instances in which significant APs pulled out of the ETF market—Knight in August 2012 after suffering a technology error that impaired its ability to create and redeem ETF shares, and Citigroup in June 2013 because it reached an internal net capital ceiling imposed by its corporate banking parent.⁴⁸ In both instances, other APs stepped in to provide liquidity to the ETF, and additionally, “investors could have turned to the secondary

⁴³ Proposal at 33646.

⁴⁴ *Id.*

⁴⁵ Proposal at 33645-33647; SEC, Request for Comment on Exchange-Traded Products, 80 Fed. Reg. 34729 (June 17, 2015), available at <http://www.gpo.gov/fdsys/pkg/FR-2015-06-17/pdf/2015-14890.pdf> (“ETF Request for Comment”). BlackRock has written extensively on liquidity and other market structure aspects of the ETF market. See e.g., Bond ETF *ViewPoint*; BlackRock, *ViewPoint, Addressing Market Liquidity* (July 2015), available at <http://www.blackrock.com/corporate/en-us/literature/whitepaper/viewpoint-addressing-market-liquidity-july-2015.pdf>.

⁴⁶ Investment Company Institute, *The Role and Activities of Authorized Participants of Exchange-Traded Funds* (Mar. 2015), available at https://www.ici.org/pdf/ppr_15_aps_etfs.pdf (“ICI AP Analysis”).

⁴⁷ The percentage of secondary market activity relative to total trading is 91% for domestic equity, 92% for international equity, 94% for emerging markets equity, 81% for all bonds, 83% for domestic high-yield bonds, and 78% for emerging markets bonds. ICI AP Analysis, Figure 4.

⁴⁸ ICI AP Analysis.

market, which was functioning normally and not showing signs of stress, to sell their ETF shares.”⁴⁹ The ICI also noted that in the worst case where an AP might not step up immediately, ETFs would trade like closed-end funds, and the effects would be contained to the affected ETFs and not transmitted to other ETFs or the underlying securities markets.⁵⁰

While the ETF market continues to evolve, BlackRock believes the market is sufficiently well established (with \$2.7 trillion in assets worldwide)⁵¹ and does not pose significant liquidity risks. In fact, evidence suggests that ETFs often enhance the liquidity of the broader markets by alleviating the need for market participants to trade the underlying stocks and bonds that ETFs hold. Nevertheless, in our response to the ETF Request for Comment and in numerous *ViewPoints* and comment letters,⁵² we have made a number of recommendations relating to the regulation of the ETF market place. These recommendations include clarifying the appropriate use of the ETF label, streamlining and expediting the process for bringing “standard” ETFs to market and considering changes to listing or market maker requirements for less liquid ETFs to encourage order flow to focus on venues with significant order books rather than fragment among market makers quoting on multiple venues.⁵³

We recognize that the Commission may find information about AP activity as to particular funds or more generally useful in order to further its own evaluation of the liquidity of ETFs and the role of APs. This information may also help facilitate Commission goals of directing examination and enforcement efforts.⁵⁴ The Commission could explicitly require ETF providers to maintain creation and redemption information by fund by APs, and have such information available to the Commission during an examination or on an “as requested” basis. For the reasons stated above, we believe that AP activity should not be publicly available.

We agree with the Commission that most of the information requested by proposed Form N-CEN is helpful for investors, including the information about tracking difference and tracking error, creation/redemption fees, shares required for a creation unit, the net creation and redemption activity across all APs, and a list of APs that are authorized to transact in a given ETF. We believe that such information provided annually could be useful for investors to compare ETFs. However, we recommend a modification to the creation/redemption fee information to make it even more helpful for investors. We recommend that the fee information be modified such that a range for variable fees actually paid during the past year be provided as this information would be more meaningful than simply reporting the fee applicable to the last unit created or redeemed during the reporting period. The last creation or redemption may have been subject to a fee that is not representative of the transactions that occurred during the full period, and investors would be better served by having access to more meaningful information regarding the range of actual fees charged and the average fee actually charged.

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ ICI, 2015 Investment Company Fact Book (2015), available at http://www.icifactbook.org/pdf/2015_factbook.pdf. bData as of year-end 2014.

⁵² ETF Request for Comment; Bond ETF *ViewPoint*; Market Stability *ViewPoint*; Exchange Traded Products *ViewPoint*; BlackRock, *ViewPoint*, *ETFs: A Call for Greater Transparency and Consistent Regulation* (Oct. 2011).

⁵³ Bond ETF *ViewPoint*.

⁵⁴ See Proposal at 33591.

A. Categories of Data That Enhance The Shareholder Experience

Shareholder Report Delivery: Rule 30e-3

In addition to the benefits of gathering more information for purposes of allowing for effective and transparent regulation of asset managers and informing investors of potential risks associated with the particular funds in which they are or might decide to become invested, the Commission's Proposal has the added benefit of promoting more effective tools for cost-effective disclosure to investors. In particular, BlackRock applauds the Commission's allowance of electronic delivery of shareholder reports as a substitute for physical delivery. This important initiative recognizes the global trend of utilizing internet-based communications as a primary means of communication and fulfillment, thereby providing investors with access to fund financial and other information at a lower cost to the fund, a cost borne by its investors. Importantly, the Commission's Proposal strikes a balance and allows those investors that want to continue to receive physical copies to easily request that these be provided.

We support the Commission's proposed rule to allow funds to obtain shareholder consent for electronic delivery by sending shareholders a written statement sixty days in advance of the fund's reliance on the rule. Such a written statement would inform the shareholder of the fund's intent to make future shareholder reports available on the funds website and alert the shareholder to the fact that he or she would no longer receive print reports unless the shareholder notifies the fund of a preference for them.⁵⁵ Tremendous cost savings can be anticipated from this Proposal, and we believe that the public is ready for this step given its use of the internet for this purpose.⁵⁶ Furthermore, changing the current US practice would align the US investment industry more closely with global practices.⁵⁷ All regulatory filings would continue to be produced and available but at a much lower cost, which would ultimately result in savings for fund shareholders. Combined, BlackRock and its funds' shareholders incur costs of approximately \$30 million annually with physical print and distribution vendors. For RICs, the decreased print and distribution costs could directly benefit shareholders as these expenses are typically expenses borne by funds. Further, the reduction in use of paper and related printing and mailing resources that will ultimately result from this change is in line with initiatives to reduce our country's carbon footprint.⁵⁸ Given the focus on climate change, the "green" element is an important added benefit of this Proposal.

⁵⁵ We understand that thereafter, the fund would mail a notice, in connection with the publication of each shareholder report, notifying the shareholder that the report is available online and again providing information on how to obtain a paper copy of the report. We encourage the Commission to consider not requiring such ongoing notice to increase the cost savings to investors and further promote a more "green" fund industry.

⁵⁶ Ninety-four percent of households owning RICs had internet access in 2014 (up from 68% in 2000), with widespread use among various age groups, education levels and income levels. See Investment Company Institute, *2015 Investment Company Fact Book* at 129, available at https://www.ici.org/pdf/2015_factbook.pdf (also finding, with respect to Internet access in mutual fund owning households: (1) head of household age 65 or older, 86% have access, (2) education level of high school diploma or less, 84% have access, and (3) household income of less than \$50,000, 84% have access). Investors also increasingly prefer enhanced availability of information on the Internet. See Investment Company Institute, *2014 Investment Company Fact Book* at 115-117, available at https://www.ici.org/pdf/2014_factbook.pdf (finding 82% of U.S. households owning mutual funds used the Internet for financial purposes).

⁵⁷ In the United Kingdom, the annual audited financial statements are mailed to shareholders only upon request by the shareholder. In Canada, shareholders are given choices on how to receive regulatory documents. On an annual basis, iShares sends a negative consent letter to shareholders. A response is required if the shareholder wishes to receive a physical copy of the semi and annual shareholder report. In Ireland, no specific requirements are mandated and investment funds notify shareholders on how documents can be obtained. In Luxembourg, physical reports are available upon request.

⁵⁸ See e.g., Office of the Press Secretary, Fact Sheet: White House Launches American Business Act on Climate Pledge (Jul. 27, 2015), available at <https://www.whitehouse.gov/the-press-office/2015/07/27/fact-sheet-white-house-launches-american-business-act-climate-pledge>.

Overall, we support the ability for investors acquiring shares in a fund for the first time to provide consent to electronic delivery of reports both initially and on an ongoing basis through a streamlined, automated process.⁵⁹ We support the Commission's Proposal of implied consent (if fund shareholders are silent in response to the notice of electronic delivery) and recommend that the Commission permit funds to infer consent as to all series offered by the fund and all funds in the complex. We also encourage the Commission to clarify how consent would be achieved where shareholders hold fund shares through a broker or other financial intermediary and allow such consent to apply to all funds held through that financial intermediary. We also support the proposed safe harbor provision that would allow a fund to continue relying on the rule even if it were temporarily unable to meet the posting requirements of the rule due to technical difficulties beyond the fund's control.

We recommend a few clarifications that would allow funds and shareholders to realize the cost savings possible under the Commission's Proposal.⁶⁰ The Commission should clarify that electronic delivery consents with existing fund shareholders for prospectuses or other fund documents would satisfy the consent requirements on a going forward basis such that these fund shareholders would not need to be provided notice through paper or electronic delivery. We also recommend that the Commission allow fund shareholders to opt out of electronic delivery through a variety of convenient means, including through a toll-free number, fax, e-mail, website or mail. These multiple means of contact will assure that shareholders who prefer physical reports will have flexibility to advise the fund of their preference. Such an approach would be more convenient for fund shareholders, while at the same time much less expensive than the Commission's Proposal to require a reply form that is pre-addressed with postage paid with each notice. We are aware that a number of other clarifications are being suggested by industry groups and we urge the Commission to consider any clarifications that allow shareholders to maximize the cost savings possible under this rule Proposal.

Securities Lending Fee Information

In addition to the broader information requests associated with securities lending, BlackRock is supportive of the proposed requirements to increase information about securities lending fees incurred by shareholders of RICs. Investor protection is well served by a level playing field that allows investors to make informed choices on a risk adjusted basis – balancing fees charged alongside performance and risk management capabilities. Uniform and clear information requirements associated with securities lending activities will also have the benefit of empowering mutual fund directors to more effectively evaluate and compare securities lending services being provided to RICs. Furthermore, in order to facilitate investor comparisons, we recommend that the Commission consider the benefits of reporting the *net* results to each fund of a securities lending program (i.e., net of cash collateral management fees and other charges) just as funds report fund investment performance net of total expenses.

⁵⁹ In the future, the Commission may want to consider expanding consent for electronic delivery to cover fund account statements, confirmations, and other similar documents for the same reasons described above.

⁶⁰ We support the Commission Proposal to not delay implementation of Rule 30e-3 so that shareholders will be able to benefit as soon as possible from the reduction in expenses associated with this change.

III. Suggested Technical Clarifications and Harmonization of Forms

In this section we explain a number of specific suggestions that we believe will further support the Commission's objectives in the data collection efforts outlined in this Proposal.

Regulation S-X

We are supportive of the changes to Regulation S-X, which will primarily standardize disclosures and lead to better comparability and consistency across funds. We believe that the Commission should go further in promoting consistency of reporting by better aligning the disclosures under Regulation S-X with standardized reporting under US generally accepted accounting principles ("GAAP"). In this regard, we have several recommendations to the Commission to further align with GAAP and improve disclosures for users of fund financial statements as follows:

First, we do not believe that requiring RICs to present their schedule of investments under §210.12-12 by type of investment, the related industry, and the related country, or geographic region of the investment, would add value for investors. This presentation would result in an increase in the length of the schedule, ultimately resulting in additional costs to shareholders, without a corresponding benefit. Instead, we recommend that the Commission refer to the GAAP requirements regarding concentration risk in order to promote consistency in reporting of this type of information. In particular, pursuant to paragraphs 20-21 of Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 825-10-50, a RIC is required to, in addition to the categorization in the schedule (type of investment and related industry, country or geographic region), report any other significant concentration of credit risk. For example, a RIC investing in international securities that categorizes its investments by geographic region would also report a summary of its investments by industry, if such concentration is significant.⁶¹ In Exhibit 1, we provide an illustration of this presentation. This summary information is either presented following the schedule or in the Notes to Financial Statements. We advocate that the Commission require the same summary schedule when there is significant concentration risk to align with GAAP rather than the current proposal to separately show all three categories in the schedule. We also believe that this will align with Form N-1A requirements to present a graphical representation of holdings by a reasonably identifiable category, such as type of securities, industry sector, geographic region or maturity. Per Form N1-A instructions, only one chart is required and the categories and the basis of the presentation are formatted in a manner reasonably designed to depict clearly the types of investments made by a Fund given its investment objectives.

⁶¹ American Institute of Certified Public Accountants, *Audit and Accounting Guide, Investment Companies*, Section 7.25. See Exhibit 1 hereto for an example of this presentation.

Exhibit 1: Example of Presentation under FASB ASC 825-10-50

As of Month dd, 20XX, the Fund had the following industry classifications:	
Industry	Percent of Long-Term Investments
Drug & Grocery Store Chains	15%
Oil, Gas & Consumable Fuels	6
Banks	6
Pharmaceuticals	5
Diversified Financial Services	4
Other ¹	64
¹ Consists of U.S. Treasury Obligations and Foreign Government Obligations (16%), all other industries less than 4% of long-term investments (48%).	

Second, as part of the Regulation S-X updates, the Commission is proposing reorganizing the order in which some derivatives are presented. The Commission asked if it should require additional subgrouping of the schedules beyond what is already required. We support the Commission’s proposed requirement that derivatives be grouped by type of instrument as indicated under Instruction 1 of proposed Rule 12-13C (interest rate swaps, credit default swaps, and total return swaps). We believe that the derivatives could be further grouped by exposure category to be consistent with other GAAP disclosure requirements related to fair value and derivatives in the financial statements.

Third, since most investment companies report derivatives on a gross basis (the fair value of derivative assets is reported separately from the fair value of derivative liabilities), we would also suggest that appreciation and depreciation be shown in two separate columns or include subtotals for appreciation and depreciation instead of one column as proposed for all derivatives with the exception of exchange traded or centrally cleared derivatives. This change in format will also facilitate the requirement to reconcile the unrealized appreciation/depreciation with the corresponding amount reported on the related balance sheet. See Exhibits 2 and 3 for a comparison between the Commission’s Proposal and our suggested amendments, respectively.

Exhibit 2: Proposed “§ 210.12-13C Open Swap Contracts”

Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H
Description and terms of payments to be received from another party ^{1 2 3}	Description and terms of payments to be paid to another party ^{1 2 3}	Counterparty ⁴	Maturity date	Notional amount	Value	Upfront payments/receipts	Unrealized appreciation/depreciation ^{5 6 7 8 9}

Exhibit 3: Suggested Enhancements to Make Proposed “§ 210.12-13C Open Swap Contracts” Consistent with US GAAP

As of Month dd, 20XX, OTC total return swaps outstanding were as follows:										
Reference Entity	Floating Rate	Counterparty	Maturity Date	Notional Amount (000)	Value	Premiums Paid	Premiums Received	Unrealized Appreciation	Unrealized Depreciation	
Equity contracts										
UniCredit SpA	3-month EURIBOR plus 0.10% ¹	Bank of America N.A.	1/21/15	EUR	328	246,165	—	—	246,165	—
Volkswagen AG	3-month EURIBOR minus 0.25% ¹	BNP Paribas S.A.	1/30/15	EUR	10	85,650	—	—	85,650	—
Telecom Italia SpA	3-month EURIBOR minus 0.25% ¹	JPMorgan Chase Bank N.A.	11/10/15	EUR	6,557	207,841	—	—	—	(207,841)
Energy Select Sector SPDR Fund	3-month LIBOR minus 0.10% ¹	Bank of America N.A.	12/18/15	USD	150	384,614	—	—	—	(384,614)
Total									331,815	(592,455)
Interest rate contracts										
Return on Markit IOS 4.00%, 30-year, fixed rate Fannie Mae	1-month LIBOR2	Credit Suisse International	1/12/44	USD	29,574	(192,242)	—	(365,881)	173,639	—
Return on Markit IOS 4.00%, 30-year, fixed rate Fannie Mae	1-month LIBOR2	Credit Suisse International	1/12/44	USD	14,301	(24,401)	—	(135,840)	111,439	—
Return on Markit IOS 5.00%, 30-year, fixed rate Fannie Mae	1-month LIBOR3	Goldman Sachs Bank USA	1/12/41	USD	14,450	23,107	187,931	—	—	(164,824)
Return on Markit IOS 4.50%, 30-year, fixed rate Fannie Mae	1-month LIBOR3	Bank of America N.A.	1/12/41	USD	14,426	24,614	209,454	—	—	(184,840)
Total							397,385	(501,721)	285,078	(349,664)
¹ Fund pays the total return of the reference entity and receives the floating rate. Net payment made at termination. ² Fund pays the floating rate and receives the total return of the reference entity. ³ Fund pays the total return of the reference entity and receives the floating rate.										

Lastly, in proposed Rule 12-13C, the Commission is proposing that each major category of swaps be listed by descriptive title. We would also suggest that the Commission expand this to state that over-the-counter swaps be presented separately from centrally cleared/exchange-traded swaps. Such differentiation will facilitate reconciliation to the total variation margin receivable or payable on the related balance sheet. This suggestion will align with proposed Rule 12-13A and promote further consistency across all RICs.

We also support the Commission’s efforts to eliminate Regulation S-X’s requirements for specific disclosure for written options activity under Rule 6.07.7(c). As the GAAP disclosure requirements for derivatives have evolved, this disclosure is duplicative of other disclosures related to written options in the financial statements.

In summary, we believe these proposed changes will enhance the requirements of Regulation S-X, as outlined in the Proposal. These revisions will promote consistency, align with industry practices and improve the comparability across fund holdings. This clarity will benefit the industry and fund shareholders.

Form N-PORT

The Commission has proposed to require “registered management investment companies and ETFs organized as UITs, other than money market funds and SBICs, to electronically file with the Commission monthly portfolio investments information on new Form N-PORT in an XML format no later than 30 days after the close of each month”.⁶² Given the

⁶² Proposal at 33594.

level of complexity of the requested information and need to ensure consistency and accuracy of all information provided to the Commission on Form N-PORT, we suggest that the Commission consider extending the submission deadline to at least 45 days after month-end to allow advisers adequate time to provide the required information with sufficient oversight and review to ensure the accuracy and consistency of information.

Further, proposed Form N-PORT requires disclosure of certain information regarding collateral received in relation to a securities lending transaction at a point in time:

Item C.12. Securities lending:

- a. Does any amount of this investment represent reinvestment of cash collateral received for loaned securities? [Y/N] If yes, provide the value of the investment representing cash collateral.
- b. Does any portion of this investment represent non-cash collateral received for loaned securities? [Y/N] If Yes, provide the value of the securities representing non-cash collateral.
- c. Is any portion of this investment on loan by the Registrant? [Y/N] If Yes, provide the value of the securities on loan.

The disclosure required by Item C.12.a is broadly consistent with BlackRock's existing disclosure under applicable GAAP disclosure requirements. We note that the information requested in Item C.12 is relevant for regulators who are concerned about potential risks to investors that may arise if lending funds do not receive sufficient collateral to cover their outstanding securities loans,⁶³ and collecting this information on Form N-PORT would make it more accessible to the Commission. In addition, information requested in Item C.12.c. relates to rehypothecation of securities received as collateral for securities loans, and as such this would be useful for regulators to determine how widespread such rehypothecation practices are and whether this practice contributes to overall market leverage levels or could present other risks.⁶⁴ In the event RICs accept non-cash collateral in connection with securities loans, we believe the funds should be required to disclose if contractual lending arrangements permit rehypothecation of the securities collateral received, and whether the fund intends to use this authority under what circumstance and for what purpose.⁶⁵ This will allow both the Commission and investors to determine potential risks in these funds.

We are supportive of enhanced disclosures as to securities lending activities generally, but we have reservations about public disclosure of some of the data on proposed Form N-

⁶³ It is industry practice to require over-collateralization on the value of the securities lent. The loans and collateral are marked-to-market daily. The over-collateralization percentage varies depending on the type of collateral posted. In some cases, prevailing market practices effectively determine the level of over-collateralization. BlackRock typically requires borrowers to post collateral between 102% and 112% of the value of the securities lent. See *Securities Lending May 2015 ViewPoint*. Further, as a result of SEC Rule 2a-7 reforms in 2010 and the OCC Short Term Investment Fund ("STIF") reforms in 2012 addressing cash reinvestment vehicles, cash portfolios regulated by the SEC and OCC are comprised of short maturity and high credit quality securities, and have a high degree of liquidity. See SEC, Press Release, SEC Approves Money Market Fund Reforms to Better Protect Investors (Jan. 27, 2010), available at <https://www.sec.gov/news/press/2010/2010-14.htm>; Short-Term Investment Funds. In BlackRock's securities lending program, securities lending transactions involving cash collateral use cash reinvestment vehicles that are managed consistent with Rule 2a-7, OCC STIF rules, or funds with similar investment guidelines.

⁶⁴ The industry standard lending agreement published by the Securities Industry and Financial Markets Association ("SIFMA") (which is the agreement used by RICs managed by BlackRock) does not permit the rehypothecation or on-lending of any non-cash collateral received in connection with securities loans. SIFMA, Standard Form and Document Library, available at http://www.sifma.org/services/standard-forms-and-documentation/mra_-gmra_-msla-and-msftas/.

⁶⁵ As noted in the *Securities Lending May 2015 ViewPoint*, BlackRock does not rehypothecate non-cash collateral.

PORT. Specifically, Item B.4 of proposed Form N-PORT requests information about securities lending counterparties:

For each counterparty to the fund in any securities lending transaction, provide the following information:

- a. Name of counterparty.
- b. Legal Entity Identifier (“LEI”) of counterparty (if any).
- c. Aggregate value of all securities on loan to the counterparty.

BlackRock is supportive of providing the names of those securities lending counterparties with whom the fund has lending agreements. However, we note that the recent introduction of LEIs has presented challenges for large, multinational broker-dealers who are often the counterparties to RICs’ securities lending arrangements and this requirement will have implications not just for the RIC but also for its counterparties. As a result, this requirement will require RICs and borrowers to agree on the specific form that such LEI information will take, which will require development and enhancements to loan order placement systems. As such, we suggest that the Commission allow for sufficient time to implement the appropriate protocols and make necessary system enhancements to facilitate LEI reporting.

Disclosing to the public, for each securities lending counterparty, the aggregate value of all securities on loan to the counterparty at the frequency requested in the Proposal, may have unintended consequences on securities lending markets since borrowers may be concerned about the details of their exposures being made public to clients and competitors. If detailed borrower information is made available publicly, even on a delayed basis, it may make borrowers less likely to borrow from RICs and more likely to borrow from lenders who are not required to make similar disclosures, thus defeating the Commission’s purposes for obtaining a greater amount of loan information. Such an outcome would run counter to the Commission’s goals of monitoring trends and risks in the securities lending area. In addition, requiring public disclosure of loans by each counterparty could lead observers to reach inappropriate conclusions should a fund suddenly materially decrease (or increase) its lending activity with respect to a specific counterparty.⁶⁶ Borrowers might also be concerned about their exposure being made public to clients and competitors, thus discouraging use of this service which provides value to clients and the securities markets. To address this concern, we suggest that RICs be required to disclose aggregated securities loans to each counterparty in annual Commission filings that are not publicly available. RICs would also continue to have the option to publicly disclose this information in annual and semi-annual reports under GAAP if they choose to do so. In this way, the public would continue to receive relevant information on a RIC’s securities lending activities, and the Commission would receive the requested information regarding counterparty exposures associated with securities lending activities that are conducted by RICs. Alternatively, instead of requesting the name of each counterparty to be publicly disclosed, the Commission could ask for aggregate value of securities on loan for different categories of borrowers. In particular, we suggest requesting aggregate value on loan in two categories – (a) banks or registered broker-dealers; or (b) other types of borrowers. This

⁶⁶ There can be many reasons why a borrower’s loan balance with a fund can change dramatically from month to month; lending spreads may narrow making borrowing unattractive, other borrowers may emerge who are willing to offer a more attractive spread, the borrower’s clients may need to borrow fewer securities, the borrower may negotiate more favorable rates with another lender, a securities lending program’s methodology may allocate securities loans to other borrowers, etc. There can be a myriad of other reasons that have nothing to do with the creditworthiness of the borrower why lending activity with a single borrower can fluctuate, and BlackRock believes that making this information public may lead market participants or regulators to reach inappropriate conclusions regarding a lender’s view of a borrower’s creditworthiness.

could help the public further understand the regulatory exposure of the lender without individually identifying particular borrowing institutions.

Form N-CEN

We support the Commission's broadened disclosures on Form N-CEN and commend its elimination of duplicate forms, such as Form N-SAR. We believe that certain technical clarifications regarding Form N-CEN would make these proposed changes more beneficial to investors.

Regarding securities lending, we believe that the information being requested on Form N-CEN will be useful to regulators and investors, including the information on borrower defaults,⁶⁷ indemnity rights, and securities lending service providers. Moreover, investors and RIC boards will particularly benefit from the information on administrative fees, cash collateral reinvestment fees, and indemnification fees. While there is very little readily-available information about fund fees, BlackRock has been at the forefront of publicly disclosing fee information as to those funds for which it is the investment adviser.⁶⁸ In BlackRock's experience, since most other funds do not disclose fee information, there is very little readily available information which has made it difficult for regulators, RIC boards, and investors to assess the comparability of securities lending programs.⁶⁹ While we believe that the Commission's Proposal will enhance the ability of regulators and RIC boards to assess the impact of securities lending activities, we believe that the Commission would be better served by modifying the disclosures in proposed Form N-CEN to provide additional context and thus more useful information.

Specifically, we note that while the fee information would provide an explicit source of comparable information about contractual arrangements, it does not provide any meaningful information about performance (e.g., gross lending income), which would be necessary in order to enable the public, regulators and fund boards to make meaningful comparisons between lending agent capabilities and results. Thus, we recommend that funds engaged in securities lending also be required to report, both by fund and by lending agent, the following: the average amount and number of securities on loan during the reporting period, average securities lending utilization rates over the reporting period, aggregate securities lending income earned during the reporting period (gross and net to the fund), aggregate securities lending spread information for the reporting period and any costs or expenses allocated to the fund in connection with securities lending, including any securities lending cash collateral management fees. Moreover, we believe that this information should be made available on an annual, calendar year-end basis to facilitate reviews of comparability of lending agents' fees and performance. We understand that this type of information is often more readily available to RICs on a fiscal period basis (which means the data may be reviewed as part of a RIC's Sarbanes-Oxley disclosure controls and procedures review, as well as part of the RIC's financial statement audits), so we are willing to support fiscal period reporting of this data. However, we believe that providing this

⁶⁷ We interpret borrower default to be restricted to true defaults (as opposed to technical defaults such as settlement fails).

⁶⁸ In 2011, BlackRock voluntarily began disclosing information regarding fees applicable to our RICs advised by us in shareholder reports. The following year, we began including additional disclosure on securities lending fees in RIC registration statements and in related marketing materials.

⁶⁹ In order to perform its review of the reasonableness of fees to be paid to the investment manager or others in regards to securities lending programs, specialist consultants are often retained to provide market data—some of which is publically available through industry self-reporting and some of which is not publicly available but is known to the consultant through experience because of its review of bids provided to the fund or to other clients of the consultant.

information on a calendar year basis would be beneficial to the Commission, fund boards and investors.⁷⁰

Information on fees alone, without the context of how a lending program performed, how much income was derived, etc., makes the information gathered on the new Forms incomplete and less useful than it could be. Different lenders may price lending services differently depending on what other services are provided. This information should be considered in its totality when evaluating a fee.⁷¹ We recommend that the Commission consider expanding the information required to include additional relevant information to enable a more comprehensive understanding of securities lending performance rather than fees alone. The Commission should also request details of any special restrictions imposed on the program (such as so-called specials only programs and asset class specific lending programs). Such disclosure could standardize data for securities lending evaluations in the same manner as the management fee ratio does for investment advisory contract evaluations.

Net Asset Value Error Information on Form N-CEN

We believe a clarification is needed regarding the new question about NAV error on proposed Form N-CEN. The proposed Form N-CEN asks the following question:

23.a) During the reporting period, did the Registrant make any payments to shareholders or reprocess shareholder accounts as a result of an error in recalculating the Registrant's net asset value (or net asset value per share)?
[Y/N]

We note that a fund may receive a payment from the party responsible for the error, which may or may not be the Registrant. Thus, we suggest that the question be reworded as follows:

23.a) During the reporting period, were there any errors that exceeded the registrants threshold for reprocessing? [Y/N]

* * * * *

⁷⁰ In this regard, we note that the Commission already requires RICs to include registration statement disclosure regarding fund performance that is calculated both on a calendar year basis (to facilitate performance comparisons across funds) and a fiscal year end basis (in fund financial highlights). See Form N-1A Items 4 and 13.

⁷¹ Securities lending services are often bundled with custodial or other services, which makes the securities lending agents' fees difficult to assess.

We thank the Commission for providing BlackRock the opportunity to express our support for its efforts to enhance the data available to it and to provide our comments and suggestions on the Proposal. Please contact the undersigned if you have any questions or comments regarding BlackRock's views.

Sincerely,

Barbara Novick
Vice Chairman

Benjamin Archibald
Managing Director

cc:

The Honorable Mary Jo White
Chairman
Securities and Exchange Commission

The Honorable Luis A. Aguilar
Commissioner
Securities and Exchange Commission

The Honorable Daniel M. Gallagher
Commissioner
Securities and Exchange Commission

The Honorable Michael Piwowar
Commissioner
Securities and Exchange Commission

The Honorable Kara M. Stein
Commissioner
Securities and Exchange Commission

David Grim
Director
Division of Investment Management
Securities and Exchange Commission

Appendix A: High Level Framework for Discussion on Economic Leverage *Calculating “Commitment” Leverage*

Introduction & Overview

In discussion below, we have outlined a simplified, high level framework with the goal of starting a conversation across the regulatory and buy-side community around an appropriate and comprehensive method to measure economic leverage. The approach is conceptually consistent with the AIFMD Commitment Leverage approach in that both borrowings and structural leverage from derivative positions used as part of investment strategies in a portfolio are included in the leverage measure. Further, the approach appropriately recognizes that derivatives used for hedging positions and offsetting long and short positions do not create leverage. We note, however, that the specific calculations we describe deviate from the AIFMD rules for the purpose of simplification and clarity. We do not view the calculation of leverage described below as a precise measure of leverage as, given its simplicity, there are several intentional limitations with this approach. Further, we note that the calculation of a reasonable and comprehensive measure of leverage naturally introduces complexity which can increase costs of implementation and the operational difficulty associated with producing this figure for multiple portfolios on a regular basis. These considerations would need to be addressed in order to implement such a measure of leverage.

That said, we believe that the approach described below is a reasonable starting point that could help begin a robust conversation about leverage between the Commission and the industry. In particular, this approach only requires data on the positions in the portfolio and it does not introduce a significant amount of subjectivity into determining the existence of a hedge or offsetting position which will help promote consistency in the calculations provided by various managers. As such, we believe that with enhanced precision on approaches for risk bucketing and normalization of risk into common units (described below), managers could calculate this figure in a relatively consistent manner, albeit with a workable implementation timeframe that takes into account the level of complexity associated with the production of this figure.

We recommend that the Commission engage with the asset management industry through industry forums or other means to determine: (a) enhancements to improve precision, add granularity, and eliminate simplifying assumptions; and (b) obtain the appropriate balance between precision and the need for consistent computability across the broad and diverse range of RICs under the Commission’s purview. We would welcome participation in such forums as well as the opportunity to consider other ideas that may better achieve the Commission’s objectives.

Conceptual Discussion

Below is a high level overview of the steps that one would take to calculate “commitment” leverage where leverage includes borrowings (e.g. repo, bank lines of credit, and inter-fund lending) and structural leverage from derivatives positions (after removing positions that are offsetting or hedging positions in a fund).

Step 1: Net “natural offsets” using an appropriate exposure metric for each risk factor type.

- 1A: Determine units of measurement for each risk exposure type. For example:
 - **Interest Rate Risk:** Duration dollars by currency

- **Spread Risk:** Duration times Spread (“DxS”) by market (e.g., investment grade credit, high yield credit, agency MBS, CMBS, etc.), and currency
- **Inflation Risk:** Real duration dollars by currency
- **Equity Risk:** Delta-adjusted equity beta by country
- **FX Risk:** Unhedged (active) currency exposure
- **Commodity Risk:** Delta-adjusted commodity beta

**We note that guidance around appropriate risk buckets would need to be given to ensure consistent application of this approach. This guidance should include sufficient granularity of risk buckets. For example, for spread risk, there are a multitude of distinct risks that would need to be defined and captured (e.g. Investment Grade, High Yield, Bank Loan, Agency MBS, CMBS, Structured Products, Emerging Markets, Sovereign, etc.) Additionally, enhanced methods to normalize varying risks into common equivalents should be considered.*

1B: Calculate net exposure of each by risk factor block for cash securities and derivatives separately.

- Offsetting exposures from reverse repo transactions should not be included in this calculation. For example, bookkeeping positions for a repo transaction typically include a long position for the security being used as collateral and an offsetting short repo position. This means that a repo position would only count towards leverage, if the resulting cash that is raised is used towards the purchase of another asset.

Step 2: Compare net cash and net derivative exposure.

2A: Compare net exposure from cash securities to those from derivatives and exclude derivatives exposure being used for hedging or risk reduction.

- If sign of cash and derivative position is the same, take the absolute value.
- If sign of each derivative position is opposite from the cash position, this means that the derivatives are being used as a hedge and should be excluded from leverage calculation.
- If cash is less than derivative exposure, use absolute value of the difference, as this signifies that derivative usage is above and beyond that needed for hedging or risk management purposes.

Step 3: Normalize net derivative exposure by volatility.

- Adjust each risk block exposure based on its long term historical volatility and normalize to a common unit.

Step 4: Convert exposure to an appropriate ‘dollar’ unit and divide by portfolio NAV.

- For fixed income, we suggest normalizing to the portfolio’s benchmark duration or to 10 year equivalents if the portfolio does not have a benchmark. With this approach, methodology enhancements would be needed for very long-dated portfolios as conversion to 10 year equivalents may overstate risk.
- For borrowing, divide outright borrowing by NAV.
- In this approach, exposure from derivatives not used for hedging will be treated as structural leverage. The exception is long and short positions

with the same underlying and other relevant contract terms. Where long and short positions have the same terms, they should be considered offsetting and removed from the leverage calculation.

Step 5: Repeat steps 1 to 4 for all risk exposures and add to obtain commitment leverage.

Illustrative Example

Exhibit A.1: Calculations for Interest Rate Duration Risk Exposure

Currency	Step 1A - Duration Dollars				Total	Step 1B - Net Exposures		Step 2 - Net Hedges		Step 3 - Normalize Vol	
	Cash.Long	Cash.Short	Deriv.Long	Deriv.Short		Cash Net	Deriv Net	Sign Check	Deriv Net Hedges	10Yr Vol	Norm Deriv
AUD	6,652,720	(6)	1,782,564,660	(804)	1,789,216,570	6,652,714	1,782,563,856	Same	1,782,563,856	0.84%	1,773,903,407
BRL	0	0	549,869,224	(176,836,580)	373,032,644	0	373,032,644	Same	373,032,644	1.61%	715,094,886
CAD	50	(260)	148,795,849	(147,445,152)	1,350,486	(210)	1,350,697	Opposite	1,350,486	0.68%	1,086,587
CLP	-	-	0	(0)	(0)	-	(0)	Opposite	0	0.74%	0
CNH	25,032,085	-	(0)	0	25,032,085	25,032,085	(0)	Opposite	-	0.58%	-
CNY	2,137,235	-	380,672,225	-	382,809,460	2,137,235	380,672,225	Same	380,672,225	0.48%	217,729,747
COP	-	-	0	(0)	(0)	-	(0)	Opposite	0	1.31%	0
EUR	6,924,876,650	(1,012,860,313)	953,459,757	(3,493,652,121)	3,371,823,873	5,912,016,237	(2,540,192,364)	Opposite	-	0.74%	-
GBP	1,184,410,326	(430,451,094)	-	(3,458,834,838)	(2,704,875,605)	753,959,232	(3,458,834,838)	Opposite	2,704,875,605	0.83%	2,662,736,010
HKD	8,192,974	-	-	-	8,192,974	8,192,974	-	Opposite	-	0.82%	-
HUF	-	-	-	(148,397,406)	(148,397,406)	-	(148,397,406)	Opposite	148,397,406	1.85%	326,113,134
IDR	824	-	(0)	0	824	824	0	Same	0	1.66%	0
INR	444,108,932	-	(282,897)	(38,898,164)	404,927,871	444,108,932	(39,181,061)	Opposite	-	0.83%	-
JPY	1,782,539,231	(1,671)	381,193	(1,744,972,685)	37,946,067	1,782,537,560	(1,744,591,492)	Opposite	-	0.28%	-
KRW	-	(773)	1,326,191,576	(17,282,371)	1,308,908,432	(773)	1,308,909,205	Opposite	1,308,908,432	0.59%	921,527,056
MXN	414,229,832	0	711,413,109	(184,798,657)	940,844,283	414,229,832	526,614,451	Same	526,614,451	1.13%	704,989,172
MYR	-	-	0	(0)	0	-	0	Opposite	0	0.49%	0
NOK	1,387	-	-	(0)	1,387	1,387	(0)	Opposite	-	0.74%	-
NZD	132,125,234	-	-	-	132,125,234	132,125,234	-	Opposite	-	0.90%	-
PLN	0	-	214,345,561	(882,190,748)	(667,845,187)	0	(667,845,187)	Opposite	667,845,187	0.96%	764,100,760
RUB	83,262,789	-	(0)	0	83,262,789	83,262,789	(0)	Opposite	-	1.97%	-
SEK	2,865,984	-	-	-	2,865,984	2,865,984	-	Opposite	-	0.74%	-
SGD	2,791	-	-	-	2,791	2,791	-	Opposite	-	0.81%	-
THB	320,198	-	-	-	320,198	320,198	-	Opposite	-	0.71%	-
TRY	7,874	-	-	(0)	7,874	7,874	(0)	Opposite	-	2.28%	-
USD	23,165,133,753	(2,634,547,746)	3,613,553,356	(21,915,939,706)	2,228,199,657	20,530,586,007	(18,302,386,353)	Opposite	-	0.84%	-
ZAR	4,643	-	(0)	0	4,643	4,643	(0)	Opposite	-	1.25%	-
Grand Total	34,175,905,413	(4,077,861,862)	9,680,963,610	(32,209,249,232)	7,569,757,930	30,098,043,551	(22,528,285,621)				8,087,280,760

Step 4 - Convert derivative exposure into 'ten year equivalents' and leverage

Net Norm Deriv	10Yr Duration	10Yr Equiv	NAV	Leverage
8,087,280,760	7.5	1,078,304,101	10,000,000,000	10.8%

Step 1: Net "Natural Offsets"

Step 1A: Calculate exposure, defined as duration dollars for interest rate risk, for each currency for cash securities and derivatives separately.

- See green table.

Step 1B: Compare net exposure from cash securities to those from derivatives and exclude derivative exposure being used for hedging or risk reduction purposes.

- USD Cash: Long \$23.3 billion duration dollars and Short \$2.6 billion → Net = \$20.5 billion (red circles).
- USD Derivatives: Long \$3.6 billion duration dollars and Short \$21.9 billion → Net = -18.3bn (blue circles).

Step 2: Net Hedges

- USD: Net duration dollars of derivatives is opposite sign of the cash positions and absolute value is less than cash position exposure. Derivatives are being used as a hedge or for risk reduction purposes and should therefore be excluded from the commitment leverage calculation (purple box).
- MXN: Both net cash and derivative exposure is long (same sign), therefore include entire derivative exposure in the leverage calculation as derivatives are being used to obtain exposure to MXN interest rates (purple box).

Step 3: Volatility Normalization

- Apply the ratio of long term volatilities to express duration dollars in US interest rate terms.
- Total portfolio exposure is \$8.1bn (yellow box).

Step 4: Units Conversion

- Convert duration dollars into ‘ten year equivalents’ as a percentage of NAV.
- Divide normalized derivative exposure by duration of the ten-year. The approximate duration of the ten-year is 7.5.
 - $8.1\text{bn} / 7.5 = 1.1\text{bn}$
- Divide by portfolio NAV to express in percentage terms:
 - $1.1\text{bn} / 10.\text{bn} = 10.8\%$

Step 5: Repeat Step 2 for All Risk Exposures and Add to Obtain Commitment Leverage

- A. Interest Rates – 10.8% using US 10 year equivalent exposures by currency (see step 4 under the illustrative example above for details on this calculation).
- B. Spreads – 1.9% using IG Corporate Equivalents. In this case, spread risk exposure (as measured by duration times spread ‘DxS’) is segmented by currency, sector and position type (i.e. Investment Grade, High Yield, Foreign Agency, Agency MBS, Municipal and Structured Bonds) and converted to Investment Grade Corporate Equivalents to obtain exposures in common units and capture derivative hedges. The Investment Grade Corporate Index was chose given its prevalence as a component of the Barclay’s US Aggregate Index.

Exhibit A.2

Currency	Sector	Net Exposure (DxS)		Sign Check	Net Hedges	
		Cash Net	Deriv Net		Deriv Net Hedges	
AUD	Credit	952,106,355	-	Opposite		-
CNH	Credit	14,462,570,659	-	Opposite		-
EUR	Credit	1,080,221,075,016	117,597,806,957	Same		117,597,806,957
EUR	Foreign Agency	20,861,462,581	-	Opposite		-
EUR	Structured Products	111,773,713,839	-	Opposite		-
GBP	Credit	158,186,505,332	-	Opposite		-
GBP	Structured Products	261,829,862,257	-	Opposite		-
HKD	Credit	15,542,209,335	-	Opposite		-
INR	Credit	4,773,612,253	-	Opposite		-
JPY	Credit	1,312,082,689	(1,114,496,820)	Opposite		-
SEK	Structured Products	4,748,945,144	-	Opposite		-
SGD	Credit	1,833,050,457	-	Opposite		-
THB	Credit	1,387,046,735	-	Opposite		-
USD	Agency MBS	186,836,416,357	(130,335,846,858)	Opposite		-
USD	Credit	1,719,613,210,898	88,818,225,556	Same		88,818,225,556
USD	Municipal Bond	128,517,072,286	-	Opposite		-
USD	Structured Products	2,283,584,798,795	-	Opposite		-

Calculations related to Spreads:

Total DxS = \$206bn

DxS of Barclay's Investment Grade Corporate Index = 1090

Exposure Equivalents = \$189MM

NAV = \$10bn

= Spread Derivative Leverage = 1.9%

C. FX – 7.1% using DXY

A similar approach is used for currency exposures. Under this approach, convert unhedged portfolio level exposure to equivalent units of the DXY Index, and sum the absolute values. The DXY Index is a weighted average of the US Dollar versus a basket of other major currencies and provides an indication of the international value of the US Dollar.

Exhibit A.3

Currency	Exposure	LT Volatility	Abs Val DXY Equiv
AUD	-1.3	12.8%	2.0
CHF	0.2	11.2%	0.2
EUR	-1.8	10.6%	2.3
HKD	0.1	0.4%	0.0
JPY	-0.8	9.5%	0.9
NOK	0.4	12.8%	0.6
PLN	0.3	15.2%	0.6
TRY	0.1	11.0%	0.2
DXY		8.3%	
Total			7.1

D. Outright Borrowing using repo⁷² - \$285 million or 2.8% of NAV

E. Short Positions - \$601 million or 5.9% of NAV



Result

When added to NAV, total commitment exposure is 128.5% meaning that this fund is levered under the commitment approach 1.285 times.

⁷² Borrowing could also include the use of bank credit lines or inter-fund lending.

Tradeoffs between Precision versus Tractability

The above described calculation of “commitment” leverage provides an estimate of the degree to which borrowings and derivatives are used as leverage in a fund (based on hedges and offsets that are manually calculated using risk bucketing approaches and normalization of risk to common units). Note that the units of leverage are meant to represent the economic equivalent of borrowing, and when trying to assess the impact of derivatives on economic leverage, there is no perfect solution. The commitment leverage measure necessarily does not fully-capture the full range of basis and other risks that are embedded in a fund’s risk profile. One way to compensate for this limitation is to use an additional risk metric, ex-ante portfolio risk, to get a more holistic understanding of the portfolio, albeit in a different measurement unit.

Portfolio risk can be measured directly by estimating ex-ante risk of all positions in the portfolio based on a variance / covariance matrix (e.g., estimated from a historical time series of volatilities and correlations of market risk factors). Measuring a portfolio’s factor exposures (i.e., portfolio risk sensitivities such as duration, convexity, spread duration, etc.) only provides an indirect and incomplete set of metrics. The ex-ante risk calculation attempts to provide a comprehensive metric that integrates the portfolio’s factor exposure with an estimate of the volatility structure in the markets. In typical asset management practice, ex-ante market risk is generally measured on an annualized basis and in terms of one standard deviation of total returns. The measure captures volatilities at the individual risk factor level as well as correlations across risk factors, thereby incorporating the effects of diversification among portfolio positions. This measure captures volatilities at the individual risk factor level as well as correlations across risk factors based on the variance/covariance matrix structure and market price levels for risk factors. This means that diversification is captured explicitly by the model.

It therefore follows that an approach that leans more heavily on a portfolio’s factor exposures, such as our simplified “commitment leverage calculation”, may miss certain elements of the underlying risk dynamics. The grid of exposure types (e.g., US interest rates) is used to net factor exposures one-to-one against each other, implicitly assuming that all such exposures within a given “risk bucket” are perfectly positively or negatively correlated. This is a simplification that does not generally hold true, although the result of this simplifying assumption will often be reasonable if the grid of risk buckets used is sensible.

Calculating Ex-Ante Portfolio Risk

In this example, the annual one standard deviation risk of this portfolio was 1.42%. This means, on an ex-ante basis, the one standard deviation, annualized portfolio risk is expected to be 1.42. As shown in Exhibit A.8, the 1.42% one standard deviation risk includes stand-alone risk from key risk factors, including rate risk (91 bps), spread risk (89 bps), and equity risk (29 bps). Diversification and application of correlations in the calculation of portfolio risk results in a 1.42% risk measure that is substantially lower than the sum of the key stand-alone risks for the portfolio. This can be readily viewed in the risk contribution column shown in Exhibit A.8.

Exhibit A.8: Example Calculation of Portfolio Risk

Risk Group	Exposure	Exposure Units	Stand-Alone Risk	Risk Contribution
Rates	1.57	years of duration	91	57
EUR Sovereign Spreads	0.32		45	26
DEM Rates	0.49		44	15
Other Interest Rates	0.38		18	8
USD interest Rates	0.59		55	8
AUD Interest Rates	0.15		13	2
CEE Interest Rates	-0.08		4	-2
JPY Interest Rates	0.00		4	-1
GBP Interest Rates	-0.28		20	0
Spreads	2.49	years of spread duration	89	50
Corporate	0.99		47	29
High Yield	0.36		31	19
Investment Grade	0.63		16	9
USD Emerging Markets	0.17		20	11
Other Spreads	1.50		33	10
Loans	0.25		9	5
CMBS	0.21		7	4
Muni	0.39		17	-3
Mortgage	0.47		14	2
Government Related/Covered	0.03		4	1
ABS	0.15		2	0
Swap Spreads	-0.14	years of spread duration	7	-1
Equity	4.33	percent of NAV	27	21
Foreign Exchange	2.93	percent of NAV	29	13
Inflation	0.33	years of duration	14	2
Alternative (Commodity)	0.53	percent of NAV	7	0
Volatility	0.68	years of volatility duration	5	0

Detailed Risk from US Interest Rate Exposure

As shown below, the ex-ante portfolio risk measure captures risk at a more granular level including actual exposures, diversification, and offsets. In this example, the portfolio has long exposure to 10Y US Rates of .54 (with stand-alone portfolio risk of 45 bps) and short exposure to 2Y US Rates of -.32 (with stand-alone risk of 13 bps). The risk of these positions is captured explicitly in the portfolio risk measure with risk contribution to US rate risk from the 2Y exposure equal to zero and 5 bps for the 10Y exposure.

Exhibit A.9

Risk Group	Exposure	Exposure Units	Stand-Alone Risk	Risk Contribution
USD Interest Rates	0.59	years of duration	55	8
Treasury 3M	0.09		1	0
Treasury 1Y	0.06		1	0
Treasury 2Y	-0.32		13	0
Treasury 3Y	0.03		1	0
Treasury 5Y	0.08		6	0
Treasury 7Y	-0.20		16	-2
Treasury 10Y	0.54		45	5
Treasury 15Y	0.13		11	1
Treasury 20Y	0.11		9	1
Treasury 25Y	0.04		3	0
Treasury 30Y	0.05		4	1

Gross Notional Exposure

Gross Notional Exposure can be useful in providing information about the portfolio's use of derivatives (i.e., the "derivatives footprint" as described throughout this letter). In this example, the fund's GNE is 417% of NAV or \$41.7 billion. This shows that the fund in this example uses a significant amount of derivatives which may signal a degree of complexity in the portfolio. However, actual economic leverage as measured by our "commitment" leverage calculation shown above is only 28.5% of NAV.

For illustrative purposes, we have provided the components of GNE below.

Exhibit A.4: GNE from Cash Securities

Currency	Cash Gross Notional (% of NAV)	Cash Gross Notional (\$ billions)
EUR	18%	1.8
GBP	3%	0.3
JPY	1%	0.1
MXN	1%	0.1
USD	99%	9.9
Other	2%	0.2
Grand Total	124%	12.4

Exhibit A.5: GNE from Interest Rate Derivatives

Currency	Derivative Gross Notional (% of NAV)	Derivative Gross Notional (\$ billions)
AUD	9%	0.9
BRL	5%	0.5
CAD	12%	1.2
CNY	1%	0.1
EUR	8%	0.8
GBP	43%	4.3
JPY	3%	0.3
KRW	6%	0.6
MXN	3%	0.3
PLN	4%	0.4
USD	120%	12.0
Other	2%	0.2
Grand Total	216%	21.6

Exhibit A.6: GNE from Spread Derivatives

Currency	Derivative Gross Notional (% of NAV)	Derivative Gross Notional (\$ billions)
EUR	5%	0.5
GBP	0%	-
JPY	0%	-
USD	47%	4.7
Other	1%	0.1
Grand Total	53%	5.3

Exhibit A.7: GNE from FX Derivatives

Currency	Derivative Gross Notional (% of NAV)	Derivative Gross Notional (\$ billions)
AUD	1%	0.1
EUR	16%	1.6
GBP	2%	0.2
HKD	0%	-
JPY	2%	0.2
MXN	1%	0.1
NOK	0%	-
PLN	0%	-
Other	2%	0.2
Grand Total	24%	2.4

As this example demonstrates, GNE can be misleading from a risk perspective, particularly if it is used in isolation from other measures. Specifically, in the case of US interest rates, derivatives are primarily being used to express front end interest rate views, which require large notional positions, and for risk reduction purposes. As the commitment leverage and portfolio risk calculations showed, the majority of these positions are not being used to introduce additional risk into the portfolio.