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March 28, 2016

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

Re: *Use of Derivatives by Registered Investment Companies and Business Development Companies* (File No. S7-24-15)

Dear Mr. Fields:

The Investment Company Institute¹ appreciates the opportunity to comment on the Securities and Exchange Commission's proposed new rule under Section 18 of the Investment Company Act of 1940 ("1940 Act").² Although cast as an exemption, the proposed rule would break new ground in severely restricting funds' ability to use derivatives. The proposal would require regulated funds to adhere to one of two limits on derivatives use – a notional exposure-based limit or a risk-based limit. The proposal also would expand existing asset segregation obligations and require certain funds to establish a new derivatives risk management program.

The SEC articulates at least two goals in proposing the new rule. One goal is to modernize the guidance for funds' use of derivatives and financial commitment transactions.³ We strongly support the

¹ The Investment Company Institute (ICI) is a leading, global association of regulated funds, including mutual funds, exchange-traded funds ("ETFs"), closed-end funds, and unit investment trusts in the United States, and similar funds offered to investors in jurisdictions worldwide. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. ICI's U.S. fund members manage total assets of \$16.9 trillion and serve more than 90 million U.S. shareholders.

² *Use of Derivatives by Registered Investment Companies and Business Development Companies*, Release No. IC-31933, 80 Fed. Reg. 80884 (Dec. 28, 2015) ("Proposing Release"), available at <https://www.gpo.gov/fdsys/pkg/FR-2015-12-28/pdf/2015-31704.pdf>. The proposed rule would apply to open-end funds, closed-end funds, business development companies ("BDCs"), most ETFs, and exchange-traded managed funds. The proposed rule would not apply to unit investment trusts, including ETFs structured as unit investment trusts.

³ The Commission uses the term "derivatives" to mean "any swap, security-based swap, futures contract, forward contract, option, any combination of the foregoing, or a similar instrument . . . under which the fund is or may be required to make

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SEC's efforts in this regard. To understand the expectations of the SEC and its staff in this area, funds currently must look to an amalgamation of decades-old SEC guidance, staff no-action letters, and informal staff comments about specific fund disclosures.⁴ Under the resulting regulatory framework, a fund investing in derivatives transactions avoids issuing a "senior security"⁵ in violation of Section 18 of the 1940 Act if that fund segregates liquid assets or enters into offsetting positions to "cover" the transaction.⁶ This asset coverage framework has served funds and fund investors quite well. It has helped ensure that funds have sufficient assets to meet their future payment obligations under derivatives transactions. Consolidating the multiple sources of guidance, and modernizing where necessary to address specific identified problems, can help promote greater clarity of regulatory obligations and stronger controls over funds' use of derivatives.⁷

A second goal expressed by the SEC is to ensure that funds are not "unduly speculative" – that they are not hazarding an excessive risk of loss – as a result of their use of derivatives.⁸ We also support this goal. Nevertheless, major aspects of the proposal would restrict funds far beyond the extent required for this purpose and would work to the clear detriment of fund investors. Indeed, were the

any payment or delivery of cash or other assets during the life of the instrument or at maturity or early termination, whether as a margin or settlement payment or otherwise." See proposed Rule 18f-4(c)(2). The proposed rule defines a "financial commitment transaction" as "any reverse repurchase agreement, short sale borrowing, or any firm or standby commitment agreement or similar agreement under which a fund has obligated itself, conditionally or unconditionally, to make a loan to a company or to invest equity in a company, including by making a capital commitment to a private fund that can be drawn at the discretion of the fund's general partner." See proposed Rule 18f-4(c)(4). Unless the context otherwise requires, we use the term "derivatives transactions" to encompass derivatives and financial commitment transactions.

⁴ See, e.g., *Securities Trading Practices of Registered Investment Companies*, Release No. IC-10666, 44 Fed. Reg. 25128 (Apr. 27, 1979) ("Release 10666"), available at <http://www.sec.gov/divisions/investment/imseniorsecurities/ic-10666.pdf>.

⁵ Section 18(g) of the 1940 Act defines a "senior security" as:

any bond, debenture, note, or similar obligation or instrument constituting a security and evidencing indebtedness, and any stock of a class having priority over any other class as to distribution of assets or payment of dividends . . .

⁶ Some legal experts question the SEC's authority to regulate derivatives under Section 18, noting that the section was clearly intended to regulate a fund's capital structure, and not fund investments or trading practices. See, e.g., Amy R. Doberman, *SEC Proposal on Investment Company Use of Derivatives – A Solution in Search of a Problem?*, REV. OF SEC. AND COMMOD. REG. (forthcoming May 2016) ("there is a question as to whether it is a "bridge too far" to connect the plain language of Section 18 with a far-reaching, dense, and extremely burdensome set of regulatory requirements as contemplated by [the proposed rule]").

⁷ For excellent background on the proposal, see generally, *SEC Proposes New Rule Concerning Registered Funds' Use of Derivatives*, Ropes & Gray (Jan. 7, 2016), available at <https://www.ropesgray.com/newsroom/alerts/2016/January/SEC-Proposes-New-Rule-Concerning-Registered-Funds-Use-of-Derivatives.aspx>.

⁸ Section 1(b)(7) of the 1940 Act.

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rule adopted as proposed, funds and fund investors would lose the many benefits that derivatives provide to them today, benefits having no relation to “undue speculation.”

As the Commission well knows, the success of the U.S. fund industry has depended on a core value proposition: by investing through a regulated fund, ordinary investors are able to gain access to professional asset management that otherwise would be unavailable to them. Today, the use of derivatives – to achieve efficiencies, enhance liquidity, and lower costs – is a critically important tool of asset management. Any rulemaking in this area must preserve this tool and the benefits it provides for fund investors. Otherwise, the SEC only will have “dumbed down” mutual funds, hobbled them in their ability to best serve U.S. investors, and made them less competitive as a result. By contrast, private funds, exchange-traded notes, separate accounts, collective investment trusts, and other investment products all would be free to use derivatives without restriction and without any of the protections of the 1940 Act.⁹

Regrettably, the proposed percentage limits on the notional amount of exposure a fund may obtain through derivatives transactions would hamstring funds’ ability to use derivatives in ways that are very beneficial to U.S. investors.¹⁰ We do not support adoption of these limits, particularly any limit based on notional amount, which is not an appropriate measure of economic exposure or risk.

One fundamental error in the proposed limits is reliance on gross notional exposure as a yardstick for determining whether a fund is unduly speculative. Notional amounts overstate a fund’s obligation under, and the economic risks associated with, a derivatives transaction. Moreover, the

⁹ The disparate regulatory treatment is even more troubling as private funds promise to become more available to ordinary investors and different technologies expand the availability of separate accounts to more and more investors. There are a number of regulatory and legislative efforts looking to expand significantly the universe of potential private fund investors. For example, the United States House of Representatives recently referred a bill to the Senate that would codify the net worth and income requirements that the SEC set forth in 1982 for individuals who wish to qualify as accredited investors that can invest in private funds. The bill also would extend accredited investor status to individuals licensed as brokers or financial advisors and those whom the SEC determines to have sufficient professional knowledge related to a particular investment. *See, e.g.*, Fair Investment Opportunities for Professional Experts Act, H.R. 2187, 114th Cong. (2016), available at <https://www.congress.gov/bill/114th-congress/house-bill/2187>. Similarly, an SEC report recommends several possible updates to the accredited investor definition, including allowing individuals to qualify as accredited investors based on measures of financial sophistication such as professional credentials, past investing or professional experience, or passing an accredited investor exam. *See, e.g.*, *Report on the Review of the Definition of “Accredited Investor,”* Securities and Exchange Commission (Dec. 18, 2015), available at <https://www.sec.gov/corpfin/reportspubs/special-studies/review-definition-of-accredited-investor-12-18-2015.pdf>. Lowering the bar to private fund investment ironically would expose less sophisticated investors to derivatives without any of the protections of the 1940 Act.

¹⁰ The proposal includes a limit of 150 percent of a fund’s net assets for most funds, and a limit of 300 percent of a fund’s net assets for funds where the derivatives transactions, in aggregate, result in an investment portfolio that is subject to less market risk than if the fund did not use derivatives. Placing limits on funds that prevent them from entering trades, which may otherwise reduce or eliminate potential risk, could adversely affect fund investors.

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Commission's proposed value-at-risk ("VaR") limit serves little use and would never be workable for a fund that holds only cash and cash equivalents and derivatives.

These proposed limits have every potential to eliminate an invaluable portfolio management tool that has sparked industry innovation and efficiency and has served U.S. investors so successfully for many years. As discussed below, the data backs up this concern. They point to outcomes that the SEC appears not to have contemplated when issuing the proposal. Indeed, the SEC evaluated relatively limited data when considering the proposal. We conducted a broader study analyzing data from 6,661 funds, with a total of \$13.6 trillion in assets under management, or about 80 percent of the assets of long-term registered funds industry-wide.¹¹ Based on our analysis, at least 471 funds, with \$613 billion in assets, would exceed the proposed notional exposure limit. More than forty percent of those funds are taxable bond funds, which use derivatives to hedge interest rate risk or credit risk or use them to gain exposure to the fixed income markets. The bond funds so impacted represent \$485 billion or 15 percent of the industry-wide assets of taxable bond funds.

There is nothing before the Commission or in its proposing release to suggest that these bond funds are engaged in "undue speculation" through their use of derivatives. In fact, a fund can have nearly identical investment exposure by investing through derivatives as another that invests in the corresponding fixed income instruments, but the fund with the derivatives would be subject to these restrictions while the other fund would not. Thus, the rule, if adopted as proposed, would have the practical effect of forcing a bond fund that invests through derivatives to liquidate or dramatically change its investment strategy.¹² Such an outcome, with its adverse impact on bond funds and their investors, was not explored let alone justified in the SEC's proposing release or accompanying staff paper.

A fund investor, when purchasing shares of a regulated fund, could not possibly foresee the severe implications of the proposed limits, including tax consequences caused by funds' being required to de-register and most likely liquidate.¹³ There are issues of fairness here for funds and their sponsors

¹¹ See *infra*, Section IV.A.; see also *infra*, Appendix A, for detailed statistics summarizing the results of the study on the proposed portfolio limits.

¹² Causing existing funds to modify substantially their investment programs means that investors will no longer have access to the investment products that they selected in accordance with their particular risk/return profiles. It also will be costly to fund investors and may alter fund risks in ways that investors neither expect nor desire. For example, a fund that no longer can obtain exposure to the bond market through a single holding in an index-based credit default swap ("CDS") now may need to obtain exposure to the market by buying many bonds in a series of transactions, increasing transaction costs and potentially making the fund's portfolio less liquid. Requiring extensive changes to investment strategies therefore appears to us to be at odds with the Commission's desire to promote fund liquidity. Moreover, if the investment strategies were a fundamental policy of a fund, the fund would have to incur substantial costs to obtain shareholder approval to make those changes.

¹³ In addition to potentially losing the ability to continue to invest in the de-registered funds, those investors may incur unexpected capital gains payments and other tax consequences. Investors that hold indirect interests related to the de-registered funds also may be affected. For example, investors that hold options tied to an underlying ETF may hold near

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as well. Fund sponsors invest considerable time and resources to register with the SEC, and in some cases to obtain exemptive relief. They fully disclose to the SEC staff and to investors the way in which they use derivatives in their investment strategies. The very regulatory agency that made their registration statements effective (or approved their exemptive orders) proposes that they must close their doors.¹⁴ And the Commission has not provided the analysis that lead it to this proposed result – *i.e.*, why the SEC was able to make investor protection and other findings when it issued orders authorizing some of these funds to operate but why it now proposes to deem them “unduly speculative.” At a minimum, administrative law calls for an explanation of those conflicting positions.

By contrast to the limits it proposes, the SEC is on a much sturdier foundation with its proposed asset segregation requirements.¹⁵ Appropriately risk-adjusted for the profiles of the derivatives in a fund’s portfolio, asset segregation is an effective tool for limiting economic leverage and ensuring that funds have the means to make good on future payment obligations.¹⁶ We commend the SEC’s focus on this area and we support adoption of the proposed asset segregation requirements, with the changes we recommend below, primarily permitting highly liquid assets to be used to meet coverage

valueless options if the ETF is forced to liquidate prior to the options’ exercise dates. This effect will not be limited just to current fund investors and investors in related instruments, but to the entire market. Entire categories of the market that have recently developed (and accordingly might not have accumulated as many assets as other established categories) may no longer be offered in a 1940 Act structure, limiting investor choice or potentially increasing investor costs. For example, some investors may seek to use structured notes to obtain exposures similar to those of a de-registered fund, which are generally more costly, less regulated, and rely on the credit of a bank counterparty.

¹⁴ There are hundreds of fully operational funds with billions of dollars of assets that may be required to liquidate because of the proposed rule even after those funds had worked through the proper review and, in some cases, approval process to operate, during which those funds clearly noted the extent to which they would or could use derivatives. To our knowledge, the SEC did not raise any Section 18 concerns or the need to obtain relief under that section during those processes. *See also* and Rajib Chanda & Sarah E. Cogan, *Registered Funds Alert*, Simpson Thacher (Feb. 2016) at 3, available at www.stblaw.com/docs/default-source/default-document-library/registeredfundsalert_february2016.pdf (“To our knowledge, the SEC has never before proposed a rule that was designed to force specific types of funds to deregister, effectively putting them out of business or moving them into regulatory regimes other than the 1940 Act”).

¹⁵ A task force of the American Bar Association, at the request of the SEC staff, prepared a set of recommendations for the regulation of funds’ use of derivatives. The task force’s recommendations focused primarily on asset segregation requirements. *See The Report of the Task Force on Investment Company Use of Derivatives and Leverage*, Committee on Federal Regulation of Securities, ABA Section of Business Law at 16-21, (July 6, 2010), available at http://meetings.abanet.org/webupload/commupload/CL410061/sitesofinterest_files/DerivativesTF_July_6_2010_final.pdf.

¹⁶ SEC Commissioner Michael Piwowar expressed similar sentiment in his statement concerning the proposal. *See Dissenting Statement at Open Meeting on Use of Derivatives by Registered Investment Companies and Business Development Companies*, Commissioner Michael S. Piwowar (Dec. 11, 2015), available at: <https://www.sec.gov/news/statement/piwowar-dissenting-statement-use-of-derivatives-funds.html> (“Commissioner Piwowar’s Dissenting Statement”) (“[T]he proposed asset segregation requirements should function as a leverage limit on funds and ensure that funds have the ability to meet their obligations arising from derivatives. Therefore, absent data indicating that a separate specified leverage limit is warranted, there is no justification for imposing any additional requirements or burdens on funds”).

requirements.¹⁷ We also support the adoption of a derivatives risk management program, again with some recommended changes, especially relating to the SEC's expectations of the role of directors. Combining risk-adjusted asset segregation with a derivatives risk management program will establish a stronger regulatory framework for funds' use of derivatives, provide an appropriate limit on leverage, and prevent undue speculation.

We explain our views in greater detail below. **Section I** explains the many benefits of derivatives and summarizes our comments. **Section II** discusses our recommendations on the proposed asset segregation requirements. **Section III** suggests modifications to the derivatives risk management program and provides our views on the proposed role of directors in overseeing funds' use of derivatives. **Section IV** explains our opposition to the prescriptive limits on derivatives exposure and provides the results of an ICI study of the impact of those limits on existing funds. **Section V** discusses two general interpretive issues related to the proposed rule. We conclude our letter with comments on proposed new recordkeeping, reporting, and disclosure requirements in **Section VI** and on the compliance period in **Section VII**.

I. Background and Executive Summary of ICI's Comments

When considering rulemaking relating to derivatives, it is critically important to keep their uses in mind, especially the beneficial ways in which funds use them. The benefits derivatives provide funds are numerous and include the following:

- ***Hedging risk.*** Derivatives enable funds to manage a variety of risks, including credit risk and currency risk. Using derivatives, for example, a portfolio manager may seek to hedge the currency risk of a Japanese portfolio security by purchasing a currency forward that pays the fund when the value of the yen falls against the U.S. dollar. This serves to eliminate or minimize currency risk – *i.e.*, currency fluctuations between the U.S. dollar and the yen – on the fund's performance, providing investors only the return of the Japanese security.
- ***Managing interest rate risk and duration.*** Many funds use interest rate derivatives to adjust interest rate exposure, offset risks posed by interest rate volatility, and increase or decrease the duration of their portfolios. These derivatives target specific risks funds want to take and can reduce a portfolio's volatility. For example, a portfolio manager holding a portfolio of bonds may believe that interest rates will rise. To reduce volatility caused by the change, the portfolio manager may enter into interest rate swaps that pay the fund a floating rate of interest based on daily interest rates in exchange for a fixed rate of interest. Entering into this swap could ease the expected effect that the increase in interest rates would have on the price of bonds in the fund's portfolio.

¹⁷ We appreciate that the SEC may wish to provide further guidance on asset segregation for greater standardization of those requirements, and we stand ready to assist the Commission in these efforts.

- ***Enhancing liquidity compared to other, more traditional securities.*** Derivatives can enhance substantially the liquidity profile of a fund. They allow a fund to reduce market exposure efficiently in times of stress. For example, a corporate bond fund often can sell treasury futures or index-based CDS more quickly and efficiently with one or a few transactions and with minimal impact on the bond market than it could if selling corporate bonds individually.
- ***Gaining or reducing exposure, including when access by other instruments is difficult, costly, or practically impossible.*** A fund can access certain asset classes, including some emerging market assets and currencies or commodities, more efficiently and at a lower cost through derivatives than through other means and without materially changing the risk profile of the fund. Indeed, a fund might otherwise have no other access to these assets. A fund, for example, would have difficulty obtaining direct exposure to A-shares in China. A fund or other foreign investor typically must obtain a license to be a qualified foreign institutional investor, a process that may be costly and lengthy. Faced with this hurdle, a fund could obtain indirect exposure to the A-shares market by entering into a total return swap or other form of derivatives contract.¹⁸
- ***Managing or equitizing cash.*** A fund that receives varying amounts of cash daily may invest that cash in derivatives almost immediately to gain exposure to a stock or bond market quickly while maintaining liquidity. Use of derivatives in this manner puts cash to work faster, in line with investment objectives, and often reduces impact costs by allowing the fund to increase gradually its direct positions in stocks and bonds. Portfolio managers of actively-managed equity funds with inflows, for example, could buy S&P 500 futures on a temporary basis to gain immediate exposure to the equity market. This portfolio management tool allows a fund manager to time stock purchases and accumulate shares while minimizing any adverse price impact caused from purchasing large blocks of shares. This strategy also minimizes any negative effect on a fund's performance caused by holding excess cash in lieu of equities.
- ***Reducing costs or managing portfolios efficiently.*** A fund could use one derivative or a small number of derivatives to obtain exposure to the return of a broad-based stock or bond index without having to purchase each of the stocks or bonds in the index individually. The derivative contract likely costs substantially less than directly acquiring and holding the index constituents to achieve the return of the broad-based stock or bond index. Portfolio managers use index-based CDS as another means to gain exposure to a portfolio of bonds.

¹⁸ Chinese A-shares are Renminbi (RMB)-denominated common stock listed and traded on the Shanghai or Shenzhen exchanges in China. They account for nearly 95 percent of total tradable shares in the People's Republic of China stock exchanges.

Index-based CDS have deep liquidity and generally cost less to trade than a basket of cash bonds.

To preserve these many benefits and to achieve the SEC's goals in issuing the proposal, we have the following recommendations:

- ***Asset segregation.*** The SEC should adopt the proposed asset segregation requirements with modifications. One critical modification is to allow funds to segregate highly liquid assets, not just cash and cash equivalents, especially for the new risk-based coverage amount. The SEC also should expand the situations in which a fund's obligations are netted to better reflect the true amounts funds might owe to counterparties.
- ***Derivatives risk management program.*** Similarly, the SEC should adopt the derivatives risk management program requirement with modifications. The most critical modification to this part of the proposal is a revision of how the SEC views the role of directors. The proposal would have boards far too burdened with the minutiae of portfolio management rather than exercising their more appropriate oversight function. Additionally, the SEC should permit funds to appoint either an individual or a group as the derivatives risk manager consistent with its approach in other areas.
- ***Portfolio limits.*** The SEC should discard the proposed portfolio limits based on notional exposure, focusing its efforts instead on the risk-mitigating role of asset segregation and derivatives risk management programs. If the SEC disagrees and pursues portfolio limits, it should do so only after analysis of data and the SEC should strongly consider the alternative approaches to portfolio limits that we describe in our letter. These approaches would:
 - Adjust the notional amounts of each derivative contract based on the risk of the underlying reference asset and increase the adjusted exposure-based limit to 200 percent; and
 - Provide alternative VaR tests to permit funds to acquire additional derivatives contracts above the exposure-based limit when those additional derivatives reduce the risk of the portfolio or the risks of derivatives in the portfolio are limited.
- ***Interpretive issues.*** If the SEC adopts portfolio limits, it should confirm that funds need not look through other pooled investment vehicles when computing those limits. Additionally, the SEC should exclude derivatives transactions and financial commitment transactions that comply with the proposed rule from any other asset coverage requirements under Section 18. The proposed asset segregation requirements for those transactions render additional asset coverage requirements unnecessary.

- ***Recordkeeping.*** We generally support the proposed recordkeeping requirements, but maintaining records showing compliance with a particular portfolio limit immediately after entering into each derivatives transaction is administratively burdensome and costly. Requiring funds to maintain records related to one test each business day would ease these burdens, while helping to ensure that funds demonstrate compliance with any portfolio limits.
- ***Existing guidance and compliance dates.*** The SEC should give funds a transition period of at least 30 months before rescinding its and its staff's existing guidance.

II. Asset Segregation Requirements

The proposed rule would require a fund to maintain a specified value of “qualifying coverage assets” for each derivatives transaction and financial commitment transaction, with the definition of qualifying coverage assets differing for the two categories of transactions.¹⁹ The qualifying coverage assets would be identified on the fund’s books and records at least once each business day pursuant to board-approved policies and procedures.²⁰ Under the proposed rule, the total amount of a fund’s qualifying coverage assets could not exceed the fund’s net assets, and the assets a fund maintains as qualifying coverage assets could not be used to cover both a derivatives transaction and a financial commitment transaction.

We strongly support the Commission’s proposal to enhance the asset segregation requirements for derivatives transactions. We agree that the proposed means of determining the risk-based coverage amounts provide an effective framework that would require funds to determine those amounts based on their specific derivatives transactions, investment strategies, and risks. The asset segregation requirements are designed to manage the risks associated with derivatives transactions and financial commitment transactions by better enabling a fund to meet its obligations arising from those transactions. In addition, the risk-based coverage amounts will provide an effective limit on leverage that should address the Commission’s stated concerns about undue speculation. The limit on leverage, however, would be effectuated in a more risk-sensitive manner than portfolio limits because the risk-based amount would be determined based on the specific risk profiles of an instrument and its use within a fund’s portfolio.

We strongly disagree, however, with the extraordinarily narrow scope of assets that may be used as qualifying coverage assets for derivatives transactions. The proposed restriction on the types of assets eligible as qualifying coverage assets are unnecessary to ensure that funds are able to meet their

¹⁹ Proposed Rule 18f-4(c)(8).

²⁰ Several of proposed Rule 18f-4’s requirements entail board approval, including approval by a majority of the independent directors.

obligations under derivatives transactions and are out of line with international standards and the standards of other U.S. regulators.

Below, we discuss our views on the asset segregation requirements in greater detail and make a number of recommendations, including: (1) expanding the scope of asset types eligible as qualifying coverage assets for derivatives transactions; (2) modifying the calculation of coverage amounts for derivatives transactions; (3) modifying the calculation of coverage amounts for financial commitment transactions; and (4) confirming that certain instruments are neither derivatives transactions nor financial commitment transactions.

A. Derivatives Transactions

1. Expand the Types of Assets Eligible as Qualifying Coverage Assets

The proposal would limit qualifying coverage assets for derivatives transactions to cash and cash equivalents.²¹ In the proposal, the Commission indicates that current U.S. generally accepted accounting principles would be used to determine what qualifies as “cash equivalents”²² and provides as examples certain Treasury bills, agency securities, bank deposits, commercial paper, and shares of money market funds.²³ Limiting qualifying coverage assets to cash and cash equivalents substantially narrows the categories of liquid assets that funds may segregate to cover obligations under derivatives transactions under current Commission staff guidance.²⁴

For some funds, including many equity funds, holding large quantities of cash and cash equivalents for collateral purposes may conflict with their investment objectives and strategies. Restricting qualifying coverage assets to cash and cash equivalents can penalize investors by creating a “cash drag” on the performance of a fund that otherwise would be fully invested. The increased demand for cash from funds under the proposed rule, combined with both the increased demand for cash under

²¹ Proposed Rule 18f(c)(8). In limited situations, the proposal also would permit funds to use a particular asset for any transaction under which a fund may satisfy its obligation under the transaction by delivering that asset. We agree that this is an appropriate exception, as funds would owe no further obligation upon delivery of that asset.

²² The proposal states that current U.S. generally accepted accounting principles define cash equivalents as “short-term, highly liquid investments that are readily convertible to known amounts of cash and that are so near their maturity that they present insignificant risk of changes in value because of changes in interest rates.” Proposing Release at 80932.

²³ Proposing Release at 80932.

²⁴ See Release No. 10666, *supra* note 4 (permitting segregation of cash, U.S. government securities, and other high-grade debt obligations); Merrill Lynch Asset Management, L.P., SEC Staff No-Action Letter (July 2, 1996), available at <http://www.sec.gov/divisions/investment/imseniorsecurities/merrilllynch070196.pdf> (permitting segregation of any “liquid assets,” including equity securities and non-investment grade debt securities).

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proposed Rule 22e-4 and other regulatory requirements, may well strain the supply of available cash equivalents and negatively impact capital markets.²⁵

In the proposal, the Commission recognizes that the mark-to-market coverage amount and risk-based coverage amount are “conceptually similar” to variation margin and initial margin.²⁶ We agree. The permitted types of qualifying coverage assets for derivatives transactions under the proposed rule are, however, substantially more limited than those U.S. regulators recently approved for initial and variation margin for certain derivatives.²⁷ U.S. prudential regulators and the Commodity Futures Trading Commission (“CFTC”) permit initial and variation margin for derivatives to include eligible collateral that align with the international standards for permitted assets for derivatives margin adopted by the Basel Committee on Banking Supervision (“BCBS”) and the International Organization of Securities Commissions (“IOSCO”).²⁸ Those rules generally permit the following types of assets, among others, to satisfy both initial margin and variation margin requirements: (i) high-quality government and central bank securities; (ii) high-quality corporate bonds; and (iii) equities included in major stock market indices.²⁹

²⁵ See, e.g., Jorge Cruz Lopez, et al., *The Market for Collateral: The Potential Impact of Financial Regulation*, Bank of Canada, *Financial System Review*, Bank of Canada (June 2013), available at <http://www.bankofcanada.ca/wp-content/uploads/2013/06/fsr-0613-lopez.pdf> (analyzing the expected permanent increase in the demand for cash and other high quality assets used as collateral in connection with OTC derivatives reform). The need for cash equivalents may put additional pressure on the Treasury market, which will already be strained from recent money market reform rules. Requiring funds to sell portfolio securities to raise cash, especially in stressed markets, also may force funds to sell at low prices and may contribute to market turmoil.

²⁶ See Proposing Release at 80932-80933 (“Given that the proposed rule’s requirements relating to the mark-to-market coverage amount and risk-based coverage amount are conceptually similar to initial margin (which represents an amount collected to cover potential future exposures) and variation margin (which represents an amount collected to cover current exposures), and that the proposed rule would permit the mark-to-market coverage amount and risk-based coverage amount to be reduced by the value of assets that represent initial or variation margin, we believe that limiting qualifying coverage assets to cash and cash equivalents would be appropriate”).

²⁷ *Margin and Capital Requirements for Covered Swap Entities*, 80 Fed. Reg. 74840 (Nov. 30, 2015) (final rule), available at <https://www.gpo.gov/fdsys/pkg/FR-2015-11-30/pdf/2015-28671.pdf> and 80 Fed. Reg. 74916 (Nov. 30, 2015) (interim final rule) (together “Prudential Regulators Margin Rules”), available at <https://www.gpo.gov/fdsys/pkg/FR-2015-11-30/pdf/2015-28670.pdf>; *Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants*, 81 Fed. Reg. 636 (Jan. 2, 2016) (“CFTC Margin Rules”), available at <https://www.gpo.gov/fdsys/pkg/FR-2016-01-06/pdf/2015-32320.pdf>.

²⁸ *Margin requirements for non-centrally cleared derivatives*, Basel Committee on Banking Supervision and Board of the International Organization of Securities Commissions (Sept. 2013) (“BCBS/IOSCO Final Margin Policy Framework”), available at <http://www.bis.org/publ/bcbs261.pdf>. As part of the G20 commitments to provide greater oversight and transparency of the derivatives markets, the BCBS and IOSCO undertook significant efforts to establish an international framework of minimum margin requirements for uncleared derivatives.

²⁹ The Prudential Regulators Margin Rules, the CFTC Margin Rules, and the BCBS/IOSCO Final Margin Policy Framework include the following non-exhaustive list of examples of eligible collateral that would meet this standard: (i)

In adopting those rules, both the U.S. prudential regulators and the CFTC acknowledged that limiting eligible margin assets as they initially proposed would not reflect market practice and would drain the liquidity of end users by forcing them to hold more cash.³⁰ We see no regulatory purpose or investor protection that is furthered by limiting eligible collateral types beyond those limits imposed by these other regulatory bodies.³¹

The SEC's proposed approach also is a marked departure from the international margin standards. Under the BCBS/IOSCO Final Margin Policy Framework, assets can serve as margin if they are "highly liquid and should, after accounting for an appropriate haircut, be able to hold their value in a time of financial stress."³² This standard clearly aligns with the concerns of the Commission in ensuring that sufficient assets are available to meet a fund's payment obligations, even in stressed conditions.

The Commission says that it is not proposing to include a broader universe of assets that constitute qualifying coverage assets because of concerns that such assets could decline in value at the same time a fund's potential obligations under its derivatives transactions increase, resulting in assets insufficient to cover the fund's obligations.³³ A more effective and less harmful way to address this concern is by applying risk adjustments to the value of non-cash assets in calculating the amount of a fund's qualifying coverage assets, rather than by excluding such assets from the universe of qualifying coverage assets altogether. Using a broader group of qualifying coverage assets, combined with appropriate risk adjustments, would allow funds to continue to hold assets consistent with their

cash; (ii) high-quality government and central bank securities; (iii) high-quality corporate bonds; (iv) high-quality covered bonds; (v) equities included in major stock indices; and (vi) gold.

³⁰ For example, the CFTC's initial proposal would have limited the categories of eligible assets for variation margin to cash in the form of U.S. dollars or a currency in which payment obligations under the swap are required to be settled. *See Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants*, 79 Fed. Reg. 59898 (Oct. 3, 2014) (proposed rule), available at <https://www.gpo.gov/fdsys/pkg/FR-2014-10-03/pdf/2014-22962.pdf>. Subsequently, the CFTC agreed with commenters (including the ICI) and expanded the list of eligible collateral.

³¹ The Prudential Regulators Margin Rules, the CFTC Margin Rules, and the BCBS/IOSCO Final Margin Policy Framework each relate to margin requirements for uncleared derivatives. There is no good rationale to have a more restrictive universe of qualifying coverage assets for cleared derivatives.

³² *See* BCBS/IOSCO Final Margin Policy Framework, *supra* note 28, at 4.

³³ Proposing Release at 80932. As the Commission recognizes, with the current guidance requiring funds to segregate their daily mark-to-market value for all derivatives and the required variation margin for cleared derivatives, the obligations truly at risk are the intraday profits and losses associated with a derivatives transaction. *See, e.g., Use of Derivatives by Investment Companies under the Investment Company Act of 1940*, Release No. IC-29776, 76 Fed. Reg. 55237 (Sept. 7, 2011) ("2011 SEC Concept Release"), at n. 83 and surrounding text, available at <https://www.gpo.gov/fdsys/pkg/FR-2011-09-07/pdf/2011-22724.pdf>.

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investment strategy to minimize cash drag while also addressing the Commission's concern that funds have sufficient assets available to meet their obligations even if their assets decline in value.

Risk adjustments are used for the purposes of calculating initial margin and variation margin under the Prudential Regulators Margin Rules and CFTC Margin Rules. Those adjustments, which range from 0.5 percent for eligible government securities with a residual maturity of less than one year to 25 percent for equity securities included in the S&P 1500 Composite or a related index, are listed in Appendix B to this letter.³⁴

In addition to the categories of assets under the Prudential Regulators Margin Rules and the CFTC Margin Rules, the Commission should permit as qualifying coverage assets ETFs registered under the 1940 Act. Consistent with the rationale above, certain fund portfolios may hold a large percentage of ETFs as part of their investment strategy. Some funds, in particular, could implement a currency-hedged strategy by holding an underlying ETF investing in foreign securities, as well as currency derivatives intended to offset the currency risk of the underlying ETF. The Commission should permit these funds to use interests in underlying ETFs to cover their obligations under their derivatives investments to avoid disrupting a fund's investment strategy and requiring the fund to hold more cash and cash equivalents or other investments than it would otherwise.

We strongly urge the Commission to expand its definition of qualifying coverage assets. The revised set of qualifying coverage assets should include, among other things, cash, high quality government and central bank securities (including those of non-U.S. governments), investment grade municipal securities, high quality corporate bonds, equities included in major stock market indices, and interests in money market funds and registered ETFs. The SEC should subject these non-cash assets to the same risk adjustments provided in the Prudential Regulators Margin Rules and the CFTC Margin Rules, with registered ETFs adjusted in the same manner as their underlying securities index.³⁵

2. Modify Calculation of Coverage Amounts

Under the proposed rule, for each derivatives transaction, a fund would be required to maintain qualifying coverage assets in an amount equal to the sum of (i) a mark-to-market coverage amount and

³⁴ Although the S&P 500 Index and the S&P 1500 Composite Index are listed specifically with the Prudential Regulators Margin Rules and the CFTC Margin Rules, those rules permit securities in other major stock indexes (including global and international stock indexes) to be used as coverage assets using similar risk adjustments.

³⁵ For example, if an ETF has an underlying securities index with constituent securities that mainly are part of the S&P 500 Index, the ETF should receive a 15 percent adjustment. If an ETF has an underlying securities index with constituent securities that mainly are part of the S&P 1500 Composite Index, the ETF should receive a 25 percent adjustment. *See infra*, Appendix B.

(ii) a risk-based coverage amount.³⁶ The mark-to-market coverage amount for a particular derivatives transaction would equal the amount that would be payable by the fund if it were to exit the derivatives transaction at the time of determination.³⁷ In the proposal, the Commission stated that the mark-to-market coverage amount generally would be consistent with the fund's valuation of the derivatives transaction.³⁸ The fund could reduce its mark-to-market coverage amount for a derivatives transaction by the value of any assets that represent variation margin or collateral posted to cover the fund's mark-to-market exposure with respect to that particular transaction or for other transactions covered by a netting agreement.³⁹

The risk-based coverage amount for a particular derivatives transaction would represent a reasonable estimate of the fund's potential obligation if it were to exit the derivatives transaction under stressed conditions.⁴⁰ This estimate would be determined in accordance with board-approved policies and procedures that account for, as relevant, the structure, terms, and characteristics of the derivatives transaction and the underlying reference asset.⁴¹ The proposed rule would allow a fund to reduce the risk-based coverage amount for a derivatives transaction by the value of any assets that represent initial margin or collateral posted to cover the fund's future obligations under that particular derivatives transaction or for other transactions covered by a netting agreement.⁴²

Under the proposed rule, if a fund has entered into a netting agreement that allows netting of payment obligations with respect to multiple derivatives transactions, the fund could calculate each of its mark-to-market coverage amount and risk-based coverage amount on a net basis for all derivatives transactions covered by the netting agreement.⁴³

³⁶ Proposed Rule 18f-4(a)(2).

³⁷ Proposed Rule 18f-4(c)(6).

³⁸ Proposing Release at 80926.

³⁹ Proposed Rule 18f-4(c)(6)(ii). Initial margin could not be used to reduce a fund's mark-to-market coverage amount (although it could be used to reduce a fund's risk-based coverage amount). The SEC's view is that initial margin represents a security guarantee to cover potential future fund obligations under the derivatives transaction and therefore should not be used to cover a fund's mark-to-market exposure. Proposing Release at 80928.

⁴⁰ Proposed Rule 18f-4(c)(9).

⁴¹ Proposed Rule 18f-4(c)(9); Proposing Release at 80929.

⁴² Proposed Rule 18f-4(c)(9)(ii). Variation margin could not be used to reduce a fund's risk-based coverage amount (although it could be used to reduce a fund's mark-to-market coverage amount). The SEC's view is that variation margin is used to satisfy current mark-to-market liability and therefore should not be available to cover the fund's potential future liabilities under a transaction. Proposing Release at 80930, n. 360.

⁴³ Proposed Rule 18f-4(c)(6)(i), (c)(9)(i).

a. Net Calculation of Coverage Amounts for Derivatives Transactions that Provide Offsetting Exposures

The proposed rule would not permit a fund to take into account offsetting transactions for purposes of the proposed asset segregation requirements. The Commission expressed concern that, in the asset segregation context, a fund would remain subject to the risk that one counterparty would not perform, thereby potentially leaving the fund without sufficient assets to meet its obligations to another counterparty.⁴⁴

We disagree that, for purposes of the asset segregation requirements, funds should have to assume the unlikely scenario that none of their counterparties will perform. Funds should be able to calculate coverage amounts by netting derivatives transactions with offsetting exposures of the same type with the same maturity and material terms. Two points justify our position.

First, the risk that a counterparty does not perform is not remotely realistic with respect to offsetting futures, listed options, and swaps cleared through the same clearing house and the same futures commission merchant (“FCM”) or broker. Those offsetting positions with the same party would reduce the net amount of any obligation owed without increasing the risk that a counterparty will default.

Second, the asset segregation provisions of the proposed rule are not the appropriate mechanism for addressing counterparty risk.⁴⁵ Funds regularly monitor and address counterparty risk in other ways, such as the evaluation of counterparty creditworthiness,⁴⁶ documentation of legal rights and obligations in agreements with counterparties, exposure monitoring, and internal limits to help ensure diversification.⁴⁷ These practices would be formalized under a required derivatives risk management program.

⁴⁴ Proposing Release at 80933.

⁴⁵ The proposal would require funds to assess and manage counterparty risk through the proposed derivatives risk management program. *See* proposed Rule 18f-4(a)(3)(i)(A).

⁴⁶ Many investment advisers subject their funds’ counterparties to the same type of credit analysis applicable to fixed income investments. Advisers may attempt to limit counterparty risk by using counterparties with an investment grade credit rating. Credit analysis also can include an assessment of quantitative measures of financial strength such as capital and leverage ratios.

⁴⁷ Some advisers have developed analytic and reporting tools that monitor net and gross exposures and risk-adjusted exposure to each counterparty.

b. A Lack of “Termination” Rights and “Trading” of a Derivatives Contract Should Not Increase the Risk-Based Coverage Amount

The proposal assumes that the lack of termination rights or the inability to trade a derivative should increase the risk-based coverage amount.⁴⁸ Many derivatives transactions are not “traded” but are entered into on a bilateral, over-the-counter basis.

We request that the Commission state clearly in its final rules that termination rights and the tradeable nature of a contract are only factors a fund can consider when determining the appropriate risk-based coverage amount for a transaction, but a fund need not segregate the full notional amount of a transaction merely because the derivatives contracts do not have these features. As the Commission recognizes in other parts of the proposal, counterparties can enter into offsetting transactions to terminate effectively a derivatives contract because they often do not have the unilateral right to terminate derivatives transactions.⁴⁹ For example, a party typically may not terminate futures contracts or cleared swaps because the counterparty to such transactions is the clearing house, and it is standard market practice to eliminate economic exposure of such transactions by entering into an equally offsetting transaction.⁵⁰ Also, funds often do not have the unilateral right under derivatives transaction documentation to terminate over-the-counter swaps; the parties typically terminate by agreeing to a price at the time of termination. Our understanding is that funds regularly eliminate their economic exposure under derivatives transactions by entering offsetting transactions or agreeing with their counterparty that the transaction will be terminated early or novated to another counterparty.⁵¹

⁴⁸ The proposal includes a list of relevant factors that a fund’s policies and procedures could consider in determining a reasonable estimate of the potential amount payable by the fund if the fund were to exit a derivatives transactions under stressed conditions, including, for example, the terms of the transaction and the fund’s intended use of the transaction in its investment strategy. In that context, the Commission notes “...that, if a fund has a derivatives transaction that is not traded or has an underlying reference asset that is not traded (or, in either case, is not traded on a regular basis) or the fund does not have the ability to terminate the transaction, then a fund’s policies and procedures should consider whether the risk-based coverage amount should, in certain circumstances, be increased to reflect the full potential amount that may be payable by the fund under the derivatives transaction.” Proposing Release at 80929-80930.

⁴⁹ See, e.g., Proposing Release at 80906.

⁵⁰ The Commission recognizes this approach with respect to certain futures and forward transactions. Proposing Release at 80906.

⁵¹ We understand that funds generally have the ability to enter into offsetting transactions even under stressed conditions. For example, a surge of swap trading followed the Lehman Brothers Holdings Inc. bankruptcy in 2008 and into 2009, as former Lehman clients rebalanced their portfolios. See Nick Sawyer, *Trading volumes surge as Lehman clients rehedged*, Risk Magazine, (Oct. 1, 2008), available at <http://www.risk.net/risk-magazine/news/1506294/trading-volumes-surge-lehman-clients-rehedge>; see also Michael Mackenzie, *Negative 30-year rate swap spread linger*, Fin. Times, (Sept. 9, 2009), available at <http://www.ft.com/intl/cms/s/0/3be4e8b8-9d5c-11de-9f4a-00144feabdc0.html> (describing drivers of extended swap demand the year after the Lehman bankruptcy).

When a fund reasonably determines that it can exit a derivatives transaction without paying the full notional amount in stressed conditions, we believe that the fund should not have to segregate assets equal to the full notional amount of the transaction.

c. Interpretation of “Stressed Conditions” for Purposes of Determining the Risk-Based Coverage Amount Should Be Consistent with Other Regulatory Standards

The Commission recognizes that the risk-based coverage amount is “conceptually similar” to initial margin requirements.⁵² The SEC should clarify that funds can estimate stressed conditions in the same way that initial margin is determined. Both the Prudential Regulators Margin Rules and the CFTC Margin Rules require models for determining initial margin to incorporate a method for stressed conditions.⁵³ The data used to calibrate the model must be based on an observation period of at least one to five years and must incorporate a period of significant financial stress.⁵⁴ Clearing houses use a similar method to calculate initial margin.⁵⁵ Systemically important clearing houses are required to conduct a periodic sensitivity analysis of how such margin coverage might be affected by highly stressed market conditions.⁵⁶

The Commission should permit funds to interpret “stressed conditions” in accordance with this standard in the Prudential Regulators Margin Rules and the CFTC Margin Rules and the standard that the clearing houses use for calculating initial margin for purposes of determining the risk-based coverage amount.⁵⁷ A consistent interpretation with these other regulatory standards would ease the

⁵² See Proposing Release at 80932-80933.

⁵³ Both sets of rules require initial margin models to be an estimate of the one-tailed 99 percent confidence interval for an increase in the value of a swap (or portfolio of swaps) due to an instantaneous price shock that is equivalent to a movement in all underlying risk factors, including prices, rates, and spreads, over a holding period equal to the shorter of ten business days or the maturity of the swap (or the portfolio of swaps). See Prudential Regulators Margin Rules, *supra* note 27, at § __.8(d) and CFTC Regulation 23.154(b)(2).

⁵⁴ *Id.* This formulation is consistent with the determination of initial margin requirements under the BCBS/IOSCO Final Margin Policy Framework. See BCBS/IOSCO Final Margin Policy Framework, *supra* note 28, at 11 (stating that “[t]he initial margin amount must be calibrated to a period that includes financial stress to ensure that sufficient margin will be available when it is most needed and to limit the extent to which the margin can be procyclical”).

⁵⁵ Their initial margin requirements are required to be sufficient to cover the clearing house's potential future exposure with a 99-percent confidence interval based on price movements between the last collection of variation margin and the time the clearing house estimates it would take to liquidate a position, which is generally 5 business days for swaps. CFTC Regulation 39.13(g).

⁵⁶ CFTC Regulation 39.36(b).

⁵⁷ Under the proposal, we believe that funds in their policies and procedures could choose to calculate the risk-based coverage amount based on the initial margin requirements under the Prudential Regulators Margin Rules and the CFTC Margin Rules, even if funds are not obligated to make initial margin payments under those rules (*e.g.*, FX forwards and swaps).

operational burden on funds (and lower costs for fund shareholders) by preventing funds from being required to calculate separately the risk-based coverage amount.

d. Confirm Certain Trading Agreements are Standard “Netting Agreements”

Under the proposed rule, if a fund has entered into a netting agreement that allows the fund to net its payment obligations under multiple derivatives transactions, the fund can calculate both its mark-to-market coverage amount and its risk-based coverage amount on a net basis with respect to all transactions covered by such netting agreement. Allowing a fund to segregate the net amounts owed to each counterparty (and the net risk-based coverage amount with respect to each counterparty) better reflects the actual economic exposure of the fund to each counterparty under the derivatives transactions, and we therefore support the proposed approach. We request that the Commission clarify what constitutes an eligible netting agreement.

The proposed rule is ambiguous because it does not specify which “payment obligations” may be determined on a net basis for an agreement to constitute a “netting agreement.” The form of ISDA Master Agreement, for example, which is a widely used standard form agreement used for trading over-the-counter derivatives, provides that amounts owed upon an event of default or other early termination of the agreement will be calculated on a net basis.⁵⁸ Similarly, the form of ISDA Credit Support Annex, which market participants typically use to document their agreement to exchange collateral in connection with transactions under an ISDA Master Agreement, generally provides for net calculations and deliveries of collateral across transactions under the ISDA Master Agreement.⁵⁹ Amounts owed under an ISDA Master Agreement outside of a default or early termination scenario are paid on a net basis if they are due on the same date, in the same currency, and under the same transaction. Parties to an ISDA Master Agreement can (and often do) agree that ordinary course of business payments are determined on a net basis if they are due on the same date and in the same currency, even if they are due under different transactions.⁶⁰

The Commission should confirm that the mark-to-market coverage amount and risk-based coverage amount for transactions under the same ISDA Master Agreement (or a similar trading agreement) can be determined on a net basis for all derivatives transactions – by confirming that an ISDA Master Agreement (or such other trading agreement) is a “netting agreement” for these purposes.

⁵⁸ See Section 6 of both the 1992 and 2002 forms of ISDA Master Agreement.

⁵⁹ See Paragraph 3 of the 1994 form ISDA Credit Support Annex (Bilateral Form – New York Law).

⁶⁰ See Section 2(c) of both the 1992 and 2002 forms of ISDA Master Agreement.

This interpretation also would be consistent with derivatives market participants' common understanding of the term, "netting agreement."⁶¹

e. Margin Provided Under a Standard Clearing or Escrow Receipt Arrangement Should Reduce the Mark-to-Market Coverage Amount and Risk-Based Coverage Amount

The proposed rule does not appear to account for various common situations in which netting of payment obligations with respect to multiple derivatives is effectively permitted. For instance, in compliance with CFTC rules, certain interest rate swaps and index-based CDS are required to be cleared through a clearing house rather than held on a bilateral basis under an ISDA Master Agreement or similar agreement. Funds may elect to clear other types of derivatives as well. Cleared positions held by a fund typically are governed by applicable law, including certain CFTC rules, the rules of the applicable clearing house, as well as the terms of the fund's account documentation with an FCM that is a member of the clearing house and acts as the fund's agent with respect to the clearing house. A similar structure (with some differences) is typically used for futures contracts and for listed options.

Although there is no "agreement" in place between the fund and a clearing house, payments to and from the clearing house through the FCM typically are determined on a net basis, similar to the treatment under a "netting agreement." Therefore, we request that the Commission clarify that positions held by a fund with the same clearing house through the same FCM or broker can be treated in the same way as transactions under a "netting agreement" for purposes of determining the mark-to-market coverage amount and the risk-based coverage amount.

We also recommend that the Commission clarify that escrow receipts provided for the benefit of a fund's listed options broker can be treated the same as margin to reduce such fund's mark-to-market coverage amount and risk-based coverage amount. Some registered funds provide their margin for certain listed options through escrow receipts.⁶² If a fund writes an equity call option, for example, the custodian agrees to deliver the underlying stock to the broker when the fund is required to do so. Similarly, if the fund writes an equity put option, the custodian agrees to deliver the required cash when

⁶¹ "Netting agreement" is a widely used term in the derivatives area, and typically refers to an agreement that allows a party to determine obligations on a net basis in the event of a default of the other party or early termination. *See infra*, Section II.B.1.a (discussing the netting of obligations under financial commitment transactions that are governed by a netting agreement). If such netting is permitted, the Commission should clarify that each of the Master Securities Forward Transaction Agreement, Global Master Repurchase Agreement, and Master Repurchase Agreement is a "netting agreement" as well.

⁶² An "escrow receipt" is an arrangement permitted under FINRA Rule 4210 and Options Clearing Corporation Rule 610, under which the fund's custodian agrees to deliver certain assets credited to the fund's account at the custodian to the fund's broker (or the Options Clearing Corporation) when the fund is required to perform.

the fund is required to do so. The custodian makes a deposit of certain permitted assets of the fund with a depository or pledges assets to secure the deposit.⁶³

One reason funds use escrow receipts is to mitigate the costs and time delays that can be involved in establishing tri-party agreements at a fund's custodian. If a fund posts its margin to a tri-party agreement at its custodian, the broker has to advance margin to the Options Clearing Corporation with respect to the fund's options positions without receiving an actual payment of margin from the fund and can charge the costs of financing that payment to the fund. Although the assets underlying an escrow receipt are not delivered to the options broker, an escrow receipt serves the same purpose as margin – assets are set aside to cover the fund's payment obligations and make the broker whole if the fund does not perform. We see no policy justification for the rule to treat escrow receipts differently than margin.

f. Eliminate Distinction between Variation and Initial Margin for Reducing Mark-to-Market and Risk-Based Coverage Amounts

Under the proposed rule, a fund can reduce the mark-to-market coverage amount for a derivatives transaction by the value of any assets that represent variation margin or collateral posted to cover the fund's mark-to-market exposure with respect to such transaction (or other transactions that are subject to a netting agreement that allows the fund to net its payment obligations with respect to such transactions).⁶⁴ Similarly, a fund can reduce its risk-based coverage amount for a derivatives transaction by the value of any assets that represent initial margin or collateral with respect to such transaction (or other transactions that are subject to a netting agreement that allows the fund to net its payment obligations with respect to such transactions).⁶⁵ The proposal, however, would prohibit posted variation margin from reducing the risk-based coverage amount and posted initial margin from reducing the mark-to-market coverage amount.

The Commission proposes to restrict the reduction for the coverage amounts in this manner because it believes “initial margin represents a security guarantee to cover potential future amounts payable by the fund and is not used to settle or cover the fund's mark-to-market exposure...,” except in a default.⁶⁶ We do not believe that this is a valid distinction in practice or in concept. Under the form ISDA Credit Support Annex, one net payment of margin is typically made between the parties, rather than separate payments of initial margin and mark-to-market margin.⁶⁷ A party also may require initial

⁶³ See Options Clearing Corporation Rule 610.

⁶⁴ Proposed Rule 18f-4(c)(6)(ii).

⁶⁵ Proposed Rule 18f-4(c)(9)(ii).

⁶⁶ Proposing Release at 80928.

⁶⁷ See paragraphs 3(a) and 3(b) of the 1994 form of ISDA Credit Support Annex (Bilateral Form – New York Law). We recognize that this approach may be changing in new forms of the ISDA Credit Support Annex being developed in

margin for security when there is a change in the mark-to-market exposure in between margin calls (in which case the initial margin is in whole or in part designed to cover mark-to-market exposure). In general, except in the case of daily settlement of futures contracts, the posting of mark-to-market margin does not settle a fund's payment obligations under a transaction (although the margin is available to the counterparty to cover such exposures in a close-out scenario if the fund fails to perform). There is no distinction between the uses of variation margin and initial margin for this purpose. Moreover, allowing a fund to combine the sum of initial margin and variation margin for this purpose would not appear to present any additional risk to the fund because, in each case, the initial or variation margin in question has been posted with the counterparty and is therefore available to satisfy the fund's obligations arising under the derivatives transaction. Therefore, a fund should be permitted to combine the sum of initial margin and variation margin posted by the fund to reduce the sum of such fund's mark-to-market coverage amount and risk-based coverage amount (in the aggregate).

B. Financial Commitment Transactions

1. Qualifying Coverage Assets for Financial Commitment Transactions

Under the proposed rule, a fund would be required to maintain qualifying coverage assets equal to at least the amount of the "financial commitment obligation"⁶⁸ associated with each of its financial commitment transactions (*i.e.*, essentially the notional value of the obligation).⁶⁹ The fund's qualifying coverage assets for its financial commitment transactions would be required to be identified on the fund's books and records and determined at least once each business day.⁷⁰ Board-approved policies and procedures would govern the fund's maintenance of qualifying coverage assets for financial commitment transactions.

a. Permit Netting of Obligations under Financial Commitment Transactions Covered by a Netting Agreement

Under the proposed rule, funds may not net transactions under the same netting agreement for purposes of determining the amount of qualifying coverage assets to be segregated with respect to financial commitment transactions. This prohibition differs from the treatment of derivatives transactions; as described above, the mark-to-market coverage amount and the risk-based coverage amount for derivatives transactions can be determined on a net basis with other derivatives transactions

preparation for compliance with the Prudential Regulators Margin Rules and CFTC Margin Rules but note that it remains a common market practice.

⁶⁸ The proposed rule defines "financial commitment obligation" as the "amount of cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under a financial commitment transaction." Proposed Rule 18f-4(c)(5). This includes, in the case where a particular asset is to be delivered, the value of that asset.

⁶⁹ Proposed Rule 18f-4(b)(1).

⁷⁰ *Ibid.*

covered by a netting agreement. The Commission does not explain, and we cannot discern, any reason for treating financial commitment transactions differently from derivatives transactions for purposes of netting of obligations.

Similar to derivatives transactions, various types of “financial commitment obligations” are often entered into under netting agreements. For example, reverse repurchase agreements may be entered into under the form Master Repurchase Agreement published by the Securities Industry and Financial Markets Association (“SIFMA”), or the form Global Master Repurchase Agreement published by SIFMA and the International Capital Markets Association. Similar to the form of ISDA Master Agreement, these forms provide for amounts owed upon default or other termination to be determined on a net basis across transactions, as well as for net calculations and delivery of collateral.⁷¹ Also, these forms provide that payments between the parties under the agreement are to be made on a net basis in a manner similar to ISDA Master Agreements.⁷² Because netting agreements for financial commitment transactions net payments in a manner similar to that of netting agreements for derivatives transactions, netting should be permitted equally for both types of transactions. The fund’s obligations under these agreements are determined on a net basis, so in both cases, the amount of qualifying coverage assets required to be segregated by the fund should be determined on a net basis.

b. Clarify Types of Assets Eligible to Serve as Qualifying Coverage Assets

Under the proposed rule, qualifying coverage assets for financial commitment transactions would include: (1) cash and cash equivalents; (2) assets that may be delivered to fulfill a fund’s obligations under a financial commitment transaction; (3) assets that have been pledged with respect to the financial commitment obligation and can be expected to satisfy the obligation; and (4) assets that

⁷¹ See Sections 4, 11 and 12 of the form Master Repurchase Agreement and Sections 4 and 10 of the 2011 form of Global Master Repurchase Agreement.

⁷² See, e.g., Section 12 of the form of Master Repurchase Agreement: “(iii) [each of the parties agrees] that payments, deliveries and other transfers made by either of them in respect of any [transaction under the agreement] shall be deemed to have been made in consideration of payments, deliveries and other transfers in respect of any such [transaction] hereunder, and the obligations to make such payments, deliveries and other transfers may be applied against each other and netted.” See also Section 6(h) of the form Global Master Repurchase Agreement: “Subject to paragraph 10, all amounts in the same currency payable by each party to the other under any [transaction under the agreement] or otherwise under [the agreement] on the same date shall be combined in a single calculation of a net sum payable by one party to the other and the obligation to pay that such shall be the only obligation of either party in respect of those amounts.”

are convertible to cash or that will generate cash, equal in amount to the financial commitment obligation, prior to the date on which the fund can be expected to be required to pay the obligation.⁷³

The phrase “assets convertible to cash or that will generate cash”⁷⁴ is ambiguous and could be subject to conflicting interpretations. We seek confirmation that the term “convertible to cash” encompasses fund portfolio securities or assets that may be sold or otherwise disposed of in return for cash prior to the date on which the fund’s obligation is due. The Commission should not limit the assets to those that mature or otherwise convert to cash under the terms of the instrument. So long as an asset with sufficient value could be liquidated for cash in hand before the fund is required to make a payment under its financial commitment transaction, the fund should have little risk that it would not be able to meet its payment obligations. Accordingly, we recommend adding a new definition to the proposed rule as follows: “*Assets convertible to cash* means any asset that the fund’s investment adviser reasonably believes may be converted, sold or otherwise disposed of in return for cash or cash equivalents received by the fund prior to the date on which the fund’s financial commitment obligation is due.”

C. Confirm that Certain Instruments are Neither Derivatives Transactions nor Financial Commitment Transactions

According to the proposal, the Commission largely seeks to maintain the distinction between derivatives transactions and financial commitment transactions set forth in Release 10666.⁷⁵ We generally agree with this approach and also request that the Commission clarify whether certain instruments would be considered a derivatives transaction or a financial commitment transaction under the proposed rule.

The proposed rule would define a “derivatives transaction” as:

any swap, security-based swap, futures contract, forward contract, option, any combination of the foregoing or any similar instrument . . . under which the fund is or

⁷³ Proposed Rule 18f-4(c)(8)(ii) and (iii). The definition of qualifying coverage assets for financial commitment transactions appears to permit collateral posted for a financial commitment transactions to be considered assets that have been pledged and therefore “segregated” for purposes of the asset segregation requirements. See Proposing Release at 80949 (“Assets that a fund has transferred to its counterparty in connection with a reverse repurchase agreement could be regarded as having been pledged by the fund for purposes of paragraph (c)(8)(iii) of the proposed rule. If such assets can be expected to satisfy the fund’s obligations under such transaction, the fund could, if consistent with its policies and procedures relating to qualifying coverage assets, segregate such assets on its books and records as qualifying coverage assets for such transaction”).

⁷⁴ Proposed Rule 18f-4(c)(8)(iii).

⁷⁵ The Commission chose to define “derivatives transactions” and “financial commitment transactions” using lists of instruments rather than using a more technical definition because the scope of any other definition could be too broad or more difficult to apply, and could capture instruments that are not intended to be deemed senior securities.

may be required to make any payment or delivery of cash or other assets during the life of the instrument or at maturity or early termination, whether as a margin or settlement payment or otherwise.⁷⁶

According to the Commission, the term “derivatives transaction” is intended to cover senior securities that obligate a fund to make future payments or delivery of assets to a fund’s counterparty.⁷⁷

The proposed rule would define a “financial commitment transaction” as:

any reverse repurchase agreement, short sale borrowing, or any firm or standby commitment agreement or similar agreement (such as an agreement under which a fund has obligated itself, conditionally or unconditionally, to make a loan to a company or to invest equity in a company, including by making a capital commitment to a private fund that can be drawn at the discretion of the fund’s general partner).⁷⁸

Under the proposal, financial commitment transactions would not include fund obligations to deliver cash or assets “as part of a regular-way settlement of a securities transaction (rather than a forward-settling transaction or transaction in which settlement is deferred).”⁷⁹ We agree. As the Commission recognized in Release 10666, regular-way settlement transactions are unlike financial commitment transactions because those transactions merely require delivery of cash or assets and generally only require a brief period to settle a security.⁸⁰ The Commission also should confirm that, similarly, when parties to a transaction do not agree by contract for a future delivery or settlement of an asset and settlement generally is within the customary period of time for that market, those transactions would not be financial commitment transactions or derivatives transactions.

The proposal also indicates that existing staff positions under Section 17(f) requiring that a fund not have on loan, at any given time, securities representing more than one-third of the fund’s total asset value, together with other guidance concerning securities lending, already may address any

⁷⁶ Proposed Rule 18f-4(c)(2).

⁷⁷ See Proposing Release at text surrounding nn. 142-43. See proposed Rule 18f-4(c)(2).

⁷⁸ Proposed Rule 18f-4(c)(4).

⁷⁹ See Proposing Release at n. 147.

⁸⁰ Cf. Release 10666, *supra* note 4, at n.11 (“The Commission recognizes that, for example, in the ordinary purchase of equity securities there is often a delay of a few days between the purchase of the security, and clearance and settlement. This general statement of policy respecting Section 18 of the [1940] Act is not intended to address arrangements involving the purchase of equity securities where the delay in delivery involves, for example, only the brief period usually required by the selling party and its agent solely to locate appropriate stock certificates and prepare them for submission for clearance and settlement in the customary way”).

potential Section 18 concerns raised by a fund's obligation to return collateral received in connection with loaning securities.⁸¹ We agree with the Commission's view that the one-third limit practically constrains the amount of collateral the fund can receive and its corresponding obligation to return such collateral.⁸²

Funds typically receive cash, and less frequently U.S. government securities and letters of credit, as collateral for loaned securities. The type of collateral, the availability of the securities on loan, and the fund's remaining assets address any concern that the fund would be unable to meet its obligations to return the collateral. Therefore, we request that the Commission confirm in any adopting release that an obligation to return securities lending collateral does not constitute a derivatives transaction, financial commitment transaction, or any other senior security for purposes of Section 18 (provided the applicable no-action guidance is followed).

III. The Proposed Risk Management Program

Depending on the extent and complexity of its derivatives usage, a fund may be required under the proposed rule to adopt and implement a board-approved, written derivatives risk management program reasonably designed to assess and manage the risks associated with the fund's derivatives transactions. We support the SEC's adoption of the requirement for a fund to develop and maintain a formalized derivatives risk management program if the fund engages in significant amount of derivatives or highly complex derivatives, as specified in the proposed rule.⁸³ A formalized derivatives risk management program coupled with a robust asset segregation requirement (*e.g.*, with risk-based coverage amounts) should ensure that funds meet their obligations, while addressing concerns about the potential for undue speculation.

Under the proposed rule, a fund that engages in any derivatives transaction⁸⁴ must adopt a written derivatives risk management program, unless the fund complies with a portfolio limit under which (i) the aggregate exposure associated with the fund's derivatives transactions (based on the notional value of the derivatives) does not exceed 50 percent of the value of the fund's net assets

⁸¹ See Proposing Release at text surrounding n. 149. The requirements set forth in the staff's no-action positions under Section 17(f) should address any Section 18 concerns relating to the collateral. See, *e.g.*, Brinson Funds, SEC Staff No-Action Letter (Nov. 25, 1995), available at <https://www.sec.gov/divisions/investment/noaction/1997/brinsonfunds112597.pdf>.

⁸² See Sections 18(a) and 18(f) of the 1940 Act.

⁸³ Proposing Release at 80935.

⁸⁴ A fund's use of financial commitment transactions or other senior securities that do not constitute a "derivatives transaction" would not trigger the derivatives risk management program requirement.

immediately after entering into any derivatives transaction;⁸⁵ and (ii) the fund does not enter into any complex derivatives transactions.⁸⁶ The proposed rule would require the program to include various elements, including written policies and procedures reasonably designed to segregate the fund's derivatives risk management functions from the fund's portfolio management and to assess and manage the risks associated with the fund's derivatives transactions. These risks include leverage risk, market risk, counterparty risk, liquidity risk, and operational risk, as applicable, and any other risks considered relevant. In addition, the fund would be required to review and update the program periodically (at least annually), including any models (*e.g.*, any VaR calculation models used by the fund during the period covered by the review), measurement tools or policies and procedures that are part of, or used in, the program to evaluate their effectiveness and reflect changes in risks over time.⁸⁷

Regulated funds have made derivatives risk management an important focus of front, middle and back office operations. As a continuation of these efforts, requiring funds that use a significant amount of derivatives or invest in complex derivatives to adopt a written, principles-based derivatives risk management program has the potential to benefit the industry by standardizing and making more consistent the parameters around which such funds monitor derivatives risk.

We agree with the Commission that the risk management program should apply to derivatives transactions only, and not to financial commitment transactions and/or other senior security transactions. Further, we generally agree with the proposed elements of a derivatives risk management program regarding the assessment and management of risks and, except as discussed below, periodic review and segregation of functions, as set forth in the proposal. We commend the Commission for proposing a robust principles-based program rule, which allows each fund to implement a program that is customized to manage the risks posed by the fund's use of particular types of derivatives and in the manner in which the derivatives relate to the fund's investment portfolio and strategy.

⁸⁵ In our study, 1,089 funds (16 percent of our sample) had notional exposures from their derivatives positions in excess of 50 percent of their net assets.

⁸⁶ A complex derivatives transaction is defined as "any derivatives transaction for which the amount payable by either party upon settlement date, maturity or exercise: (i) is dependent on the value of the underlying reference asset at multiple points in time during the term of the transaction; or (ii) is a non-linear function of the value of the underlying reference asset, other than due to optionality arising from a single strike price." *See* proposed Rule 18f-4(c)(1). The requirement to adopt a program applies on a fund-by-fund basis. As a result, some funds within a complex might be exempt from the requirement while others would be required to adopt a program.

⁸⁷ The proposed rule provides that an annual review is a minimum requirement, and that a fund should consider whether more frequent reviews are appropriate depending on the circumstances. The proposed rule suggests that the written policies and procedures to manage the risks of a fund's derivatives transactions might include portfolio tracking systems, exception reporting and other mechanisms designed to monitor derivatives risks and deliver current information to the relevant risk management personnel. The proposed rule also notes that the management of derivatives risk could involve the evaluation of counterparties, maintenance of contingency plans and communication between derivatives risk management personnel and the fund's portfolio managers or board members.

We recommend, however, a number of modifications to the specific elements of the derivatives risk management program. The revisions stay true to the Commission's regulatory objectives and also would ease associated burdens on funds. We discuss below our specific comments on the proposed derivatives risk management program, including recommendations regarding: (1) inadvertent crossing of the threshold used to determine which funds would be required to adopt the program; (2) implementation of a *de minimis* threshold with respect to the use of complex derivatives; (3) proposed improvements to the risk manager requirement, including permitting a group or committee to serve as the derivatives risk manager and permitting portfolio management personnel to serve on such a committee; and (4) the role of a fund's board.

A. Scope of the Derivatives Risk Management Program

1. Cure Periods for Inadvertent Crossing of Notional Threshold

The proposed rule does not make clear whether a fund that seeks to limit its exposure to derivatives to 50 percent or less of the net assets of the fund, but temporarily exceeds that threshold would be required to adopt a derivatives risk management program. We recommend that the Commission provide in any final rule that a fund that temporarily exceeds the 50 percent limit will not be required to adopt a derivatives risk management program.⁸⁸ A fund could temporarily exceed the 50 percent threshold solely due to market developments and the fluctuation of the fund's net assets. Such a temporary violation event does not warrant a fund and its board having to expend the resources to adopt a formal derivatives risk management program if the fund falls under the threshold within a reasonable cure period, such as 30 days. As we discuss below, the Commission suggests a 30-day cure period for inadvertent breaches of the proposed rule's portfolio limits. We believe a similar period of time should be granted when a fund temporarily exceeds the 50 percent threshold.⁸⁹

2. De Minimis Amounts of Complex Derivatives

The proposed rule would require a fund to adopt a derivatives risk management program if it enters into any complex derivatives transactions, *i.e.*, the use of even a single complex derivative, regardless of its size or relationship to a fund's portfolio or net assets, would require that a program be adopted. The definition of a complex derivatives transaction⁹⁰ is broad enough that a wide range of funds may find it consistent with their investment strategies to enter into such transactions to a limited extent for investment, hedging, or other purposes.

⁸⁸ As we further discuss below, notional amounts are not a good measure of risk or leverage. To the extent the SEC determines to retain any limit or condition that relies on notional amounts, we strongly recommend that the SEC base those limits or conditions on risk-adjusted notional amounts. *See infra*, Section IV.D.1.

⁸⁹ *See infra*, Section IV.D.5.b.

⁹⁰ *See supra*, note 86.

We request that the Commission modify the proposed rule to permit a fund to use a *de minimis* amount of complex derivatives transactions without giving rise to the risk management program requirement. Although we acknowledge the potential for greater risk of loss and exposure to market risks from complex derivatives transactions,⁹¹ funds should not have to incur the expense and burdens associated with implementing a full derivatives risk management program if they engage in only a *de minimis* amount of such transactions. For these purposes, we would recommend setting such *de minimis* threshold at 1 percent of a fund's net assets (based on the complex derivatives transactions' risk-adjusted notional value, calculated in accordance with proposed Rule 18f-4(c)(7)(iii)(C)), which is a level that would result in minimal impact to a fund's portfolio.

B. Role of the Derivatives Risk Manager

For a fund required to adopt a derivatives risk management program, the proposed rule would require the fund to designate, and the board to approve, a single person (not a group or committee) to administer the program. Such person would be required to be an employee or officer of the fund or its investment adviser or sub-adviser and could not be a portfolio manager of the fund. We generally support the concept of specifically tasking personnel to perform this function, but recommend a different approach to aspects of the proposed requirement, as discussed below.

1. Funds Should Be Able to Appoint Either an Individual or a Group/Committee As Derivatives Risk Manager

We recommend that the Commission provide funds the flexibility to appoint either an individual or a group or committee to fill the role of derivatives risk manager. Oversight of derivatives risk management is complicated and requires some level of expertise in a number of areas, including trading, liquidity, leverage, risk, documentation and legal concerns. Funds should have the flexibility to task a group or committee with responsibility for administering their derivatives risk management programs if that would lead to a more effective and workable result. Groups or committees often direct

⁹¹ The Commission cites the following concerns relating to the use of complex derivatives transactions in specifying an alternative approach for determining the notional amount for a complex derivatives transaction: (i) that the notional amount for some complex derivatives, if determined without regard to this provision, may not appropriately reflect the fund's underlying market exposure for purposes of the portfolio limit, and (ii) that complex derivatives can have market risks that are difficult to estimate due to the presence of multiple forms of optionality or other non-linearities, which similarly may not be adequately reflected in a notional amount calculated without separately considering each of the risks as with the special provision for complex derivatives transactions in the proposed rule. Proposing Release at 80905.

other “complex and significant” fund functions, such as day-to-day implementation of fund valuation decisions.⁹²

The Commission also notes that it believes that “having a designated individual responsible for managing the program should enhance its accountability and effectiveness.”⁹³ Unlike other areas of oversight where the Commission has deemed it appropriate to require a single individual to oversee an aspect of fund operations (*e.g.*, the provision in Rule 38a-1 that requires the fund’s CCO to provide the board an annual written report on the fund’s compliance program), derivatives risk management falls within the scope of a fund’s investment management and risk monitoring operations, both of which are the general responsibility of the fund’s investment adviser. Derivatives risk management presumably would fall within the overall assessment of risk within an adviser, and each organization will have its own approach to managing all risks together (including derivatives risk, liquidity risk, operational risk, and any number of others). It would be artificial and potentially counterproductive to require a firm that determines a committee approach to risk management is the most appropriate to isolate derivatives risk management under a different control structure.

The sheer diversity across the industry with respect to firm size, extent and nature of derivatives use, investment strategies and risk profile, among other distinguishing factors, supports a conclusion that a rule on derivatives risk management should give a degree of flexibility to funds in establishing the contours and leadership of their derivatives risk management programs.

Permitting a fund and its board to choose among different structures for a derivatives risk manager, such as an individual or groups/committees comprised of advisory personnel, sub-advisory personnel and/or fund officers, would be more consistent with the SEC’s approach in the proposal for liquidity risk management.⁹⁴ Under that proposal, a fund would be required to designate its investment adviser or officers, as opposed to an individual, as responsible for administering a fund’s liquidity risk management program. The Commission states that the requirement in proposed Rule 18f-4 differs

⁹² We note that Rule 38a-1 imposes a requirement that a single individual be appointed as chief compliance officer (“CCO”) of a fund, to avoid “balkanize[ing] responsibility for fund compliance and isolate fund boards from compliance personnel, thus impeding boards’ abilities to exercise their oversight responsibilities effectively.” Compliance Programs of Investment Companies and Investment Advisers, Release No. IC-26299, 68 Fed. Reg. 74714, 74721 (Dec. 24, 2003) (“Rule 38a-1 Adopting Release”). The Commission noted in that case that Rule 38a-1 “provides fund boards with direct access to a single person with overall compliance responsibility for the fund who answers directly to the board.” *Id.* at 74722. However, because of the existence of Rule 38a-1, we do not think the same concerns arise in the context of a derivatives risk management program, as any such program will be part of a fund’s compliance program and therefore will be under the ultimate oversight of the fund’s CCO, who is required to report directly to the board.

⁹³ Proposing Release at 80943, n. 438.

⁹⁴ See Open-End Fund Liquidity Risk Management Programs; Swing Pricing; Re-Opening of Comment Period for Investment Company Reporting Modernization Release, Release No. IC-31835, 80 Fed. Reg. 62274 (Oct. 15, 2015) (“Liquidity Management Proposal”), available at www.gpo.gov/fdsys/pkg/FR-2015-10-15/pdf/2015-24507.pdf.

from the approach taken in the Liquidity Management Proposal, noting that “the risks of derivatives transactions are complex and significant.”⁹⁵ As explained immediately above, it is precisely for this reason that oversight of derivatives could benefit significantly from shared responsibility and day-to-day oversight by a group or committee of individuals with varied experience and expertise regarding derivatives.

In addition, the Commission does, as it should, distinguish the derivatives risk manager from a fund’s CCO, noting certain ways in which the roles differ.⁹⁶ The Commission also notes that this distinction is consistent with the designation process the Commission proposed in the Liquidity Management Proposal.⁹⁷ We agree with this distinction, which supports the conclusion that it is unnecessary for a derivatives risk manager to be limited to an individual with sole responsibility for the program.

Tasking an individual as a fund’s derivatives risk manager particularly would be difficult for sub-advised funds. The proposed rule would permit the derivatives risk manager to be an officer or employee (other than a portfolio manager) of a fund’s sub-adviser.⁹⁸ Although we agree in principle that sub-advisory personnel should be permitted to participate in overseeing the derivatives risk management program, we note that appointing an individual to oversee a derivatives risk management program, especially at a sub-adviser, may be particularly difficult in the context of sub-advised funds. As the Commission knows, sub-advisory arrangements take a variety of forms throughout the industry. For example, a fund’s adviser may be responsible for the fund’s administrative and compliance functions and may engage a sub-adviser to manage the fund’s investments. A fund may use one or more sub-advisers to manage particular sleeves of a portfolio (*e.g.*, a sub-adviser may be engaged to manage the commodity sleeve of a portfolio while the adviser manages the fund’s other assets). There also are various iterations of the use of both affiliated and unaffiliated sub-advisers with varying degrees of interaction with, and knowledge of the activities of, the adviser and/or any other sub-adviser.

Because of the various forms that sub-advisory arrangements may take, and given that derivatives risk management programs must be observed on a fund-by-fund basis, it may be unrealistic and/or unduly complex to require a single individual, especially at a sub-adviser, to be responsible for overseeing a fund’s derivatives risk management program in the subadvisory context. For example, one

⁹⁵ Proposing Release at 80943, n. 438

⁹⁶ *Id.* The Commission states: “Unlike the chief compliance officer under Rule 38a-1, proposed Rule 18f-4 would not require that a derivatives risk manager only be removable by the board, nor would the board need to approve the derivatives risk manager’s compensation. While we expect that a derivatives risk manager would play an important role, we do not believe that his or her removal or compensation would in all cases be so central to the fund’s investment activities or compliance function to require that risk managers should generally be appointed or removed only by the board.” *Id.*

⁹⁷ *Id.* at n. 223.

⁹⁸ *Id.* at n. 440.

or more sub-advisers may not have access to the necessary trading, operational and compliance information available to the adviser or other sub-advisers to oversee effectively the program. It also may be impractical for a single individual to be able to report to the board in the context of a fund that uses one or more sub-advisers. For these reasons, it is imperative that a fund retain the flexibility to designate the appropriate person or committee to serve as the derivatives risk manager, and that the fund and the appropriate sub-adviser(s) retain the ability to negotiate derivatives risk management responsibilities.

2. Clarify Good Faith Decisions Do Not Create Liability for Derivatives Risk Managers

We strongly urge the Commission to make clear in any final rule that any good faith decisions made by the derivatives risk manager (whether an individual or group/committee) would not result in liability. As with risk management relating to investments generally, decisions regarding derivatives risk management are fundamentally forward-looking in nature. So long as a derivatives risk manager is qualified to serve in such capacity and performs his, her or its duties in good faith, the Commission should make clear in any final rule or its adopting release that the derivatives risk manager would not be liable for the performance of derivatives transactions or their effects on a portfolio, nor would the derivatives risk manager be targets of Commission enforcement actions, in the event that a good faith decision ultimately turns out to be wrong.

In addition, we urge the Commission to state expressly that a derivatives risk manager's supervisory and other duties only extend to overseeing the derivatives risk management program and do not relate to portfolio management decisions, such as approving individual transactions or investment decisions.⁹⁹

The guidance we recommend will advance the Commission's presumed goal of ensuring highly talented, well qualified, sufficiently senior professionals are willing to accept designation as derivatives risk managers. Without this guidance, the Commission would create an incentive, at best, to devote resources and attention away from derivatives risk management toward managing the high risk of being second-guessed. At worst, the Commission would create a dramatic disincentive to serve as derivatives

⁹⁹ At least one Commissioner has expressed concern that unclear distinctions between responsibility for compliance and business policies might create perverse incentives for CCOs under Rule 206(4)-7. See *Statement on Recent SEC Settlements Charging Chief Compliance Officers With Violations of Investment Advisers Act Rule 206(4)-7*, Commissioner Daniel M. Gallagher (June 18, 2015), available at <https://www.sec.gov/news/statement/sec-cco-settlements-iaa-rule-206-4-7.html> (stating that "there is a significant risk that by taking ownership of the implementation of the policies and procedures, CCOs could unwittingly also be taking ownership of business functions, subjecting them to strict liability whenever there is a violation of the securities laws"). Without clarification as to potential liability, the same concerns would apply to derivatives risk managers.

risk managers. For similar reasons, the Commission should extend the guidance to liquidity risk managers, compliance officers, and fund trustees and directors.

3. Portfolio Management Personnel Should be Able to Serve as Part of Derivatives Risk Manager Committee

To the extent any final rule permits a group or committee to act as the derivatives risk manager, as discussed above, we believe that exclusion of fund portfolio managers from participation in such group or committee would be unnecessary and counterproductive. Portfolio managers may have key insights and substantive knowledge regarding the use of derivatives and the roles those derivatives play in a portfolio's risk profile. Automatically excluding such individuals from serving on a group or committee responsible for derivatives risk management would limit its effectiveness. Indeed, one of the advantages of allowing a group or committee to act as the derivatives risk manager is to allow that function to draw on the diverse range of internal expertise relating to derivatives and their attendant risks.

We recognize that the Commission is concerned that conflicts of interest may arise between the objectives of the derivatives risk manager and a fund's portfolio managers, as discussed in the proposal. The Commission should not prohibit the beneficial participation of portfolio managers in a derivatives risk management group or committee entirely but should require each fund to institute policies reasonably designed to address any potential conflicts of interest. Funds, for example, could adopt policies providing that a portfolio manager may be a part of a group or committee but may not have voting or other decision-making authority or serve as chairperson. Funds could consider requiring portfolio managers to recuse themselves from voting or other decision making authority with respect to derivatives portfolios they actively manage. Funds alternatively could consider limiting the percentage (*e.g.*, 25 percent) of the group or committee that may be portfolio management personnel. On balance, having the benefits of portfolio management expertise on such a group or committee would outweigh any potential risks of undue influence if appropriately structured.

C. Board Responsibilities

The proposed rule would require that a fund's board of directors be responsible for general oversight of the derivatives risk management program. The Commission notes that this responsibility would resemble the board's proposed oversight role described in the SEC's Liquidity Management Proposal. The proposed rule would require a board, including a majority of the independent directors, initially to approve each fund's derivatives risk management program, as well as any material changes thereto, to approve the designation (but not the compensation or removal) of the derivatives risk manager, and to review at least quarterly a written report from the derivatives risk manager concerning the adequacy and effectiveness of the program.

We generally agree with how the Commission has framed the role of the fund board within the proposed rule, *i.e.*, as one of oversight. We are concerned, however, that certain responsibilities that

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would be required of the board go beyond oversight and require decisions that should be made by the investment adviser as part of its obligation to provide an investment program for the fund. We support the detailed comments provided by the Independent Directors Council regarding responsibilities of a fund board¹⁰⁰ and note a few key points in this letter.

Specifically, we urge the Commission to avoid requiring the board to approve specific limits on derivatives transactions, models (including any VaR calculation models used during the period covered by the review), and measurement tools that are part of, or used in, the program.¹⁰¹ Instead, the adviser should be responsible for making such determinations, subject to the board's oversight and general principles and parameters set forth in the written program. It is inappropriate for the board to have to make determinations regarding the adequacy of any specific risk monitoring techniques, which are more appropriately within the adviser's purview. Instead, a board should be required to determine that the derivatives risk management program as a whole is adequately designed to assess and manage risks, which could be a component of its approval of the fund's overall compliance program.

We also question the requirement that the board "review" a fund's derivatives risk management program, which is inconsistent with the wording of Rule 38a-1 setting forth analogous board responsibilities. Rule 38a-1 requires the board to receive a copy of the CCO's annual written report concerning the adequacy of a fund's compliance policies and procedures and the effectiveness of their implementation. We request that the Commission revise the proposed rule to be consistent with the language in Rule 38a-1 to avoid any confusion about differences in meaning.

Further, consistent with the requirement under Rule 38a-1 and the Liquidity Management Proposal, we recommend that the SEC only require the derivatives risk manager's written report assessing the adequacy and effectiveness of a program to be delivered to boards annually, rather than quarterly. This timeframe better aligns with how boards and risk managers should be allocating their time and efforts. Specifically, derivatives risk managers should spend more time managing the derivatives risk management program rather than writing reports. Of course, material issues should be brought to the board's attention, as needed, and funds and boards could choose to adopt more frequent reporting.

¹⁰⁰ Letter from Amy B.R. Lancellotta, Managing Director, Independent Directors Council, to Brent J. Fields, Secretary, Securities and Exchange Commission, dated March 28, 2016.

¹⁰¹As recommended below in Section IV, funds should not have to identify in advance the portfolio limit to which they would adhere. If the Commission adopts this recommendation, the board of directors would not need to approve a particular portfolio limit but approve the policies and procedures that the fund would use to comply with either portfolio limit. *See infra*, Section IV.D.5.c.

IV. The SEC Should Not Adopt the Portfolio Limits, which Serve Only to Harm Funds and Their Shareholders

The SEC proposes to require every fund that invests in derivatives transactions to comply either with a 150 percent notional exposure limit (“Exposure-Based Limit”) or a 300 percent risk-based limit (“Risk-Based Limit”).¹⁰² The Commission says its intent in proposing these limits is to address concerns that funds are not “unduly speculative.”

We disagree with these limits. Our views are expressed below, and we also demonstrate below that notional exposure has little to no relationship to the return volatility of a fund. If the SEC nonetheless determines to adopt portfolio limits, we recommend an alternative framework that would retain exposure and risk-based limits, but would do so in a manner that accounts for differences in risk in derivatives and would better preserve the benefits derivatives provide to fund investors.

A. ICI Study Demonstrates that the Portfolio Limits will Result in Adverse and Unintended Consequences for a Large Number of Funds and Their Shareholders

We do not believe the Commission was able to evaluate fully the impact of the Exposure-Based Limit or the Risk-Based Limit on funds because of data limitations.¹⁰³ The SEC’s rationale in proposing the portfolio limits, in part, was based on the SEC’s Division of Economic and Risk Analysis (“DERA”) conclusion that only 4 percent of long-term funds would exceed the Exposure-Based Limit and therefore be impacted by the proposed portfolio limits.¹⁰⁴ This conclusion was based on a study of approximately 10 percent of the funds and assets in the fund industry (approximately 1,200 funds with \$1.7 trillion in assets under management).

To supplement the record, we conducted our own analysis (“ICI Study”) – Attachment A to this letter – and concluded that the rule, if adopted, would have a more substantial impact than the SEC suggested. The ICI Study analyzed data from 82 complexes with 6,661 funds and \$13.6 trillion in assets under management. ICI’s analysis represents 59 percent of the industry-wide number and 80 percent of the industry-wide assets of long-term mutual funds (including variable annuities and funds-

¹⁰² See proposed Rule 18f-4(a)(1).

¹⁰³ For example, the Commission noted that it did not have sufficient information to allow its staff to understand fully the impact of the risk-based limit on funds but noted that it has proposed to obtain additional information regarding derivatives transactions in the Fund Reporting Proposal. See Proposing Release at n. 313 and surrounding text. In this regard, we agree with Commissioner Piwowar that the Commission should have waited until it could analyze the data obtained pursuant to the new rules on fund reporting to propose any new requirements on the funds’ use of derivatives. See Commissioner Piwowar’s Dissenting Statement, *supra* note 16. The data would have provided the Commission with more pertinent and concrete information on which to base its policy decisions.

¹⁰⁴ See Daniel Deli, Paul Hanouna, Christof Stahel, Yue Tang & William Yost, *Use of Derivatives by Registered Investment Companies*, SEC Division of Economic and Risk Analysis (2015) (“DERA White Paper”), available at <http://www.sec.gov/dera/staff-papers/white-papers/derivatives12-2015.pdf>.

of-funds), closed-end funds, and 1940 Act registered ETFs.¹⁰⁵ We make the following observations regarding the DERA White Paper and the Commission's proposal based on the ICI Study.

The DERA White Paper estimated that about 4 percent of the existing funds would exceed the 150 percent exposure limit and about 1 percent would exceed the 300 percent exposure limit.¹⁰⁶ These figures, however, failed to focus on the absolute *number* of funds that would be affected and their total assets.

The ICI Study determined that at least 471 funds with \$613 billion in assets would exceed the 150 percent exposure limit and at least 173 funds with \$338 billion in assets would exceed the 300 percent exposure limit. It is important to note that the ICI Study, like the DERA White Paper, reflects only one point in time and notional values relative to assets can vary widely over the course of the year.¹⁰⁷ Indeed, the ICI Study also may underestimate the impact of the portfolio limits for two reasons. First, the calculations only measured exposure at one point in time – in this case, the end of 2015, and the limits would operate on a continuous basis. Second, we elected not to extrapolate our findings to the industry as a whole and as a result, these figures should be viewed as lower bound estimates of the number of funds and assets the proposed rule affects.

The ICI Study indicates that the proposed portfolio limits would have significant and perhaps unintended consequences on taxable bond funds. This finding is in contrast to the DERA White Paper, which did not note any particular impact on bond funds.¹⁰⁸ Taxable bond funds often use derivatives to mitigate risks (*e.g.*, to hedge interest rate risk or credit risk) or gain exposure to the fixed income markets. The ICI Study shows that 42 percent or 198 of the 471 funds with exposures relative to their assets greater than 150 percent were taxable bond funds. These bond funds represent 79 percent (or \$485 billion) of the \$613 billion in assets over the 150 percent exposure limit. Overall, these funds represent 10 percent of the industry-wide number of taxable bond funds and 15 percent of

¹⁰⁵ See *infra*, Appendix A, for a detailed comparison to the industry-wide number of funds and assets by type of fund and by type of investment objective.

¹⁰⁶ The Commission seems to place emphasis on a presumption that a small percentage of funds (4 percent) would have to modify their investment strategies to satisfy the 150 percent Exposure-Based Limit (mainly certain alternative strategy funds and leveraged ETFs). In the ICI Study, for 96 percent of funds to pass the Exposure-Based Limit, the threshold would have to be raised to 250 percent.

¹⁰⁷ We note that 312 funds with \$271 billion in assets under management had exposures between 100 percent and 150 percent of net assets. Funds' notional exposures will fluctuate depending on the market, and funds that are below the 150 percent exposure limit may exceed 150 percent at some point. This group of funds will likely have to monitor their derivatives usage closely as they potentially could exceed the 150 percent exposure limit on a different date or over a different time period. In addition, many of these funds will have to manage their portfolios with a "cushion" sufficiently below the 150 percent exposure limit to ensure compliance.

¹⁰⁸ See Proposing Release at 80911 ("Based on this analysis we believe that, except for alternative strategy funds and certain leveraged ETFs, most funds should be able to comply with a 150 percent exposure portfolio limitation without modifying their portfolios").

the industry-wide assets of those funds.

The 300 percent exposure limit also has the greatest impact on taxable bond funds, as a group – 64 percent or 111 of the 173 funds with exposure greater than 300 percent were taxable bond funds. These funds represented 80 percent (or \$269 billion) of the \$338 billion in assets over the 300 percent exposure limit. These funds represented 6 percent of the industry-wide number and 8 percent of the industry-wide assets of taxable bond funds.

Fixed income derivatives, such as interest rate swaps, short-term interest rate futures, and CDS, are important tools that many bond fund managers use to manage risks, gain exposure, or reduce exposure. Also, they generally are more liquid and less costly to trade than cash bonds. Yet, under the proposed rule, taxable bond funds' use of these instruments would be limited, making bond portfolios more difficult and costly to manage – to the detriment of their shareholders.

For example, consider a bond fund manager that wants to lower the duration of the fund's portfolio temporarily. The manager uses 3-month Eurodollar futures to accomplish this because they are short-term, very liquid, and have an extremely low volatility (10-year annualized daily volatility of 0.3 percent). Currently, the fund has \$10 million, all in bonds each with a duration of 10 years. The fund manager's new duration target is 9 years and the manager could achieve this by selling \$40 million in Eurodollar futures (Figure 1). After this transaction, the fund would have notional exposure of 400 percent. Because the transaction reduces the fund's duration, it is "risk-reducing." Nevertheless, under the proposed rule, this fund would not be allowed to conduct this transaction because it would be above 300 percent notional exposure.

If precluded from using derivatives in this manner, the fund could still reduce its duration by selling some of its 10-year bonds and buying bonds with shorter maturities. This strategy almost certainly drives up transaction costs for shareholders. In addition, if the fund is in the corporate bond space, it may be difficult to find bonds with the maturities and credit profile necessary to meet the manager's objective.

Figure 1: Taxable Bond Fund Lowers Duration, But Exceeds 300% Notional Exposure

Total assets = \$10 million

Current portfolio duration target = 10 years

New portfolio duration target = 9 years

Asset type	Duration (years)	Weight	Value
Bonds (long)	10	1	\$10 million
Eurodollar futures (short)	0.25	-4	\$40 million

Value of Notional Test = ($\$40 \text{ million} / \10 million) = 400%

Note: The duration of the portfolio (D_p) is the weighted average of the duration of the positions in the portfolio (D_1 and D_2). The formula is $D_p = w_1D_1 + w_2D_2$. The new target portfolio duration (D_p) is 9, the weight on the bonds (w_1) in the portfolio equals 1 ($\$10 \text{ million} / \10 million), the duration of the bonds (D_1) is 10, and the duration (D_2) of the Eurodollar futures is 0.25. Solving ($9 = 10 + .25 w_2$), we obtain $w_2 = -4$. As a result, the manager sells short \$40 million ($4 * \10 million) in Eurodollar futures.

In another situation, a fund manager may wish to increase temporarily the duration of the portfolio by six months. Assume as before that the fund has \$10 million in assets, all in bonds each with a duration of 10 years. The fund manager's new duration target is 10.5 years. As shown in Figure 2, to achieve this target, the fund manager could take a long position of \$20 million in Eurodollar futures. After this transaction, the fund would have notional exposure of 200 percent.

In this case, because the fund is increasing its duration, under the proposed rule, the fund could not consider this transaction to be "risk-reducing." As a result, this transaction would be prohibited because it would place the fund over the 150 percent Exposure-Based Limit. The fund, of course, could extend its duration by selling some of its bonds and, in turn, buy bonds with a duration greater than 10 years. As before, buying and selling bonds in the cash market, rather than using derivatives, results in the same economic outcome for the fund's portfolio, but at potentially greater cost to the fund and its shareholders.

Figure 2: Taxable Bond Fund Increases Duration and Fails VaR Test

Total assets = \$10 million

Current portfolio duration target = 10 years

New portfolio duration target = 10.5 years

Asset type	Duration (years)	Weight	Value
Bonds (long)	10	1	\$10 million
Eurodollar futures (long)	0.25	2	\$20 million

Value of Notional Test = $(\$20 \text{ million}/\$10 \text{ million}) = 200\%$

Note: The duration of the portfolio (D_p) is the weighted average of the duration of the assets in the portfolio (D_1 and D_2). The formula is $D_p = w_1D_1 + w_2D_2$. The new target portfolio duration (D_p) is 10.5, the weight on the bonds (w_1) in the portfolio equals 1 ($\$10 \text{ million}/\10 million), the duration of the bonds (D_1) is 10, and the duration (D_2) of the Eurodollar futures is 0.25. Solving $(10.5 = 10 + .25 w_2)$, we obtain $w_2 = 2$. As a result, the manager buys \$20 million ($2 \times \10 million) in Eurodollar futures.

The ICI Study also found, as did the DERA White Paper, that the portfolio limits will have a significant impact on alternative funds – 47 percent or 221 of the 471 funds with notional values greater than 150 percent relative to their assets were alternative funds. These alternative funds represented 13 percent (or \$79 billion) of the \$613 billion in assets over the 150 percent exposure limit. Overall, these funds represented 34 percent of the industry-wide number and 37 percent of the industry-wide assets of alternative funds.

In sum, based on our analysis, at least 369 funds, with \$458 billion in assets under management, either will have to de-register or substantially change their investment strategies to continue their businesses as registered funds.¹⁰⁹ We urge the Commission to consider more fully and carefully the necessity for, and consequences of, the portfolio limits it has proposed.

¹⁰⁹ The 369 funds and \$458 billion estimates are based on survey responses indicating that a fund exceeded 300 percent notional exposure or had notional exposure between 150 percent and 300 percent and failed the VaR test or indicated the fund would fail the VaR test. Certain funds could not perform the VaR test, did not respond to the question, or indicated that they could pass the VaR test. Those funds and their related assets under management were not included in these figures.

B. The Portfolio Limits Inappropriately Rely on Gross Notional Exposure

Both the Exposure-Based Limit and the Risk-Based Limit would cap a fund's notional amounts attributable to derivatives.¹¹⁰ The proposed rule would require a fund to limit to specified percentages of its net assets its exposure from: (i) derivatives transactions (based on notional exposure); (ii) "financial commitment transactions" (based on obligation amount); and (iii) any senior security (based on total indebtedness). The proposed rule would define "notional amounts" generally to mean either: (i) the market value of an equivalent position in the underlying reference asset for the derivatives transaction (expressed as a positive amount for both long and short positions); or (ii) the principal amount on which payment obligations under the derivatives transaction are calculated.¹¹¹

We urge the Commission not to adopt portfolio limits based on notional exposure. A fund with high notional exposure may be more risky, less risky, or equally as risky as a fund that has no exposure whatsoever to derivatives. As the Commission well recognizes, notional amounts typically overstate the risks that a fund may incur from derivatives.¹¹²

Using notional amounts as a basis for determining whether a fund is unduly speculative is flawed because notional exposures do not measure economic risk or leverage adequately. Consider, for example, two taxable bond funds that track the Barclays Aggregate Bond Index (shown in Figure 3). Each fund has \$500 million in assets. Fund A invests in physical bonds and has no derivative positions. Fund B, on the other hand, holds nearly all of its assets in cash and also invests in 5-year Treasury futures with a notional value of \$500 million to gain interest rate exposure and 5-year index-based CDS with a notional value of \$500 million to gain credit exposure. According to the proposed notional test ("Notional test"), Fund A is unlevered, while Fund B has "leverage" of 200 percent (\$1 billion gross notional value divided by \$500 million in assets, expressed as a percentage). These two rather different strategies have essentially identical economic risks and rewards, yet the proposed portfolio limits would prohibit Fund B's investment strategy, implicitly deeming it more speculative than Fund A.

¹¹⁰ See proposed Rule 18f-4(c)(3)(i) (defining "exposure" to include "the aggregate notional amounts of the fund's derivatives transactions").

¹¹¹ See proposed Rule 18f-4(c)(7)(i) and (ii).

¹¹² See Proposing Release at 80903 ("...we recognize that a derivative's notional amount does not reflect the way in which the fund uses the derivative and the notional amount is not a risk measure. An exposure-based test based on notional amounts therefore could be viewed as a relatively blunt measurement in that different derivatives transactions having the same notional amount but different underlying assets . . . may expose a fund to very different potential investment risks").

Figure 3: Two Funds with Different Strategies, Yet Essentially Identical Return Risk**Fund A**

Portfolio composition	3-Year annualized daily return volatility
Bonds in Barclays U.S. Aggregate Bond Index = \$500 million	3.4%
Notional value of derivatives = \$0	0%
Value of Notional Test = (\$0/\$500 million) = 0%	Portfolio volatility ¹ = 3.4%

Fund B

Portfolio composition	3-Year annualized daily return volatility
Cash = \$500 million	0%
Total notional value of derivatives = \$1 billion	
5-year Treasury futures = \$500 million	3.0%
5-year investment grade indexed CDS = \$500 million	1.3%
Value of Notional Test = (\$1 billion/\$500 million) = 200%	Portfolio volatility ² = 3.3%

1. Because this portfolio holds bonds that replicate the Barclays U.S. Aggregate Bond Index, the portfolio's return volatility (σ_p) will be the same as that of the Barclays U.S. Aggregate Bond Index.

2. Because this portfolio holds three different asset classes (asset class A (cash), asset class B (Treasury futures), and asset class C (indexed CDS)), the portfolio's return volatility (σ_p) will be determined by the weight (w) of each asset class in the portfolio, return volatility (σ^2) of each asset class, and covariances (Cov) of returns (r) between the different asset classes.

This is mathematically represented as $\sigma_p = \sqrt{\sigma_p^2}$, where $\sigma_p^2 = w_a^2 \sigma_a^2 + w_b^2 \sigma_b^2 + w_c^2 \sigma_c^2 + 2w_a w_b \text{Cov}(r_a, r_b) + 2w_a w_c \text{Cov}(r_a, r_c) + 2w_b w_c \text{Cov}(r_b, r_c)$. Given that the total asset value of the portfolio is \$500 million, each asset class has a weight of 1 (\$500 million/\$500 million). The variance of the returns on cash and covariance of returns on cash with Treasury futures and with indexed CDS is zero. For simplicity, we have assumed that the covariance of returns on Treasury futures and indexed CDS also is zero. This reduces the formula down to $\sqrt{\sigma_p^2} = \sqrt{(\sigma_b^2 + \sigma_c^2)} = \sqrt{(3^2 + 1.3^2)} = \sqrt{10.69} = 3.3$. If the covariance of returns between Treasury futures and indexed CDS had been taken into consideration, the realized 3-year return volatility would be 3.1 percent. Over the past 10 years, the annualized daily volatility of the Barclays U.S. Aggregate Bond Index was 3.9 percent versus 3.8 percent for the synthetic portfolio (Fund B).

Using notional amounts could produce an anomalous result by prohibiting a fund from creating a portfolio using derivatives that has the same economic risks and exposure as a portfolio of securities. We question why two funds with economically the same return risk and exposure should be treated so differently – one prohibited and one permitted – based on whether a fund uses derivatives. In such instances, the proposal appears to prefer form over substance.

Moreover, elevated notional exposures are not indicative of the level of expected return risk. Alternative funds tend to make more use of derivatives in their investment strategies and as a result, will tend to have higher notional exposures than other types of funds. Managed futures funds are an example of a type of alternative fund that makes extensive use of derivatives. These funds generally provide investors a way to invest in trend-following strategies that are diversified across multiple markets and most have an overall target for return volatility to help limit portfolio risk.¹¹³ In Figure 4, we illustrate through a simplified example how a hypothetical managed futures fund can have high notional exposure, but relatively low expected return risk.

Our hypothetical fund has \$100 million in assets (cash) and an expected portfolio volatility target of 7 percent. The fund invests across five asset classes: equity, fixed income, commodities, currency, and short-term interest rates using derivatives. Managers generally decide how much risk, *ex ante*, each asset class is expected to contribute to the overall volatility target. In our simple example, equity, fixed income, commodities and currency each contribute 23.75 percent and combined they contribute 95 percent to the volatility target. Short-term interest rates contribute 5 percent.

Once the risk contributions for each asset class are decided, we can determine the risk target of each asset class. Because equity, fixed income, commodities, and currency have the same risk contribution, they also have the same risk targets; whereas short-term interest rates, which have a smaller contribution to the overall target volatility have a lower risk target. To translate these risk targets into dollars for each type of derivative contract, the risk targets for each asset class are scaled by their respective historical volatilities to obtain notional weights. These notional weights are then multiplied by the total assets of the fund (\$100 million) to obtain the notional value of the derivative contract.

As seen in the example, because Eurodollar futures have extremely low historical volatility, they must have a large notional amount to contribute their small – 5 percent – share to the fund's overall volatility target of 7 percent. Our hypothetical fund would have notional exposure of 677 percent of net assets, of which roughly three-quarters is from exposure to short-term interest rates.

¹¹³ Trend-following strategies involve going long markets that have been rising and going short markets that have been falling, betting that those trends continue.

Figure 4: Hypothetical Managed Futures Fund

Total assets = \$100 million

Expected portfolio volatility target¹ = 7%

Asset class	Risk contribution	Risk target ²	Historical volatility ³	Notional weight ⁴	Notional amount ⁵
1. Equity: S&P 500 e-mini	23.75%	3.4%	21.0%	0.162	\$16.2 million
2. Fixed income: 5-year Treasury futures	23.75%	3.4%	4.0%	0.85	\$85 million
3. Commodities: WTI crude oil futures	23.75%	3.4%	36.4%	0.093	\$9.3 million
4. Currency: Euro/U.S. forwards	23.75%	3.4%	10.2%	0.333	\$33.3 million
5. Short-term interest: Eurodollar futures	5.0%	1.6%	0.3%	5.33	\$533 million

Total notional⁶ = \$676.8 million

Value of Notional Test = (\$676.8 million/\$100 million) = 677%

1. Target expected standard deviation of the portfolio represented by $\sigma_p = \sqrt{\sigma_p^2}$.
2. Target expected standard deviation of each asset class. For simplicity, we have assumed all covariances between asset classes are zero. As a result, asset class risk targets are determined by solving $\sigma_p = \sqrt{(w_1\sigma_p^2 + w_2\sigma_p^2 + w_3\sigma_p^2 + w_4\sigma_p^2 + w_5\sigma_p^2)}$ where the weight (w) is the risk contribution from the asset class ($w_1 = w_2 = w_3 = w_4 = .2375$ and $w_5 = 0.05$) and $\sigma_p^2 = 7^2$. In this case, the formula reduces down to $7 = \sqrt{(4*0.2375*7^2 + 0.05*7^2)}$. The risk target for equity, fixed income, commodities, and currency asset classes is 3.4 and the risk target for short-term interest is 1.6.
3. Historical volatility is the annualized daily return volatility of the specified derivative contract over the past 10 years.
4. Notional weight determined by dividing the asset class risk target by its historical volatility.
5. Calculated by multiplying \$100 million by notional weight.
6. Sum of notional amounts (\$16.2 million + \$85 million + \$9.3 million + \$33.3 million + \$533 million).

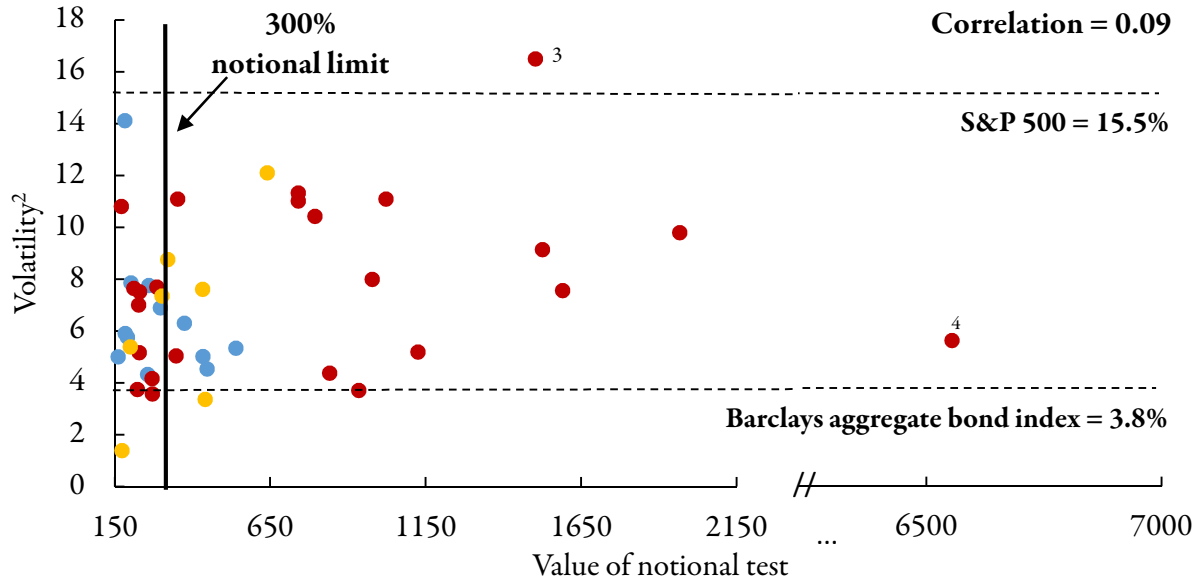
Empirically, we can demonstrate that a fund's notional exposure has little to no relationship to its return volatility (often used in finance as an indicator of "risk"). In Figure 5, we plot the value of a fund's Notional test as proposed against its twelve-month trailing volatility (annualized daily standard deviation of a fund's returns over the previous year) for the alternative funds and taxable bond funds, respectively, that exceeded the 150 percent Exposure-Based Limit in our sample.¹¹⁴ For alternative funds (top panel), the correlation between their return volatility and their notional exposure is a mere 0.09 (essentially zero). We also compare these funds' return volatilities to that of two widely used cash equity and bond benchmarks: the S&P 500 Total Return Index and the Barclays Aggregate Bond Index. The vast majority of alternative funds with notional exposure exceeding 150 percent were between the two benchmarks. In every case but one, these funds had return volatility less than that of the S&P 500; thus, by this measure, these funds were less "risky" than plain vanilla large-cap equity funds. Indeed, some alternative funds had return volatility that was less than that of the Barclays Aggregate Bond Index.

We obtain similar results for taxable bond funds. There is little, if any, relationship between a taxable bond fund's notional exposure and the variability of its returns. The correlation between their return volatility and their notional exposure is only 0.09 (bottom panel). About half of taxable bond funds with notional exposure exceeding 150 percent had return volatility that was less than that of the Barclays Aggregate Bond Index, including more than one-third that had notional exposure in excess of 300 percent.

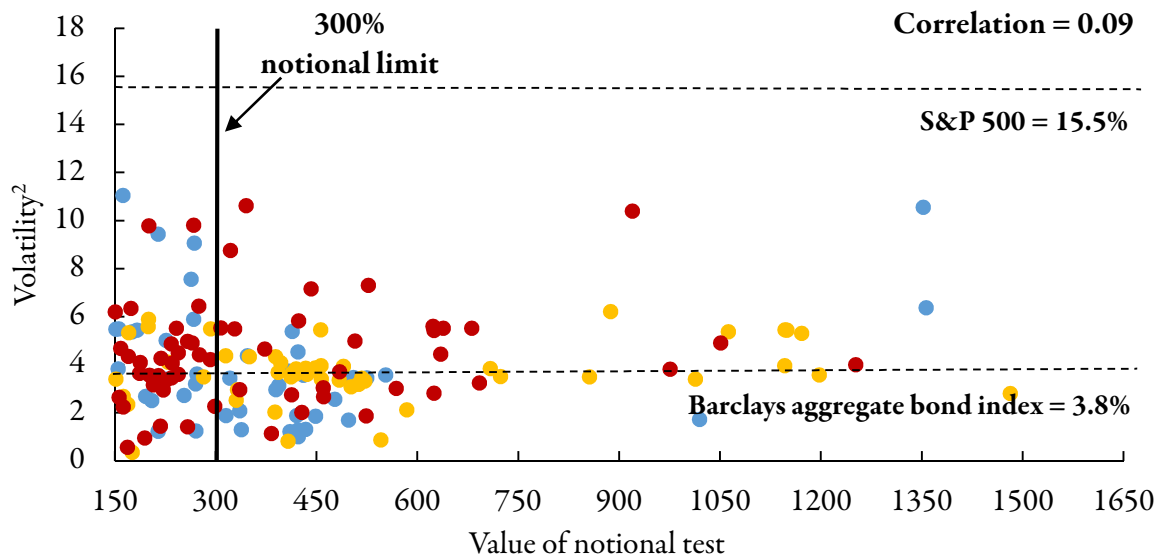
¹¹⁴ As noted earlier, these two categories of funds were impacted the most by the proposal.

Figure 5: Return Volatility of Funds with Notional Exposure Greater Than 150 Percent
 Percent, year-end 2015

Alternative funds¹



Taxable bond funds



• Passed proposed VaR test • Failed proposed VaR test⁵ • Proposed VaR test result not reported

¹ Excludes leveraged/inverse funds.

² Measured as the annualized standard deviation of the fund's daily return over the previous twelve months.

³ Fund has annualized volatility range of 7-20 percent with a target of 15 percent.

⁴ Fund has substantial short-term interest derivatives.

⁵ Funds that reported they failed the proposed VaR test or if they could not calculate VaR, reported that the return volatility of the fund's full portfolio was greater than the return volatility of its securities portfolio.

Given these data, we disagree with the suggestion that a fund is “unduly speculative” simply because the fund exceeds arbitrarily drawn portfolio limits based on notional exposure. Other regulators recognize the drawbacks of a notional exposure calculation in providing any meaningful information about leverage and risk. A report recently issued by the Office of Financial Research (“OFR”), for example, explained the weaknesses of data based on notional exposure.¹¹⁵ Other regulators likewise have questioned whether notional amounts are appropriate measures for triggering regulatory oversight.¹¹⁶

C. The Risk-Based Limit Alternative is of Little Value

As discussed above, as an alternative to the 150 percent Exposure-Based Limit, the proposal would require a fund to comply with a Risk-Based Limit under which a fund can have notional exposures of up to 300 percent of the fund’s net assets if the fund meets a VaR test that measures whether the fund’s aggregate use of derivatives reduces, rather than magnifies, potential risk from market movements. The Commission apparently views an outer limit to exposure to be desirable, even for funds whose derivatives are determined to be “risk reducing,” because funds otherwise could have large derivatives exposures that could increase unduly the speculative character of a fund.¹¹⁷

Under the VaR test, funds would measure the VaR of two components: (i) the fund’s entire portfolio, including securities, other investments, and derivatives transactions (“full portfolio VaR”); and (ii) the fund’s portfolio of securities and other investments, excluding any derivatives transactions (“securities VaR”). A fund would satisfy the proposed VaR test, thus making it eligible for use of the 300 percent Risk-Based Limit, if the fund’s full portfolio VaR is less than the fund’s securities VaR immediately after entering into any senior securities transaction. The shortcomings of the Risk-Based Limit were revealed in our analysis of funds’ portfolio holdings.

The proposed VaR test does not provide a meaningful alternative to the 150 percent Exposure-Based Limit for two reasons. First, if a fund exceeds the 150 percent Exposure-Based Limit, all of the derivatives transactions entered into by such fund in the aggregate must be risk reducing, which is not a

¹¹⁵ OFR expressed two primary concerns with the use of these metrics: (i) different position types may present different risks; and (ii) gross notional exposure does not account for netted positions. Specifically, OFR noted that, “[o]ne shortcoming of both [gross notional exposure] and aggregate derivative metrics is that they do not differentiate between different types of derivatives, making it difficult to identify a hedge fund’s portfolio risks by position type or notional size. For example, the notional values of a CDS and an interest rate swap do not pose equivalent risk. [Gross notional exposure] also does not account for netted positions, because it is based on summed absolute long and short values.” See Office of Financial Research, 2015 Financial Stability Report (Dec. 15, 2015) at 38, available at https://financialresearch.gov/financial-stability-reports/files/OFR_2015-Financial-Stability-Report_12-15-2015.pdf.

¹¹⁶ See Remarks of CFTC Chairman Timothy Massad before the 2016 P.R.I.M.E. Finance Annual Conference (Jan. 25, 2016), available at <http://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-38>.

¹¹⁷ See Proposing Release at 80923. The Commission also noted that a limit was included to address concerns regarding the effectiveness of VaR. *Id.*

requirement for funds whose notional exposures do not exceed the Exposure-Based Limit. Indeed, the proposed VaR test would create the incentive for a fund to obtain within its investment mandate all its risk exposure through physical securities to maximize its securities VaR and only enter into derivative transactions that are risk-reducing. This outcome has potentially negative consequences if the physical securities trade in markets that are less liquid and more costly to transact in than the markets for the derivatives a fund would use as a substitute to obtain that same exposure.

Second, for funds that hold cash and U.S. Treasury securities (rather than other types of investments) in addition to derivatives, the securities VaR generally would be close to zero (because the VaR of cash and U.S. Treasury securities is so low). It would be very difficult, if not impossible, for the full portfolio VaR to be lower than the securities VaR.¹¹⁸

Our empirical analysis highlights these flaws in the proposed VaR test. In Figure 5, we also identified whether a fund passed the VaR test (blue dot), failed the VaR test (red dot), or did not provide a VaR test result (yellow dot) in response to the survey. At least two important findings stand out in both the alternative category and the taxable bond fund category. First, there are funds that have notional exposure over 300 percent, but passed the proposed VaR test. These funds have risk reducing derivatives in the aggregate, yet because their notional exposure exceeds an *ad hoc* limit, they are deemed to be unduly speculative by the SEC. Second, there are funds that have less than 300 percent notional exposure and pass the VaR test, but have return volatilities that are greater than those of funds with higher notional exposures that fail the proposed VaR test. It is impossible to determine which funds are “riskier” based on the results of the proposed VaR test. In looking at our full sample across all investment objectives, of the 298 funds that were between the 150 percent and 300 percent notional limits, only 48 percent (143 funds) could calculate the VaR test and, of those, 72 percent (104 funds) failed it.¹¹⁹

D. An Alternative Approach if the SEC Continues to Consider Limits

Notwithstanding these significant concerns, if the Commission determines to adopt portfolio limits, it should make a number of modifications to minimize the negative impact of the rule. In particular, we recommend requiring a risk-based calculation of notional exposure, increasing the Exposure-Based Limit to 200 percent, and refining other parameters for calculating exposure. We further urge the Commission to remove the proposed requirement for funds to adopt one of the two alternative portfolio limits and instead require funds to comply with a new approach that would permit

¹¹⁸ Although the Commission acknowledged that funds holding cash and cash equivalents and derivatives would not be able to satisfy the VaR test, we could not ascertain any basis for the Commission to permit such funds to exist up to the Exposure-Based Limit but, unlike with other types of funds, automatically prohibit those funds from getting any exposure in excess of the Exposure-Based Limit. *See* Proposing Release at n. 314.

¹¹⁹ Of the funds that could not perform the VaR test, 126 funds indicated that the return volatility of the fund’s portfolio was greater than the return volatility of its securities portfolio. Presumably, these funds also would have failed the VaR test.

funds to easily transition from one limit to the other.¹²⁰ This new approach consolidates the limits allowing a fund to exceed its Exposure-Based Limit only if the fund is using those additional derivatives, in the aggregate, to reduce or limit risk. We discuss the elements of our recommended alternative below.

1. Adjust Notional Amounts of Derivatives for Risk

a. Conversion Factors

As discussed above, the notional amounts for derivatives transactions with different underlying reference assets translate to very different risks and obligations yet they all are treated the same for purposes of calculating compliance with the portfolio limits. Actual risk posed by derivatives varies considerably not just based on notional amount but also the characteristics of the derivatives' underlying assets.

Simply adding up the notional amount of derivatives with different underlying reference assets provides an inaccurate picture of the amount of leverage and risk within a fund portfolio. A fund that enters into interest rate derivatives, for example, is obligated to make only interest rate payments based on the notional amount of the contract, not payments equal to the entire notional amount of the contract. Similarly, as shown in Figure 6, a futures contract on an underlying asset with low volatility (*e.g.*, two-year U.S. Treasury futures) historically has had significantly less return risk than a futures contract on an underlying asset with higher volatility (*e.g.*, the S&P 500 e-mini).

¹²⁰ See proposed Rule 18f-4(a)(5)(i).

Figure 6: Historical Annualized Daily Volatilities of Various Types of Derivatives

Type of derivative	1-year*	3-year*	10-year*
Short-term interest rate			
Eurodollar futures	0.1%	0.1%	0.3%
Fixed Income			
2-year U.S. Treasury note futures	1.1%	0.8%	1.5%
5-year U.S. Treasury note futures	3.2%	3.0%	4.0%
10-year U.S. Treasury note futures	5.2%	4.9%	6.3%
U.S. Treasury long bond futures	12.5%	9.8%	10.7%
U.S. Treasury ultra bond futures	14.3%	12.4%	14.5%
Credit			
5-year investment grade CDX	1.6%	1.3%	2.5%
5-year high-yield CDX	6.3%	5.7%	8.4%
Equity			
S&P 500 e-mini	16.5%	13.5%	21.0%
Commodities			
Corn futures	21.6%	23.5%	30.8%
WTI crude oil futures	48.5%	35.6%	36.4%
Gold futures	16.0%	18.0%	20.3%
Currencies			
Euro/U.S. dollar forwards	11.9%	9.0%	10.2%
Yen/U.S. dollar forwards	9.8%	9.5%	10.6%
British pound/U.S. dollar forwards	9.2%	7.4%	9.7%
Memo: Physical securities indexes			
S&P 500 index	16.7%	13.7%	21.3%
Barclays U.S. aggregate bond index	3.7%	3.4%	3.9%

* Period ending March 18, 2016.

Sources: Barclays/Lehman, Bloomberg, Citigroup, DataStream, IFS, JP Morgan, RBS, Standard & Poor's, and WMCO/Reuters

Focusing on notional exposure also systematically disadvantages certain types of funds that use categories of derivatives that have high notional amounts but lower risk profiles. Prime examples of this are taxable bond funds that use interest rate derivatives and global equity funds that hedge currency risk.

To remedy some of the inaccuracies (and the overstatement of risks) inherent with the use of notional amounts, the Commission should allow funds to adjust the notional amounts attributable to derivatives based on the underlying asset classes. Regulators and market participants well understand the concept that derivatives with different underlying asset classes present different risk profiles.¹²¹

The SEC and other regulators have allowed for adjustments to notional exposures by an appropriate factor to address concerns about relying on notional values. In setting the standardized “look-up table” of initial margin requirements for uncleared swaps, for example, the U.S. prudential regulators and the CFTC set the initial margin requirements as different percentages of notional amounts for each underlying asset class to better reflect the varying risk profiles for derivatives with different underlying asset classes.¹²² U.S. prudential regulators also use different risk factors for various categories of derivatives in determining prudential capital requirements for U.S. banks that use derivatives.¹²³

Moreover, the SEC differentiated between different types of swaps when it adopted its joint rules with the CFTC defining which entities would be required to register with the CFTC and/or the Commission in connection with their swaps activities.¹²⁴ In those rules, the Commission and the CFTC established a test that recognizes that using notional amounts without adjusting for the potential risks of different swaps was not an appropriate measure for determining whether an entity has a “substantial position” in those swaps and would therefore be required to register as a “major security-based swap participant” with the Commission or a “major swap participant” with the CFTC.¹²⁵ The test appreciates that not all notional amounts should be treated equally and allows adjustments to

¹²¹ The DERA White Paper provides similar reservations about using notional amounts, noting that “because of differences in expected volatilities of the underlying assets, notional amounts of derivatives across different underlying asset[s] (sic) generally do not represent the same unit of risk. For example, the level of risk associated with a \$100 million notional amount of an S&P 500 index futures is not equivalent to the level of risk of a \$100 million notional amount of interest rate swaps, currency forwards or commodity futures.” See DERA White Paper, *supra* note 104, at 10.

¹²² See *infra*, Appendix C; see also Prudential Regulators Margin Rules, *supra* note 27, at Appendix A; CFTC Margin Rules, *supra* note 27, at Section 23.154(c).

¹²³ See *id.*; see also 12 C.F.R. 3, app. C, § 32 (Office of the Comptroller of the Currency bank capital standards).

¹²⁴ See *Further Definition of “Swap Dealer,” “Security-Based Swap Dealer,” “Major Swap Participant,” “Major Security-Based Swap Participant” and Eligible Contract Participant*, 77 Fed. Reg. 30596 (May 23, 2012) (“Final Major Swap Participant Rule”), available at <https://www.gpo.gov/fdsys/pkg/FR-2012-05-23/pdf/2012-10562.pdf>.

¹²⁵ See *id.*

notional amounts depending on the underlying asset class.¹²⁶ Specifically, the Commission and CFTC rules allow an entity to determine its potential outward exposure to a category of swaps or security-based swaps by multiplying the total notional amount of the entity's positions in each such category by certain enumerated risk conversion factors to reflect the different potential risks of the different asset classes.¹²⁷

We understand that the SEC and CFTC's risk conversion factors for swap registration status might reflect conversion factors for certain types of derivatives that may not be the perfect fit for these purposes (*e.g.*, short-term interest rate derivatives with one year or less residual maturity would have a 0 percent notional amount under the SEC and CFTC conversion factors). The conversion factors and the other regulators' "look-up tables" do reflect the SEC's and other regulators' clear understanding that notional amounts should be adjusted for different instruments when used to assess risk.¹²⁸

b. Duration Weighting for Interest Rate Derivatives

The Commission should normalize the duration weighting for interest rate derivatives if it does not provide risk adjustments for notional amounts.¹²⁹ As the ICI Study shows, the proposed rule would affect taxable bond funds disproportionately as compared to other categories of funds. Many "plain vanilla" taxable bond funds use derivatives to adjust the interest rate risk to their portfolios, often to achieve a shorter average portfolio duration to reduce overall portfolio risk. Allowing funds to reduce the notional amounts for these derivatives would better reflect their potential obligations and risks

¹²⁶ "The exposure measures in general would be based on the total notional principal amount of those positions, adjusted by certain risk factors that reflect the type of swap or security-based swap at issue and the duration of the position." *Further Definition of "Swap Dealer," "Security-Based Swap Dealer," "Major Swap Participant," "Major Security Based Swap Participant" and "Eligible Contract Participant,"* 75 Fed. Reg. 80174, 80192 (Dec. 21, 2010), available at <https://www.gpo.gov/fdsys/pkg/FR-2010-12-21/pdf/2010-31130.pdf>.

¹²⁷ See *infra*, Appendix D; see also CFTC Regulation § 1.3(hhh)(6)(iii)(B)(2); Rule 3a67-9(a)(3)(i)(B)(2) under the Securities Exchange Act of 1934. The risk conversion factors incorporate and build upon the risk multipliers used by U.S. bank regulators for purposes of setting prudential capital requirements and were designed to be consistent with that approach. See Final Major Swap Participant Rule, *supra* note 124, at 30668-30669. In declining to implement certain changes to the risk conversion factors suggested by commenters, the CFTC noted that it was "... building upon an existing regulatory approach that is comparatively simpler to implement and leads to reproducible results, rather than seeking to develop a brand new approach."

¹²⁸ For operational ease, if the Commission adopts a set of risk-adjusted conversion factors, it should clarify that a fund may determine to comply with the Commission-established portfolio limits using the full notional amounts of its derivatives contracts, rather than applying any conversion factor to adjust for risk.

¹²⁹ Normalizing the duration for interest rate derivatives is conceptually similar to risk-adjusting notional amounts across all asset types. In essence, a fund would adjust the notional amount of the interest rate derivative based on its remaining duration. Lower duration derivatives would have higher adjustments.

while providing additional flexibility to taxable bond funds to adjust the duration of their portfolios for the benefit of fund shareholders.

Under the proposed rule, an interest rate derivative with a short duration and an interest rate derivative with a longer duration are treated the same for purposes of the Exposure-Based Limit and the Risk-Based Limit although the two derivatives transactions could result in very different interest rate exposures. Conversely, the proposed rule would treat two separate methods of achieving the same interest rate exposure differently for purposes of calculating notional exposure. A fund, for example, could achieve the same interest rate exposure by purchasing four 3-month, \$1 million Eurodollar futures contracts, or by entering into an interest rate swap with a \$1 million notional amount and a 12-month term. The four 3-month futures contracts, however, would count four times as much toward the Exposure-Based Limit and the Risk-Based Limit under the proposed rule. Funds would therefore have an incentive to enter into the interest rate swap rather than the futures contracts even though the fund otherwise might prefer futures contracts for counterparty credit risk, liquidity, or other reasons.

We recommend that notional amounts for interest rate derivatives be normalized, as suggested by the Commission in the proposal, to ten-year bond equivalents.¹³⁰ The notional exposure of the three-month, \$1 million Eurodollar futures contract, for example, would be adjusted to approximately \$25,000 (\$1 million divided by 40, converting a three-month contract into a ten-year bond equivalent). Normalizing interest rate derivatives to ten-year bond equivalents would be consistent with the manner in which the Commission permits private funds to report their gross derivatives exposure on Form PF and would reflect the relative risk of interest rate derivatives based on durations.¹³¹

c. Adjust Short-Term Interest Rate Derivatives

If the Commission determines to adopt neither a risk-adjusted notional schedule nor a normalized duration weighting for interest rate derivatives, we urge at a bare minimum that the notional amounts for short-term interest rate derivatives (one year or less) be divided by an appropriate divisor for a twelve-month period. If a fund held \$200 million in notional amount of 3-month Eurodollar futures contracts, for example, the notional amount would be divided by four, resulting in an adjusted notional exposure of \$50 million. This reduction in notional amount again would better reflect the risk of interest rate derivatives and would be consistent with the treatment of short-term futures contracts in the DERA White Paper. As the Commission discussed in the proposal (and as recognized by DERA), calculating the notional amounts for these short-term interest rate derivatives without adjusting to a 12-month period could overstate the magnitude of the fund's investment

¹³⁰ See Proposing Release at 80908. Because funds typically would not owe more than the notional amount on any derivatives contract, bonds that have a duration longer than ten years should have a notional amount equal to the full notional amount of the contract, and not higher.

¹³¹ See Item 26 of Form PF (permitting funds to report for a 10-year bond equivalent).

exposure.¹³² We urge the Commission to adopt more than this minimum adjustment, which alone likely will not be sufficient to bring many funds below the 150 percent Exposure-Based Limit.¹³³

2. Other Revisions to Calculating Notional Exposure

a. Exclude Direct Hedging Transactions from Portfolio Limits

The Commission did not propose adjusting notional amounts to exclude derivatives that arguably may be used to hedge or cover other transactions. The Commission states that it would be too difficult to develop a suitably objective standard and that confirming compliance with any such standard would be difficult, both for fund compliance personnel and Commission staff.¹³⁴ The Commission reasoned that hedging relationships may be difficult to describe effectively in an exemptive rule and that many hedges are imperfect.¹³⁵

We agree that describing various hedging scenarios may be difficult and could be subject to varying interpretations. That said, we believe that certain narrowly tailored exclusions can and should be crafted in an objective manner so as to limit the concern about differing interpretations or unclear delineation between a hedge and leveraged transactions thereby permitting confirmation of compliance. We therefore recommend that the Commission permit the notional amount of derivatives transactions entered into for very discrete hedging purposes to be excluded from the calculation of the Exposure-Based Limit and the Risk-Based Limit. Providing these limited exclusions for certain direct hedging transactions would not be at odds with the Commission's policy objective of assuring that funds are not unduly speculative due to derivatives use. In this regard, we recommend that the Commission permit funds to exclude the notional amount of derivatives transactions that reduce the specific risk exposure of a portfolio security or its currency that is directly related to such security or currency and is limited to the total amount of the long position being held. The hedging exclusion would be limited to the following circumstances:

- A currency derivative that provides short exposure to a currency in which a security held by the fund is denominated, and the short exposure does not exceed the value of the security;
- A written call option on securities in the fund's portfolio; and

¹³² See Proposing Release at 80908.

¹³³ According to the ICI Study, of the 471 funds with \$485 billion in assets that exceed the 150 percent Exposure-Based Limit, only 28 funds with \$74 billion would pass the limit after a short-term interest rate adjustment.

¹³⁴ See Proposing Release at 80909.

¹³⁵ See Proposing Release at 80914.

- A purchased single-name CDS that provides credit protection on the issuer of a security held by the fund with a notional exposure that does not exceed the principal amount of the security.

These hedges are akin to direct offsets that reduce or eliminate economic exposure. Limiting the reduction to notional value of a direct hedge to the value or principal amount of a security held by the fund further ensures that the derivative does not provide speculative exposure.

b. Exclude Financial Commitment Transactions from Portfolio Limits

Under the proposed rule, funds would be required to include financial commitment transactions in the exposure calculation for the portfolio limits.¹³⁶ Funds also would be required to segregate qualifying coverage assets equal to the full amount of their financial commitment obligations.

Segregation of qualifying coverage assets substantially limits any leverage that may be obtained through financial commitment obligations. Including financial commitment transactions in the calculation of notional amounts for purposes of the Exposure-Based Limit and the Risk-Based Limit is therefore unnecessary to limit leverage or “undue speculation.” We therefore urge the Commission to exclude financial commitment transactions from the exposure calculation for the portfolio limits because the proposed asset segregation requirement for such transactions would address the Commission’s concerns about both avoiding undue speculation and ensuring that funds have sufficient assets to make their payment obligations.

Our recommendation is consistent with other parts of the proposal, which exclude financial commitment transactions from certain or most of the other requirements of the proposed rule. For example, the proposal requires funds to adopt derivatives risk management programs only if they exceed a 50 percent exposure limit on derivatives, regardless of whether or not financial commitment transactions are used. In fact, the portfolio limits and the derivatives risk management program would not apply at all to a fund that engages in financial commitment transactions but uses no derivatives. We assume the Commission chose to treat financial commitment transactions differently than derivatives in these important respects because, even though the Commission considers financial commitment transactions to be senior securities, the concerns underlying Section 18 are sufficiently addressed through the proposed asset coverage requirements.

If the Commission does not agree with this approach, we ask that the Commission instead require funds to segregate a mark-to-market amount and risk-based amount rather than the full notional amount of the financial commitment obligations and that, for purposes of the portfolio limits, it permit funds to net financial commitment transactions in the same manner as derivatives transactions.

¹³⁶ See proposed Rule 18f-4(b)(1). See also proposed Rule 18f-4(c)(5) (defining “financial commitment obligations”).

c. Permit Netting Across Different Instruments for Portfolio Limits

The proposed rule would permit funds to net notional amounts from any directly offsetting derivatives transaction that is the same type of instrument and has the same underlying reference asset, maturity, and other material terms (although permitting different counterparties).¹³⁷ The netting exception is extremely limited and is designed to apply only to those situations in which a fund effectively would use an offsetting transaction to settle all or a portion of a transaction prior to its expiration or maturity.¹³⁸

We support the proposed netting provision but request that the Commission remove the limits on netting to transactions involving the same type of instrument. Funds may find it more efficient and less costly to eliminate the economic exposure of their positions through the use of an instrument that is different from the one it is holding. For example, a fund may hold a long currency future but decide to eliminate the position with a short currency forward having the same underlying reference currencies, maturity, and other material terms. A short currency forward provides the same exposure to the underlying currencies as a short currency future. Offsetting positions in different instruments that have the same material terms could be reasonably expected to eliminate market risk.

Similarly, we request confirmation on the treatment of rolling forward contracts. We understand that a fund would be permitted to net a short forward contract with a long forward contract having the same underlying reference asset, maturity, and material terms. We understand, however, that funds often offset outstanding currency forward contracts with “spot” contracts with offsetting positions in the same underlying currencies.¹³⁹ Spot contracts offset the currency exposure in the outstanding currency forward contract in the same way as an offsetting long forward transaction. Therefore, a fund should be able to net a short forward contract with a long “spot” contract having the same underlying reference currencies, maturity, and material terms. Given that the “spot” transactions economically would be offsetting the forward contracts, we seek confirmation that a fund could net both instruments under the proposed rule.

d. Clarify Calculation of Notional Amounts for Cross-Currency Forwards

The proposal provides a table listing different types of derivatives transactions and methods by which funds typically would calculate a transaction’s notional amount.¹⁴⁰ For FX forwards, the table indicates that the notional amount would be the notional contract value of the “currency leg(s).” For currency forwards in which one of the legs is U.S. dollars (or the base currency of the fund), we request

¹³⁷ See proposed Rule 18f-4(c)(3)(i).

¹³⁸ See Proposing Release at 80906.

¹³⁹ These contracts typically are referred to as “spot” contracts rather than “forward” contracts because they settle within the typical settlement period for delivery of the underlying currencies (for most currencies, two business days).

¹⁴⁰ See Proposing Release at 80902, Table 1.

that the Commission clarify that the notional amount is the notional value of the U.S. dollar (or base currency) leg.¹⁴¹

Moreover, the Commission should explain how a fund should calculate the notional amount of a currency forward when both legs are in non-U.S. currencies. If the contract is a cross-currency contract and neither currency is U.S. dollars (nor the base currency of the fund), for example, the Commission should clarify whether the notional amount should include both legs of the currency forward or only one leg. The method used for determining the notional amount of these contracts could have a material impact on the calculation of the Exposure-Based Limit and Risk-Based Limit for some funds, and therefore it is important for the Commission to clarify which method should be used. Doing so will assure that funds determine the amounts in a consistent manner.

e. Clarify Calculation of Notional Amounts for Complex Derivatives

To calculate the notional amount of complex derivatives, the proposal would require funds to compute the aggregate notional amount(s) of one or more instruments, excluding other complex derivatives transactions, reasonably estimated to offset substantially all of the market risk of the complex derivatives transaction at the time the fund enters the transaction.¹⁴² This portion of the proposal seems particularly unclear and could lead to vastly different estimates of notional amounts based on subjective determinations. In addition, we understand that some derivatives contracts may not be able to be replicated using non-complex derivatives to determine notional values (*e.g.*, Asian options). We therefore recommend that the Commission adopt a more objective approach measuring the exposure of an investment in the underlying instruments.¹⁴³ Employing a single objective determination would eliminate variability and subjectivity and promote consistent methodologies.

3. Raise the Exposure-Based Limit to 200 Percent

We urge the Commission to raise the Exposure-Based Limit to 200 percent. A 200 percent Exposure-Based Limit would help ensure that the new regime is not unduly restrictive nor fraught with

¹⁴¹ *Id.* at Table 1. Under the Undertaking for Collective Investments in Transferable Securities (“UCITS”) framework, the notional amount would be the notional amount of the contract in the base currency. *See* Committee of European Securities Regulators, *CESR’s Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS* (Apr. 19, 2010), available at https://www.esma.europa.eu/sites/default/files/library/2015/11/10_108.pdf. Thus, if the base currency in the USD/euro forward contract is U.S. dollars, then the notional amount would be the notional amount of the U.S. dollar portion of the contract.

¹⁴² *See* proposed Rule 18f-4(c)(7)(iii)(C).

¹⁴³ For example, the method of calculating notional exposure under the Alternative Investment Fund Managers Directive (“AIFMD”) may be a possible approach for certain complex derivatives transactions. The AIFMD provides, for instance, that the notional exposure of so-called barrier (knock-in, knock-out) options is determined by the following formula: number of contracts * notional contract size * market value of underlying equity share * delta. The AIFMD also provides conversion methodologies for determining the notional exposure of volatility and variance swaps. *See* European

unintended consequences—*i.e.*, requiring a significant percentage of funds to adjust their investment programs potentially to the detriment of shareholders. We believe the Commission could adjust the limit in this way, without compromising its objective of ensuring that funds are not unduly speculative.

The Commission stated that it considered a number of factors in setting the Exposure-Based Limit at 150 percent. First, the Commission considered that the amount represents the level of market exposure that would be possible through securities investments augmented by borrowings permitted under Section 18. Second, the Commission considered the extent to which different exposure limits would affect funds' ability to pursue their strategies. Third, the Commission considered that funds using any derivatives can experience derivatives-related losses, including with exposures below the limits proposed. In connection with these considerations, the Commission noted that a 150 percent limit would permit funds and their advisers generally to continue to operate and pursue a variety of investment strategies, including alternative strategies.¹⁴⁴

Although these factors may be helpful, the selection of any percentage limit, including the 150 percent Exposure-Based Limit, seems to involve more art than science. Further, because funds likely will have internal compliance systems that will impose a lower limit than the Exposure-Based Limit to ensure that the funds do not exceed the limit,¹⁴⁵ raising the threshold to 200 percent will give funds some greater flexibility. Given that market conditions or redemption activity can affect net asset value (and therefore compliance with the Exposure-Based Limit even without a change in the notional amount of derivatives transactions), we believe raising the threshold by our recommended amount is reasonable.

4. Revise the VaR Test

We recommend two alternative VaR tests to replace the proposed VaR test that is, as discussed above, of limited use to funds. If the Commission raises the Exposure-Based Limit to 200 percent of net assets, the “additional” amount of notional exposure that a fund could take on under the Risk-Based Limit using one of the two tests described below should remain at 150 percent. The Risk-Based Limit therefore would be 350 percent of net assets.

Commission Delegated Regulation (EU) No. 231/2013 of 19 Dec. 2012, supplementing Directive 2011/61/EU of the European Parliament and of the Council, Articles 8 and 10, and Annex II at items 3 and 4, available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0231&from=EN>.

¹⁴⁴ See Proposing Release at 80909-10. Still, the Commission recognized that particular funds would need to modify their portfolios to reduce their use of derivatives to comply with a 150 percent Exposure-Based Limit.

¹⁴⁵ We believe funds will likely have a lower internal limit particularly if the tests are conducted on a daily basis as recommended below to avoid breaching the limit.

a. Require Derivatives Above the Exposure-Based Limit to be Risk Reducing

The Commission should modify its proposed VaR test, used for purposes of the Risk-Based Limit, to address certain deficiencies. Our recommendations also would make it possible for a fund to avail itself of either the Exposure-Based Limit or the Risk-Based Limit at any particular time.

We recommend that, if a fund's notional exposures exceed the Exposure-Based Limit, only the notional amount of the fund's derivatives transactions that are in excess of the Exposure-Based Limit would have to be risk-reducing in the aggregate. Rather than the comparison in the proposed rule, our recommended approach would compare the VaR of the fund's portfolio with notional exposure equal to the Exposure-Based Limit to the VaR of the full portfolio, including the additional notional exposure (in excess of the Exposure-Based Limit). In other words, funds would be required to compare the full portfolio VaR to the VaR of (i) all securities and other assets of the fund, exclusive of derivatives; plus (ii) derivatives transactions and senior securities whose aggregate exposures equal the Exposure-Based Limit ("exposure-limit VaR").¹⁴⁶ If a fund's full portfolio VaR is less than its exposure-limit VaR, then the fund should be entitled to obtain exposure up to the Risk-Based Limit. For operational reasons and as further discussed below, we recommend that the exposure test be computed once each business day.¹⁴⁷

Under the proposal, a fund could invest in any securities and derivatives, whether those derivatives increase exposure or are "risk reducing," so long as the fund's exposure does not exceed the Exposure-Based Limit. Consistent with this approach, only the additional derivatives that increase a fund's notional exposure above the Exposure-Based Limit should be required to be, in the aggregate, risk-reducing. This proposed approach would maintain the structure of the Commission's Risk-Based Limit framework while allowing more funds to qualify for use of the Risk-Based Limit through a more rational application of the VaR test.

Comparing the full portfolio VaR to the exposure-limit VaR would allow funds to benefit from both of the Commission's two tests and allay the concerns of funds that are close to the Exposure-Based Limit that they can transition to the Risk-Based Limit. As we noted earlier, the data from both the DERA White Paper and the ICI Study show funds' compliance with the limits as of one particular point in time. Funds' use of derivatives varies daily and, over longer periods of time, a fund's aggregate exposures could have broad ranges. Therefore, a fund that has notional exposure of 145 percent of net assets (or 195 percent under our proposed Exposure-Based Limit) holding derivatives that are not, in the aggregate, risk reducing could proceed to enter into new derivatives or senior securities transactions by availing themselves of the Risk-Based Limit rather than changing its investment strategy as soon as

¹⁴⁶ As discussed above, among other things, the aggregate notional exposure should exclude financial commitment transactions and adjust derivatives' notional amounts based on the risk arising from the category of derivatives transaction. *See supra*, Sections IV.D.2.b and IV.D.1.

¹⁴⁷ *See infra*, Section IV.D.5.a.

its exposure exceeds 150 percent. The fund only would need to determine whether any additional derivatives entered into above the Exposure-Based Limit would increase the fund's VaR.

b. Use an Absolute VaR Test with Portfolio Limits

Alternatively to the recommendation above, the Commission should consider replacing the proposed VaR test with an absolute VaR test. Under the absolute VaR test, a fund would be permitted to have notional exposures up to the Risk-Based Limit if the VaR of the fund's portfolio is equal to 20 percent or less of the fund's net assets. In employing an absolute VaR test, the Commission could consider standardizing certain specific VaR components or methodology to ensure greater uniformity across the industry or to address any concerns about the variability and subjectivity of the test.

An absolute VaR test would limit the amount of portfolio risk that funds could incur with derivatives. Additionally, funds would be limited in the notional amount of exposure they could incur consistent with the SEC's proposed VaR test. Funds (particularly those with advisers that have experience complying with the absolute VaR test in Europe) also would have familiarity with its operation and one common VaR calculation could be used globally, which has the benefit of operational ease and efficiency.¹⁴⁸

c. Require VaR to Be Reported as a Percentage of Assets

The proposed rule would define VaR as "an estimate of potential losses on an instrument or portfolio, expressed as a positive amount in U.S. dollars, over a specified time horizon and at a given confidence level" (emphasis added).¹⁴⁹

Using a VaR calculation based on dollar amounts could lead to perhaps unintended results.¹⁵⁰ A fund that has \$100 million in net assets with 60 percent of those assets in securities and 40 percent of those assets in unrealized gains from derivatives would show a VaR with a base dollar amount of \$60 million for the securities VaR and a VaR with a base dollar amount of \$100 million for the full portfolio VaR.¹⁵¹ If the fund determines that its securities VaR (measured as a percentage) is 5 percent but its full portfolio VaR (measured as a percentage) is 4 percent, then the fund should be able to use the Risk-Based Limit because derivatives are reducing the risk of the fund's portfolio. If the VaR needs to be

¹⁴⁸ Firms have spent considerable sums developing VaR systems to comply with UCITS and other global regulations. For operational efficiency, we urge that any new framework seek to build off the processes that firms already have in place. The operational efficiencies of an approach that fits with existing processes will make market risk monitoring more efficient in the long run.

¹⁴⁹ See proposed Rule 18f-4(c)(11).

¹⁵⁰ These concerns may not apply to funds that only invest in futures that settle each day.

¹⁵¹ We understand that, for purposes of determining net assets, funds do not reflect the notional amounts of derivatives contracts but unrealized gains and losses from those contracts. Nevertheless, unrealized gains and losses on derivatives could be a significant part of a fund's net assets.

expressed in terms of U.S. dollars (rather than a percentage), however, the securities VaR would be equal to \$3 million (5 percent of \$60 million) and the portfolio VaR would be equal to \$4 million (4 percent of \$100 million). Thus, even though the full portfolio VaR is lower than the securities VaR measured as percentages, the full portfolio VaR would be higher than the securities VaR if measured by dollar amount. We urge the Commission to use the calculation of VaR as a percentage of assets rather than a dollar amount.¹⁵²

5. Other Matters Related to Portfolio Limits

a. Permit Funds to Compute Portfolio Limit Tests Once Each Business Day

The proposal would require funds to compute the portfolio limit tests immediately prior to entering into each senior securities transaction.¹⁵³ We recommend that, in lieu of imposing these difficult real-time operational burdens on funds, the Commission permit funds to test for compliance with exposure limits and the VaR test once each business day to provide funds with sufficient time to monitor appropriately and review their senior securities transactions. The daily checks would provide frequent enough monitoring and enable funds to ensure that their computations are performed with a more exacting result and remain compliant on a daily basis.

To ensure that funds do not run afoul of this proposed requirement, a fund would need to keep track of its derivatives exposures and net assets on a real-time basis throughout each business/trading day. For instance, if a portfolio manager determines to place a trade to enter into a swap agreement, he or she would need to know the fund's precise derivatives exposure and net assets immediately prior to the transaction to determine whether the trade is permissible. A fund also would have to undertake potentially complicated VaR calculations on a real-time basis throughout the trading day to comply with the Risk-Based Limit.

Calculating these tests on a real-time basis throughout the trading day would be operationally impossible for very many at the current time. Many funds would have to develop systems to aggregate and monitor in real time a fund's complete derivatives holdings, including aggregate notional amounts as of a certain point in time, as well as other senior securities transactions. The data for these instruments are often kept within different departments at the investment adviser and are not necessarily maintained with the rest of the fund's portfolio holdings, especially in the case of over-the-counter instruments or fund borrowings. Therefore, systems would have to be updated to access and provide this data in real time, which would be costly, increasing fund shareholder expenses significantly.

More problematic are similar systems issues associated with making VaR computations in real time. The contributions of a fund's various senior securities and other holdings to a full portfolio VaR

¹⁵² If the Commission follows our recommended alternative approach, for the same reasons, VaR should be reported as a percentage of assets.

¹⁵³ See proposed Rule 18f-4(a)(1).

and securities VaR will constantly change throughout the trading day, so computations as of one minute could change by the next. VaR models, for example, using a Monte Carlo simulation perform 100,000 random scenarios, requiring a complex process involving loading positions, checking that positions are modeled correctly, running calculations through the model, loading the results into a database, then publishing the results. Currently, this process takes hours, runs overnight, and cannot be done easily before and after a contemplated trade, especially if funds have to execute this process for multiple derivatives trades a day. Many funds (particularly smaller funds) use third-party vendors for VaR information. To comply with the proposed rule's requirements, funds will have to request and pay for these reports on an exponentially more frequent basis.

Subadvised funds will have further practical issues with these requirements. Fund advisers may delegate portfolio management of particular sleeves of a portfolio to subadvisers that likely do not manage the sleeves using the same systems as the fund adviser or other subadvisers. Access to these holdings may be through custodial or accounting systems that do not reflect up-to-the minute trades, and, thus, there likely is no real time, integrated reporting of all holdings. Funds would presumably have to delegate to subadvisers the task of monitoring the portfolio limits and/or conducting the VaR test for the particular sleeve for which the subadviser is responsible.

For multi-manager funds, the portfolio limits or VaR from each subadviser would need to be reported real time to all other managers in a manner that would enable monitoring consistent with the rule's requirements with respect to the fund's entire portfolio. In some cases, subadvisers also may have the ability to trade on behalf of the fund under ISDA Master Agreements or other trading documentation that has been negotiated by the subadviser and may be confidential so gathering information required for determinations, such as when netting is permitted under such agreements, may be problematic at the fund adviser level.¹⁵⁴

b. Permit Funds that Exceed the Portfolio Limits to Acquire Additional Derivatives When the Derivatives Reduce the Notional Amount

The proposed rule requires that funds that use derivatives comply with either an Exposure-Based Limit or a Risk-Based Limit "immediately after entering into any senior security transaction."¹⁵⁵ We support a similar once-daily approach, which recognizes that funds may passively exceed their selected portfolio limit or VaR test during the day due to market movements and other factors, which should not be treated as a limits violation.¹⁵⁶ Upon this occurrence, however, the proposed rule would

¹⁵⁴ To the extent that a primary adviser does not have the information necessary to monitor compliance with the portfolio limits or asset segregation requirements in sub-advised funds or sleeves of a fund (because, for example, of confidentiality of a subadviser's trading agreements), we suggest that the SEC provide guidance that the primary adviser could rely on a subadviser's representations and warranties as an alternative to monitoring compliance directly at the fund level.

¹⁵⁵ Proposed Rule 18f-4(a)(1).

¹⁵⁶ As described immediately above in Section IV.D.5.a, we recommend that these limits be tested once each business day.

restrict a fund from entering into any additional senior securities transactions. The Commission asks whether it should permit funds to engage in a series of derivatives transactions in which those transactions ultimately would reduce the fund's exposure as a percentage of net assets, even if the fund's exposure immediately after giving effect to such transactions is in excess of the applicable limit.¹⁵⁷

We support such an approach. Any final rule should not prohibit such funds from entering into any additional senior securities transaction unless such transaction brings them under the limits.¹⁵⁸ A fund may find that it would be most advantageous to conduct those exposure-reducing transactions over time rather than in one transaction. For example, a fund may choose to enter into a series of new derivatives transactions to reduce its outstanding derivatives positions (or a portion of its outstanding derivatives transactions) *pro rata* to bring the fund below the applicable limit. Likewise, in the event funds inadvertently exceed the VaR requirements, funds should be able to reduce the VaR of their portfolio in a series of transactions within a similar timeframe. We see no reason to deny funds this flexibility.

For similar reasons, under these circumstances, the Commission also should not prohibit funds that want to "roll" their derivatives positions from one expiring contract to another. Under the proposed rule, such "rolls" of existing derivatives transactions would not be permitted if the fund exceeded the applicable limit at the time of the "roll."

The Commission could address concerns that a fund could try to extend its period of non-compliance by imposing an outer-limit of 30 days, which the Commission suggests for inadvertent breaches, after which a fund would no longer be permitted to engage in any further derivatives transactions unless the fund reduces its exposure below its applicable limit or reduce its VaR immediately after the transaction.¹⁵⁹ The 30-day period would ensure that funds bring their portfolios back into compliance within a limited period and provide both the fund and the Commission with objective criteria against which to test such compliance.

c. Permit Funds to Satisfy Either Exposure-Based Limit or Risk-Based Limit at Any Time

The proposed rule would require funds to adopt, and boards to approve, one of the two alternative portfolio limits.¹⁶⁰ A fund, for example, that has adopted an Exposure-Based Limit may find it prudent to enter into additional risk-limiting derivatives transactions that would take it over the

¹⁵⁷ See Proposing Release at 80925.

¹⁵⁸ Passive breaches during which a fund does not acquire additional derivatives positions would not require a cure period because there would be no breach of the proposed rule's conditions until the fund acquires additional senior securities.

¹⁵⁹ See Proposing Release at 80925.

¹⁶⁰ See Proposed Rule 18f-4(a)(5)(i).

Exposure-Based Limit but would satisfy a Risk-Based Limit. Under the current proposal, this fund could not do so until its board adopts a Risk-Based Limit. Conversely, a fund that adopted a Risk-Based Limit would have to continue to run a VaR test even if it were clearly under the Exposure-Based Limit until its board adopts an Exposure-Based Limit. We do not believe these types of compliance burdens and costs are necessary. Funds should be permitted to observe either limit at any particular time and without prior board approval.¹⁶¹ We see no reason why funds should be required to choose a particular limit with which it must comply if the derivatives risk management program specifically allows a fund to comply with either limit. Removing the requirement to choose a portfolio limit in advance would appear to be consistent with the purposes of the proposed rule.

d. Permit Closed-End Funds and BDCs to Use Higher Exposure-Based Limits

The proposed rule would require all funds using derivatives to limit their senior securities exposures to 150 percent or 300 percent of net assets regardless of the type of fund. Under Section 18 of the 1940 Act, Congress authorized the capital structures of both closed-end funds and BDCs to vary from other types of funds to enable them to engage in more leverage, thereby increasing the potential for generating capital growth compared to other funds and investments. Although open-end funds and ETFs can borrow from banks so long as they maintain 300 percent asset coverage, closed-end funds may issue a separate class of senior securities representing indebtedness, so long as the class has asset coverage of at least 300 percent of the obligation (among other requirements).¹⁶² Additionally, closed-end funds can issue a separate class of senior securities representing equity (*e.g.*, preferred stock) so long as the fund maintains 200 percent asset coverage (among other requirements).¹⁶³

BDCs have even more flexibility to obtain leverage. BDCs, like closed-end funds, can issue senior securities representing debt and equity in addition to bank borrowings. Unlike closed-end funds, however, BDCs need only maintain asset coverage of 200 percent for each of the obligations.

Congress intentionally permitted closed-end funds and BDCs to issue senior securities and obtain leverage in excess of that permitted for open-end funds. Accordingly, the Commission should recognize these statutory distinctions by permitting closed-end funds and BDCs to comply with higher exposure limit thresholds than open-end funds.

¹⁶¹ See *supra*, Section III.C.

¹⁶² See Section 18(a)(1)(A) of the 1940 Act.

¹⁶³ See Section 18(a)(2)(A) of the 1940 Act.

V. Other Interpretive Issues

A. Confirm No “Look Through” is Required to Other Pooled Vehicles

The proposal does not provide clear guidance whether or in what circumstances a fund may have to look through to its investments in another investment company or other pooled vehicle for purposes of calculating its portfolio limit, asset segregation requirements, derivatives exposure threshold for determining whether a derivatives risk management program is required, or with respect to other aspects of the proposed rule.

As part of its Economic Analysis, the proposal provides that “[s]ome funds may also use fund of funds investment structures to seek leverage through investments in other funds, although the underlying funds in these arrangements also would be subject to the limitations in Section 18 and the requirements of the proposed rule if those underlying funds are registered funds.”¹⁶⁴ This statement would suggest that no look through would be required with respect to a fund’s investments in another 1940 Act registered fund. We request that the Commission clarify that funds are not required to look through other 1940 Act registered funds in connection with its adoption of a final rule.

We further request that the Commission confirm that funds need not look through to the investments of other pooled vehicles in which they may invest, including private funds, for purposes of the proposed rule. As a general matter, the proposed rule applies by its terms to investments in “derivatives transactions,” “financial commitment transactions” and other “senior securities.” An investment in a pooled vehicle would not appear to fall within the applicable definitions provided the investment is non-recourse and does not involve a future payment obligation or evidence of indebtedness.¹⁶⁵ Although an investment in a private fund or other pooled vehicle may expose a fund indirectly to the performance of derivatives and related leverage in the underlying vehicle’s portfolio, the investment would not constitute a senior security. Therefore, the Commission should not require any look through if the investment in another pooled vehicle does not require the fund to make any payments in the future.¹⁶⁶ In addition, there may be substantial operational challenges in managing a

¹⁶⁴ Proposing Release at 80960.

¹⁶⁵ We acknowledge that the definition of “financial commitment transaction” in the proposed rule includes as an example of a “similar agreement” an “agreement under which a fund has obligated itself, conditionally or unconditionally, to make a loan to a company or to invest equity in a company, including by making a capital commitment to a private fund that can be drawn as the discretion of the fund’s general partner.” See proposed Rule 18f-4(c)(4). We believe an investment in a pooled vehicle that has been funded would not be a financial commitment transaction.

¹⁶⁶ The Commission recognizes this distinction in the proposal: “We recognize, however, that not every derivative will involve the issuance of a senior security because not every derivative imposes a future payment obligation on the fund. A fund that purchases an option, for example, generally will make a non-refundable premium payment to obtain the right to acquire (or sell) securities under the option but generally will not have any subsequent obligation to deliver cash or assets to the counterparty unless the fund chooses to exercise the option. A derivative that does not impose a future payment

fund-of-funds to an exposure-based limit if subject to a real-time look-through requirement, including but not limited to challenges involved when the underlying fund is unaffiliated or advised by an unaffiliated subadviser.

We recognize that Section 48(a) of the 1940 Act generally prohibits a fund from doing indirectly what it may not do directly under the 1940 Act.¹⁶⁷ To avoid interpretive questions and related uncertainties, we recommend that the Commission set forth clear/objective guidance as to when a look through would be required, if at all.

B. Do Not Apply Statutory Asset Coverage Requirements to Senior Securities Entered into Pursuant to the Proposed Rule

In the proposal, the Commission requests comment on whether any final rule should address, or whether the Commission should provide guidance concerning, funds' compliance with other aspects of Section 18 in connection with funds' use of derivatives transactions or financial commitment transactions.¹⁶⁸ We believe that the Commission should provide guidance in this area.

In particular, we seek confirmation that Section 18 asset coverage requirements do not apply to the derivatives and financial commitment transactions that comply with proposed Rule 18f-4. Because asset segregation requirements of the proposed rule apply to a fund's derivatives and financial commitment transactions, application of the separate statutory asset coverage requirements of Section 18 would be unnecessary for those senior securities that comply with proposed Rule 18f-4. Moreover, as the Commission identifies in the proposal, requiring funds also to apply the Section 18 asset coverage requirements would be complicated and lead to numerous interpretive issues, such as how a fund should treat derivatives and financial commitment transactions, and the liabilities associated therewith, for purposes of calculating "asset coverage" for senior securities representing indebtedness or stock under Section 18(h) of the 1940 Act.

VI. Recordkeeping, Reporting, and Disclosure

A. Recordkeeping

Under the proposal, funds would be required to maintain certain written records, including records relating to the fund's selection of a portfolio limit and the fund board's initial determination to

obligation on a fund in this respect generally resembles non-derivative securities investments in that these investments may lose value but will not require the fund to make any payments in the future." Proposing Release at 80891-80892.

¹⁶⁷ Section 48(a) of the 1940 Act provides "It shall be unlawful for any person, directly or indirectly, to cause to be done any act or thing through or by means of any other person which it would be unlawful for such person to do under the provision of [the 1940 Act] or any rule, regulation, or order thereunder."

¹⁶⁸ Proposing Release at 80901.

comply with the portfolio limit and any subsequent changes;¹⁶⁹ records demonstrating that immediately after the fund entered into any senior securities transaction, the fund complied with the applicable portfolio limit;¹⁷⁰ board-approved policies and procedures regarding the fund's maintenance of qualifying coverage assets;¹⁷¹ records reflecting the fund's daily mark-to-market and risk-based coverage amounts for derivatives transactions; records relating to a fund's financial commitment obligations and the qualifying coverage assets maintained by the fund to cover these amounts;¹⁷² board-approved policies and procedures regarding the fund's derivatives risk management program;¹⁷³ records of materials and reports provided to the fund's board; and records describing periodic reviews and updates to the derivatives risk management program. The records would be required to be kept for five years (the first two years in an easily accessible place) and are designed to allow Commission examiners or a fund's board or compliance personnel to evaluate the fund's ongoing compliance with the conditions of the proposed rule.

We generally support the Commission's proposed requirements to maintain such records and believe that they would help to ensure and document compliance with the rule. Consistent with our recommendations above, however, a fund should have the ability to choose the portfolio limit that it relies on at any particular time as long as it complies with one of the two alternative portfolio limits. Accordingly, the Commission should not require a board to approve a portfolio limit and, in turn, no records of related board determinations should be required.

Also, consistent with our recommendations above, the Commission should not require funds to maintain records indicating that immediately after entering into any senior securities transaction a fund complied with its chosen portfolio limit. Maintaining those records is administratively burdensome and costly and provide little practical value.

B. Form N-PORT

The proposal would require funds that must implement a derivatives risk management program to report on proposed Form N-PORT the *gamma* and *vega* of derivatives with optionality, including

¹⁶⁹ See proposed Rule 18f-4(a)(6)(i).

¹⁷⁰ See proposed Rule 18f-4(a)(6)(iv). These would reflect the fund's exposure, the value of the fund's net assets and, if applicable, the fund's full portfolio VaR and securities VaR. *Id.*

¹⁷¹ See proposed Rules 18f-4(a)(6)(ii) (derivatives transactions) and 18f-4(b)(3) (financial commitment transactions).

¹⁷² See proposed Rules 18f-4(a)(6)(v) and 18f-4(b)(3)(ii). For derivatives transactions, these amounts would not need to identify the qualifying coverage assets maintained in respect of each specific derivatives transaction. For financial commitment transactions, funds would identify the specific qualifying coverage assets used to cover each financial commitment transaction. *Id.*

¹⁷³ See proposed Rule 18f-4(a)(6)(iii). These would include materials and written reports provided to the board, as well as records documenting periodic updates and reviews required as part of the program. *Id.*

options, warrants, and swaptions.¹⁷⁴ *Gamma* measures the sensitivity of *delta* in response to price changes in the underlying instrument and, together with *delta*, is intended to provide the Commission and others with a more precise estimate of the effect of underlying price changes on a fund's investments.¹⁷⁵ *Vega* measures the amount that an option contract's price changes in relation to a one percent change in the volatility of an underlying asset and is intended to assist the Commission and others estimate changes in a portfolio based on changes in market volatility, as opposed to asset prices. As with other information on Form N-PORT, information reported for the third month of the fiscal quarter would be disclosed publicly after a 60-day lag.

We do not object to the requirement that funds report the additional risk metrics information on proposed Form N-PORT although we question whether they will provide accurate information regarding a fund's relative price and volatility risk. If the Commission determines to retain this requirement, we strongly recommend that the information be kept non-public. As we noted in our response to the Fund Reporting Proposal and, as acknowledged by the Commission, risk metrics for derivatives with optionality, particularly *delta* and any related measures, are extremely subjective and could be confusing to investors.¹⁷⁶ Determining *delta* and related measures is highly dependent on a variety of assumptions and inputs that differ depending on the option model used, which will lead to comparability issues among funds. Although these differences may be smaller for certain derivatives, they can be large for others depending on the instrument (*e.g.*, exotic options) and, if applicable, the instrument's time to maturity.

Many third parties, including shareholders and potential investors, will not understand or may misinterpret the information because they do not have the background information regarding assumptions to compare appropriately the holdings across funds. Moreover, disclosure of these risk metrics could potentially harm fund shareholders by expanding the types of proprietary information about funds' portfolio positions and investment strategies that are publicly disclosed and, as conceded by the Commission, could increase opportunities for third parties to engage in predatory trading

¹⁷⁴ See proposed Item C.11.c.viii of proposed Form N-PORT.

¹⁷⁵ *Delta* measures the sensitivity of an option's value to changes in the price of a reference asset. The Commission has proposed requiring funds to report the *delta* for options and warrants on proposed Form N-PORT. See proposed Item C.11.c.vii of proposed Form N-PORT. See also *Investment Company Reporting Modernization*, 80 Fed. Reg. 33590 (June 12, 2015), available at <https://www.gpo.gov/fdsys/pkg/FR-2015-06-12/pdf/2015-12779.pdf> ("Fund Reporting Proposal").

¹⁷⁶ See Letter from David W. Blass, General Counsel, Investment Company Institute, to Brent J. Fields, Secretary, Securities and Exchange Commission, dated August 11, 2015, at pp. 41-42 and 46-47, available at <http://www.sec.gov/comments/s7-08-15/s70815-315.pdf> ("ICI Fund Reporting Comment Letter"). The Commission appears to acknowledge this potential to confuse investors by noting that "certain inputs that go into computing *gamma* and *vega* inherently involve some level of judgment." Proposing Release at n. 503.

practices.¹⁷⁷ We therefore recommend that the Commission find that public disclosure of the *gamma* and *vega* for derivatives is neither necessary nor appropriate in the public interest or for the protection of investors.¹⁷⁸

C. Form N-CEN

The proposal also would require funds that engage in derivatives transactions to disclose on proposed Form N-CEN whether the fund relied on the Exposure-Based Limit or the Risk-Based Limit during the reporting period.¹⁷⁹ The proposed Form N-CEN information is intended to allow the Commission to identify funds that rely on the proposed exemptive rule.

We support the Commission's proposed approach that would require a fund to report on a historic basis the portfolio limit that it relied on during the reporting period. As discussed above, we recommend that the Commission permit funds to satisfy either portfolio limit without board approval.¹⁸⁰ We therefore suggest that a fund be required to disclose whether it observed the Exposure-Based Limit, the Risk-Based Limit, or both limits during the reporting period.

VII. Existing Guidance and Compliance Dates

If the proposed rule is adopted, the Commission intends to rescind Release 10666 and related staff no-action letters addressing derivatives and financial commitment transactions. A fund would be permitted to rely on the new rule any time after its effective date, but the Commission expects to provide a transition period during which funds could continue to rely on Release 10666 and related guidance.

Relying on one exemptive rule that sets forth reasonable and appropriate conditions that address the Commission's concerns is far preferable to relying on a host of no-action positions and informal staff guidance. The exemptive rule would provide a clear and uniform means of meeting leverage restrictions and asset coverage requirements and give funds assurance that they are meeting the Commission's standards.

¹⁷⁷ See Proposing Release at 80972 (disclosing *gamma* and *vega* could harm fund shareholders by "expanding the opportunities for professional traders to exploit this information by engaging in predatory trading practices, such as 'front-running' and 'copycatting/reverse engineering of trading strategies'").

¹⁷⁸ See ICI Fund Reporting Comment Letter, *supra* note 176, at pp. 25-30 (discussing methods for keeping reported information on proposed Form N-PORT that is neither necessary nor in the public interest or for the protection of investors non-public).

¹⁷⁹ See proposed Items 31(k) and 31(l) of proposed Form N-CEN.

¹⁸⁰ See *supra* Sections III.C and IV.D.5.c.

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Of course, there are operational challenges funds will encounter when transitioning to the exemptive rule. Although many funds that use derivatives have derivatives risk management programs in place already, funds will need time to develop systems to comply with the conditions of the proposed rule, including with respect to specific portfolio limits, asset segregation requirements, board reporting and recordkeeping, disclosures, financial reporting, and appointment of a derivatives risk manager. With the significant new regulatory requirements with which fund complexes had to comply (*e.g.*, money market reform) and additional requirements that may be finalized before the derivatives rule (*e.g.*, new fund reporting and liquidity management requirements), the Commission should provide funds with a reasonable amount of time to implement any new requirements.¹⁸¹

We recommend a 30-month transition period, which would be consistent with the amount of time the Commission proposed giving certain funds in connection with the Fund Reporting Proposal and the Liquidity Management Proposal.

* * * * *

¹⁸¹ In this regard, and as we noted in our comment letter to the Liquidity Management Proposal, we urge the Commission to consider each of the Fund Reporting Proposal, the Liquidity Management Proposal and this proposal together and impose consistent compliance dates to ensure that fund sponsors can consider and address overlapping issues as efficiently as possible. See Letter from David W. Blass, General Counsel, Investment Company Institute, to Brent J. Fields, Secretary, Securities and Exchange Commission, dated January 13, 2016, available at <http://www.sec.gov/comments/s7-16-15/s71615-54.pdf>, at pp. 33 and 73.

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We appreciate the opportunity to comment on the proposal. If you have any questions regarding our comment letter or would like additional information, please feel free to contact me at (202) 326-5815; Dorothy Donohue, Deputy General Counsel at (202) 218-3563; Jennifer S. Choi, Associate General Counsel at (202) 326-5876; or Kenneth C. Fang, Assistant General Counsel at (202) 371-5430.

Sincerely,

/s/ David W. Blass

David W. Blass
General Counsel

cc: The Honorable Mary Jo White
The Honorable Kara M. Stein
The Honorable Michael S. Piwowar

David W. Grim, Director
Diane C. Blizzard, Associate Director
Division of Investment Management

APPENDIX A

ICI Study Regarding Proposed Portfolio Limits

I. Scope of the Study

ICI undertook a study to assess the impact of the proposed portfolio limitations on funds in conjunction with its comment letter on proposed Rule 18f-4.¹ ICI designed a survey to collect fund-level information related to the Exposure-Based Limit and the Risk-Based Limit. The survey also collected information for each fund regarding type (mutual fund, ETF, or closed-end fund), investment objective,² and total net assets as of year-end 2015.³ ICI distributed the survey to a wide range of ICI members, including small-sized fund complexes and those that make minimal use of derivatives, financial commitments, and other senior securities. Fund complexes were strongly encouraged to submit responses for all of their long-term mutual funds (including variable annuities), 1940 Act-registered ETFs, closed-end funds, and funds-of-funds regardless of the fund's level of senior securities to avoid a sample biased towards funds that make greater use of derivatives.⁴

The ICI Study had excellent coverage for the overall industry as well as across fund types and investment objectives. ICI received survey responses from 82 fund complexes on 6,661 funds with \$13.6 trillion in total net assets as of year-end 2015.⁵ As shown in Figure A.1a, our sample represented 80 percent (top panel) of fund industry assets (top panel) and 59 percent of the total number of funds.⁶ In contrast, the sample in the DERA White Paper analyzed 1,188 funds with approximately \$1.7 trillion in total net assets – representing 10 percent of both the industry-wide number of funds and total net assets as of June 2015. Within investment objectives, coverage in the ICI Study ranged from

¹ “Funds” means all long-term mutual funds (including variable annuities), ETFs registered under the 1940 Act, closed-end funds, and funds that primarily invest in other funds (commonly referred to as funds-of-funds). Money market funds were excluded from the analysis.

² Complexes were asked to report their funds’ “U.S. category group” and “Morningstar category” from Morningstar. If a fund was not in Morningstar, the complex was asked to classify the fund into the Morningstar groupings based on the fund’s investment strategy.

³ Most fund complexes were able to provide information as of year-end 2015, a couple, however, provided information as of mid-January 2016 and one provided information as of mid-November.

⁴ The number of funds in each fund complex’s response were cross-checked against ICI’s internal database. In cases in which there were funds missing from the response and it was determined that these funds had no senior securities, they were added to the ICI sample with a value of zero recorded for the proposed notional test. As in the study by DERA, money market funds were excluded from our analysis. *See* DERA White Paper.

⁵ Two advisors submitted responses for registered investment companies they sub-advise. Although the responses represent multiple fund complexes, each response was considered to be from one “fund complex.” Also, if a fund sponsor identified in the sub-advisor’s response also had submitted a separate response to ICI, funds were cross-checked and any double-counting was eliminated.

⁶ Industry totals use ICI internal data categorized into Morningstar’s “U.S. category group” classification scheme because ICI’s industry totals for ETFs and closed-end funds are larger than Morningstar’s.

78 percent (U.S. equity and international equity) to 94 percent (commodities) of total net assets and from 49 percent (international equity) to 79 percent (sector equity) of the total number of funds. The DERA White Paper did not provide a breakdown of its sample across investment objectives.

Coverage of the ICI Study across all types of funds was very high. The ICI long-term mutual fund sample accounted for 78 percent of total net assets and 56 percent of the total number of long term mutual funds (Figure A.1b). For ETFs, the ICI sample represented 93 percent of total net assets and 73 percent of the total number of ETFs (Figure A.1c). The ICI closed-end fund sample accounted for 70 percent of total net assets and 68 percent of the total number of closed-end funds (Figure A.1d). The DERA sample covered approximately 10 percent of the number of funds and total assets for each fund type (mutual fund, ETF, and closed-end fund). Coverage rates of the ICI Study across the various investment objectives for each fund type also were very good.

One drawback to both our analysis and the DERA White Paper is that it reflects only one point in time and notional exposure can vary widely over the course of the year depending on market conditions and funds' use of derivatives and other senior securities. We were unable to collect a time series of notional values on a fund-by-fund basis in the time allotted for the comment period. Nevertheless, we recommend that the SEC undertake such an analysis to better assess the impact of the proposal which it will be able to perform more easily when new rules on fund reporting are put in place.

II. Results of Proposed Notional Test

The SEC proposed portfolio limits, in part, based on the DERA White Paper, which found that only 4 percent of funds exceeded 150 percent and just 1 percent exceeded 300 percent in notional exposure as measured by its proposed "Notional test." In order to gauge whether this was an accurate representation, ICI as part of its survey asked fund complexes to calculate the value of the Notional test as proposed in Rule 18f-4 for each of their funds using portfolio data as of year-end 2015. Figures A.2a through A.2d show the distribution of total net assets (top panel) and number of funds (bottom panel) by the value of the Notional test for all funds and separately for mutual funds, ETFs, and closed-end funds in the ICI sample.

Although our sample covers a majority of the fund industry, we elected not to extrapolate these findings to estimate the total number of funds and assets that would be affected by the rule. Because the use of derivatives varies substantially by adviser and fund investment objective, we did not want to overestimate the impact of the proposed portfolio limits. As a result, these figures should be viewed as lower bound estimates for the number of funds and assets that the proposed rule affects.

Our analysis indicates that the portfolio limits will affect a broader swath of funds and industry assets than suggested in the DERA study. Because the DERA White Paper was limited by its smaller sample size, DERA elected not to estimate the absolute number of funds and the total net assets that would be directly affected by the portfolio limits. Based on the ICI Study, at least 471 funds with \$613 billion in assets had notional exposure in excess of 150 percent and 173 funds with \$338 billion in

assets were above 300 percent (Figure A.2a). The majority of the affected funds are mutual funds—332 mutual funds with \$582 billion in assets were above the 150 percent Exposure-Based Limit and 158 mutual funds with \$331 billion exceeded 300 percent notional exposure (Figure A.2b). For ETFs in the ICI sample, 125 funds with \$20 billion in assets had values of the Notional test that exceeded 150 percent and 8 funds with \$3 billion in assets were greater than 300 percent (Figure A.2c).⁷ For closed-end funds in the ICI sample, 14 funds with \$11 billion in assets had notional exposure above 150 percent and 7 funds with \$4 billion in assets exceeded 300 percent (Figure A.2d).

Among all funds in the ICI sample, 48 percent (3,183 funds out of 6,661) accounting for 57 percent of sample assets (\$7.8 trillion out of \$13.6 trillion) used derivatives, financial commitments, and/or other senior securities—meaning that they had a positive value for the Notional test (Figure A.2a).⁸ In the DERA sample, 38 percent of funds (451 out of 1,188) accounting for 52 percent of sample assets (\$857 billion out of \$1.7 trillion) had a positive value for the Notional test.

III. Investment Strategies of Funds Impacted by the Proposed Rule

Our analysis indicates that while the proposed portfolio limits will impact funds across all types of investment strategies, alternative funds and taxable bond funds, in particular, would be disproportionately affected. Based on the DERA White Paper, the SEC believed certain alternative funds would have difficulties complying with the proposed requirements and our own analysis is consistent with this expectation.⁹ From our sample, we found that 47 percent or 221 funds out of the 471 funds with notional exposure greater than 150 percent relative to net assets were alternative funds (bottom panel, Figure A.3a). These alternative funds represented 13 percent or \$79 billion of the \$613 billion in assets over the 150 percent Exposure-Based Limit (top panel, Figure A.3a). Overall, these funds represented 34 percent of the industry-wide number and 37 percent of the industry-wide assets of alternative funds.

The DERA study, however, failed to note any particular impact on bond funds and, thus, the SEC was not aware that the portfolio limits would have unintended consequences for taxable bond funds. Our study shows that 42 percent or 198 of the 471 funds with notional exposure greater than 150 percent of their net assets were taxable bond funds. These bond funds represent 79 percent or \$485 billion of the \$613 billion in assets over the 150 percent Exposure-Based Limit. Overall, these

⁷ Values of the Notional test for several of these funds exceeded 300 percent by a very small amount (less than 0.5 percentage points).

⁸ For mutual funds in the ICI sample, 47 percent (2,410 mutual funds out of 5,083) with 61 percent of their total net assets (\$6.9 trillion out of \$11.4 trillion) used derivatives and/or other senior securities (Figure A.2b). For ETFs in the ICI sample, 36 percent (433 ETFs out of 1,200) with 34 percent of their assets (\$433 billion out of \$2.0 trillion) had non-zero notional exposure (Figure A.2c). For closed-end funds in the ICI sample, 90 percent (340 closed-end funds out of 378) with 94 percent of their total assets (\$171 billion out of \$183 billion) used derivatives and/or senior securities (Figure A.2d).

⁹ See *Use of Derivatives by Registered Investment Companies and Business Development Companies*, SEC Release No. IC-31933, 80 Fed. Reg. 80884 at 80911 (Dec. 28, 2015), available at <https://www.gpo.gov/fdsys/pkg/FR-2015-12-28/pdf/2015-31704.pdf>.

funds represent 10 percent of the industry-wide number and 15 percent of the industry-wide assets of taxable bond funds. Nearly all of the taxable bond funds with notional exposure that exceeded 150 percent were mutual funds – 182 taxable bond mutual funds with \$471 billion in assets.

We also examined the composition of funds that had values of the Notional test between 150 percent and 300 percent and found a disproportionate impact on taxable bond funds (Figure A3.b). Of funds with notional exposure between 150 percent and 300 percent, 62 percent of the number of funds were alternative funds and 29 percent were taxable bond funds. In terms of assets, however, taxable bond funds accounted for 79 percent of the \$275 billion in assets in funds with notional exposure between 150 percent and 300 percent. Although bond funds with Notional test values in this range are eligible to take the VaR test, it is of limited use for them – of the bond funds in this group that could perform the proposed VaR test, 59 percent failed.

The 300 percent notional exposure limit as part of the proposed Risk-Based Limit also has the greatest impact on taxable bond funds, as a group – 64 percent or 111 of the 173 funds with notional exposure greater than 300 percent were taxable bond funds (Figure A3.c). These funds represented 80 percent or \$269 billion of the \$338 billion in assets that exceeded 300 percent notional exposure. Overall, these bond funds with notional exposure in excess of 300 percent represented 6 percent of the industry-wide number and 8 percent of the industry-wide assets of taxable bond funds. Again, nearly all of the taxable bond funds that exceeded 300 percent notional exposure were mutual funds – 103 taxable bond mutual funds with \$262 billion in assets.

A. Alternative Funds

Figure A.4a shows the distribution of total net assets (top panel) and number of funds (bottom panel) by the value of the Notional test for all alternative funds. As noted in the DERA White Paper, alternative funds tend to be more prevalent users of derivatives by the nature of their investment strategies. Our study found that 95 percent of alternative funds used derivatives, financial commitments and/or other senior securities. These funds accounted for 88 percent of the assets of alternative funds in the ICI sample. About 45 percent of alternative funds with \$79 billion in assets representing 53 percent of assets in alternative funds in the ICI sample, exceeded the 150 percent Exposure-Based Limit.

The alternative category in Morningstar can be broken down into six sub-categories: multialternative, managed futures, market neutral, long/short equity, multicurrency, and leveraged/inverse using the Morningstar Category classification scheme. As shown in Figure A.4b, 71 percent of the 221 alternative funds that had notional exposure greater than 150 percent of their net assets were leveraged/inverse funds; however, these funds comprised only 26 percent of the \$79 billion in affected assets. Whereas, multialternative funds – funds that employ multiple alternative strategies in a single portfolio (*e.g.*, managed futures strategy, market neutral strategy, long/short equity strategy, and multicurrency strategy) – account for 40 percent of the assets of alternative funds with Notional

test values greater than 150 percent. Managed future funds represent 18 percent of the assets and 5 percent of the number of affected alternative funds.

B. Taxable Bond Funds

Figure A.5a shows the distribution of total net assets (top panel) and number of funds (bottom panel) by the value of the Notional test for all taxable bond funds. Taxable bond funds also tend to make more use of derivatives to manage interest rate risk and credit exposure in their portfolios. Our study found that nearly 70 percent of taxable bond funds used derivatives, financial commitments and/or other senior securities. These funds accounted for 74 percent of the assets of taxable bond funds in the ICI sample. About 15 percent of taxable bond funds with \$485 billion in assets representing 17 percent of assets in taxable bond funds in the ICI sample, exceeded the 150 percent Exposure-Based Limit.

When we examined taxable bond funds with notional exposure in excess of 150 percent in more detail using the Morningstar Category classification scheme, we found that 41 percent of their assets were in intermediate term bond funds, which are generally considered “plain vanilla” bond funds (Figure A.5b). Only 16 percent of affected taxable bond fund assets were in “nontraditional” bond funds.¹⁰

¹⁰ Morningstar defines nontraditional bond funds as funds that pursue strategies divergent in one or more ways from conventional practice in the broader bond-fund universe. Funds in this group may follow “absolute return” strategies that seek to avoid losses and produce returns that are uncorrelated with the overall bond market. Others may have “unconstrained” portfolios that have more flexibility to invest tactically across a wide range of individual sectors, including high-yield and foreign debt. These funds typically have broad freedom to manage interest rate sensitivity, but attempt to manage those exposures to minimize volatility. Other funds may attempt to minimize volatility by maintaining short or ultra-short duration portfolios, while attempting to generate high returns by taking on significant credit and foreign bond market risk. Funds in the nontraditional bond category often will use credit default swaps and other fixed income derivatives to a significant level within their portfolios.

Figure A.1a: Sample Representation, All Funds¹

Year-end, 2015

Total net assets in billions of dollars

U.S. category group²	ICI sample	Industry³	ICI sample as percent of industry
U.S. equity	5,197	6,677	78%
International equity	2,071	2,642	78%
Sector equity	611	708	86%
Taxable bond	2,790	3,274	85%
Municipal bond	579	702	82%
Allocation	2,083	2,755	76%
Alternative	148	211	70%
Commodities	21	22	94%
Not reported ⁴	79		
Total	13,579	16,991	80%

Number of funds

U.S. category group²	ICI sample	Industry³	ICI sample as percent of industry
U.S. equity	1,622	3,205	51%
International equity	1,044	2,110	49%
Sector equity	546	693	79%
Taxable bond	1,331	1,989	67%
Municipal bond	552	797	69%
Allocation	960	1,750	55%
Alternative	497	651	76%
Commodities	35	47	74%
Not reported ⁴	74		
Total	6,661	11,242	59%

¹“Funds” means all long-term mutual funds (including variable annuities), ETFs registered under the Investment Company Act of 1940, and closed-end funds. Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

²Investment objective classification scheme from Morningstar.

³Industry totals from ICI internal data categorized into Morningstar “U.S. category group” classification scheme.

⁴Morningstar “US Category Group” and “Morningstar Category” for fund not reported on ICI survey.

Sources: Investment Company Institute and Morningstar

Figure A.1b: Sample Representation, Mutual Funds¹
Year-end, 2015

Total net assets in billions of dollars

U.S. category group²	ICI sample	Industry³	ICI sample as percent of industry
U.S. equity	4,276	5,705	75%
International equity	1,630	2,151	76%
Sector equity	356	366	97%
Taxable bond	2,403	2,874	84%
Municipal bond	487	594	82%
Allocation	2,060	2,729	75%
Alternative	117	180	65%
Commodities	20	21	97%
Not reported ⁴	78		
Total	11,428	14,620	78%

Number of funds

U.S. category group²	ICI sample	Industry³	ICI sample as percent of industry
U.S. equity	1,378	2,847	48%
International equity	706	1,498	47%
Sector equity	318	360	88%
Taxable bond	1,014	1,620	63%
Municipal bond	356	574	62%
Allocation	910	1,668	55%
Alternative	298	431	69%
Commodities	31	42	74%
Not reported ⁴	72		
Total	5,083	9,040	56%

¹ “Mutual funds” means all long-term mutual funds (including variable annuities). Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

² Investment objective classification scheme from Morningstar.

³ Industry totals from ICI internal data categorized into Morningstar “U.S. category group” classification scheme.

⁴ Morningstar “US Category Group” and “Morningstar Category” for fund not reported on ICI survey.

Sources: Investment Company Institute and Morningstar

Figure A.1c: Sample Representation, Exchange-Traded Funds (ETFs)¹
Year-end, 2015

Total net assets in billions of dollars

U.S. category group²	ICI sample	Industry³	ICI sample as percent of industry
U.S. equity	910	936	97%
International equity	430	472	91%
Sector equity	247	309	80%
Taxable bond	330	336	98%
Municipal bond	15	19	77%
Allocation	6	7	89%
Alternative	30	31	98%
Commodities	<0.5	1	45%
Total	1,968	2,111	93%

Number of funds

U.S. category group²	ICI sample	Industry³	ICI sample as percent of industry
U.S. equity	227	303	75%
International equity	311	549	57%
Sector equity	210	270	78%
Taxable bond	207	225	92%
Municipal bond	26	36	72%
Allocation	17	37	46%
Alternative	198	219	90%
Commodities	4	5	80%
Total	1,200	1,644	73%

¹“Exchange-traded funds” means all ETFs registered under the Investment Company Act of 1940. Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

²Investment objective classification scheme from Morningstar.

³Industry totals from ICI internal data categorized into Morningstar “U.S. category group” classification scheme.

Sources: Investment Company Institute and Morningstar

Figure A.1d: Sample Representation, Closed-End Funds

Year-end, 2015

Total assets¹ in billions of dollars

U.S. category group²	ICI sample	Industry³	ICI sample as percent of industry
U.S. equity	12	36	33%
International equity	11	19	60%
Sector equity	8	33	24%
Taxable bond	57	64	89%
Municipal bond	77	89	86%
Allocation	17	19	90%
Alternative	<0.5	<0.5	100%
Not reported ⁴	1		
Total net assets	183	260	70%

Number of funds

U.S. category group²	ICI sample	Industry³	ICI sample as percent of industry
U.S. equity	17	55	31%
International equity	27	63	43%
Sector equity	18	63	29%
Taxable bond	110	144	76%
Municipal bond	170	187	91%
Allocation	33	45	73%
Alternative	1	1	100%
Not reported ⁴	2		
Total net assets	378	558	68%

¹Includes preferred share classes.

²Investment objective classification scheme from Morningstar.

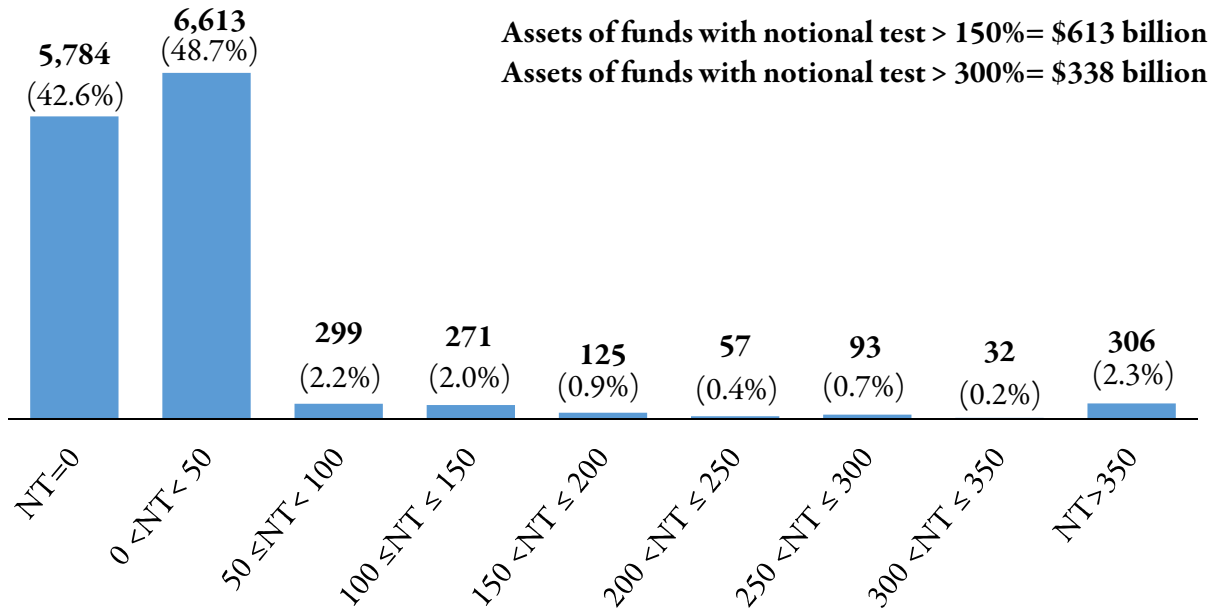
³Industry totals from ICI internal data categorized into Morningstar “U.S. category group” classification scheme.

Sources: Investment Company Institute and Morningstar

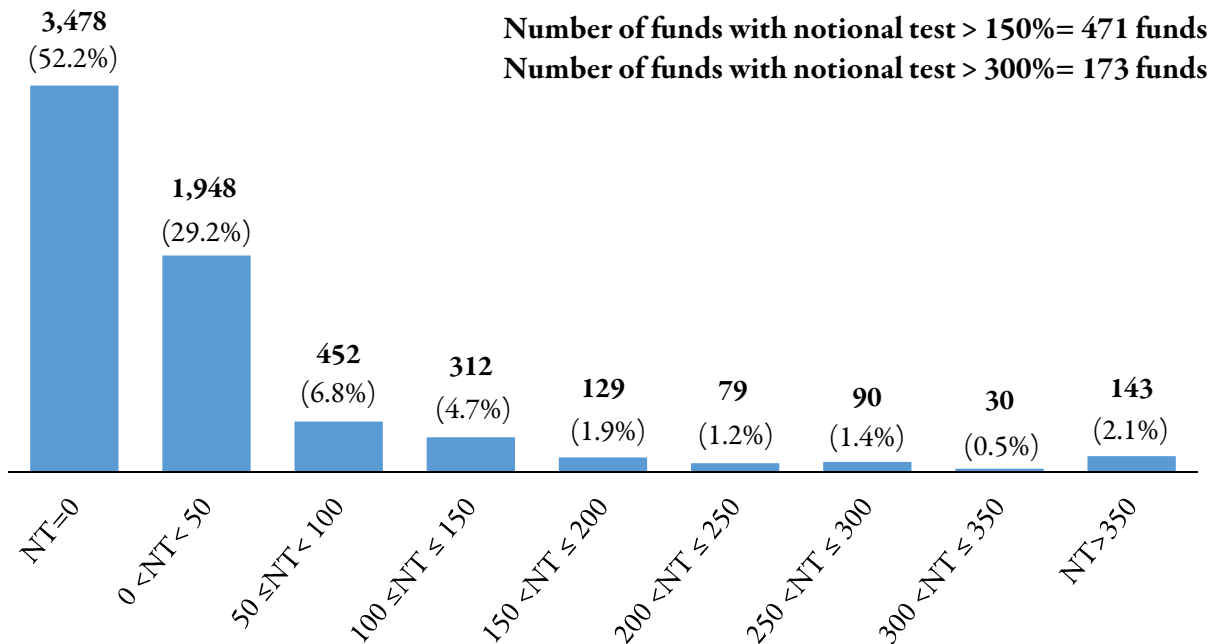
Figure A.2a: Distribution of All Funds¹ by Value of Notional Test²

Year-end, 2015

Total net assets in billions of dollars



Number of funds



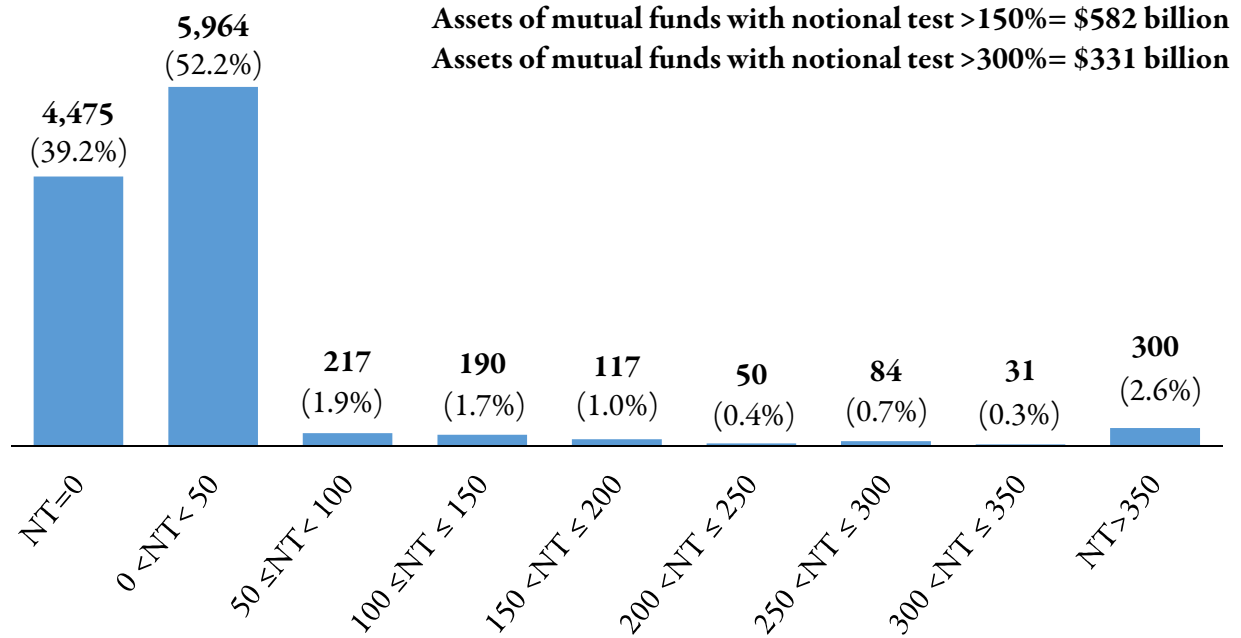
¹“Funds” means all long-term mutual funds (including variable annuities), ETFs registered under the Investment Company Act of 1940, and closed-end funds. Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

²Notional test (NT) as defined in proposed Rule 18f-4.

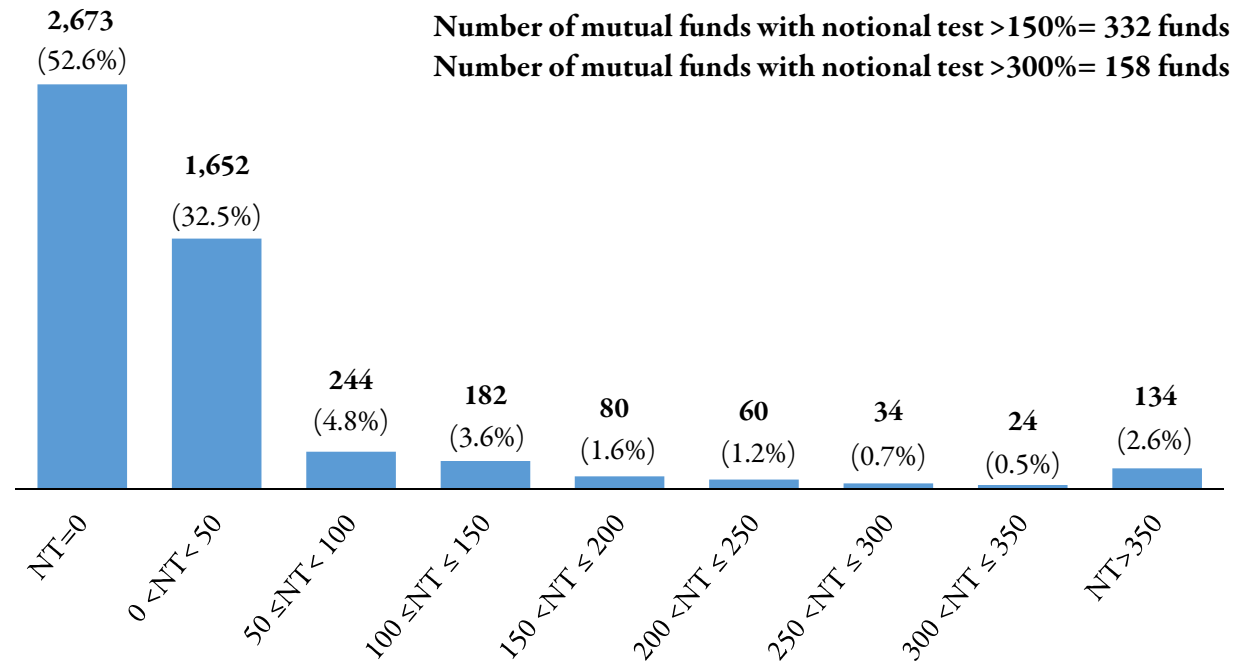
Figure A.2b: Distribution of Mutual Funds¹ by Value of Notional Test²

Year-end, 2015

Total net assets in billions of dollars



Number of funds

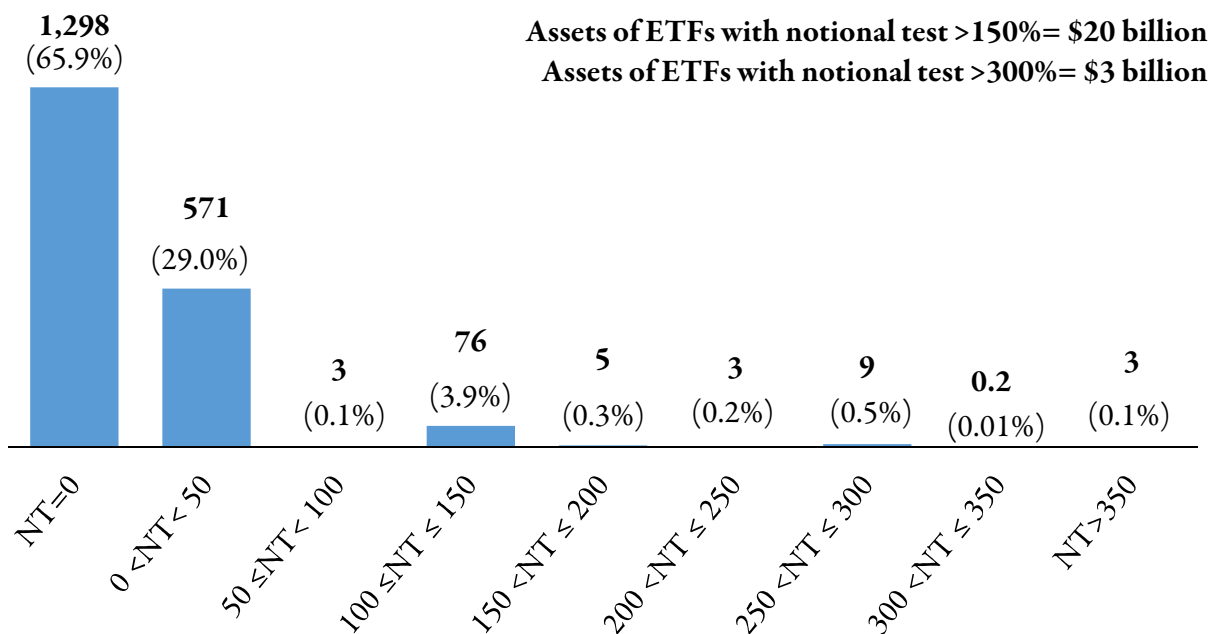


¹ "Mutual funds" means all long-term mutual funds (including variable annuities). Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

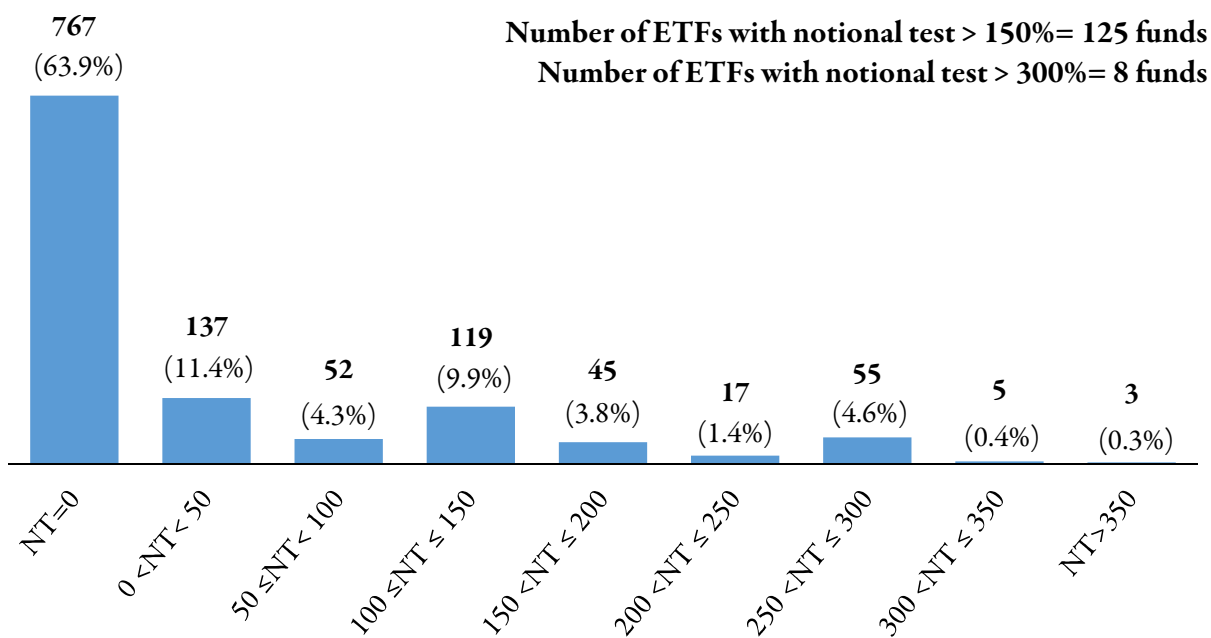
² Notional test (NT) as defined in proposed Rule 18f-4.

Figure A.2c: Distribution of Exchange-Traded Funds (ETFs)¹ by Value of Notional Test²
Year-end, 2015

Total net assets in billions of dollars



Number of funds



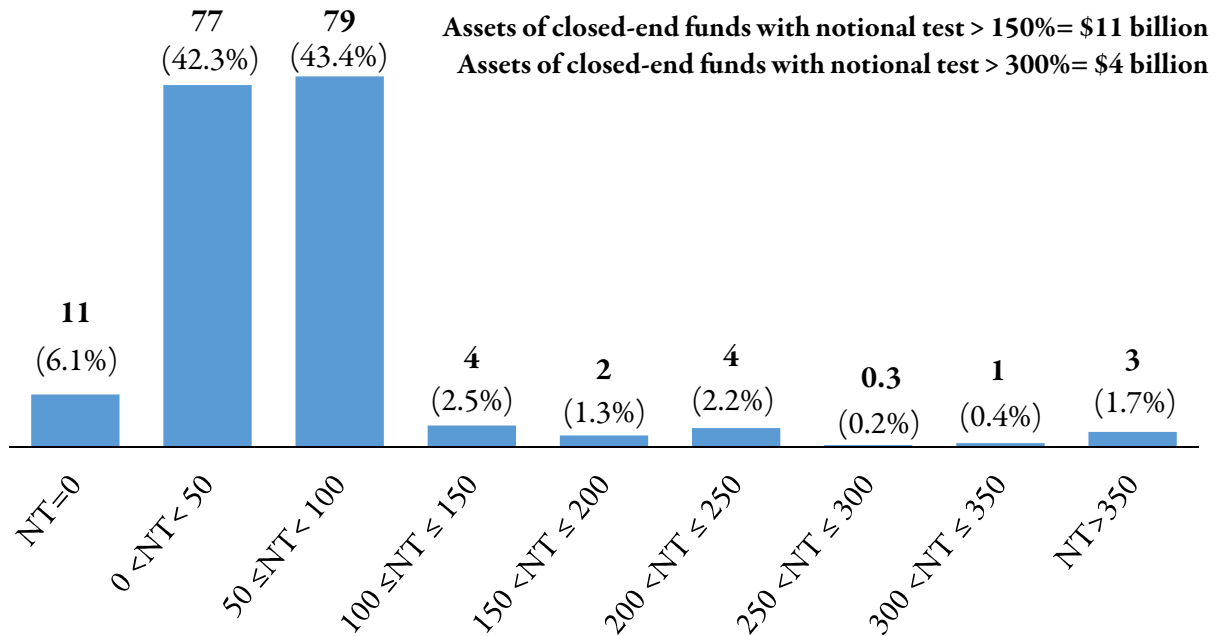
¹“Exchange-traded funds” means all ETFs registered under the Investment Company Act of 1940. Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

²Notional test (NT) as defined in proposed Rule 18f-4.

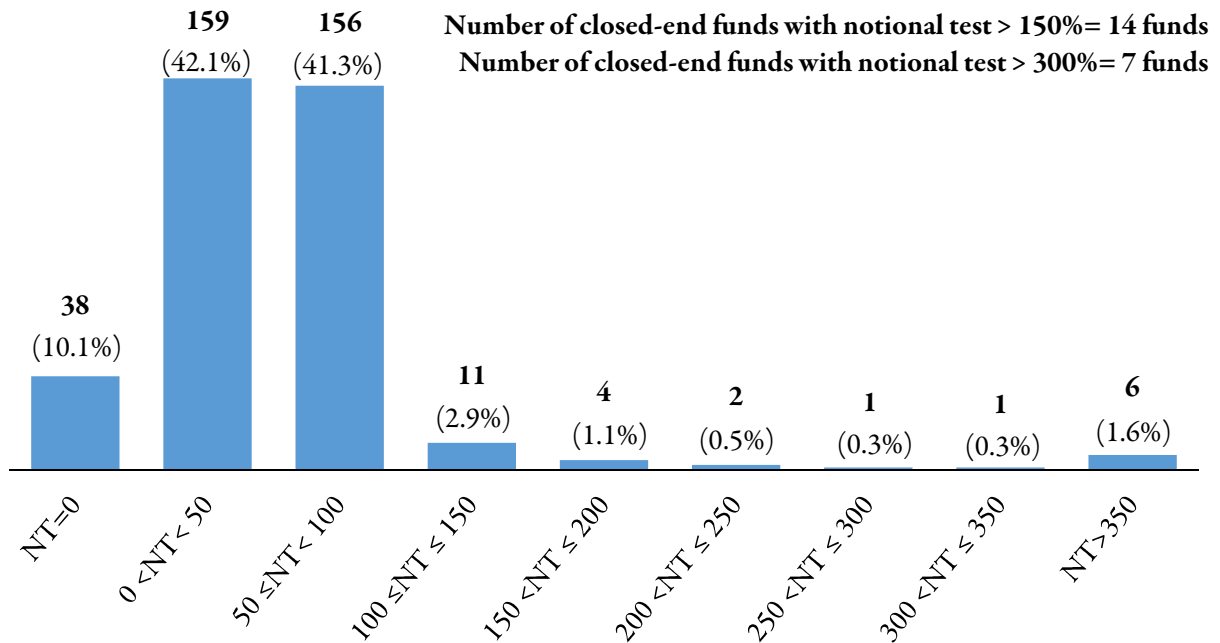
Figure A.2d: Distribution of Closed-End Funds by Value of Notional Test²

Year-end, 2015

Total assets¹ in billions of dollars



Number of funds

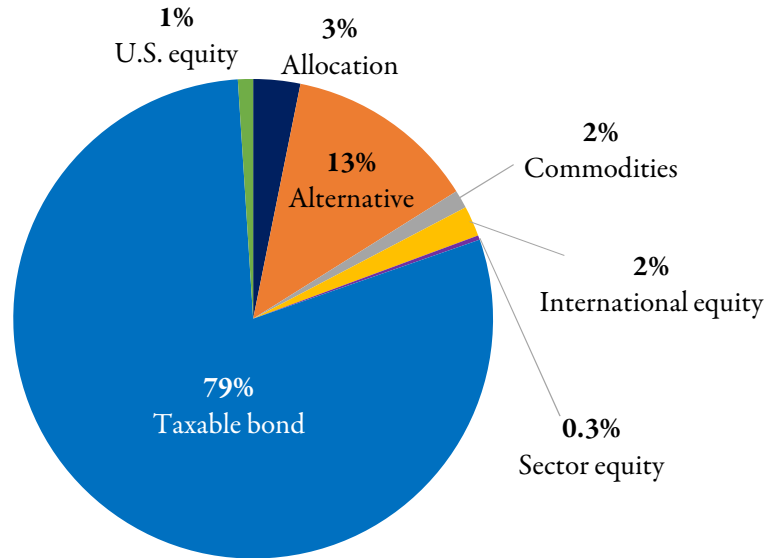


¹ Includes preferred share classes.

² Notional test (NT) as defined in proposed Rule 18f-4.

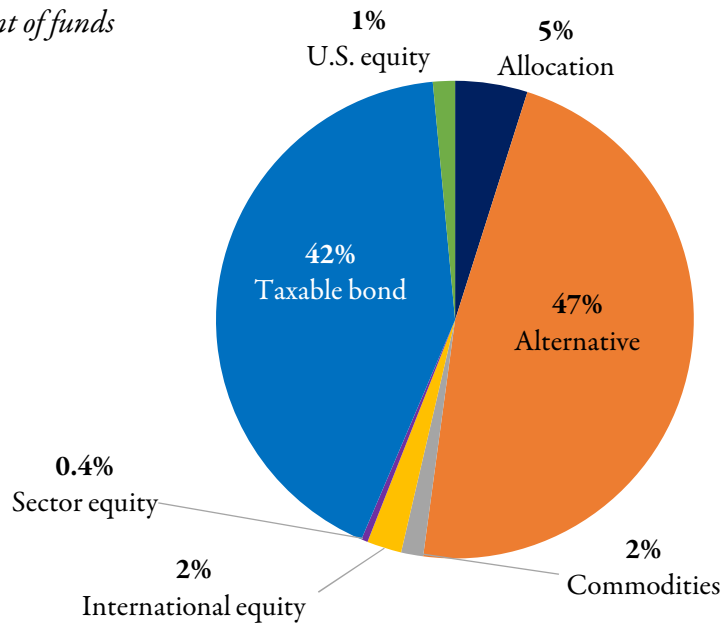
Figure A.3a: Distribution by U.S. Category Group¹ of All Funds² With Notional Test Greater Than 150 Percent
Year-end, 2015

Percent of total net assets



Total net assets: \$613 billion

Percent of funds

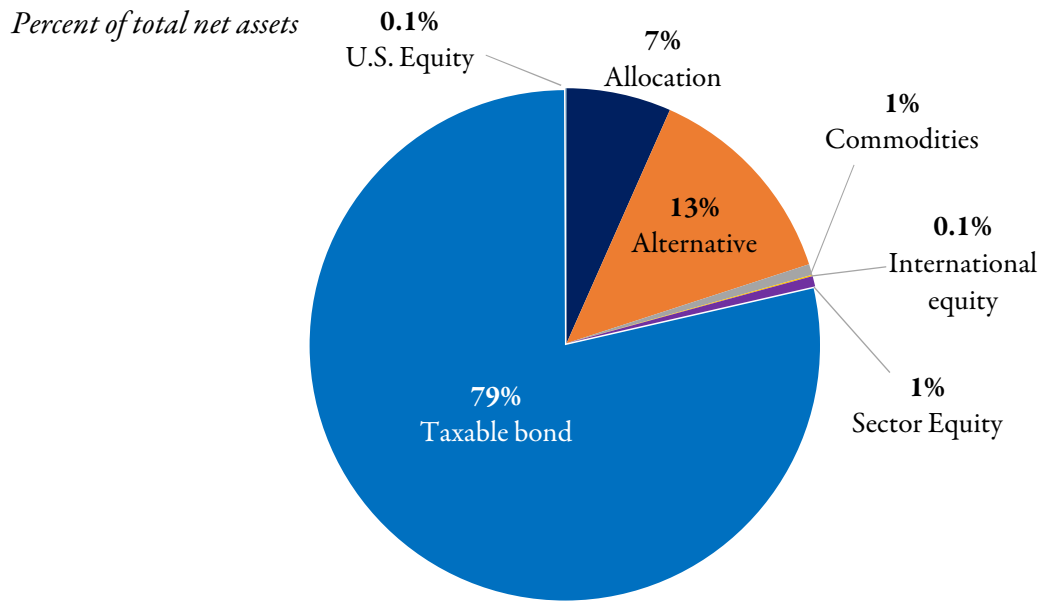


Number of funds: 471

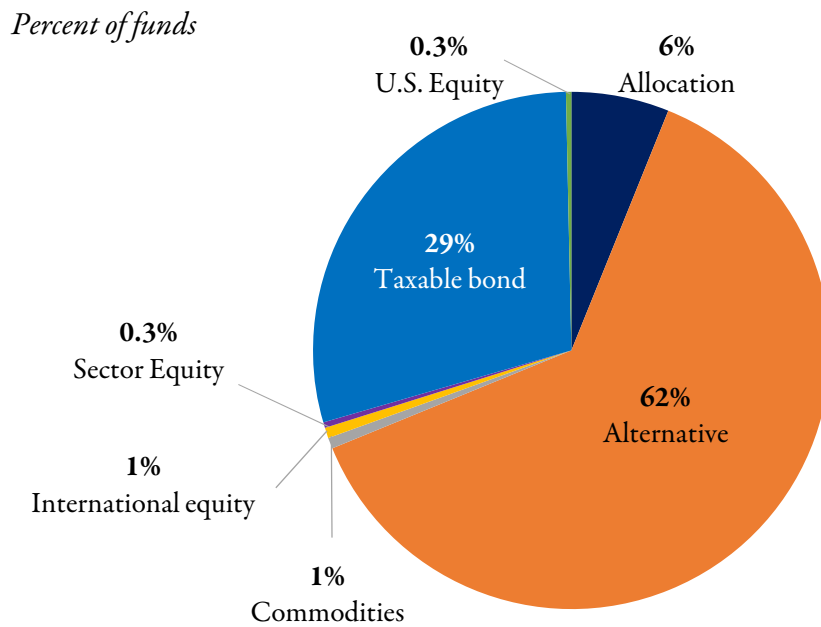
¹ Investment objective classification scheme from Morningstar.

² "Funds" means all long-term mutual funds (including variable annuities), ETFs registered under the Investment Company Act of 1940, and closed-end funds. Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

Figure A.3b: Distribution by U.S. Category Group¹ of All Funds² With Notional Test Between 150 Percent and 300 Percent
Year-end, 2015



Total net assets: \$275 billion



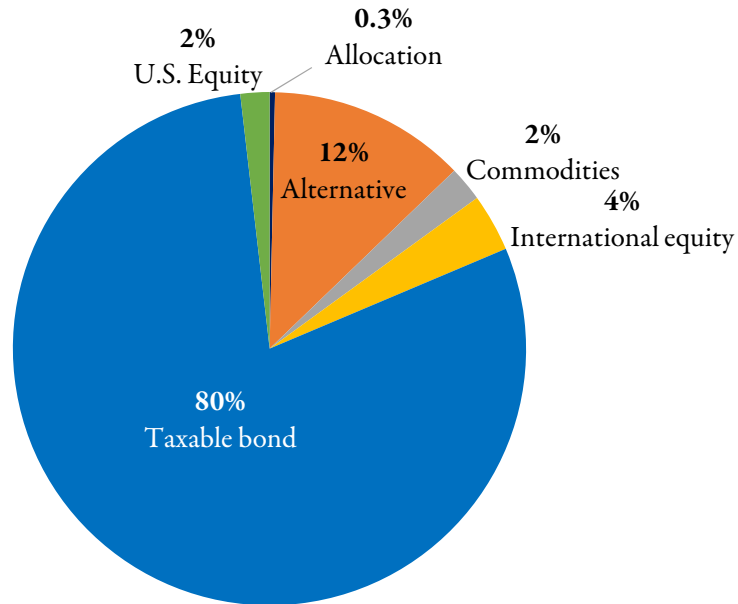
Number of funds: 298

¹ Investment objective classification scheme from Morningstar.

² "Funds" means all long-term mutual funds (including variable annuities), ETFs registered under the Investment Company Act of 1940, and closed-end funds. Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

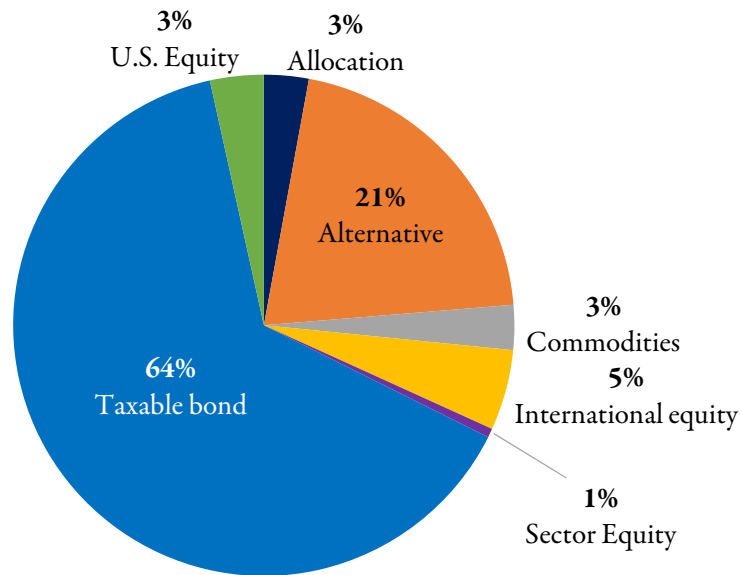
Figure A.3c: Distribution by U.S. Category Group¹ of All Funds² With Notional Test Greater Than 300 Percent
Year-end, 2015

Percent of total net assets



Total net assets: \$338 billion

Percent of funds



Number of funds: 173

¹ Investment objective classification scheme from Morningstar.

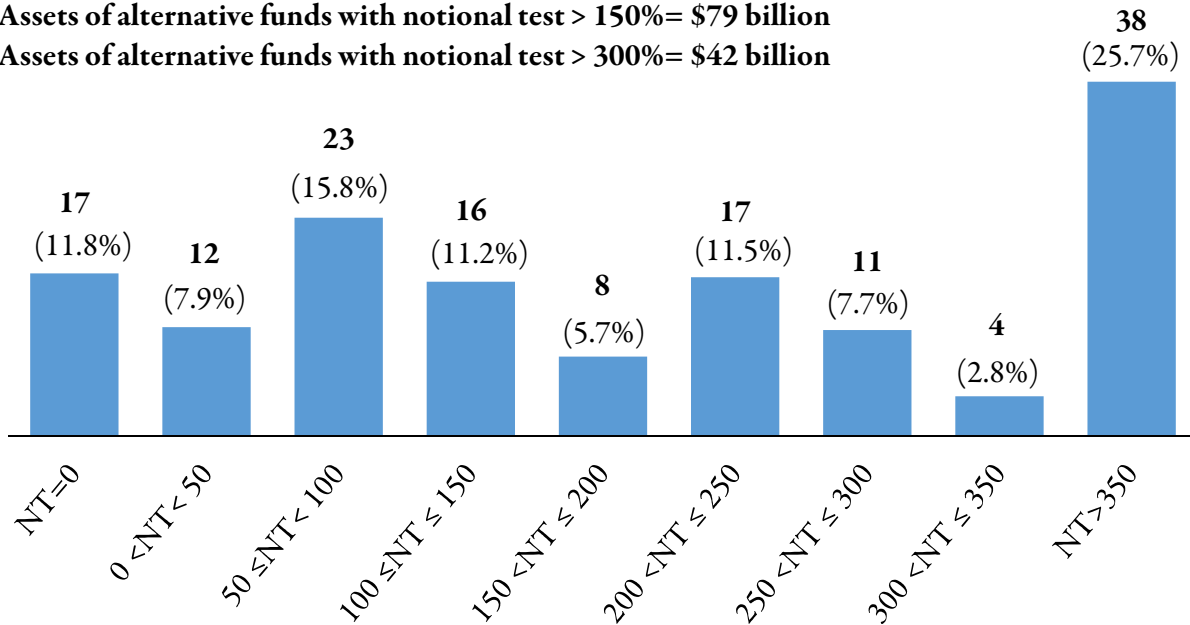
² "Funds" means all long-term mutual funds (including variable annuities), ETFs registered under the Investment Company Act of 1940, and closed-end funds. Data also include funds that invest primarily in other funds (commonly referred to as funds-of-funds).

Figure A.4a: Distribution of Alternative Funds¹ by Value of Notional Test²
Year-end, 2015

Total net assets in billions of dollars

Assets of alternative funds with notional test > 150% = \$79 billion

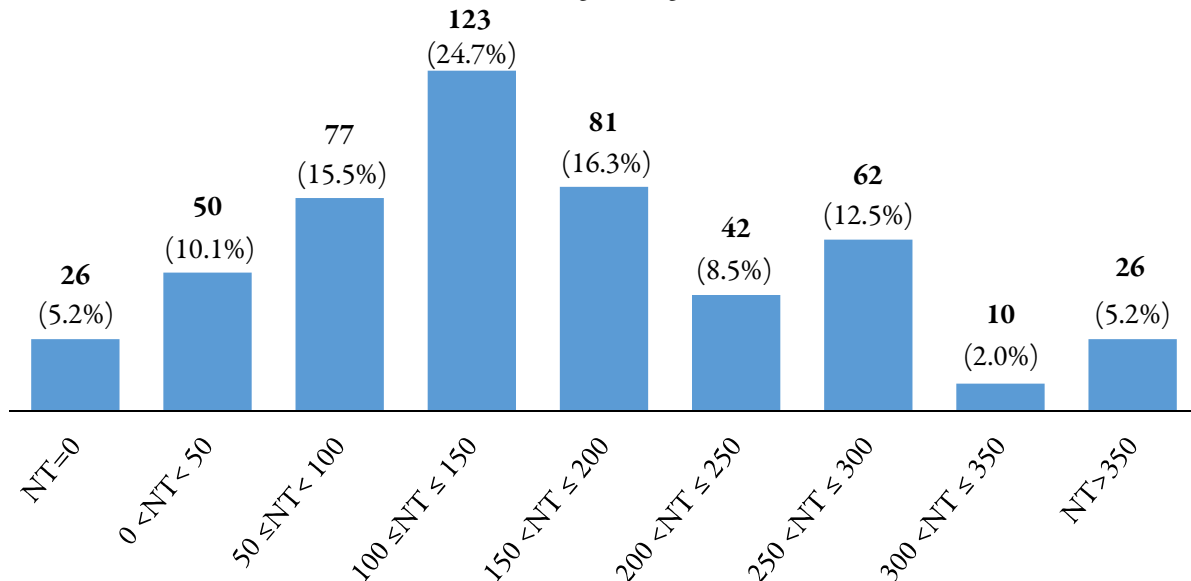
Assets of alternative funds with notional test > 300% = \$42 billion



Number of funds

Number of alternative funds with notional test > 150% = 221 funds

Number of alternative funds with notional test > 300% = 36 funds

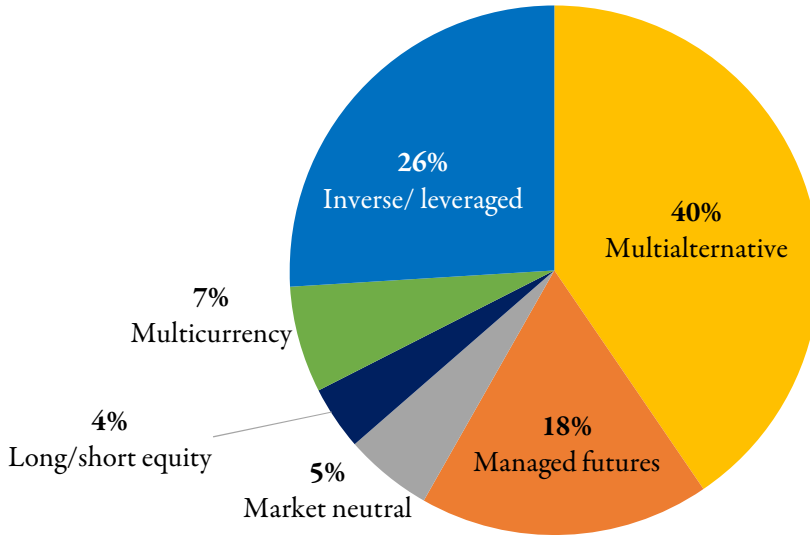


¹“Alternative funds” includes funds categorized as multialternative, managed futures, market neutral, long/short equity, multicurrency, and inversed/leveraged.

²Notional test (NT) as defined in proposed Rule 18f-4.

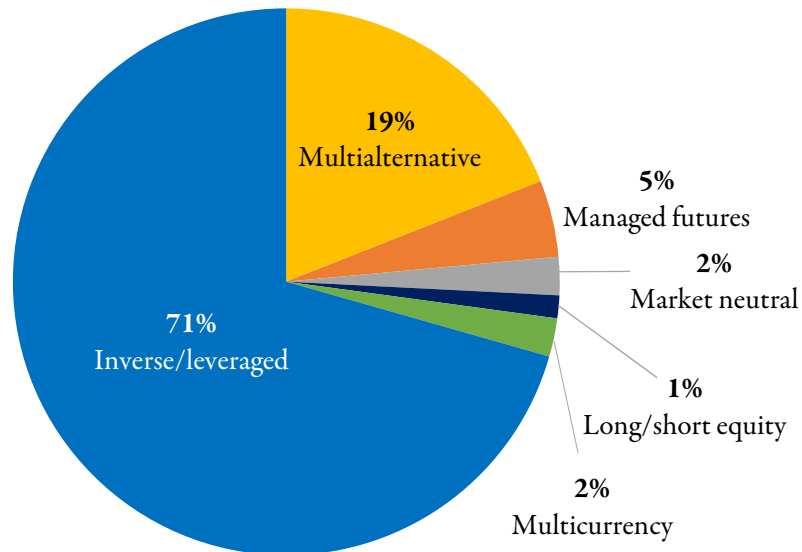
Figure A.4b: Distribution by Morningstar Category¹ of Alternative Funds With Notional Test > 150 Percent
Year-end, 2015

Percent of total net assets



Total net assets: \$79 billion

Percent of funds

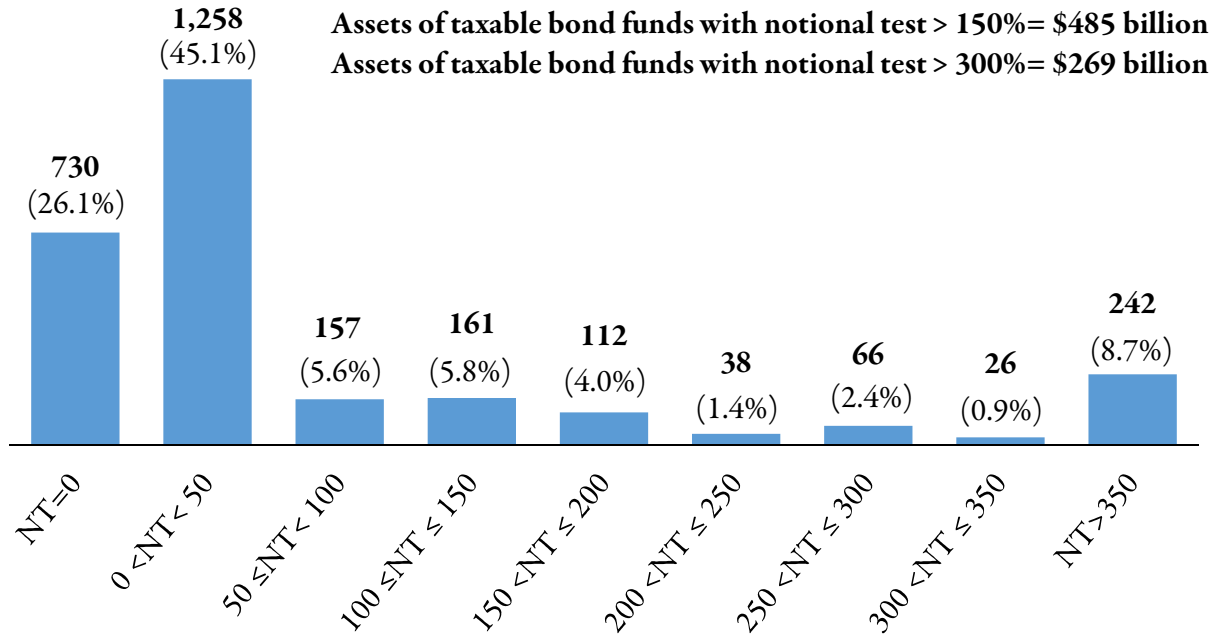


Number of funds: 221

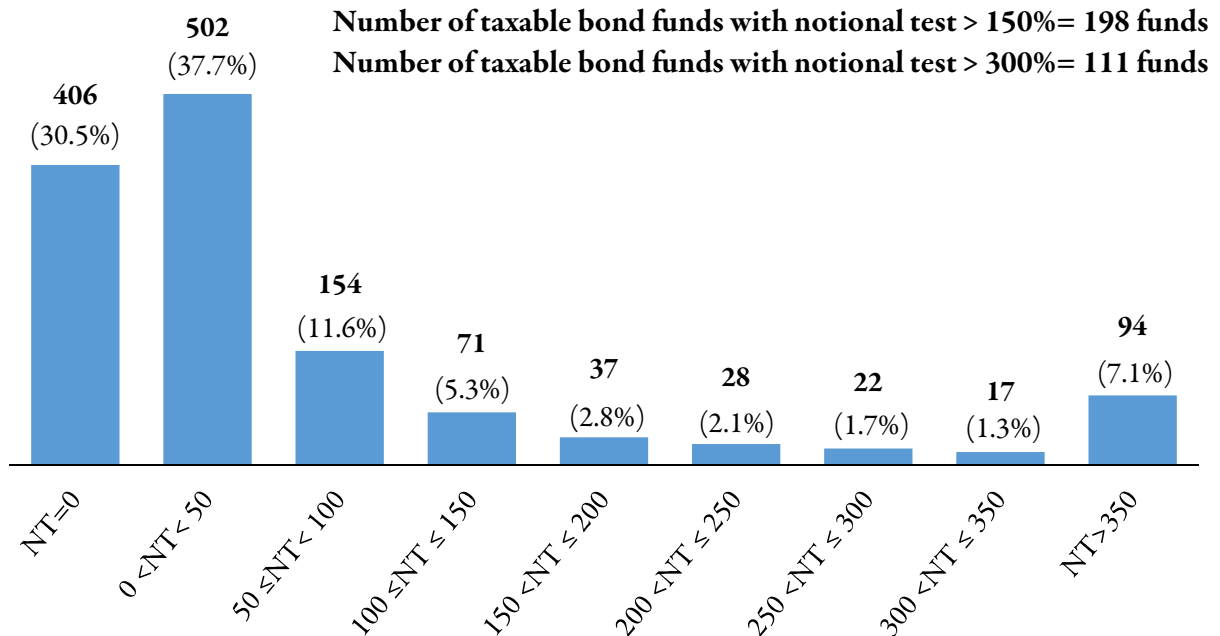
¹ More detailed investment objective provided by Morningstar.

Figure A.5a: Distribution of Taxable Bond Funds¹ by Value of Notional Test²
Year-end, 2015

Total net assets in billions of dollars



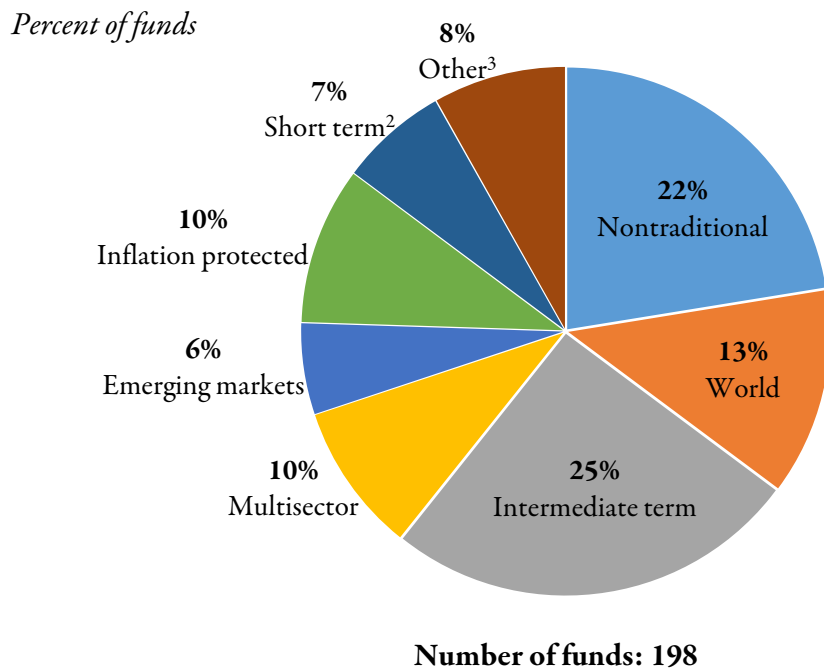
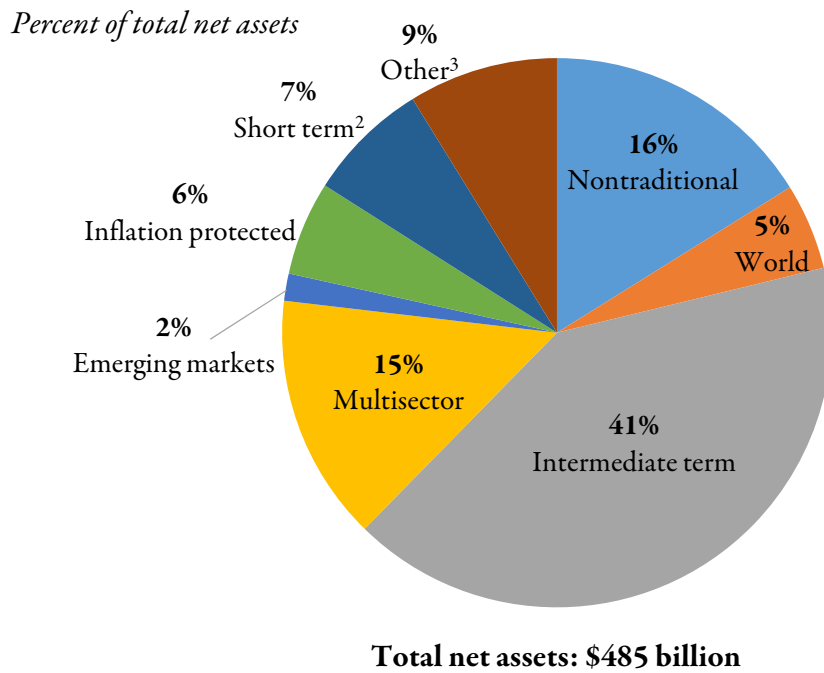
Number of funds



¹“Taxable bond funds” includes funds categorized as nontraditional bond, world bond, intermediate-term bond, multisector bond, emerging markets bond, inflation protected bond, short-term bond, ultrashort bond, corporate bond, high-yield bond, intermediate government bond, and long-term bond.

²Notional test (NT) as defined in proposed Rule 18f-4.

Figure A.5b: Distribution by Morningstar Category¹ of Taxable Bond Funds With Notional Test > 150%
Year-end, 2015



¹ More detailed investment objective provided by Morningstar.

² "Short term" are funds categorized as short-term and ultrashort bond.

³ "Other" are funds categorized as corporate, high-yield, intermediate government, and long-term bond.

APPENDIX B

Margin Values for Eligible Non-Cash Margin Collateral under the Prudential Regulators Margin Rules and the CFTC Margin Rules

Asset Class	Discount (%)
Cash in same currency as derivative obligation	0.0
Eligible government and related debt (<i>e.g.</i> , central bank, multilateral development bank, U.S. Government-sponsored enterprise (“GSE”) securities): residual maturity less than one-year	0.5
Eligible government and related debt (<i>e.g.</i> , central bank, multilateral development bank, GSE securities): residual maturity between one and five years	2.0
Eligible government and related debt (<i>e.g.</i> , central bank, multilateral development bank, GSE securities): residual maturity greater than five years	4.0
Eligible GSE debt securities: residual maturity less than one year	1.0
Eligible GSE debt securities: residual maturity between one and five years	4.0
Eligible GSE debt securities: residual maturity greater than five years	8.0
Other eligible publicly traded debt: residual maturity less than one-year	1.0
Other eligible publicly traded debt: residual maturity between one and five years	4.0
Other eligible publicly traded debt: residual maturity greater than five years	8.0
Equities included in S&P 500 or related index	15.0
Equities included in S&P 1500 Composite or related index but not S&P 500 or related index	25.0
Gold	15.0
Additional (additive) haircut on asset in which the currency of the derivative obligation differs from that of the collateral asset	8.0

Sources: *Margin and Capital Requirements for Covered Swap Entities*, 80 Fed. Reg. 74839 (Nov. 30, 2015) (final rule) at Appendix B; *Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants*, 81 Fed. Reg. 636 (Jan. 2, 2016) (final rule) at Section 23.156(a)(3)(i)(B).

APPENDIX C

Standardized Minimum Initial Margin Requirements for Non-Cleared Swaps and Non-Cleared Security-Based Swaps

Asset Class	Gross Initial Margin (% of Notional Exposure)
Credit: 0–2 year duration	2%
Credit: 2–5 year duration	5%
Credit: 5+ year duration	10%
Commodity	15%
Equity	15%
Foreign Exchange/Currency	6%
Cross Currency Swaps: 0–2 year duration	1%
Cross-Currency Swaps: 2–5 year duration	2%
Cross-Currency Swaps: 5+ year duration	4%
Interest Rate: 0–2 year duration	1%
Interest Rate: 2–5 year duration	2%
Interest Rate: 5+ year duration	4%
Other	15%

Sources: *Margin and Capital Requirements for Covered Swap Entities*, 80 Fed. Reg. 74839 (Nov. 30, 2015) (final rule) at Appendix A; *Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants*, 81 Fed. Reg. 636 (Jan. 2, 2016) (final rule) at Section 23.154(c).

APPENDIX D

Conversion Factor Matrix for Security-Based Swaps and Swaps Used to Determine “Major Swap Participants” and “Major Security-Based Swap Participants”

Asset Class	Discount Factor (% of Notional Amount)
<i>Security-Based Swaps</i>	
Debt: 1 year or less	10%
Debt: 1-5 years	10%
Debt: 5+ years	10%
Equity & Other: 1 year or less	6%
Equity & Other: 1-5 years	8%
Equity & Other: 5+ years	10%
<i>Swaps</i>	
Interest Rate: 1 year or less	0%
Interest Rate: 1-5 years	0.5%
Interest Rate: 5+ years	1.5%
FX & Gold: 1 year or less	1%
FX & Gold: 1-5 years	5%
FX & Gold: 5 + years	7.5%
Precious Metals: 1 year or less	7%
Precious Metals: 1-5 years	7%
Precious Metals: 5 + years	8%
Other Commodities: 1 year or less	10%
Other Commodities: 1-5 years	12%
Other Commodities: 5 + years	15%
Credit: 1 year or less	10%
Credit: 1-5 years	10%
Credit: 5+ years	10%
Equity: 1 year or less	6%
Equity: 1-5 years	8%
Equity: 5+ years	10%

Source: 17 C.F.R. § 1.3(jj)(3)(ii)(Table 1 – Conversion Factor Matrix for Swaps); 17 C.F.R. 240.3a67-3(c)(2).