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Use of Derivatives by Registered Investment Companies and Business
Development Companies; Proposed Rule

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 270 and 274

[Release No. IC-31933; File No. S7-24-15]

RIN 3235-AL60

Use of Derivatives by Registered Investment Companies and Business Development Companies

AGENCY: Securities and Exchange Commission.

ACTION: Proposed rule.

SUMMARY: The Securities and Exchange Commission (the “Commission” or “SEC”) is proposing rule 18f-4, a new exemptive rule under the Investment Company Act of 1940 (the “Investment Company Act” or “Act”) designed to address the investor protection purposes and concerns underlying section 18 of the Act and to provide an updated and more comprehensive approach to the regulation of funds’ use of derivatives. The proposed rule would permit mutual funds, exchange-traded funds (“ETFs”), closed-end funds, and companies that have elected to be treated as business development companies (“BDCs”) under the Act (collectively, “funds”) to enter into derivatives transactions and financial commitment transactions (as those terms are defined in the proposed rule) notwithstanding the prohibitions and restrictions on the issuance of senior securities under section 18 of the Act, provided that the funds comply with the conditions of the proposed rule. A fund that relies on the proposed rule in order to enter into derivatives transactions would be required to: comply with one of two alternative portfolio limitations designed to impose a limit on the amount of leverage the fund may obtain through derivatives transactions and other senior securities transactions; manage the risks associated with the fund’s derivatives transactions by maintaining an amount of certain assets, defined in the proposed rule as “qualifying coverage assets,” designed to enable the fund to meet its obligations under its derivatives transactions; and, depending on the extent of its derivatives usage, establish a formalized derivatives risk management program. A fund that relies on the proposed rule in order to enter into financial commitment transactions would be required to maintain qualifying coverage assets equal in value to the fund’s full obligations under those transactions. The Commission also is proposing amendments to proposed Form N-PORT and proposed Form N-CEN that would require

reporting and disclosure of certain information regarding a fund’s derivatives usage.

DATES: Comments should be received on or before March 28, 2016.

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission’s Internet comment form (<http://www.sec.gov/rules/concept.shtml>);
- Send an email to rule-comments@sec.gov. Please include File Number S7-24-15 on the subject line; or
- Use the Federal eRulemaking Portal (<http://www.regulations.gov>). Follow the instructions for submitting comments.

Paper Comments

- Send paper comments to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number S7-24-15. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet Web site (<http://www.sec.gov/rules/proposed.shtml>). Comments also are available for Web site viewing and printing in the Commission’s Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make publicly available.

Studies, memoranda or other substantive items may be added by the Commission or staff to the comment file during this rulemaking. A notification of the inclusion in the comment file of any such materials will be made available on the Commission’s Web site. To ensure direct electronic receipt of such notifications, sign up through the “Stay Connected” option at www.sec.gov to receive notifications by email.

FOR FURTHER INFORMATION CONTACT:

With respect to proposed rule 18f-4, Adam Bolter, Jamie Lynn Walter, or Erin C. Loomis, Senior Counsels; Thoreau A. Bartmann, Branch Chief; Brian McLaughlin Johnson, Senior Special Counsel; or Aaron Schlaphoff or Danforth Townley, Attorney Fellows; and with respect to the proposed amendments to Form N-PORT and

Form N-CEN, Jacob D. Krawitz, Senior Counsel, or Sara Cortes, Senior Special Counsel, at (202)-551-6792, Investment Company Rulemaking Office, Division of Investment Management, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-8549.

SUPPLEMENTARY INFORMATION: The Commission is proposing rule 18f-4 [17 CFR 270.18f-4] under the Investment Company Act of 1940 [15 U.S.C. 80a] and amendments to proposed Form N-PORT and proposed Form N-CEN.

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I. Introduction

The activities and capital structures of funds are regulated extensively under the Investment Company Act,¹ Commission rules, and Commission guidance.² The use of derivatives by

funds implicates certain requirements under the Investment Company Act, including section 18 of that Act. As discussed in more detail below, section 18 limits a fund's ability to obtain leverage or incur obligations to persons other than the fund's common shareholders through the issuance of senior securities, as defined in that section.

Derivatives may be broadly described as instruments or contracts whose value is based upon, or derived from, some other asset or metric (referred to as the "reference asset," "underlying asset" or "underlier").³ Funds employ derivatives for a variety of purposes, including to: Seek higher returns through increased investment exposures; hedge interest rate, credit, and other risks in their investment portfolios; gain access to certain markets; and achieve greater transaction efficiency.⁴ At the same time, derivatives can raise risks for a fund relating to, for example, leverage, illiquidity (particularly with respect to complex over-the-counter ("OTC") derivatives), counterparties, and the ability of the fund to meet its obligations.⁵

We are committed, as the primary regulator of funds, to designing regulatory programs that respond to the risks associated with the increasingly complex portfolio composition and operations of the asset management

transactions) must comply with all other applicable statutory and regulatory requirements, such as other federal securities law provisions, the Internal Revenue Code (the "IRC"), Regulation T of the Federal Reserve Board ("Regulation T"), and the rules and regulations of the Commodity Futures Trading Commission (the "CFTC"). See also Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law 111-203, 124 Stat. 1376 (2010) (the "Dodd-Frank Act"), available at <http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf>.

³ See Use of Derivatives by Investment Companies under the Investment Company Act of 1940, Investment Company Act Release No. 29776 (Aug. 31, 2011) [76 FR 55237 (Sept. 7, 2011)] ("Concept Release"), at n.3.

⁴ See Concept Release, *supra* note 3, at n.5.

⁵ See Concept Release, *supra* note 3, at n.6. As discussed in Open-End Fund Liquidity Risk Management Programs; Swing Pricing; Re-Opening of Comment Period for Investment Company Reporting Modernization Release, Investment Company Act Release No. 31835 (Sept. 22, 2015) [80 FR 62273 (Oct. 15, 2015)] ("Liquidity Release"), long-standing Commission guidelines generally limit an open-end fund's aggregate holdings of "illiquid" assets to 15% of the fund's net assets. Under these guidelines, an asset is considered illiquid if it cannot be sold or disposed of in the ordinary course of business within seven days at approximately the value at which the fund has valued the investment. These guidelines apply to all investments (including derivatives) held by an open-end fund. Proposed rule 22e-4, which we proposed in September 2015, would codify this standard along with other requirements that are designed to promote effective liquidity risk management for open-end funds.

industry. The dramatic growth in the volume and complexity of the derivatives markets over the past two decades, and the increased use of derivatives by certain funds,⁶ led us to initiate a review of funds' use of derivatives under the Investment Company Act to evaluate whether the regulatory framework, as it applied to funds' use of derivatives, continues to fulfill the purposes and policies underlying the Act and is consistent with investor protection. We published a Concept Release on funds' use of derivatives in 2011 (the "Concept Release") to assist with this review and solicit public comment on the current regulatory framework.⁷ As noted in the Concept Release, our staff has been exploring the benefits, risks, and costs associated with funds' use of derivatives. Our staff's review of these and other matters, together with input from commenters on the Concept Release and others, have informed our consideration of the regulation of funds' use of derivatives, including in particular whether funds' current practices, based on their application of Commission and staff guidance, are consistent with the investor protection purposes and concerns underlying section 18 of the Investment Company Act.

Today, we are proposing new rule 18f-4, which is designed to address the investor protection purposes and concerns underlying section 18 and to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives transactions and other transactions that implicate section 18 in light of the dramatic growth in the volume and complexity of the derivatives markets over the past two decades and the increased use of derivatives by certain funds. As discussed in more detail below, the proposed rule would permit a fund to enter into derivatives and financial commitment transactions, notwithstanding the prohibitions and restrictions on the issuance of senior securities under section 18 of the Act, provided that the fund complies with the conditions of the proposed rule. The proposed rule's conditions are designed both to impose a limit on the leverage a fund may obtain through the use of derivatives and financial commitment transactions and other senior securities transactions, and to require the fund to have assets available to meet its obligations arising from those transactions, both of which are central

⁶ See Concept Release, *supra* note 3, at n.7. See also *infra* section II.

⁷ See Concept Release, *supra* note 3.

¹ 15 U.S.C. 80a. Unless otherwise noted, all references to statutory sections are to the Investment Company Act, and all references to rules under the Investment Company Act, including proposed rule 18f-4, will be to title 17, part 270 of the Code of Federal Regulations, 17 CFR part 270.

² Our staff has also issued no-action and other letters that relate to fund use of derivatives. In addition to Investment Company Act provisions, funds using derivatives (and financial commitment

investor protection purposes and concerns underlying section 18. The proposed rule also would require funds that engage in more than a limited amount of derivatives transactions or that use certain complex derivatives transactions, as defined in the proposed rule, to establish formalized risk management programs to manage the risks associated with such transactions.

II. Background

A. Background Concerning the Use of Derivatives by Funds

As noted above, derivatives may be broadly described as instruments or contracts whose value is based upon, or derived from, some reference asset. Reference assets can include, for example, stocks, bonds, commodities, currencies, interest rates, market indices, currency exchange rates, or other assets or interests.⁸ Common examples of derivatives used by funds include forwards, futures, swaps, and options.⁹

Derivatives are often characterized as either exchange-traded or OTC.¹⁰ Exchange-traded derivatives—such as futures,¹¹ certain options,¹² and options

on futures¹³—are standardized contracts traded on regulated exchanges, such as the Chicago Mercantile Exchange and the Chicago Board Options Exchange. OTC derivatives—such as certain swaps,¹⁴ non-exchange traded options, and combination products such as swaptions¹⁵ and forward swaps¹⁶—are contracts negotiated and entered into outside of an organized exchange. Unlike exchange-traded derivatives, OTC derivatives may be significantly customized, and may not be cleared by a central clearing organization. OTC derivatives that are not centrally cleared may involve greater counterparty credit risk, and may be more difficult to value, transfer, or liquidate than exchange-traded derivatives.¹⁷ The Dodd-Frank Act and rules thereunder seek to establish a comprehensive new regulatory framework for two broad categories of derivatives—swaps and security-based swaps. The framework is designed to reduce risk, increase transparency, and promote market integrity within the financial system.¹⁸

¹³ Options on futures generally trade on the same exchange as the relevant futures contract. When a call option on a futures contract is exercised, the holder acquires from the writer a long position in the underlying futures contract plus a cash amount equal to the excess of the futures price over the strike price. When a put option on a futures contract is exercised, the holder acquires a short position in the underlying futures contract plus a cash amount equal to the excess of the strike price over the futures price. See Concept Release, *supra* note 3, at n.24.

¹⁴ A “swap” is generally an agreement between two counterparties to exchange periodic payments based upon the value or level of one or more rates, indices, assets, or interests of any kind. For example, counterparties may agree to exchange payments based on different currencies or interest rates. See Concept Release, *supra* note 3, at n.25. Except as otherwise specified or the context otherwise requires, we use the term “swap” in this Release to refer collectively to swaps, as defined in section 1a of the Commodity Exchange Act, 7 U.S.C. 1a (the “CEA”), and security-based swaps, as defined in section 3(a)(68) of the Exchange Act.

¹⁵ A “swaption” is an option to enter into an interest rate swap where a specified fixed rate is exchanged for a floating rate. See Concept Release, *supra* note 3, at n.26.

¹⁶ A forward swap (or deferred swap) is an agreement to enter into a swap at some time in the future (“deferred swap”). See Concept Release, *supra* note 3, at n.27.

¹⁷ An OTC derivative may be more difficult to transfer or liquidate than an exchange-traded derivative because, for example, an OTC derivative may provide contractually for non-transferability without the consent of the counterparty, or may be sufficiently customized that its value is difficult to establish or its terms too narrowly drawn to attract transferees willing to accept assignment of the contract, unlike most exchange-traded derivatives. See Concept Release, *supra* note 3, at n.28.

¹⁸ The Dodd-Frank Act, *supra* note 2, was signed into law on July 21, 2010. The Act mandates, among other things, substantial changes in the OTC derivatives markets, including new clearing, reporting, and trade execution mandates for swaps and security-based swaps, and both exchange-

While funds use derivatives for a variety of purposes, a common characteristic of most derivatives is that they involve leverage or the potential for leverage.¹⁹ We have stated that “[l]everage exists when an investor achieves the right to a return on a capital base that exceeds the investment which he has personally contributed to the entity or instrument achieving a return.”²⁰ Many derivatives transactions entered into by a fund, such as futures contracts, swaps, and written options, involve leverage or the potential for leverage in that they enable the fund to participate in gains and losses on an amount of reference assets that exceeds the fund’s investment, while also imposing a conditional or unconditional obligation on the fund to make a payment or deliver assets to a counterparty.²¹ Other derivatives transactions, such as purchased call options, provide the economic equivalent of leverage because they expose the fund to gains on an amount in excess of the fund’s investment but do not impose a payment obligation on the fund beyond its investment.²²

Funds use derivatives both to obtain investment exposures as part of their investment strategies and to manage risk.²³ A fund may use derivatives to

traded and OTC derivatives are contemplated under the new regime. See Dodd-Frank Act sections 723 (mandating clearing of swaps) and 763 (mandating clearing of security-based swaps). We have noted that these Dodd-Frank Act requirements “were designed to provide greater certainty that, wherever possible and appropriate, swap and security-based swap contracts formerly traded exclusively in the OTC market are centrally cleared.” Process for Submissions for Review of Security-Based Swaps for Mandatory Clearing and Notice Filing Requirements for Clearing Agencies; Technical Amendments to Rule 19b-4 and Form 19b-4 Applicable to All Self-Regulatory Organizations, Securities Exchange Act Release No. 67286 (June 28, 2012) [77 FR 41602 (July 13, 2012)], at text accompanying n.5.

¹⁹ See, e.g., *infra* notes 69–71.

²⁰ See Securities Trading Practices of Registered Investment Companies, Investment Company Act Release No. 10666 (Apr. 18, 1979) [44 FR 25128 (Apr. 27, 1979)] (“Release 10666”), at n.5. See also *infra* notes 21–22.

²¹ The leverage created by such an arrangement is sometimes referred to as “indebtedness leverage.” See Concept Release, *supra* note 3, at n.31. See *infra* notes 70–72 and accompanying text.

²² This type of leverage is sometimes referred to as “economic leverage.” See Concept Release, *supra* note 3, at n.32.

²³ See Concept Release, *supra* note 3, at n.33. A fund may also use derivatives to hedge current portfolio exposures (for example, when a fund’s portfolio is structured to reflect the fund’s long-term investment strategy and its investment adviser’s forecasts, interim events may cause the fund’s investment adviser to seek to temporarily hedge a portion of the portfolio’s broad market, sector, and/or security exposures). Industry participants believe that derivatives may also provide a more efficient hedging tool than reducing exposure by selling individual securities, offering greater liquidity,

⁸ For example, the reference asset of a Standard & Poor’s (“S&P”) 500 futures contract is the S&P 500 index.

⁹ See, e.g., Concept Release, *supra* note 3, at nn.35–46 and accompanying text.

¹⁰ See Concept Release, *supra* note 3, at n.22.

¹¹ A futures contract is a standardized contract between two parties to buy or sell a specified asset of standardized quantity and quality, for an agreed upon price (the “futures price” or “strike price”), with delivery and payment occurring at a specified future date (the “delivery date”). The contracts are negotiated on a futures exchange which acts as an intermediary between the two parties. The party agreeing to buy the underlying asset in the future, the “buyer” of the contract, is said to be “long,” and the party agreeing to sell the asset in the future, the “seller” of the contract, is said to be “short.” The long position (buyer) hopes or expects that the asset price is going to increase, while the short position (seller) hopes or expects that it will decrease. For a general discussion of futures contracts, see, e.g., John C. Hull, *Options, Futures, and Other Derivatives* (9th ed. 2015), at 24.

¹² An option is the right to buy or sell an asset. There are two basic types of options, a “call option” and a “put option.” A call option gives the holder the right (but does not impose the obligation) to buy the underlying asset by or at a certain date for a certain price. The seller, or “writer,” of a call option has the obligation to sell the underlying asset to the holder if the holder exercises the option. A put option gives the holder the right (but does not impose the obligation) to sell the underlying asset by or at a certain date for a certain price. The seller, or “writer,” of a put option has the obligation to buy from the holder the underlying asset if the holder exercises the option. The price that the option holder must pay to exercise the option is known as the “exercise” or “strike” price. The amount that the option holder pays to purchase an option is known as the “option premium,” “price,” “cost,” or “fair value” of the option. See Concept Release, *supra* note 3, at n.23.

gain, maintain, or reduce exposure to a market, sector, or security more quickly and/or with lower transaction costs and portfolio disruption than investing directly in the underlying securities.²⁴ The comments we received on the Concept Release reflect some of the various ways in which funds use derivatives, including, for example: To hedge risks associated with the fund's securities investments; to equitize cash to gain exposure quickly, such as by purchasing index futures rather than investing in the securities underlying the index; and to obtain synthetic positions.²⁵

At the same time and as noted above, funds' use of derivatives may entail risks relating to, for example, leverage, illiquidity (particularly with respect to complex OTC derivatives), and counterparty risk, among others.²⁶ A fund's use of derivatives presents challenges for its investment adviser and board of directors in managing derivatives use so that they are employed in a manner consistent with the fund's investment objectives, policies, and restrictions, its risk profile, and relevant regulatory requirements, including those under the federal securities laws.²⁷

lower round-trip transaction costs, lower taxes, and reduced disruption to the portfolio's longer-term positioning. *Id.* See also *infra* note 25 and accompanying text.

²⁴ See Concept Release, *supra* note 3, at section I.

²⁵ See, e.g., Comment Letter of BlackRock on Concept Release (Nov. 4, 2011) (File No. S7-33-11) ("BlackRock Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-39.pdf>; Comment Letter of AQR Capital Management on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("AQR Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-26.pdf>; Comment Letter of Vanguard on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("Vanguard Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-38.pdf>; Comment Letter of Oppenheimer Funds on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("Oppenheimer Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-44.pdf>; Comment Letter of Loomis, Sayles and Company on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("Loomis Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-25.pdf>; Comment Letter of Investment Company Institute on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("ICI Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-46.pdf>.

²⁶ See Concept Release, *supra* note 3, at n.34.

²⁷ See, e.g., Comment Letter of Mutual Fund Directors Forum on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("MFDF Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-32.pdf>, at 2 (agreeing with this statement in the Concept Release and suggesting that we "evaluate how any potential regulations will impact the ability of directors effectively to oversee their funds' use of derivatives").

B. Derivatives and the Senior Securities Restrictions of the Investment Company Act

1. Requirements of Section 18

Section 18 of the Act imposes various limitations on the capital structure of funds, including, in part, by restricting the ability of funds to issue "senior securities." The protection of investors against the potentially adverse effects of a fund's issuance of senior securities is a core purpose of the Investment Company Act.²⁸ Section 18(g) of the Investment Company Act defines "senior security," in part, as "any bond, debenture, note, or similar obligation or instrument constituting a security and evidencing indebtedness."²⁹

Congress' concerns underlying the limitations in section 18 were focused on: (1) Excessive borrowing and the issuance of excessive amounts of senior securities by funds which increased unduly the speculative character of their junior securities;³⁰ (2) funds operating without adequate assets and reserves;³¹ and (3) potential abuse of the purchasers of senior securities.³² To address these concerns, section 18(f)(1) of the Investment Company Act prohibits an open-end fund³³ from issuing or selling any "senior security" other than borrowing from a bank and subject to a requirement to maintain 300% "asset coverage."³⁴ Section 18(a)(1) of the

²⁸ See, e.g., sections 1(b)(7), 1(b)(8), 18(a), and 18(f) of the Investment Company Act.

²⁹ The definition of senior security in section 18(g) also includes "any stock of a class having priority over any other class as to the distribution of assets or payment of dividends" and excludes certain limited temporary borrowings.

³⁰ See section 1(b)(7) of the Investment Company Act; Release 10666, *supra* note 20, at n.8.

³¹ See section 1(b)(8) of the Investment Company Act; Release 10666, *supra* note 20, at n.8.

³² See Investment Trusts and Investment Companies: Hearings on S. 3580 Before a Subcomm. of the Senate Comm. on Banking and Currency, 76th Cong., 3d Sess., pt. 1 (1940) ("Senate Hearings") at 265-78. See also *Mutual Funds and Derivative Instruments*, Division of Investment Management Memorandum transmitted by Chairman Levitt to Representatives Markey and Fields (Sept. 26, 1994) ("1994 Report"), available at <http://www.sec.gov/news/studies/deriv.txt>, at 21 (describing the practices in the 1920s and 1930s that gave rise to section 18's limitations on leverage).

³³ Section 5(a)(1) of the Investment Company Act defines "open-end company" as "a management company which is offering for sale or has outstanding any redeemable security of which it is the issuer."

³⁴ "Asset coverage" of a class of securities representing indebtedness of an issuer generally is defined in section 18(h) of the Investment Company Act as "the ratio which the value of the total assets of such issuer, less all liabilities and indebtedness not represented by senior securities, bears to the aggregate amount of senior securities representing indebtedness of such issuer." Take, for example, an open-end fund with \$100 in assets and with no liabilities or senior securities outstanding. The fund

Investment Company Act similarly prohibits a closed-end fund³⁵ from issuing or selling any "senior security that represents an indebtedness" unless it has at least 300% "asset coverage," although closed-end funds' ability to issue senior securities representing indebtedness is not limited to bank borrowings, and closed-end funds also may issue senior securities that are a stock, subject to limitations in section 18.³⁶ A BDC is also subject to the limitations of section 18(a)(1)(A) to the same extent as if it were a closed-end investment company except that the applicable asset coverage amount for any senior security representing indebtedness is 200%.³⁷

2. Investment Company Act Release 10666

In Investment Company Act Release 10666, issued in 1979, we considered the application of section 18's restrictions on senior securities to the following transactions: reverse repurchase agreements, firm commitment agreements, and standby commitment agreements.³⁸ As we described in more detail in Release 10666, in a reverse repurchase agreement, a fund transfers possession of a security to another party in return for a percentage of the value of the security; at an agreed upon future date, the fund repurchases the transferred security by paying an amount equal to the proceeds of the transaction plus interest.³⁹ A firm commitment agreement is a buy order for delayed delivery under which a fund agrees to purchase a security—a Ginnie Mae, in the example we provided in Release 10666⁴⁰—from a seller at a future date,

could, while maintaining the required coverage of 300% of the value of its assets subject to section 18 of the Act, borrow an additional \$50 from a bank; the \$50 in borrowings would represent one-third of the fund's \$150 in total assets, measured after the borrowing (or 50% of the fund's \$100 net assets).

³⁵ Section 5(a)(2) of the Investment Company Act defines "closed-end company" as "any management company other than an open-end company."

³⁶ Section 18(a)(1)(A).

³⁷ See section 61(a)(1) of the Investment Company Act. BDCs, like registered closed-end funds, also may issue a senior security that is a stock (e.g., preferred stock), subject to limitations in section 18. See section 18(a)(2) and section 61(a)(1) of the Investment Company Act.

³⁸ See Release 10666, *supra* note 20.

³⁹ See Release 10666, *supra* note 20, at discussion of "Reverse Repurchase Agreements" (noting that a reverse repurchase agreement may not have an agreed upon repurchase date, and in that case, the agreement would be treated as if it were reestablished each day).

⁴⁰ In Release 10666, we described reverse repurchase agreements and firm and standby commitment agreements involving debt securities guaranteed as to principal and interest by the

Continued

stated price, and fixed yield; a standby commitment agreement similarly involves an agreement by the fund to purchase a security with a stated price and fixed yield in the future upon the counterparty's exercise of its option to sell the security to the fund.⁴¹

We concluded that such agreements, while not securities for all purposes under the federal securities laws,⁴² "fall within the functional meaning of the term 'evidence of indebtedness' for purposes of section 18 of the Act," which we noted would generally include "all contractual obligations to pay in the future for consideration presently received," and thus may involve the issuance of senior securities.⁴³ Further, we stated that "trading practices involving the use by investment companies of such agreements for speculative purposes or to accomplish leveraging fall within the legislative purposes of section 18."⁴⁴

We recognized, however, that although reverse repurchase agreements, firm commitment agreements, and standby commitment agreements may involve the issuance of senior securities and thus generally would be prohibited for open-end funds by section 18(f) (and limited by the 300% asset coverage requirement for closed-end funds), these and similar arrangements nonetheless could appropriately be used by funds subject to the constraints we described in Release 10666. We analogized to short sales of securities by funds, as to which our staff had previously provided guidance that the issue of section 18 compliance would not be raised if funds

Government National Mortgage Associations, or "Ginnie Maes." We noted, however, that we referenced Ginnie Maes only as an example of the underlying security and the reference should not be construed as delimiting our general statement of policy; we further noted that we sought in Release 10666 to "address generally the possible economic effects and legal implications of all comparable trading practices which may affect the capital structure of investment companies in a manner analogous to the securities trading practices specifically discussed [in Release 10666]." *Id.*, at discussion of "Areas of Concern." See also *infra* section III.A.2.

⁴¹ See Release 10666, *supra* note 20, at discussion of "Firm Commitment Agreements," and "Standby Commitment Agreements."

⁴² See Release 10666, *supra* note 20, at "The Agreements as Securities" discussion. See also *infra* note 61.

⁴³ Release 10666, *supra* note 20, at "The Agreements as Securities" discussion.

⁴⁴ *Id.* (stating, among other things, that, "[t]he gains and losses from the transactions can be extremely large relative to invested capital; for this reason, each agreement has speculative aspects. Therefore, it would appear that the independent investment decisions involved in entering into such agreements, which focus on their distinct risk/return characteristics, indicate that, economically as well as legally, the agreements should be treated as securities separate from the underlying Ginnie Maes for purposes of section 18 of the Act.")

"cover" senior securities by maintaining "segregated accounts."⁴⁵

We concluded that the use of segregated accounts "if properly created and maintained, would limit the investment company's risk of loss."⁴⁶ To avail itself of the segregated account approach, we stated that a fund could establish and maintain with the fund's custodian a segregated account containing certain liquid assets, such as cash, U.S. government securities, or other appropriate high-grade debt obligations, equal to the obligation incurred by the fund in connection with the senior security ("segregated account approach").⁴⁷ We stated that the segregated account functions as "a practical limit on the amount of leverage which the investment company may undertake and on the potential increase in the speculative character of its outstanding common stock," and that it "[would] assure the availability of adequate funds to meet the obligations arising from such activities."⁴⁸

We did not specifically address derivatives in Release 10666.⁴⁹ We did,

⁴⁵ See Release 10666, *supra* note 20, at text accompanying n.15 (citing Guidelines for the Preparation of Form N-8B-1, Investment Company Act Release No. 7221 (June 9, 1972) at 6-8).

⁴⁶ See Release 10666, *supra* note 20, at discussion of "Segregated Account."

⁴⁷ We stated that, under the segregated account approach, the value of the assets in the segregated account should be marked to the market daily, additional assets should be placed in the segregated account whenever the total value of the account falls below the amount of the fund's obligation, and assets in the segregated account should be deemed frozen and unavailable for sale or other disposition. See *id.* We also cautioned that as the percentage of a fund's portfolio assets that are segregated increases, the fund's ability to meet current obligations, to honor requests for redemption, and to manage properly the investment portfolio in a manner consistent with its stated investment objective may become impaired. *Id.* We stated that the amount of assets to be segregated with respect to reverse repurchase agreements lacking a specified repurchase price would be the value of the proceeds received plus accrued interest; for reverse repurchase agreements with a specified repurchase price, the amount of assets to be segregated would be the repurchase price; and for firm and standby commitment agreements, the amount of assets to be segregated would be the purchase price. *Id.*

⁴⁸ *Id.*

⁴⁹ The derivatives markets have expanded substantially since we issued Release 10666 in 1979. For example, the Options Clearing Corporation reports that in 1979, only 64 million contracts were traded on 220 equity issues. By 2014, those numbers had risen to 3,845 million contracts traded on 4,278 equity issues. The CME Group reports that 313 of its 335 derivatives products began trading after 1979 (see http://www.cmegroup.com/company/history/cmegroup_information.html). For example, the Chicago Mercantile Exchange launched its first cash-settled futures contract in 1981 and its first successful stock index future (S&P 500 index) in 1982 (see <http://www.cmegroup.com/company/history/timeline-of-achievements.html>). See also Jennifer Lynch Koski & Jeffrey Pontiff, *How Are Derivatives*

however, state that although we were expressing our views about the particular trading practices discussed in that release, our views were not limited to those trading practices, in that we sought to "address generally the possible economic effects and legal implications of all comparable trading practices which may affect the capital structure of investment companies in a manner analogous to the securities trading practices specifically discussed in Release 10666."⁵⁰

3. Developments After Investment Company Act Release No. 10666

In the years following the issuance of Release 10666, our staff issued more than thirty no-action letters to funds concerning the maintenance of segregated accounts or otherwise "covering" their obligations in connection with various transactions that implicate section 18.⁵¹ In these letters and through other staff guidance, our staff has addressed questions as they were presented to the staff, generally on an instrument-by-instrument basis, regarding the application of our statements in Release 10666 to various types of derivatives and other transactions. As derivatives markets expanded and funds increased their use of derivatives,⁵² industry practices have developed over time, based at least in part on our staff's no-action letters and other staff guidance, concerning the appropriate amount and type of assets that should be segregated in order to

Used? Evidence from the Mutual Fund Industry, 54 The J. of Fin. 791, 792 (Apr. 1999), available at <http://onlinelibrary.wiley.com/doi/10.1111/0022-1082.00126/pdf> (observing that the Taxpayer Relief Act of 1997's repeal of the "short-short rule" would likely lead to increased derivative use by mutual funds because that rule "eliminate[d] preferential pass-through tax status for funds that realize more than 30 percent of their capital gains from positions held less than three months" and "inhibited derivative use because some derivative securities such as options and futures contracts involve realizing capital gains for holding periods of less than three months").

⁵⁰ Release 10666, *supra* note 20, at "Areas of Concern" and "Background" discussion.

⁵¹ The Concept Release includes a discussion of certain staff no-action letters. See Concept Release, *supra* note 3, at section I.

⁵² See, e.g., Comment Letter of Davis Polk & Wardwell LLP on Concept Release (Nov. 11, 2011) (File No. S7-33-11) ("Davis Polk Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-49.pdf> ("[T]he Commission and the Staff, over the years, have addressed issues pertaining to the use of derivatives transactions by registered funds on an intermittent case-by-case basis. While this guidance has been helpful, it has not been able to keep pace with the dramatic expansion of the derivatives market over the past twenty years, both in terms of the types of instruments that are available and the extent to which funds use them.")

“cover” various types of derivatives transactions.⁵³

With respect to the amount of assets that funds have segregated, two general practices have developed:

- For some derivatives, funds generally segregate an amount equal to the full amount of the fund’s potential obligation under the contract, where that amount is known at the outset of the transaction, or the full market value of the underlying reference asset for the derivative (collectively, “notional amount segregation”).⁵⁴ Funds have applied this approach to, among other transactions, futures, forward contracts and written options that permit physical settlement, and credit default swaps (“CDS”) regardless of whether physical settlement or cash settlement is contemplated.⁵⁵
- For certain derivatives that are required by their terms to be net cash settled, and thus do not involve physical settlement, funds often segregate an amount equal to the fund’s

⁵³ Our staff also has stated that it would not object to a fund covering its obligations by entering into certain cover transactions or holding the asset (or the right to acquire the asset) that the fund would be required to deliver under certain derivatives. See Concept Release, *supra* note 3, at text following nn.70–71.

⁵⁴ See, e.g., Concept Release, *supra* note 3, at n.78 and accompanying text (explaining that, “[i]n determining the amount of assets required to be segregated to cover a particular instrument, the Commission and its staff have generally looked to the purchase or exercise price of the contract (less margin on deposit) for long positions and the market value of the security or other asset underlying the agreement for short positions, measured by the full amount of the reference asset, i.e., the notional amount of the transaction rather than the unrealized gain or loss on the transaction, i.e., its current mark-to-market value”). See also, e.g., Davis Polk Concept Release Comment Letter, at 3 (“In Release 10666 and in no-action letters, the Commission and the Staff generally indicated that funds relying on the segregation method should segregate assets equal to the full notional value of the reference asset for a derivative (the ‘notional amount’), less any collateral or margin on deposit.”).

⁵⁵ For example, if a fund enters into a long, physically settled forward contract, and the contract specifies the forward price that the fund will pay at settlement, the fund would, consistent with staff positions, segregate this forward/contract price. See, e.g., Dreyfus Strategic Investing and Dreyfus Strategic Income, SEC Staff No-Action Letter (June 22, 1987) (“Dreyfus No-Action Letter”), available at <http://www.sec.gov/divisions/investment/imsecurities/dreyfusstrategic033087.pdf>. As another example, if a fund enters into a short, physically settled forward and the contract obligates the fund to deliver a specific quantity of an asset at settlement—but the total value of that deliverable obligation is unknown at the contract’s outset—the fund would, consistent with staff positions, segregate, on a daily basis, liquid assets with a value equal to the daily market value of the deliverable. See *id.*; Robertson Stephens Investment Trust, SEC Staff No-Action Letter (Aug. 24, 1995) (“Robertson Stephens No-Action Letter”), available at <http://www.sec.gov/divisions/investment/imsecurities/robertsonstephens040395.pdf>. See also *supra* note 47.

daily mark-to-market liability, if any (“mark-to-market segregation”).⁵⁶ Funds initially applied this approach to specific types of transactions addressed through guidance by our staff: first interest rate swaps and later cash-settled futures and non-deliverable forwards (“NDFs”).⁵⁷ We understand, however, that many funds now apply mark-to-market segregation to a wider range of cash-settled instruments.⁵⁸ Our staff has observed that some funds appear to apply the mark-to-market approach to any derivative that is cash settled.

As noted above, in Release 10666, we stated that the assets eligible to be included in segregated accounts should be “liquid assets,” such as cash, U.S. government securities, or other appropriate high-grade debt obligations. In a 1996 staff no-action letter, the staff took the position that a fund could cover its senior securities-related obligations by depositing any liquid asset, including equity securities and non-investment grade debt securities, in a segregated account.⁵⁹ With respect to the manner in which segregation may be effected, the staff took the position that a fund could segregate assets by designating such assets on its books, rather than establishing a segregated account at its custodian.⁶⁰

As this discussion reflects, funds and their counsel, in light of the guidance we provided in Release 10666 and that provided by our staff through no-action letters and otherwise, have applied the

⁵⁶ See, e.g., Concept Release, *supra* note 3, at nn.75–77 and accompanying text (explaining that “[c]ertain swaps, for example, that settle in cash on a net basis, appear to be treated by many funds as requiring segregation of an amount of assets equal to the fund’s daily mark-to-market liability, if any”).

⁵⁷ Our staff provided this guidance in the context of its review of certain funds’ registration statements.

⁵⁸ See, e.g., Comment Letter of Ropes & Gray LLP on Concept Release (Nov. 7, 2011) (File No. S7–33–11) (“Ropes & Gray Concept Release Comment Letter”), available at <http://www.sec.gov/comments/s7-33-11/s73311-21.pdf>, at 4 (“It now appears to be an increasingly common practice for funds that engage in cash-settled swaps to segregate assets only to the extent required to meet the fund’s daily mark-to-market liability, if any, relating to such swaps.”); Davis Polk Concept Release Comment Letter, at 3 (“[F]und registration statements indicate that, in recent years, the Staff has not objected to the adoption by funds of policies that require segregation of the mark-to-market value, rather than the notional amount, for a variety of swaps as well as for cash-settled futures and forward contracts.”).

⁵⁹ See Merrill Lynch Asset Management, L.P., SEC Staff No-Action Letter (July 2, 1996) (“Merrill Lynch No-Action letter”), available at <http://www.sec.gov/divisions/investment/imsecurities/merrilllynch070196.pdf>.

⁶⁰ See Dear Chief Financial Officer Letter from Lawrence A. Friend, Chief Accountant, Division of Investment Management (Nov. 7, 1997), available at <http://www.sec.gov/divisions/investment/imsecurities/imcfo120797.pdf>.

segregated account approach to, or otherwise sought to cover, many types of transactions other than those specifically addressed in Release 10666, including various derivatives and other transactions that implicate section 18. These transactions include, for example, futures, written options, and swaps (both swaps and security-based swaps).

4. Current Views Concerning Section 18

As we stated in Release 10666, we view the transactions described in that release as falling within the functional meaning of the term “evidence of indebtedness,” for purposes of section 18.⁶¹ The trading practices described in Release 10666, as well as short sales of securities for which the staff initially developed the segregated account approach we applied in Release 10666, all impose on a fund a conditional or unconditional contractual obligation to pay or deliver assets in the future to a counterparty and thus involve the issuance of a senior security for purposes of section 18.⁶²

We apply the same analysis to derivatives transactions under which the fund is or may be required to make any payment or deliver 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 (a “future payment obligation”). As was the case with respect to the trading practices we described in Release 10666, where the fund has entered into a derivatives transaction and has a future payment obligation—a conditional or unconditional contractual obligation to

⁶¹ See Release 10666, *supra* note 20, at “The Agreements as Securities” discussion. In addition, as we noted in the Concept Release, the Investment Company Act’s definition of the term “security” is broader than the term’s definition in other federal securities laws. Compare section 2(a)(36) of the Investment Company Act with sections 2(a)(1) and 2A of the Securities Act of 1933 (“Securities Act”) and sections 3(a)(10) and 3A of the Exchange Act. See also Concept Release, *supra* note 3, at n.57 and accompanying text (explaining that we have interpreted the term “security” in light of the policies and purposes underlying the Investment Company Act).

⁶² See Release 10666, *supra* note 20, at “The Agreements as Securities” discussion. See also section 18(g) (defining the term “senior security,” in part, as “any bond, debenture, note, or similar obligation or instrument constituting a security and evidencing indebtedness”). Under the proposal, a fund would be permitted to enter into reverse repurchase agreements, short sale borrowings, or any firm or standby commitment agreement or similar agreement (collectively, “financial commitment transactions”), notwithstanding the prohibitions and restrictions on the issuance of senior securities under section 18, provided the fund complies with the proposed rule’s conditions. See *infra* section III.A.

pay in the future⁶³—we believe that such a transaction involves an evidence of indebtedness that is a senior security for purposes of section 18.⁶⁴

This interpretation is supported by the express scope of section 18, which defines the term senior security broadly to include instruments and transactions that might not otherwise be considered securities under other provisions of the federal securities laws.⁶⁵ For example, section 18(f)(1) generally prohibits an open-end fund from issuing or selling any senior security “except [that the fund] shall be permitted to borrow from any bank.”⁶⁶ This statutory permission to engage in a specific borrowing makes clear that such borrowings are senior securities, which otherwise would be prohibited absent this specific permission.⁶⁷ Section 18(c)(2) similarly

⁶³ Unless otherwise specified or the context otherwise requires, the term “derivative” or “derivatives transaction” as used in this Release means a “derivatives transaction,” as defined in proposed rule 18f-4(c)(2), which describes derivatives that impose a payment obligation on the fund.

⁶⁴ As we explained in Release 10666, we believe that an evidence of indebtedness, for purposes of section 18, includes not only a firm and un-contingent obligation, but also a contingent obligation, such as the obligation created by a standby commitment or a “put” (or call) option sold by a fund. See Release 10666, *supra* note 20, at “Standby Commitment Agreements” discussion. We understand that it has been asserted that a contingent obligation created by a standby commitment or similar agreement does not implicate section 18 unless and until the fund would be required under generally accepted accounting principles (“GAAP”) to recognize the contingent obligation as a liability on the fund’s financial statements. The treatment of derivatives transactions under GAAP, including whether the derivatives transaction constitutes a liability for financial statement purposes at any given time or the extent of the liability for that purpose, is not determinative with respect to whether the derivatives transaction involves the issuance of a senior security under section 18. This is consistent with our analysis of a fund’s obligation, and the corresponding segregated asset amounts, under the trading practices described in Release 10666. See *supra* note 47 (describing the amount of assets to be segregated for the trading practices described in Release 10666, including that a fund should segregate the full purchase price of a standby commitment beginning on the date the fund entered into the agreement, which would represent a contingent obligation of the fund).

⁶⁵ Consistent with Release 10666, we are only expressing our views concerning section 18 of the Investment Company Act.

⁶⁶ Recognizing the breadth of the term “senior security,” we observed in the Concept Release that, “[t]o address [Congress’] concerns underlying section 18, section 18(f)(1) of the Investment Company Act prohibits an open-end fund from issuing or selling any ‘senior security’ other than borrowing from a bank.” (footnotes omitted)

⁶⁷ We similarly observed in Release 10666 that section 18(f)(1), “by implication, treats all borrowings as senior securities,” and that “[s]ection 18(f)(1) of the Act prohibits such borrowings unless entered into with banks and only if there is 300% asset coverage on all borrowings of the investment company.” See Release 10666, *supra* note 20, at “Reverse Repurchase Agreements” discussion.

treats all promissory notes or evidences of indebtedness issued in consideration of any loan as senior securities except as specifically otherwise provided in that section.⁶⁸

This view also is consistent with the fundamental statutory policy and purposes underlying the Act, as expressed in section 1(b) of the Act. Section 1(b) provides that the provisions of the Act shall be interpreted to mitigate and “so far as is feasible” to eliminate the conditions and concerns enumerated in that section. These include the conditions and concerns enumerated in sections 1(b)(7) and 1(b)(8) which declare, respectively, that “the national public interest and the interest of investors are adversely affected” when funds “by excessive borrowing and the issuance of excessive amounts of senior securities increase unduly the speculative character” of securities issued to common shareholders and when funds “operate without adequate assets or reserves.” Funds’ obligations under derivative transactions can implicate each of these concerns.

As we stated in Release 10666, leveraging an investment company’s portfolio through the issuance of senior securities “magnifies the potential for gain or loss on monies invested and therefore results in an increase in the speculative character of the investment company’s outstanding securities” and “leveraging without any significant limitation” was identified “as one of the major abuses of investment companies prior to the passage of the Act by Congress.” We emphasized in Release 10666, and we continue to believe today, that the prohibitions and restrictions under the senior security provisions of section 18 should “function as a practical limit on the amount of leverage which the investment company may undertake and on the potential increase in the speculative character of its outstanding common stock” and that funds should not “operate without adequate assets or reserves.”⁶⁹ Funds’ use of derivatives, like the trading practices we addressed in Release 10666, implicate the undue

⁶⁸ Section 18(c) provides further limitations on a closed-end fund’s ability to issue senior securities, in addition to the asset coverage and other limitations provided in section 18(a), with the proviso in section 18(c)(2) that “promissory notes or other evidences of indebtedness issued in consideration of any loan, extension, or renewal thereof, made by a bank or other person and privately arranged, and not intended to be publicly distributed, shall not be deemed to be a separate class of senior securities representing indebtedness within the meaning of [section 18(c)].”

⁶⁹ See Release 10666, *supra* note 20, at “Segregated Account” discussion.

speculation concern expressed in section 1(b)(7) and the asset sufficiency concern expressed in section 1(b)(8) as discussed below.

First, with respect to the undue speculation concern expressed in section 1(b)(7), we noted above and in the Concept Release that a common characteristic of most derivatives is that they involve leverage or the potential for leverage because they typically enable the fund to participate in gains and losses on an amount that substantially exceeds the fund’s investment while imposing a conditional or unconditional obligation on the fund to make a payment or deliver assets to a counterparty. For example, a fund can enter into a total return swap referencing an equity or debt security and, in exchange for a contractual obligation to make payments in respect of changes in the value of the referenced security and the delivery of a limited amount of collateral, obtain exposure to the full notional value of the referenced security.⁷⁰ As one commenter observed, “a fund’s purchase of an equity total return swap produces an exposure and economic return substantially equal to the exposure and economic return a fund could achieve by borrowing money from the counterparty in order to purchase the equities that are reference assets.”⁷¹ This same analysis applies to various other types of derivatives under which the fund posts a small percentage of the notional amount as initial margin or collateral—or is not required to make any up-front payment or receives a premium payment—but is exposed to the gains or losses on the full notional amount of the reference asset.⁷²

⁷⁰ See, e.g., *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 (July 6, 2010) (“2010 ABA Derivatives Report”), available at <https://apps.americanbar.org/buslaw/blt/content/ibl/2010/08/0002.pdf>, at 8 (stating that “[f]utures contracts, forward contracts, written options and swaps can produce a leveraging effect on a fund’s portfolio” because “for a relatively small up-front payment made by a fund (or no up-front payment, in the case with many swaps and written options), the fund contractually obligates itself to one or more potential future payments until the contract terminates or expires”). See also *infra* notes 72–74.

⁷¹ BlackRock Concept Release Comment Letter, at 4.

⁷² See, e.g., *Board Oversight of Derivatives*, Independent Directors Council Task Force Report (July 2008) (“2008 IDC Report”), available at http://www.ici.org/pdf/ppr_08_derivatives.pdf, at 3 (“The leverage inherent in these [derivatives] instruments magnifies the effect of changes in the value of the underlying asset on the initial amount of capital invested. For example, an initial 5% collateral deposit on the total value of the commodity would result in 20:1 leverage, with a potential 80% loss (or gain) of the collateral in response to a 4% movement in the market price of the underlying commodity.”); Andrew Ang, Sergiy Gorovyy &

As discussed in more detail in sections II.D and III.B.1.c, our staff's evaluation of the use of derivatives by funds also indicates that some funds make extensive use of derivatives to obtain notional investment exposures far in excess of the funds' respective net asset values.⁷³ Our staff's review of funds' use of derivatives found that, although many funds do not use derivatives, and most funds do not use a substantial amount of derivatives, some funds do use derivatives extensively. Some of the funds that use derivatives more extensively have derivatives notional exposures that are substantially in excess of the funds' net assets, with notional exposures ranging up to almost ten times a fund's net assets.⁷⁴ These highly leveraged investment exposures appear to be inconsistent with the purposes and concerns underlying section 18 of the Act.⁷⁵

We noted in Release 10666 that, given the potential for reverse repurchase agreements to be used for leveraging and their ability to magnify the risk of investing in a fund, "one of the important policies underlying section 18 would be rendered substantially nugatory" if funds' use of reverse repurchase agreements were not subject to limitation. We similarly believe that if funds' use of derivatives that impose a future payment obligation on the fund were not viewed as involving senior securities subject to appropriate limitations under section 18, the concerns underlying section 18, including the undue speculation

concern expressed in section 1(b)(7) as discussed above, would be frustrated.⁷⁶

Second, a fund's use of derivatives under which the fund has a future payment obligation also raises concerns with respect to a fund's ability to meet its obligations, implicating the asset sufficiency concern expressed in section 1(b)(8) of the Act. Many derivatives investments entered into by a fund, such as futures contracts, swaps, and written options, pose a risk of loss that can result in payment obligations owed to the fund's counterparties.⁷⁷ Losses on derivatives therefore can result in payment obligations that can directly affect the capital structure of a fund and the relative rights of the fund's counterparties and fund shareholders, in that the fund would be required to make payments or deliver fund assets to its derivatives counterparties under the terms negotiated with its counterparties. Because of the leverage present in many types of derivatives as discussed above, these senior payments of additional collateral or termination payments to counterparties can be substantially greater than any collateral initially delivered by the fund to initiate the derivatives transaction.⁷⁸

Losses on a fund's derivatives transactions, and the resulting payment obligation imposed on the fund, can force a fund's adviser to sell the fund's investments to generate liquid assets in order for the fund to meet its obligations. The use of derivatives for leveraging purposes can exacerbate this risk and make it more likely that a fund would be forced to sell assets, potentially generating losses for the fund.⁷⁹ In an extreme situation, a fund

could default on its payment obligations.⁸⁰ The risks associated with derivatives transactions that impose a payment obligation on the fund differ from the risk of loss on other investments, which may result in a loss of asset value but would not require the fund to deliver cash or assets to a counterparty. The examples of fund losses discussed below in section II.D demonstrate the substantial and rapid losses that can result from a fund's investments in derivatives, as well as the forced sales and other measures a fund may be required to take to meet its derivatives payment obligations, implicating the undue speculation concern expressed in section 1(b)(7) and the asset sufficiency concern expressed in section 1(b)(8).⁸¹

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 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

Gregory B. van Inwegen, *Hedge Fund Leverage*, NBER Working Paper 16801 (Feb. 2011) ("Ang, Gorovyy & Inwegen"), available at <http://www.nber.org/papers/w16801.pdf>, at Table 1 (showing that under prevailing margin rates as of March 2010, a market participant could in theory obtain 10 times implied leverage under a total return swap (because the exposure under the swap would be ten times the initial margin amount); 33 times implied leverage under a financial future; and 100 times implied leverage under a foreign exchange or interest rate swap).

⁷³ For more information on the staff's review, including the staff's measurement of derivatives exposures, see *infra* section III.B.1.c and the White Paper entitled "Use of Derivatives by Investment Companies," which was prepared by staff in the Division of Economic and Risk Analysis ("DERA") and will be placed in the comment file for this Release contemporaneously with our publication of the Release. Daniel Delí, Paul Hanouna, Christof Stahel, Yue Tang & William Yost *Use of Derivatives by Registered Investment Companies* Division of Economic and Risk Analysis (2015) ("DERA White Paper"), available at <http://www.sec.gov/dera/staff-papers/white-papers/derivatives12-2015.pdf>.

⁷⁴ *Id.*

⁷⁵ See also *infra* section II.D (discussing concerns with the current approach and providing examples of situations in which funds' use of derivatives has led to substantial losses).

⁷⁶ One commenter made this point directly. See Comment Letter of Stephen A. Keen on Concept Release (Nov. 8, 2011) (File No. S7-33-11) ("Keen Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-45.pdf>, at 3 ("If permitted without limitation, derivative contracts can pose all of the concerns that section 18 was intended to address with respect to borrowings and the issuance of senior securities by investment companies."). See also, e.g., ICI Concept Release Comment Letter, at 8 ("The Act is thus designed to regulate the degree to which a fund issues any form of debt—including contractual obligations that could require a fund to make payments in the future.").

⁷⁷ Some derivatives transactions, like physically settled futures and forwards, can require the fund to deliver the underlying reference assets regardless of whether the fund experiences losses on the transaction.

⁷⁸ See, e.g., *supra* note 72.

⁷⁹ See, e.g., Peter Breuer, *Measuring Off-Balance-Sheet Leverage*, IMF Working Paper (Dec. 2000) ("Off-Balance-Sheet Leverage IMF Working Paper"), available at <http://www.imf.org/external/pubs/ft/wp/2000/wp00202.pdf>, at 7-8 ("[A] more leveraged investor facing a given adverse price movement may be forced by collateral requirements (i.e. margin calls) to unwind the position sooner than if the position were not leveraged. The unwinding

decision of an unleveraged investor depends merely on the investor's risk preferences and not on potentially more restrictive margin requirements.").

⁸⁰ See, e.g., ICI Concept Release Comment Letter, at 11 (noting that, "[h]ypothetically, in an extreme scenario, a fund that used derivatives heavily and segregated most of its liquid assets to cover its obligation on a pure mark-to-market basis could potentially find itself with insufficient liquid assets to cover its derivative positions").

⁸¹ In this regard, we note that proposed rule 22e-4 would, among other things, require an open-end fund (other than a money market fund) to: Classify, and review on an ongoing basis the classification of, the liquidity of each of the fund's portfolio positions (or portions of a position), including derivatives, into one of six liquidity categories; and assess and periodically review the fund's liquidity risk, considering various factors specified in the rule, including the fund's use of borrowings and derivatives for investment purposes. Assessing liquidity risk under rule 22e-4 would involve an assessment of the fund's derivatives positions themselves, and also may generally include an evaluation of the potential liquidity demands that may be imposed on the fund in connection with its use of derivatives. To the extent the fund is required to make payments to a derivatives counterparty, those assets would not be available to meet shareholder redemptions. See Liquidity Release, *supra* note 5, at sections III.B.2. and III. C.1.c.

payments in the future.⁸² Consistent with the views expressed by commenters, we preliminarily believe that a derivative that does not impose a future payment obligation on the fund would not involve a senior security transaction for purposes of section 18.⁸³

C. Review of Funds' Use of Derivatives

As we explained in the Concept Release, we now seek to take an updated and more comprehensive approach to the regulation of funds' use of derivatives.⁸⁴ To inform our consideration of the regulation of funds' use of derivatives, we initiated a review of funds' use of derivatives under the Investment Company Act. As we noted in the Concept Release, our staff has been exploring the benefits, risks, and costs associated with funds' use of derivatives, as well as various issues relating to the use of derivatives by funds, including whether funds' current practices, based on their application of Commission and staff guidance, are consistent with the investor protection purposes and concerns underlying section 18 of the Investment Company Act.

In considering these and other issues, our staff has engaged in a range of activities to inform our policymaking relating to the use of derivatives by funds. These include reviewing funds' derivatives holdings and other sources of information concerning funds' use of derivatives; examining advisers to funds that make use of derivatives; discussing funds' use of derivatives with market

participants; and considering other relevant information provided to the Commission concerning funds' use of derivatives, including comment letters submitted in response to the Concept Release. This review has also included an evaluation of the comment letters submitted in response to a notice issued by the Financial Stability Oversight Council ("FSOC") requesting comment on aspects of the asset management industry.⁸⁵ Although our proposal is independent of FSOC, some commenters responding to the FSOC notice discussed issues concerning leverage, and we have considered and cited to relevant comments throughout this Release.⁸⁶

The staff's review of funds' use of derivatives includes, as discussed below, a review of the derivatives and other holdings of a random sample of funds, as reported by those funds in their annual reports to shareholders. As part of this effort, the staff reviewed and compiled information concerning the holdings of randomly selected mutual funds (including a focused review and separate sampling of alternative strategy funds⁸⁷), closed-end funds, ETFs, and BDCs. Information derived from this review is discussed throughout this Release, and more details concerning the staff's review and findings are provided in the DERA White Paper, which was prepared by staff in the Division of Economic and Risk Analysis and which will be placed in the comment file for this Release contemporaneously with our publication of the Release.⁸⁸ As discussed below, in developing proposed rule 18f-4, we considered the information derived from our staff's review concerning funds' use of derivatives and other considerations, including the investor protection purposes and concerns underlying section 18 as reflected in sections 1(b)(7) and 1(b)(8).

D. Need for a New Approach

1. The Current Regulatory Framework and the Purposes and Policies Underlying the Act

a. Background and Overview

We have determined to propose a new approach to funds' use of derivatives in order to address the investor protection purposes and concerns underlying section 18 of the Act and to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives transactions in light of the dramatic growth in the volume and complexity of the derivatives markets over the past two decades and the increased use of derivatives by certain funds. In Release 10666, we took the position that funds might engage in the transactions described in that release using the segregated account approach, notwithstanding the limitations in section 18.⁸⁹ We took this position because we believed that the segregated account approach would address the investor protection purposes and concerns underlying section 18 by: (1) Imposing a "practical limit on the amount of leverage which the investment company may undertake and on the potential increase in the speculative character of its outstanding common stock"; and (2) "assur[ing] the availability of adequate funds to meet the obligations arising [from the transactions described in Release 10666]." ⁹⁰

We continue to believe that these are relevant considerations and that it may be appropriate for a fund to enter into transactions that create fund indebtedness, notwithstanding the prohibitions in section 18, if such transactions are subject both to a limit on leverage to prevent undue speculation and to measures designed to require the fund to have sufficient assets to meet its obligations.⁹¹ We are

⁸⁹ Section 18 provides very limited statutory permission for open-end funds to borrow from any bank subject to the 300% asset coverage requirement and excludes from the definition of the term "senior security" any loans made for temporary purposes by a bank or other person and privately arranged in an amount not exceeding 5% of total assets. Release 10666 thus provided guidance for certain transactions that would otherwise be prohibited under the requirements of section 18, and open-end funds have used this guidance to enter into derivatives transactions that would otherwise be prohibited under section 18. See also *infra* note 141.

⁹⁰ Release 10666, *supra* note 20, at "Segregated Account" discussion. These concerns are reflected in sections 1(b)(7) and 1(b)(8) of the Act, as discussed above. We also noted in Release 10666 that "segregated accounts, if properly created and maintained, would limit the investment company's risk of loss." *Id.*

⁹¹ We also believe these considerations are relevant when considering, as we are required to do

⁸² At least one commenter on the Concept Release asserted that a purchased option would impose a payment obligation on the fund because "[i]f the option is in the money at the time it expires, the fund's manager has a fiduciary obligation to realize the intrinsic value of the option" and "to exercise the option, the fund must either pay the full strike price (for a call) or deliver the notional amount of the underlying asset (for a put)." See Keen Concept Release Comment Letter, at 16.

⁸³ See, e.g., ICI Concept Release Comment Letter, at 8 ("The Act is thus designed to regulate the degree to which a fund issues any form of debt—including contractual obligations that could require a fund to make payments in the future. By adopting a definition of 'leverage' in the context of section 18 that relates solely to indebtedness leverage and clearly distinguishes it from economic leverage, the Commission could alleviate some of the confusion in this area while appropriately protecting investors and serving the purposes of the Act."). Although some derivatives instruments may not involve the issuance of a senior security for purposes of section 18, we generally would expect the fund's adviser to consider the potential risks associated with these instruments, including the "economic" leverage they involve.

⁸⁴ See Concept Release, *supra* note 3, at section I ("The Commission or its staff, over the years, has addressed a number of issues relating to derivatives on a case-by-case basis. The Commission now seeks to take a more comprehensive and systematic approach to derivatives-related issues under the Investment Company Act.").

⁸⁵ See Notice Seeking Comment on Asset Management Products and Activities 79 FR 77488 (Dec. 24, 2014) ("FSOC Request for Comment").

⁸⁶ Comments submitted in response to the FSOC Notice are available at <http://www.regulations.gov/#/docketDetail;D=FSOC-2014-0001>.

⁸⁷ We refer to alternative strategy funds in the same manner as the staff classified "Alt Strategies" funds in the DERA White Paper, *supra* note 73, as including the Morningstar categories of "alternative," "nontraditional bond" and "commodity" funds.

⁸⁸ See *supra* note 73.

concerned, however, that funds' current practices, including their application of the segregated account approach to certain derivatives transactions, in some cases may not adequately address these considerations.

The segregated account approach described in Release 10666 required a fund engaging in the transactions described in that release to segregate liquid assets, such as cash, U.S. government securities, or other appropriate high-grade debt obligations, equal in value to the full amount of the obligations incurred by the fund.⁹² A fund segregating an amount of the highly liquid assets described in Release 10666 equal in value to the full amount of potential obligations incurred through the transactions described in Release 10666 would be subject to a practical limit on the amount of leverage the fund could obtain through those transactions. The fund would not be able to incur obligations in excess of liquid assets that the fund could place in a segregated account, which generally would limit the fund's obligations to the fund's net assets, even if the fund's net assets consisted solely of the high-quality assets we described in Release 10666.⁹³ Segregating liquid assets equal in value to the full amount of the fund's obligations—and doing so with the types of high-quality liquid assets we described in Release 10666—also provided assurances that the fund would have adequate assets to meet its obligations.⁹⁴ The liquid assets we described in Release 10666 generally are less likely to experience volatility or to decline in value than lower quality debt securities or equity securities, for example, and the amount of the fund's

obligation under the trading practices addressed in Release 10666 generally would be known at the outset of the transaction.⁹⁵

Today, in contrast, many funds apply the mark-to-market segregation approach to certain net cash-settled derivatives, and some funds use this form of asset segregation extensively.⁹⁶ Under this approach, funds segregate an amount equal to the fund's daily mark-to-market liability on the derivative, if any.⁹⁷ Although funds initially applied this approach to a few specific types of transactions addressed through guidance by our staff (interest rate swaps, futures required to cash-settle and NDFs), many funds now apply mark-to-market segregation to other cash-settled instruments, including total return swaps ("TRS") and cash-settled written options.⁹⁸ As we noted above, our staff has observed that some funds appear to apply the mark-to-market approach to any derivative that is cash settled.

The amount of assets that a fund would segregate under the mark-to-market approach is substantially less than under the approach contemplated in Release 10666. The mark-to-market approach therefore allows a fund to obtain greater exposures through derivatives transactions than the fund could obtain using the approach we contemplated in Release 10666 with respect to the trading practices described in that release, and also may result in a fund segregating an amount of assets that may not be sufficient to enable the fund to meet its potential obligations under the derivatives transactions, as discussed below.

In addition to the smaller amount of segregated assets under the mark-to-market approach, funds now segregate various types of liquid assets, rather than the more narrow range of high-quality assets described in Release 10666, in reliance on a no-action letter issued by our staff.⁹⁹ A fund that segregates any liquid asset may be able to obtain greater leverage than a fund that segregates only the types of assets we described in Release 10666, especially when the fund also is applying the mark-to-market segregation

approach.¹⁰⁰ This is because a fund segregating only the types of assets we described in Release 10666 would be more constrained in its ability to enter into transactions requiring asset coverage by the requirement to maintain those kinds of high-quality assets. A fund that segregates any liquid asset, in contrast, may invest in various types of securities, consistent with its investment strategy, while potentially also using a large portion of its portfolio to cover transactions implicating section 18.¹⁰¹ This facilitates the fund's ability to obtain leverage because the fund, by using securities consistent with its strategy to cover derivatives transactions, can add additional exposure through derivatives without having to also maintain lower-risk assets.¹⁰²

b. Concerns Regarding Funds' Ability To Obtain Leverage

Together, funds' use of the mark-to-market segregation approach with respect to various types of derivatives, plus the segregation of any liquid asset, enables funds to obtain leverage to a greater extent than was contemplated in Release 10666. Segregating only a fund's daily mark-to-market liability—and using any liquid asset—enables the fund, using derivatives, to obtain exposures substantially in excess of the fund's net assets.¹⁰³ For derivatives for

for this proposed rule for purposes of section 6(c) of the Act, whether it would be necessary or appropriate in the public interest and consistent with the protection of investors and the purposes fairly intended by the policy and provisions of the Act to provide an exemption from the requirements of sections 18 and 61 of Act and the appropriate conditions for any exemption.

⁹² See Release 10666, *supra* note 20, at "Segregated Account" discussion. See also *supra* note 47.

⁹³ See, e.g., Ropes & Gray Concept Release Comment Letter, at 3 (in the context of Release 10666 "[a]s originally conceived by the Commission," explaining that "[a]s a practical matter, requiring the segregation of assets but not limiting the permitted segregation to cash equivalents effectively permitted funds to incur investment leverage up to a theoretical limit equal to 100% of a fund's net assets.") In addition and as we explained in Release 10666, as the percentage of a fund's portfolio assets that are segregated increases, the fund's ability to meet current obligations, to honor requests for redemption, and to manage properly the investment portfolio in a manner consistent with its stated investment objective may become impaired. See Release 10666, *supra* note 20, at "Segregated Account" discussion.

⁹⁴ See also *supra* note 47.

⁹⁵ See also, e.g., *infra* note 115 and accompanying text.

⁹⁶ See *supra* notes 56–58 and accompanying text.

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ See Merrill Lynch No-Action Letter, *supra* note 59 (staff no-action letter in which the staff took the position that a fund could cover its derivatives-related obligations by depositing any liquid asset, including equity securities and non-investment grade debt securities, in a segregated account).

¹⁰⁰ See, e.g., Vanguard Concept Release Comment letter, at 6 ("[The Merrill Lynch No-Action Letter] greatly increased the amount funds could invest in derivatives because most of a fund's portfolio securities could be used to cover its derivatives positions."); Ropes & Gray Concept Release Comment Letter, at 3 ("The Staff's subsequent no-action letter issued to Merrill Lynch in 1996 provided greater flexibility by allowing a fund to segregate any liquid assets, including equity securities and non-investment grade debt—thus potentially expanding the nature of the investment leverage risks associated with derivatives."); 2010 ABA Derivatives Report, *supra* note 70, at 14 ("This position [taken in the Merrill Lynch No-Action Letter] greatly increased the degree to which funds could use derivatives because all or substantially all of their portfolio securities could be used to 'cover' their derivatives positions.").

¹⁰¹ See, e.g., *id.*

¹⁰² For example, in a settled enforcement action discussed below involving funds that obtained exposure to certain commercial mortgage-backed securities ("CMBS") mainly through TRS contracts, our order issued in connection with the matter noted that, unlike an actual purchase of CMBS, the TRS contracts required no initial commitment of cash, which allowed the funds to take on large amounts of CMBS exposure without having to liquidate other positions, but it also caused them to take on leverage by adding market exposure on top of other assets on their balance sheets. See *infra* note 123 and accompanying text.

¹⁰³ See, e.g., Ropes & Gray Concept Release Comment Letter, at 3 (in the context of Release 10666 "[a]s originally conceived by the Commission," explaining that "[a]s a practical matter, requiring the segregation of assets but not

Continued

which there is no loss for a given day, a fund applying the mark-to-market approach might not segregate *any* assets.¹⁰⁴ This may be the case, for example, because the derivative is currently in a gain position, or because the derivative has a market value of zero (as will generally be the case at the inception of a transaction). The mark-to-market approach therefore generally will not limit a fund's ability to obtain substantial exposures through derivatives.

To evaluate the extent of funds' derivatives exposure, our staff reviewed funds' holdings and compared the amount of exposure under the funds' derivatives, based on the derivatives' notional amounts, with the fund's net assets.¹⁰⁵ As discussed in more detail in the DERA White Paper, our staff found that, although many funds do not use derivatives, and most funds do not use a substantial amount of derivatives, some funds do use derivatives extensively. Some of the funds making extensive use of derivatives obtained notional exposures through derivatives that were substantially in excess of their net assets under a mark-to-market approach and these funds could obtain even higher exposures by applying such an approach. Funds included in our staff's review sample had notional exposures ranging up to almost ten times a fund's net assets. Although we recognize that funds use derivatives for various reasons, a fund with derivatives notional exposures of almost ten times its net assets and having the potential for additional exposures, for example, does not appear to be subject to a

limiting the permitted segregation to cash equivalents effectively permitted funds to incur investment leverage up to a theoretical limit equal to 100% of a fund's net assets"; also noting that "industry practice has evolved further since 1996 [when the staff issued the Merrill Lynch No-Action Letter, *supra* note 59] in a manner that could, in some instances, allow for investment leverage that exceeds the 100% limit that was implicit in earlier Commission and Staff positions").

¹⁰⁴ The fund may, however, still be required to post collateral to comply with other regulatory or contractual requirements. *See, e.g.*, Comment Letter of Rafferty Asset Management, LLC on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("Rafferty Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-40.pdf>, at 12 (noting that "all swap" contracts have an "out of the money value of the contract [of] zero" at inception, but that the firm's swap contracts "typically require the Funds to post collateral equal to approximately 20% of the notional value of the swap transaction").

¹⁰⁵ Our staff also reviewed the extent to which funds used financial commitment transactions and the extent to which the funds entered into other types of senior securities transactions pursuant to section 18 or 61.

practical limit on leverage as we contemplated in Release 10666.¹⁰⁶

Funds are able to obtain such high levels of derivatives exposures relative to the funds' net assets primarily because of their use of the mark-to-market approach with respect to various types of derivatives, as discussed above.¹⁰⁷ We observed the argument in the Concept Release that segregating only the mark-to-market liability "may understate the risk of loss to the fund [and] permit the fund to engage in excessive leveraging" ¹⁰⁸ Concerns about the efficacy of the mark-to-market approach may be exacerbated by funds' application of the mark-to-market approach to TRS in particular. This greatly expands the potential use of the mark-to-market approach because a TRS can reference any asset, including a range of securities, commodities, or other derivatives.¹⁰⁹ Nearly any type of investment that a fund could make directly can be transformed into a cash-settled TRS which, as noted above, may "produce[] an exposure and economic return substantially equal to the exposure and economic return a fund could achieve by borrowing money from the counterparty in order to purchase

¹⁰⁶ *See, e.g.*, Ropes & Gray Concept Release Comment Letter, at 4 (noting that "[i]t now appears to be an increasingly common practice for funds that engage in cash-settled swaps to segregate assets only to the extent required to meet the fund's daily mark-to-market liability, if any, relating to such swaps" but that, "[o]f course, in many cases this liability will not fully reflect the ultimate investment exposure associated with the swap position" and that, "[a]s a result, a fund that segregates only the market-to-market liability could theoretically incur virtually unlimited investment leverage using cash-settled swaps"); Keen Concept Release Comment Letter, at 20 (stating that the mark-to-market approach, as applied to cash settled swaps, "imposes no effective control over the amount of investment leverage created by these swaps, and leaves it to the market to limit the amount of leverage a fund may use").

¹⁰⁷ Our staff also has stated that it would not object to a fund covering its obligations by entering into certain cover transactions or holding the asset (or the right to acquire the asset) that the fund would be required to deliver under certain derivatives. *See supra* note 53. *See also infra* section III.B.1.d.

¹⁰⁸ *See* Concept Release, *supra* note 3, at text accompanying n.83. *See also supra* note 106.

¹⁰⁹ When a fund purchases a total return swap, the fund agrees with a counterparty that the fund will periodically pay a specified fixed or floating rate and will receive any appreciation and any interest or dividend payments on a specified reference asset(s), and will pay any depreciation on the reference asset(s). *See, e.g.*, ISDA Product Descriptions and Frequently Asked Questions, available at <http://www.isda.org/educat/faqs.html#28> ("A total return swap is a agreement in which one party (total return payer) transfers the total economic performance of a reference obligation to the other party (total return receiver). Total economic performance includes income from interest and fees, gains or losses from market movements, and credit losses.").

the equities that are reference assets" under the TRS.¹¹⁰

c. Concerns Regarding Funds' Ability To Meet Their Obligations

Funds' current practices also may not "assure the availability of adequate [assets] to meet the obligations arising from [funds' derivatives transactions]," as we contemplated in Release 10666, and thus may implicate the asset sufficiency concern expressed in section 1(b)(8) of the Act. In Release 10666, we stated a fund should segregate liquid assets equal in value to the fund's full obligation under the transactions described in that release from the outset of the transaction.¹¹¹ Consistent with Release 10666, funds applying the notional amount segregation approach segregate an amount of assets equal in value to the full amount of the fund's potential obligation under derivatives, where that amount is known at the outset of the transaction, or the full market value of the underlying reference asset for the derivative.¹¹² Segregating assets equal in value to the fund's full potential obligation under a derivative generally would be expected to enable the fund to meet that obligation.

A fund using the mark-to-market approach, however, segregates assets the fund deems liquid in an amount equal to the fund's daily mark-to-market liability on the derivative, if any. This approach looks only to losses, and corresponding potential payment obligations under the derivative, that the fund already has incurred. A fund that follows this approach is not necessarily segregating assets in anticipation of possible future losses and any corresponding payment obligations, and the fund's segregation of assets equal to its mark-to-market liability on any particular day provides no assurances that future losses will not exceed the amount of assets the fund has segregated or would otherwise have available to meet the payment obligations resulting from such losses. A fund's mark-to-market liability on any particular day could be substantially smaller than the fund's ultimate obligations under a derivative.¹¹³ As

¹¹⁰ *See* BlackRock Concept Comment Letter, at 4 and accompanying text.

¹¹¹ *See supra* note 47.

¹¹² *See supra* notes 54-55 and accompanying text.

¹¹³ *See, e.g.*, ICI Concept Release Comment Letter, at 11 (noting that "calculating a fund's exposure daily based only on its net obligations—the 'mark-to-market' approach—may create a risk that market movements could increase a fund's exposure, so that the segregated assets are worth less than the fund's obligation" and that "[h]ypothetically, in an extreme scenario, a fund that used derivatives heavily and segregated most of its liquid assets to cover its obligation on a pure mark-to-market basis

noted above, if there is no mark-to-market liability for the fund on a given day, for example because the derivative is currently in a gain position or the fund has just entered into a derivative like a swap for which there is no daily loss for either party at inception, the fund might not segregate *any* assets.¹¹⁴

Where a fund segregates any liquid asset, rather than the more narrow range of high-quality assets we described in Release 10666, the segregated assets may be more likely to decline in value at the same time as the fund experiences losses on its derivatives than if the fund had segregated the types of liquid assets we described in Release 10666.¹¹⁵ In this case, or when a fund's derivatives payment obligations are substantial relative to the fund's assets, the fund may be forced to sell portfolio securities to meet its derivatives payment obligations, potentially in stressed market conditions.¹¹⁶ That a fund has

could potentially find itself with insufficient liquid assets to cover its derivative positions"); Vanguard Concept Release Comment Letter, at n.15 (noting that "using a market value [asset segregation] test for certain transactions can result in the under-segregation of assets"); AQR Concept Release Comment Letter, at 4 ("The current asset segregation approach, while it has been effective in mitigating the risks section 18 was designed to address (*i.e.*, excessive borrowing and operating without adequate assets and reserves), has some weaknesses. In particular, as applied to swaps, the daily end-of-day segregation of changes in market value do not reflect the likelihood of loss or volatility of the reference instrument. Intra-day value fluctuations are ignored. For futures, the issues are similar."); Ropes & Gray Concept Release Comment Letter, at 4 (noting that a swap's mark-to-market liability, if any, "in many cases . . . will not fully reflect the ultimate investment exposure associated with the swap position").

¹¹⁴ See *supra* note 104 and accompanying text.

¹¹⁵ See, e.g., Comment Letter of Better Markets, Inc. on Concept Release (Nov. 7, 2011) (File No. S7-33-11), available at <http://www.sec.gov/comments/s7-33-11/s73311-42.pdf>, at 5 (stating that "the broadening of segregated assets [permitted by the Merrill Lynch No-Action letter] increases the probability that the embedded credit associated with the derivatives will result in a senior payment of money from the Funds" . . . and, in addition, "the assets could be positively correlated with the derivatives risk being offset" and that "[l]oss on the derivatives risk could be compounded by loss on the asset"); 2010 ABA Derivatives Report, *supra* note 70, at 16 (where only the mark-to-market liability, if any, is segregated, "a fund's exposure under a derivative contract could increase significantly on an intraday basis, resulting in the segregated assets being worth less than the fund's obligations (until the fund is able to place additional assets in the segregated account To the extent that a fund relying on the Merrill Lynch Letter segregates assets whose prices are somewhat volatile, this 'shortfall' could be magnified").

¹¹⁶ We noted in Release 10666 that "in an extreme case an investment company which has segregated all its liquid assets might be forced to sell non-segregated portfolio securities to meet its obligations upon shareholder requests for redemption. Such forced sales could cause an investment company to sell securities which it wanted to retain or to realize gains or losses which it did not originally intend." See Release 10666,

segregated assets it deems sufficiently liquid to cover a derivative's daily mark-to-market liability, if any, thus may not effectively assure the fund will have liquid assets to meet its future obligations under the derivative.¹¹⁷

Some commenters on the Concept Release appear to have recognized that segregation of a fund's daily mark-to-market liability alone may not be sufficient in at least some cases. As discussed in more detail below in section III.C of this Release, some commenters have suggested that we impose asset segregation requirements under which a fund would include in its segregated account for a derivative an amount determined by the fund, in addition to the daily mark-to-market liability, designed to address future losses.¹¹⁸ Some commenters stated that it may be appropriate for a fund to maintain this additional amount, sometimes referred to as a "cushion" by commenters, in addition to assets used to cover any daily mark-to-market liability.¹¹⁹ Some of these commenters

supra note 20, at "Segregated Account" discussion. See also *infra* note 123 and accompanying text.

¹¹⁷ See, e.g., Keen Concept Release Comment Letter, at 20 ("The out-of-the money value of a swap [segregated under the mark-to-market approach] only represents how much the fund *already* has lost, not the *potential* loss that might be incurred during the term of the swap. The potential loss represents the risk of investment leverage, but the Division's position [regarding the mark-to-market approach] does not require the fund to maintain any assets to cover this risk. The only practical limit is the fund's need to maintain a buffer of unsegregated assets to cover fluctuations in the swap's out-of-the-money value.") (emphasis in original); MFDF Concept Release Comment Letter, at 4 ("A fund can also have significant liability exposures connected with a derivative position, particularly if that position does not perform as expected. Because the extent of these liabilities can far outweigh the initial investment in the instrument, the use of derivatives raises potentially serious concerns under the Investment Company Act of 1940").

¹¹⁸ See, e.g., ICI Concept Release Comment Letter; Comment Letter of Invesco Advisers, Inc. on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("Invesco Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-20.pdf> (supporting the ICI's recommendation concerning asset segregation); BlackRock Concept Release Comment letter; Comment Letter of Securities Industry and Financial Markets Association on Concept Release (Nov. 23, 2011) (File No. S7-33-11) ("SIFMA Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-51.pdf>; Vanguard Concept Release Comment Letter.

¹¹⁹ See, e.g., ICI Concept Release Comment Letter, at 3 ("When segregating less than the most conservative full notional amount, the segregation policy should require a more in depth analysis to ensure that the fund has a 'cushion' to address the potential loss from derivative contracts that could arise before the next time obligations are marked to market (often, the end of the next day)"); SIFMA Concept Release Comment Letter, at 4 ("The 'cushion' would address some potential shortcomings of a simple mark-to-market value measure, such as the risk that a Fund's indebtedness under a derivative could increase

further recommended that such an asset segregation requirement be complemented by additional guidance or requirements, with at least one commenter suggesting that we may wish to consider also imposing an "overall leverage limit."¹²⁰

For all of these reasons, funds' current practices, based on their application of Commission and staff guidance, may in some cases fail to impose an effective limit on the amount of leverage that funds can obtain through derivatives or necessarily require that funds have adequate assets to meet their obligations arising under the derivatives transactions.¹²¹ This is not consistent with our stated expectations in Release 10666 that funds' use of the segregated account approach as described in that release would achieve these goals, consistent with the undue speculation concern expressed in section 1(b)(7) and the asset sufficiency concern expressed in section 1(b)(8).¹²²

d. Examples of Substantial Derivatives-Related Losses

Three relatively recent settled enforcement actions provide examples of situations in which funds' use of derivatives caused significant losses and

significantly on an intraday basis, resulting in a gap between the value of a Fund's segregated assets and its actual payment obligations under the derivative.").

¹²⁰ See Vanguard Concept Release Comment Letter, at n.18 ("We recognize that the SEC may have concerns about allowing funds to develop their own asset segregation approach based upon SEC examples. To allay those concerns, the SEC may wish to consider adopting an overall leverage limit that funds would be required to comply with, notwithstanding that they have segregated liquid assets to back their obligations."). See also, e.g., ICI Concept Release Comment Letter, at 12 ("For funds that choose to segregate assets at less than the most conservative levels, we recommend that the SEC or its staff set forth general guidance that provides 'guardrails' to ensure appropriate protections for investors.").

¹²¹ We observed in the Concept Release the concern that the mark-to-market segregation approach, which we understand is increasingly used by funds with respect to various derivatives, "may understate the risk of loss to the fund, permit the fund to engage in excessive leveraging, fail to adequately set aside sufficient assets to cover the fund's ultimate exposure, and, therefore, perhaps not adequately fulfill the purposes underlying the segregated account approach and section 18." See Concept Release, *supra* note 3, at text accompanying n.83.

¹²² See Release 10666, *supra* note 20, at "Segregated Account" discussion (stating that "[i]f an investment company continues to engage in the described securities trading practices and properly segregates assets, the segregated account *will* function as a practical limit on the amount of leverage which the investment company may undertake and on the potential increase in the speculative character of its outstanding common stock" and that "such accounts *will* assure the availability of adequate funds to meet the obligations arising from such activities") (emphasis added).

are relevant to our consideration of whether funds' current practices, based on their application of Commission and staff guidance, are consistent with the investor protection purposes and concerns underlying section 18 of the Investment Company Act. The funds' experiences in these cases demonstrate the substantial and rapid losses that can result from a fund's investments in derivatives. The first action also demonstrates the further losses that can arise when a fund's portfolio securities also experience declines in value at the same time that the fund is required to make additional payments under the derivatives contracts.

The first action involved two mutual funds that suffered losses driven primarily by their exposure to certain commercial mortgage-backed securities ("CMBS"), obtained mainly through TRS.¹²³ Unlike an actual purchase of CMBS, these TRS contracts required no initial commitment of cash; this allowed the funds to take on large amounts of CMBS exposure without having to liquidate other positions, but it also caused them to take on leverage by adding market exposure on top of other assets on their balance sheets.

In late 2008, CMBS spreads widened to unprecedented levels, triggering substantial payment obligations for the funds under the TRS contracts while market values for the funds' portfolio securities also fell, further driving down the funds' net asset value per share. Amidst this declining market the funds also were required to sell portfolio securities to raise cash to meet their obligations under the TRS contracts. In addition, the adviser provided sponsor support to one of the funds by investing \$150 million in the fund in November 2008 to provide the fund with liquidity after its anticipated TRS payments for that month totaled approximately one-third of the fund's net assets and almost twice its available cash. Both of the funds experienced losses far greater than those suffered by their peer funds. One fund's share price declined nearly 80% (compared to an average decline of approximately 26% among its peers), far more than any sector in which the fund invested. This occurred because the fund was substantially leveraged as a result of its derivatives, particularly TRS contracts. The other fund's share price declined approximately 36% (compared to an average decline of approximately 4% among its peers).

¹²³ See In the matter of OppenheimerFunds, Inc. and OppenheimerFunds Distributor, Inc., Investment Company Act Release No. 30099 (June 6, 2012) (settled action).

The second action¹²⁴ involved a registered closed-end fund that pursued an investment strategy involving written out-of-the-money put options and short variance swaps.¹²⁵ These derivatives transactions led to substantial losses for the fund in September and October 2008, when the fund realized a loss of approximately \$45.4 million, or 45% of the fund's net assets as of the end of August 2008, on five written put options and variance swaps, contributing to a 72.4% two-month decline in the Fund's net asset value. The fund was liquidated in May 2009.

The third action¹²⁶ involved a registered closed-end fund that primarily invested in distressed debt until 2008, when it changed course and shorted credit by purchasing large amounts of CDS. In 2008 and early 2009, the fund's short exposure significantly increased as a result of large CDS purchases. The large CDS portfolio dramatically changed the fund's risk profile. Starting around April 2009, credit conditions began to improve and distressed debt increased in value, leading to large mark-to-market losses for the fund's CDS portfolio. In addition, the high cost of maintaining the CDS positions contributed to the fund's losses. In 2012, the fund performed very poorly in large part because of its short-credit CDS portfolio, and the fund's board voted to liquidate the fund.

Examples of the use of derivatives by investment funds that are not subject to the limitations under the Investment Company Act, including private funds, such as hedge funds, that are excluded from regulation under the Investment Company Act by section 3(c)(1) or 3(c)(7) of the Act also may be relevant in considering registered funds' use of derivatives.¹²⁷ Private funds' experience

¹²⁴ See In the matter of Claymore Advisors, LLC, Investment Company Act Release No. 30308 (Dec. 19, 2012); In the matter of Fiduciary Asset Management, LLC, Investment Company Act Release No. 30309 (Dec. 19, 2012) (settled actions).

¹²⁵ Variance swaps are essentially a bet on whether the actual or realized market volatility will be higher or lower than the market's expectation for volatility (or "implied volatility"). A party with a "long variance" position profits when realized volatility for the contract period is greater than the implied volatility. A party with a "short variance" position profits whenever realized volatility is less than the implied volatility.

¹²⁶ See In the Matter of UBS Willow Management L.L.C. and UBS Fund Advisor L.L.C., Investment Company Act Release No. 31869 (Oct. 16, 2015) (settled action).

¹²⁷ Section 3(c)(1) excludes from the definition of "investment company" any issuer whose outstanding securities are beneficially owned by not more than one hundred persons and which is not making and does not presently propose to make a public offering of its securities (other than short term paper). Section 3(c)(7) excludes from the

with the use of derivatives can help demonstrate the risks associated with derivatives generally, and private funds' experience also may be more directly relevant to the extent registered funds are obtaining leverage to a similar extent as private funds and pursuing similar investment strategies.

As one example, a private fund with approximately \$10.2 billion of net assets lost \$4.9 billion in natural gas futures positions in a period of a few weeks in August and September 2006 and was forced to liquidate its entire portfolio and close.¹²⁸ While the fund engaged in a range of investment strategies, its primary strategy involved a long-short strategy in one type of energy commodity—natural gas—that it traded through NYMEX futures and OTC swaps. The fund's exposure on its long and short natural gas positions in August 2006 could have been viewed as balanced or hedged at the time it made the investments, in that the fund reportedly had a net exposure that was much less substantial than the fund's substantial long and short gross exposures.¹²⁹ However, losses incurred on a portion of the fund's positions (which were not offset by gains on its other positions) resulted in substantial margin calls on the fund that it was unable to meet with its available cash, and the fund's adviser liquidated the fund's entire portfolio of natural gas positions and closed the fund, with losses to investors of almost 50% of the fund's net asset value.

This example demonstrates the challenges in assessing whether ostensibly hedged or covered positions will perform as intended (for example, whether a position intended to hedge another exposure may fail to have a hedging effect and instead result in additional, speculative exposure). In the example above, the private fund's adviser may have expected that the fund's long and short positions would

definition of "investment company" any issuer, the outstanding securities of which are owned exclusively by persons who, at the time of acquisition of such securities, are qualified purchasers, and which is not making and does not at that time propose to make a public offering of such securities. Private funds that rely on section 3(c)(1) or 3(c)(7) are not required to comply with any of the capital structure or leverage limitations under the Act, and the use of leverage by private funds, including hedge funds, may be an important component of their investment strategies.

¹²⁸ See Ludwig B. Chincarini, *A Case Study on Risk Management: Lessons from the Collapse of Amaranth Advisors L.L.C.*, 18 J. of Applied Fin. 152 (Spring/Summer 2008), available at <http://ludwigbc.com/pubs/pub9.pdf>.

¹²⁹ See *id.*, at 159 ("The position is 'hedged' in the sense that if natural gas futures prices rise or fall, one position's loss will be partly offset by the other's gain. However, the position is focusing on a spread bet.").

hedge a substantial amount of the risk inherent in each set of positions, and this could have been the case under various circumstances. But it was not the case in August and September of 2006, when the fund experienced the substantial losses discussed above leading to its liquidation.

2. Need for an Updated and More Comprehensive Approach

We now propose to take an updated and more comprehensive approach to the regulation of funds' use of derivatives and the application of the senior security restrictions in section 18. The current approach has developed over the years since we issued Release 10666 as funds and our staff sought to apply our statements in Release 10666 to various types of derivatives and other transactions on an instrument-by-instrument basis. We understand that, in determining how they will comply with section 18, funds consider various no-action letters issued by our staff. These letters were issued in the 1970s, 1980s, and 1990s, and addressed particular questions presented to the staff concerning the application of the approach enunciated in Release 10666 to various types of derivatives on an instrument-by-instrument basis.¹³⁰ We understand that funds also consider, in addition to these letters, other guidance they may receive from our staff and the practices that other funds disclose in their registration statements.

The current approach's development on an instrument-by-instrument basis, together with the dramatic growth in the volume and complexity of the derivatives markets over the past two decades, has resulted in situations for which there is no specific guidance from us or our staff with respect to various types of derivatives.¹³¹ We noted in the Concept Release the concern that the segregated account approach, by calling for an instrument-by-instrument assessment of the amount of cover required, may create uncertainty about the treatment of new products, and that new product development will inevitably lead to circumstances in which available guidance does not specifically address

each new instrument subject to section 18 constraints.¹³²

Under the current approach, different funds may treat the same kind of derivative differently, based on their own application of our staff's guidance and observation of industry practice, which at least one commenter noted "may unfairly disadvantage some funds."¹³³ Where there is no specific guidance, or where the application of existing guidance is unclear, funds may take approaches that involve a more extensive use of derivatives and that may not address the purposes and concerns underlying section 18 of the Act, as discussed above. The lack of guidance addressing some derivatives may create competitive pressures for funds to take approaches that involve a more extensive use of derivatives. The current approach, having developed over time, may treat similar derivatives in a manner that results in substantially different amounts of segregated assets, and may itself influence funds' investment decisions.¹³⁴ The lack of comprehensive guidance also makes it difficult for funds and our staff to evaluate and inspect for funds' compliance with section 18. A number of commenters on the Concept Release supported a more comprehensive and systematic approach, rather than an approach in which we or our staff provide guidance on an instrument-by-instrument basis, which these commenters generally suggested would be less effective.¹³⁵

¹³² See Concept Release, *supra* note 3, at n.79 and accompanying text.

¹³³ See, e.g., Davis Polk Concept Release Comment Letter, at 1–2 (noting that "funds and their sponsors may interpret the available guidance differently, even when applying it to the same instruments, which may unfairly disadvantage some funds").

¹³⁴ See, e.g., ICI Concept Release Comment Letter, at n.19 (noting that funds segregate the notional amount of physically settled futures contracts, consistent with the Dreyfus no-action letter, while some funds disclose that they segregate only the marked-to-market obligation in respect of cash-settled futures and agreeing with the concern reflected in the Concept Release that this "results in differing treatment of arguably equivalent products"); Davis Polk Concept Release Comment Letter, at 3 (noting that "[t]he current approach to segregation leaves many open questions and may lead to inconsistent results for financially similar instruments," noting for example that very few funds use physically settled futures contracts because staff guidance has applied the notional segregation approach to these contracts and, "[i]nstead, funds enter into over-the-counter swaps that provide similar economic exposure, even though swaps tend to be more expensive and present other potential risks, such as counterparty risk and lack of liquidity").

¹³⁵ See, e.g., ICI Concept Release Comment Letter, at 9 (advocating for a principles-based approach and noting, among other things, that "the SEC staff's approach to date of providing guidance with respect to specific types of instruments has created

A fund's use of derivatives may involve counterparty, liquidity, leverage, market, and operational risks, as noted above. As we observed in the Concept Release, "[a] fund's use of derivatives presents challenges for its investment adviser and board of directors to ensure that the derivatives are employed in a manner consistent with the fund's investment objectives, policies, and restrictions, its risk profile, and relevant regulatory requirements, including those under federal securities laws."¹³⁶ In light of these considerations and those we discuss in section III.D below, we believe that funds that make significant use of derivatives, or that use certain complex derivatives, should have formalized risk management programs to manage the risks that derivatives may pose and to help address the challenges and investor protection concerns presented by their use.¹³⁷

a patchwork of interpretations that is neither practical nor sustainable"); Davis Polk Concept Release Comment Letter, at 1 (noting that while guidance from the Commission and staff "has been helpful, it has not been able to keep pace with the dramatic expansion of the derivatives market over the past twenty years, both in terms of the types of instruments that are available and the extent to which funds use them," and that resulting "regulatory uncertainty may lead a fund to select one type of instrument or transaction over another for non-investment reasons, or to avoid certain instruments or transactions altogether," which "can lead to inefficiencies that are detrimental to funds and their shareholders"); BlackRock Concept Release Comment Letter, at 5 ("Any set of mechanical rules cannot take account of the diversity of derivatives and the multiplicity of ways they may be used by portfolio managers."); Invesco Concept Release Comment Letter; Loomis Concept Release Comment Letter; Comment Letter of American Bar Association on Concept Release (Nov. 11, 2011) (File No. S7–33–11) ("ABA Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-47.pdf>; MFD Concept Release Comment Letter; Comment Letter of T. Rowe Price Associates, Inc. on Concept Release (Nov. 7, 2011) (File No. S7–33–11) ("T. Rowe Price Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-35.pdf>; Vanguard Concept Release Comment Letter.

¹³⁶ Concept Release, *supra* note 3, at 14. See also, e.g., Comment Letter of Capital Market Risk Advisors on Concept Release (Nov. 1, 2011) (File No. S7–33–11), available at <http://www.sec.gov/comments/s7-33-11/s73311-19.pdf> (supporting risk management for derivatives, but also for all more complex and less liquid instruments).

¹³⁷ See, e.g., Oppenheimer Concept Release Comment Letter, at 3 (stating that "a core component in the oversight of the use of derivatives by funds should be the board's awareness of the controls in place, and the effectiveness of the adviser's governance of risk in maintaining this awareness" and that "[w]e believe it is reasonable for the SEC to expect large and sophisticated investment advisers to have in place a well-developed risk governance framework incorporating an independent risk management function, governance structures designed to ensure the comprehensive review by appropriate levels of management of risk issues and reporting to a fund's

Continued

¹³⁰ See *Registered Investment Company Use of Senior Securities-Select Bibliography*, available at <http://www.sec.gov/divisions/investment/seniorsecurities-bibliography.htm> (prepared by the staff and citing staff no-action letters).

¹³¹ See, e.g., ICI Concept Release Comment Letter, at 9 ("A principles based approach is necessary because the SEC staff's traditional instrument by instrument approach to guidance has created, and would continue to create, regulatory uncertainty.").

III. Discussion

As noted above, the dramatic growth in the volume and complexity of the derivatives markets over the past two decades, and the increased use of derivatives by certain funds, led us to initiate a review of funds' use of derivatives under the Investment Company Act. Based on that review, including the considerations we discussed in section II.D above and throughout this Release, we are today proposing rule 18f-4, an exemptive rule designed to address the investor protection purposes and concerns underlying section 18 and to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives transactions and financial commitment transactions. This proposal is part of a broader set of initiatives designed to address the increasingly complex portfolio composition and operations of the asset management industry.¹³⁸

Proposed rule 18f-4 would permit a fund to enter into derivatives transactions, as defined in the rule, provided that the fund complies with three primary sets of conditions of the rule designed to address the purposes and concerns underlying section 18.¹³⁹ First, the fund would be required to

board designed to facilitate and enhance effective board oversight").

¹³⁸ Other initiatives include modernizing investment company reporting and disclosure and proposing liquidity risk management programs for open-end funds, including exchange-traded funds. See Investment Company Reporting Modernization, Investment Company Act Release No. 31610 (May 20, 2015) [80 FR 33590 (June 12, 2015)] ("Investment Company Reporting Modernization Release"); Amendments to Form ADV and Investment Advisers Act Rules, Advisers Act Release No. 4091 (May 20, 2015) [80 FR 33718 (June 12, 2015)]; Liquidity Release, *supra* note 5.

¹³⁹ The proposed rule would provide an exemption from certain provisions of section 18 and 61 of the Act, subject to conditions. The proposed rule could be used by any fund subject to the requirements of section 18 or 61, including mutual funds, closed-end funds, BDCs, most ETFs, and exchange-traded managed funds. (Exchange-traded managed funds, a hybrid between a traditional mutual fund and an ETF, are open-end funds that the Commission has approved. See Eaton Vance Management, et al., Investment Company Act Release Nos. 31333 (Nov. 6, 2014) (notice) and 31361 (Dec. 2, 2014) (order)). The rule would not apply to unit investment trusts ("UITs"), including ETFs structured as UITs, because UITs are not subject to the requirements of section 18. However, as the Commission has noted (in addressing futures contracts and commodities options), derivatives transactions generally require a significant degree of management and may not meet the requirements imposed on a UIT by the Investment Company Act, including section 4(2) thereof. See section 4 of the Act; see also Custody Of Investment Company Assets With Futures Commission Merchants And Commodity Clearing Organizations, Investment Company Act Release No. 22389 (Dec. 11, 1996), at n.18 (explaining that UIT portfolios are generally unmanaged).

comply with one of two alternative portfolio limitations designed to impose a limit on the amount of leverage the fund may obtain through derivatives transactions and other senior securities transactions. The first portfolio limitation would place an overall limit on the amount of exposure (as defined in the rule) to underlying reference assets, and potential leverage, that a fund would be able to obtain through derivatives transactions and other senior securities transactions by limiting the fund's exposure under these transactions to 150% of the fund's net assets. The second portfolio limitation would focus primarily on a risk assessment of the fund's use of derivatives, and would permit a fund to obtain exposure in excess of that permitted under the first portfolio limitation where the fund's derivatives transactions, in aggregate, result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives, evaluated using a value-at-risk-based test.

Second, the fund would be required to manage the risks associated with the fund's derivatives transactions by maintaining an amount of certain assets, defined in the proposed rule as "qualifying coverage assets," designed to enable the fund to meet its obligations under its derivatives transactions. To satisfy this requirement the fund would be required to maintain qualifying coverage assets to cover the fund's mark-to-market obligations under a derivatives transaction, as well as an additional amount, determined in accordance with policies and procedures approved by the fund's board, designed to address potential future losses and resulting payment obligations under the derivatives transaction. The fund's qualifying coverage assets for its derivatives transactions generally would be required to consist of cash and cash equivalents.

Third, except with respect to funds that engage in only a limited amount of derivatives transactions and that do not use certain complex derivatives transactions as defined in the proposed rule, the fund would be required to establish a formalized derivatives risk management program administered by a designated derivatives risk manager. The derivatives risk management program requirement is designed to complement the proposed rule's portfolio limitations and asset segregation requirements applicable to every fund that engages in derivatives transactions by requiring funds subject to the requirement to adopt and implement a derivatives risk

management program that addresses the program elements specified in the rule, including the assessment and management of the risks associated with the fund's derivatives transactions. The program would be administered by a derivatives risk manager designated by the fund and approved by the fund's board of directors.

The proposed rule also would permit a fund to enter into financial commitment transactions, which include the trading practices we described in Release 10666 and short sale borrowings, provided that the fund complies with conditions requiring the fund to maintain qualifying coverage assets equal in value to the fund's full obligations under its financial commitment transactions. Because in many cases the timing of the fund's payment obligations may be specified under the terms of a financial commitment transaction or the fund may otherwise have a reasonable expectation regarding the timing of the fund's payment obligations with respect to its financial commitment transactions, a fund relying on the proposed rule would be able to maintain as qualifying coverage assets for a financial commitment transaction assets that are convertible to cash or that generate cash prior to the date on which the fund expects to be required to pay its obligations under the transaction, determined in accordance with policies and procedures approved by the fund's board of directors.¹⁴⁰

The proposed rule would supersede the guidance we provided in Release 10666, as well as the guidance provided by our staff concerning funds' use of derivatives and financial commitment transactions, which we would rescind if we adopt the proposed rule.¹⁴¹

A. Structure and Scope of Proposed Rule 18f-4

1. Structure of Proposed Rule 18f-4

Proposed rule 18f-4, as summarized above, is designed both to impose a limit on the leverage a fund relying on the rule may obtain through derivatives transactions and financial commitment transactions, and to require the fund to have qualifying coverage assets to meet its obligations under those transactions, in order to address the undue speculation concern expressed in

¹⁴⁰ A fund relying on the proposed rule would also be able to maintain as qualifying coverage assets for a financial commitment transaction fund assets that have been pledged with respect to the financial commitment obligation and can be expected to satisfy such obligation, determined in accordance with policies and procedures approved by the fund's board of directors.

¹⁴¹ See *infra* section III.I.

section 1(b)(7) and the asset sufficiency concern expressed in section 1(b)(8). We discuss in this section of the Release the structure and general approach of proposed rule 18f-4, and discuss the scope of the defined terms “derivatives transactions” and “financial commitment transactions” in section III.A.2 below.

As discussed in more detail in the sections that follow, in order to rely on the exemption provided by proposed rule 18f-4 to enter into derivatives transactions, a fund would be required to comply with one of two alternative portfolio limitations and, separately, to maintain qualifying coverage assets designed to enable the fund to meet its obligations under those transactions and to require the fund to manage the risks associated with those transactions. The proposed rule’s portfolio limitations are designed primarily to address concerns about a fund’s ability to obtain leverage through derivatives transactions, whereas the proposed rule’s requirements to maintain qualifying coverage assets are designed primarily to address concerns about a fund’s ability to meet its obligations. We believe that this approach for derivatives transactions—providing separate portfolio limitations and asset segregation requirements—would be more effective than an approach focusing only on asset segregation, particularly when it is coupled with a formalized risk management program for funds that engage in more than a limited amount of derivatives transactions or that use certain complex derivatives transactions, as we are proposing today.

We have determined to propose portfolio limitation and risk management requirements for derivatives transactions, in addition to an asset segregation requirement, because as discussed in section II.D above, asset segregation alone in some cases may not provide a sufficient limit on the amount of leverage a fund can obtain through derivatives or sufficient assurances that a fund would have adequate assets to meet its obligations arising under derivatives transactions. The asset segregation approach described in Release 10666 achieved both of these goals—limiting leverage and addressing availability of assets—because that release contemplated that funds would segregate high-quality liquid assets equal in value to the fund’s full obligations. A fund that segregated liquid assets equal to the purchase price in a standby commitment agreement, for example, would be limited in its ability to enter into standby commitment agreements because the fund could not

incur obligations under those agreements in excess of the fund’s available liquid assets; by segregating liquid assets equal to the purchase price of the standby commitment agreement, the fund would have assets available to meet its obligations under the agreement.

Although this approach appears to have addressed the concerns underlying section 18 for the particular instruments described in Release 10666 and is similar to the approach we are proposing today for financial commitment transactions, applying it to derivatives transactions by requiring funds to segregate the kinds of liquid assets we described in Release 10666 equal in value to the full notional amount of each derivative could in some cases require funds to hold more liquid assets than may be necessary to address the investor protection purposes and concerns underlying section 18. The notional amount of a derivatives transaction does not necessarily equal, and often will exceed, the amount of cash or other assets that a fund ultimately would likely be required to pay or deliver under the derivatives transaction. By addressing concerns related to a fund’s ability to obtain leverage through derivatives transactions primarily through the proposed portfolio limitations and separately addressing concerns related to a fund’s ability to meet its derivatives obligations primarily through the proposed requirements to maintain qualifying coverage assets, the proposed rule is designed to address each concern more directly, while still providing a flexible framework that can be applied by funds to various types of derivatives as they are developed in the marketplace.

These requirements also would be complemented by the proposed rule’s risk management requirements, which would require funds that engage in more than a limited amount of derivatives transactions or that use certain complex derivatives transactions, as defined in the proposed rule, to develop formalized risk management programs reasonably designed to assess and manage the risk associated with those transactions based on the fund’s own facts and circumstances. This requirement should serve to establish a standardized level of risk management for funds that engage in more than a limited amount of derivatives transactions or that use complex derivatives transactions.

2. Definitions of Derivatives Transactions and Financial Commitment Transactions

The proposed rule defines the term “derivatives transaction” to mean any swap, security-based swap, futures contract, forward contract, option, any combination of the foregoing, or any similar instrument (“derivatives instrument”) under which a fund is or 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.¹⁴² This definition is designed to describe those derivatives transactions that in our view involve the issuance of a senior security, as discussed in section II.B.4 above, because they involve a future payment obligation, that is, an obligation or potential obligation of the fund to make payments or deliver assets to the fund’s counterparty.

The proposed rule’s definition of “derivatives transaction” incorporates a list of derivatives instruments. We believe this list of derivatives instruments, together with the proposed rule’s inclusion of “similar instruments,” covers the types of derivatives that funds currently use and that involve fund obligations that implicate section 18, and that this list is sufficiently comprehensive to include derivatives that may be developed in the future.¹⁴³ We believe that this approach is preferable to having a more conceptual definition of derivatives transaction, such as an instrument or contract whose value is based upon, or derived from, some other asset or metric, which could be too broad or more difficult to apply, in that it could be understood to include or potentially include instruments or transactions that are sometimes referred to as “derivatives” but which typically would not be expected to implicate section 18.

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.¹⁴⁴ This definition is designed to describe the trading practices addressed in Release 10666, as well as short sales of securities, for which the staff initially developed the

¹⁴² Proposed rule 18f-4(c)(2).

¹⁴³ Title VII of the Dodd-Frank Act established a comprehensive framework for the regulation of swaps and security-based swaps. The definitions of these terms under section 1a of the Commodity Exchange Act and section 3(a)(68) of Securities Exchange Act, respectively, are detailed and expansive, and were designed to encompass a wide range of derivatives, including those that could be developed in the future.

¹⁴⁴ Proposed rule 18f-4(c)(4).

segregated account approach we applied in Release 10666. These transactions involve a conditional or unconditional contractual obligation to pay or deliver assets in the future and thus involve the issuance of a senior security, as discussed in section II.B.4 of this Release.

The proposed rule's definition of financial commitment transactions includes firm and standby commitment agreements, which we addressed in Release 10666,¹⁴⁵ as well as any similar agreement.¹⁴⁶ The rule includes, as 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 at the discretion of the fund's general partner.¹⁴⁷ We understand that funds often refer to these transactions as "unfunded commitments." In these transactions, as with respect to firm and standby commitment agreements, the fund has incurred a conditional or unconditional contractual obligation to pay or deliver assets in the future.

The fund would be exposed to risks as a result of these transactions in that the fund may be required to liquidate other assets of the fund to obtain the cash needed by the fund to satisfy its obligations, and if the fund is unable to meet its obligations, the fund would be subject to default remedies available to its counterparty. For example, if a fund fails to fulfill its commitments to invest in a private fund when called to do so, the fund could be subject to the remedies specified in the limited partnership agreement (or similar document) relating to that private fund, which can include, for example, a forfeiture of some or all of the fund's investment in the private fund.¹⁴⁸

¹⁴⁵ See Release 10666, *supra* note 20, at "Reverse Repurchase Agreements," "Firm Commitment Agreements," and "Standby Commitment Agreements" discussions.

¹⁴⁶ Proposed rule 18f-4(c)(4).

¹⁴⁷ The definition would not include a transaction under which a fund merely is required to deliver cash or assets as part of regular-way settlement of a securities transaction (rather than a forward-settling transaction or transaction in which settlement is deferred). Cf. Release 10666, *supra* note 20, at n.11.

¹⁴⁸ See, e.g., Phyllis A. Schwartz & Stephanie R. Breslow, *Private Equity Funds: Formation and Operation* (June 2015 ed.), at 2-34 (remedies private equity funds may apply in event of investor default include, among other things, the right to charge high interest on late payments, the right to force a sale of the defaulting investor's interest, the right to continue to charge losses and expenses to defaulting investors while cutting off their interest in future profits, and the right to take any other action permitted at law or in equity).

The rule's definitions of the terms "derivatives transactions" and "financial commitment transactions," discussed above, would specify the types of transactions in which a fund would be permitted to engage under the rule, subject to its conditions. Other senior securities transactions that do not fall within either of these definitions, such as borrowings from a bank by mutual funds or the issuance of other debt securities or preferred equity by closed-end funds or BDCs, could only be done pursuant to the requirements of section 18 (or section 61 in the case of BDCs) or in accordance with some other exemption, rather than proposed rule 18f-4.

We request comment on all aspects of the proposed rule's definitions of the terms "derivatives transaction" and "financial commitment transaction."

- Is the definition of "derivatives transaction" sufficiently clear? Are there additional types of derivatives instruments that we should include or any that we should exclude?

- The proposed rule's definition of the term derivatives transactions is designed to describe those derivatives transactions that would involve the issuance of a senior security. Do commenters agree that this is an appropriate approach? Does the rule effectively describe all of the types of derivatives transactions that would involve the issuance of a senior security? The proposed rule's definition of "derivatives transaction" incorporates a list of derivatives instruments, rather than a conceptual definition such as an instrument or contract whose value is based upon, or derived from, some other asset or metric, because we believe that the definition's list of derivatives instruments would more clearly describe the types of derivatives that implicate section 18 than a conceptual definition. Do commenters agree? Why or why not?

- 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. The proposed rule includes, as 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 at the discretion of the private fund's general partner. Do commenters agree with the scope of this definition? Are these terms sufficiently clear? Do commenters agree

that it is appropriate to include these transactions?

- Are there additional types of transactions that we should include in the definition of a "financial commitment transaction"? Adding additional transactions to the definition would permit the fund to engage in those transactions by complying with the proposed rule, rather than section 18 or 61. Are there transactions that we should exclude from the definition and for which a fund should be required to comply with the requirements of section 18 (to the extent permitted under section 18), rather than the proposed rule's conditions?

- Our staff has expressed the view that a fund's loan of portfolio securities may involve the issuance of a senior security in light of the fund's obligation to return the collateral upon termination of the loan and has expressed the view that "a mutual fund should not have on loan at any given time securities representing more than one-third of its total asset value."¹⁴⁹ Should we address funds' compliance with section 18 in connection with securities lending by, instead, including a fund's obligation to return securities lending collateral as a financial commitment transaction? Alternatively, should we require a fund to include the obligation to return securities lending collateral for purposes of the proposed rule's exposure limits, as discussed in more detail in section III.B? Or does the current approach under which funds do not have on loan at any given time securities representing more than one-third of the funds' total assets, together with other guidance from our staff concerning securities lending by funds, effectively address the senior security implications of securities lending such that we should not address securities lending in the proposed rule? Which approach would be most appropriate and why?

- The proposed rule would permit a fund to enter into a derivatives transaction or financial commitment transaction, notwithstanding the requirements of section 18 or 61 of the Act, if the fund complies with the rule's conditions. Are there other rules or forms we should consider modifying if

¹⁴⁹ See, e.g., The Brinson Funds, SEC Staff No-Action Letter (Nov. 25, 1997), available at <https://www.sec.gov/divisions/investment/noaction/1997/brinsonfunds112597.pdf> (stating that, "[a]s a general matter, securities lending arrangements are regulated under Section 17(f) of the Investment Company Act of 1940, which governs custody arrangements," but that "[t]he staff has stated that a fund's loan of portfolio securities may involve the issuance of a senior security in light of the fund's obligation to return the collateral upon termination of the loan").

we adopt the proposed rule? Should we, for example, amend Form N-2 to provide that funds required to file on that form should not include derivatives transactions and financial commitment transactions in the senior securities table? Are there other aspects of our rules and forms that we should consider amending if we were to adopt the proposed rule? If so, which rules and form items and why?

- Should any final rule address, or should we provide guidance concerning, funds' compliance with other aspects of section 18 in connection with funds' use of derivatives transactions or financial commitment transactions? For example, because the proposed rule would permit a fund to enter into derivatives transactions and financial commitment transactions notwithstanding section 18(a)(1) and section 18(f)(1), a fund relying on the proposed rule would not be required to comply with section 18's 300% asset coverage requirement (or section 61's 200% asset coverage requirement) with respect to such transactions.¹⁵⁰ Should we, however, address in any final rule or provide guidance concerning the application of the asset coverage requirements under section 18 or 61 when a fund also enters into senior securities transactions in reliance on section 18 or 61 (such as bank borrowings or, in the case of a closed-end fund or BDC, the issuance of senior debt or preferred stock)? When a fund is calculating asset coverage under section 18(h) for senior securities transactions permitted by section 18 or 61, how should the fund treat its derivatives transactions or financial commitment transactions? When determining the "aggregate amount of senior securities representing indebtedness," how should the fund treat any liabilities and indebtedness associated with the fund's derivatives transactions and financial commitment transactions? Currently, when funds are determining the amount of their liabilities and indebtedness and the amount of their senior securities for purposes of calculations under section 18(h), are funds determining these amounts in accordance with U.S. generally accepted accounting principles? Should a fund also include any liabilities and indebtedness associated with derivatives transactions

and financial commitment transactions based on U.S. generally accepted accounting principles? Alternatively, should a fund treat any liabilities and indebtedness for these transactions as "liabilities and indebtedness not represented by senior securities"? What approach would be appropriate and why?

- Is there any guidance we should provide concerning funds' compliance with other provisions of the Investment Company Act in connection with funds' use of derivatives transactions or financial commitment transactions in reliance on the proposed rule?

B. Portfolio Limitations for Derivatives Transactions

The proposed rule would require a fund that engages in derivatives transactions in reliance on the rule to comply with one of two alternative portfolio limitations.¹⁵¹ As explained in more detail below, under the first portfolio limitation (the "exposure-based portfolio limit"), a fund generally would be required to limit its aggregate exposure to 150% of the fund's net assets. A fund's "exposure" for this purpose generally would be calculated as the aggregate notional amount of its derivatives transactions, together with its obligations under financial commitment transactions and other senior securities transactions. The second portfolio limitation (the "risk-based portfolio limit") would permit a fund to obtain exposure in excess of that permitted under the exposure-based portfolio limit where the fund's derivatives transactions, in aggregate, result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives, evaluated using a test based on value-at-risk ("VaR"). A fund electing the risk-based portfolio limit generally would be required to limit its exposure under derivatives transactions, financial commitment transactions, and other senior securities transactions to 300% of the fund's net assets. As discussed below, these portfolio limitations are designed primarily to address the undue speculation concern expressed in section 1(b)(7) by imposing an overall limit on the amount of exposure to underlying reference assets, and potential leverage, that a fund would be able to obtain through derivatives and other senior securities transactions, while also providing flexibility for a fund to use derivatives for a variety of purposes.¹⁵²

¹⁵¹ Proposed rule 18f-4(a)(1).

¹⁵² The proposed rule's portfolio limitations, although designed to impose a limit on potential

1. Exposure-Based Portfolio Limit

a. Overview

The first portfolio limit would be based on the fund's overall exposure to: (1) Derivatives transactions, (2) financial commitment transactions, and (3) other transactions involving a senior security entered into by the fund pursuant to section 18 or 61 of the Act without regard to the exemption that would be provided by the proposed rule (*i.e.*, senior securities transactions engaged in by a fund in reliance on the requirements of those provisions, rather than in reliance on the exemption that would be provided by the proposed rule).¹⁵³ The proposed rule would collectively define these transactions as "senior securities transactions."¹⁵⁴ A fund that relies on the exposure-based portfolio limit would be required to operate so that its aggregate exposure under senior securities transactions, measured immediately after entering into any such transaction, does not exceed 150% of the fund's net assets.¹⁵⁵

The exposure-based portfolio limit is designed to impose an overall limit on the amount of exposure, and thus the amount of potential leverage, that a fund would be able to obtain through derivatives and other senior securities transactions. We discuss and seek comment below on the exposure-based portfolio limit, including the proposed rule's method of calculating a fund's exposure and the rule's limitation of exposure to 150% of the fund's net assets.

leverage, also could help to address concerns about a fund's ability to meet its obligations. As noted above, the use of derivatives for leveraging purposes can exacerbate the risk that losses on the derivatives, and resulting payment obligations imposed on the fund, can force the fund's adviser to sell the fund's investments to generate liquid assets in order for the fund to meet its obligations. The proposed rule would directly address concerns about a fund's ability to meet its obligations under its derivatives transactions primarily through the proposed rule's requirements to maintain qualifying coverage assets, as discussed below in section III.C.

¹⁵³ Proposed rule 18f-4(a)(1)(i); proposed rule 18f-4(c)(10) (defining the term "senior securities transaction" to mean any derivatives transaction, financial commitment transaction, or any transaction involving a senior security entered into by the fund pursuant to section 18 or 61 of the Act without regard to the exemption provided by the proposed rule).

¹⁵⁴ Proposed rule 18f-4(c)(10).

¹⁵⁵ Proposed rule 18f-4(a)(1)(i). As discussed below in section III.B.2, the risk-based portfolio limit also includes an outside limit on a fund's exposure. A fund's exposure for purposes of the risk-based portfolio limit would be calculated as described in this section of the Release, but the exposure limit would be 300% of the fund's net assets rather than 150%. Proposed rule 18f-4(a)(1)(ii).

¹⁵⁰ "Asset coverage" of a class of securities representing indebtedness of an issuer generally is defined in section 18(h) of the Investment Company Act as "the ratio which the value of the total assets of such issuer, less all liabilities and indebtedness not represented by senior securities, bears to the aggregate amount of senior securities representing indebtedness of such issuer." See *supra* note 34.

b. Calculation of Exposure

The proposed rule would define a fund's "exposure" as the sum of: (1) The aggregate notional amounts of the fund's derivatives transactions, subject to certain adjustments discussed below; (2) the aggregate obligations of the fund under its financial commitment transactions; and (3) the aggregate indebtedness (and with respect to any closed-end fund or business development company, involuntary liquidation preference) with respect to any other senior securities transactions entered into by the fund pursuant to section 18 or 61 of the Investment Company Act.¹⁵⁶ We discuss each aspect of this definition below.

i. Exposure for Derivatives Transactions

1. Determination of Notional Amounts

Under the proposed rule, a fund's exposure would include the aggregate notional amounts of its derivatives transactions.¹⁵⁷ The proposed rule would generally define the "notional

amount" of a derivatives transaction, subject to certain adjustments required by the rule (discussed below), as the market value of an equivalent position in the underlying reference asset for the derivatives transaction, or the principal amount on which payment obligations under the derivatives transaction are calculated.¹⁵⁸

We believe that, although derivatives vary widely in terms of structure, asset class, risks and potential uses, for most types of derivatives the notional amount generally serves as a measure of the fund's economic exposure to the underlying reference asset or metric.¹⁵⁹ A total return swap, for example, can provide economic exposure equivalent to a long or short position in the reference asset for the swap. Similarly, a fund can sell or buy a CDS to obtain exposure similar to a long or short position in the credit risk of an issuer of a fixed-income security. We also note that notional amounts are used in numerous other regulatory regimes as a

means of determining the scale of the derivatives activities of market participants.¹⁶⁰ We also believe that the definition of notional amount under the proposed rule is consistent with the way the term "notional amount" (or in some cases "notional value") generally is used with respect to derivatives transactions.¹⁶¹

Table 1 below sets forth a list of different types of derivatives transactions that are commonly used by funds, together with the method by which we understand a fund, for risk management, reporting or other purposes, typically would calculate the transaction's notional amount. We believe that the proposed rule's definition of notional amount generally would allow a fund to use the calculation methods below to determine the notional amounts of such derivatives transactions (before applying any of the adjustments discussed below) for purposes of calculating the fund's exposure under the proposed rule.¹⁶²

TABLE 1

Forwards:	
FX forward	Notional contract value of currency leg(s).
Forward rate agreement	Notional principal amount.
Futures:	
Treasury futures	Number of contracts * notional contract size * (futures price * conversion factor + accrued interest).
Interest rate futures	Number of contracts * contract unit (e.g., \$1,000,000).
FX futures	Number of contracts * notional contract size (e.g., 12,500,000 Japanese yen).
Equity index futures	Number of contracts * contract unit (e.g., \$50 per index point) * futures index level.
Commodity futures	Number of contracts * contract size (e.g., 1,000 barrels of oil) * futures price.
Options on futures	Number of contracts * contract size * futures price * underlying delta. ¹⁶³
Swaps:	
Credit default swap	Notional principal amount or market value of underlying reference asset.
Standard total return swap	Notional principal amount or market value of underlying reference asset.
Currency swap	Notional principal amount.
Cross currency interest rate swaps	Notional principal amount.
Standardized Options:	

¹⁵⁶ Proposed rule 18f-4(c)(3).

¹⁵⁷ Proposed rule 18f-4(c)(3)(i) (defining "exposure").

¹⁵⁸ Proposed rule 18f-4(c)(7) (defining "notional amount").

¹⁵⁹ Derivatives may be broadly described as instruments or contracts whose value is based upon, or derived from, an underlying reference asset (see *supra* at text preceding note 8). The notional amount generally serves a measure of the underlying economic exposure because it reflects the value of the underlying reference asset for that derivative or the amount of the underlying reference asset on which payment obligations are based.

¹⁶⁰ See, e.g., Margin and Capital Requirements for Covered Swap Entities, 80 FR 74839 (Nov. 30, 2015) ("Prudential Regulator Margin and Capital Adopting Release"); Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants, 79 FR 59898 (Oct. 3, 2014) ("CFTC Margin Proposing Release") (defining "material swaps exposure" by reference to average daily aggregate notional amounts of derivatives transactions). See also Further Definition of "Swap Dealer," "Security-Based Swap Dealer," "Major Swap Participant," "Major Security-Based Swap Participant" and "Eligible Contract Participant,"

Exchange Act Release No. 66868 (Apr. 27, 2012) [77 FR 30596 (May 23, 2012)] ("Swap Dealer/Major Swap Participant Release"), at section II.D (discussing use of notional amounts as basis for *de minimis* exemption to swap dealer registration requirements). See also CFTC regulations 4.5(c)(ii)(3)(b) and 4.13(a)(3)(ii)(B) (exclusion from definition of commodity pool operator and exemption from commodity pool operator registration requirement, respectively, in respect of certain pools whose commodity interest positions do not exceed 100% of the liquidation value of the pool's portfolio). See also *infra* section IV.E (discussing use of notional amounts under UCITS regulatory regime).

¹⁶¹ For example, "notional value" with respect to futures has been defined as "the underlying value (face value), normally expressed in U.S. dollars, of the financial instrument or commodity specified in a futures or options on futures contract." See *CME Group Glossary*, available at <http://www.cmegroup.com/education/glossary.html>. "Notional principal" or "notional amount" of a derivative contract is a hypothetical underlying quantity upon which interest rate or other payment obligations are computed." ISDA Online Product Descriptions and Frequently Asked Questions, available at <http://www.isda.org/educat/faqs.html#7>. The Bank for International Settlements

describes "notional amounts outstanding" as "a reference from which contractual payments are determined in derivatives markets." *Guide to the International Financial Statistics*, Bank for International Settlements (July 2009) ("BIS Guide"), available at <http://www.bis.org/statistics/intfinstatguide.pdf>, at 31. See also 2010 ABA Derivatives Report, *supra* note 70, at n.11 (noting that the term "notional amount" is used differently by different people in different contexts, but is used, in the Report, to refer to "the nominal or face amount that is used to calculate payments made on a particular instrument, without regard to whether its obligation under the instrument could be netted against the obligation of another party to pay the fund under the instrument").

¹⁶² The methods for determining the notional amounts in the table are similar to those required to be used by UCITS funds that follow the commitment approach (discussed further below in section IV.E. See European Securities and Markets Authority (formerly Committee of European Securities Regulators), *Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS*, CESR/10-788 (July 28, 2010) ("CESR Global Guidelines"), available at http://www.esma.europa.eu/system/files/10_788.pdf.

TABLE 1—Continued

Security options	Number of contracts * notional contract size (e.g., 100 shares per option contract) * market value of underlying equity share * underlying delta.
Currency options	Notional contract value of currency leg(s) * underlying delta.
Index options	Number of contracts * notional contract size * index level * underlying delta.

Although we believe that the notional amount generally serves as a measure of the fund's exposure to the underlying reference asset or metric,¹⁶⁴ we recognize that a derivative's notional amount does not reflect the way in which the fund uses the derivative and that 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 reference assets—for example, an interest rate swap and a credit default swap having the same notional amount—may expose a fund to very different potential investment risks and potential payment obligations.¹⁶⁵ We also recognize that there are other approaches to evaluating leverage associated with a fund's derivatives activities, including approaches that disregard or subtract the notional value of hedging transactions from the calculation of a fund's exposure.¹⁶⁶ Leverage can be calculated in numerous ways, however, and the appropriateness of a particular leverage metric may depend on various considerations, such as a fund's strategy and types of investments, and the specific leverage-related risks that are being considered.¹⁶⁷ On balance, we believe

that, for purposes of the proposed rule, a notional amount limitation would be a more effective and administrable means of limiting potential leverage from derivatives than a limitation which relies on other leverage measures that may be more difficult to adapt to different types of fund strategies or different uses of derivatives, including types of fund strategies and derivatives that may be developed in the future.

The proposed rule would allow a fund operating under the exposure-based portfolio limit to have exposure of up to 150% of the fund's net assets (*i.e.*, more than the fund's net assets) in recognition of the various ways in which funds may use derivatives. The 150% limit, discussed in more detail below, is designed to balance concerns about the limitations of an exposure measurement based on notional amounts with the benefits of using notional amounts, such as the ability of funds to readily determine the notional amounts of their derivatives transactions and the expectation that notional amounts can generally serve as a measure of the size of a fund's exposure to underlying reference assets or metrics, as discussed above.

We believe that, for purposes of the exposure-based portfolio limit, a test that focuses on the notional amounts of funds' derivatives transactions, coupled with an appropriate exposure limit, will better accommodate the broad diversity of registered funds and the ways in which they use derivatives than a test that would require consideration of the

manner in which a fund uses derivatives in its portfolio (*e.g.*, for hedging).¹⁶⁸ The rule seeks to achieve a balance between providing flexibility regarding the use of derivatives while limiting the potential risks associated with leverage by, in addition to the exposure limits in the proposed rule, conditioning the rule's exemptive relief on other requirements, such as the asset coverage requirements discussed in section III.C below and, if applicable, the derivatives risk management program requirements discussed in section III.D below, which must be tailored in light of the fund's particular strategy and other characteristics.

Although we believe that an exposure test that focuses on limiting the aggregate notional amounts of funds' derivatives transactions is an appropriate means of limiting leverage, in some cases, the notional amount for a derivatives transaction may not produce a measure of exposure that we believe would be appropriate for purposes of the proposed rule's exposure limitations. The proposed rule therefore includes three provisions relating to the calculation of exposure in respect of certain types of derivatives transactions for which we believe that an adjusted notional amount would better serve as a measure of a fund's investment exposure for purposes of the rule.

First, for derivatives that provide a return based on the leveraged performance of an underlying reference asset, the rule would require the notional amount to be multiplied by the applicable leverage factor.¹⁶⁹ Thus, for example, the rule would require a total return swap that has a notional amount of \$1 million and provides a return equal to three times the performance of an equity index to be treated as having a notional amount of \$3 million. Absent this provision, a fund could enter into a derivative with a stated notional amount that did not reflect the magnitude of the fund's leveraged investment exposure under the derivative.¹⁷⁰ Such a transaction, if not

¹⁶³ Delta refers to the ratio of change in the value of an option to the change in value of the asset into which the option is convertible. The delta-adjusted notional value of options is needed to have an accurate measurement of the exposure that an option creates to the underlying reference asset. See, e.g., Comment Letter of Morningstar, Inc. on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("Morningstar Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-23.pdf>, at 2.

¹⁶⁴ See *supra* notes 158–160.

¹⁶⁵ While credit default swaps are often considered riskier than typical interest rate or currency derivatives, the staff has observed that even "plain vanilla" interest rate and currency derivatives can lead to significant losses for funds. See, e.g., Katherine Burton, *Swiss Franc Trade Is Said to Wipe Out Everest's Main Fund*, Bloomberg (Jan. 18, 2015), available at <http://www.bloomberg.com/news/articles/2015-01-17/swiss-franc-trade-is-said-to-wipe-out-everest-s-main-fund> (noting significant and widespread losses following the Swiss National Bank's decision to decouple the Swiss franc from the euro).

¹⁶⁶ See *infra* section III.B.1.d.

¹⁶⁷ See, e.g., *An Overview of Leverage*, AIMA Canada (Oct. 2006) ("An Overview of Leverage"), available at <http://www.aima.org/filemanager/root/>

site_assets/canada/publications/strategy_paper_-_leverage.pdf (distinguishing between financial, construction and instrument leverage and describing the measurement of leverage using gross market exposure vs. net market exposure). See also Off-Balance-Sheet Leverage IMF Working Paper, *supra* note 79 (discussing means of measuring leverage in various types of derivatives and other off-balance-sheet transactions). See also Ang, Gorovyy & Inwegen, *supra* note 72 (discussing differences among gross leverage, net leverage and long-only leverage calculations, as applied to long-only, dedicated long-short, general leveraged and dedicated short funds). See also Comment Letter of BlackRock, Inc. on Investment Company Reporting Modernization (Aug. 11, 2015) (File No. S7-08-15) ("BlackRock Modernization Comment Letter"), available at <http://www.sec.gov/comments/s7-08-15/s70815-318.pdf>. In the BlackRock Reporting Modernization Comment Letter, the commenter proposed a high-level framework for an approach to measuring economic leverage that could potentially be applied across different types of funds and investment strategies, using comprehensive analysis of multiple different types of risk exposures.

¹⁶⁸ See *infra* section III.B.1.d.

¹⁶⁹ Proposed rule 18f-4(c)(7)(iii)(A).

¹⁷⁰ A similar requirement applies to the determination of *de minimis* thresholds for swap dealer and security-based swap dealer registration. See Swap Dealer/Major Swap Participant Release,

measured based on the leverage inherent in the derivative instrument, could otherwise provide a means of structuring transactions to avoid the proposed rule's exposure limitations.

Second, the proposed rule includes a "look-through" for calculating the notional amount in respect of derivatives transactions for which the underlying reference asset is a managed account or entity formed or operated primarily for the purpose of investing in or trading derivatives transactions, or an index that reflects the performance of such a managed account or entity.¹⁷¹ We understand that some funds, including funds that engage in managed futures or foreign currency strategies, obtain their investment exposures for such strategies by entering into a swap that references the performance of a managed account or entity, which in turn is managed on a discretionary basis by a third-party trading manager (such as a commodity trading advisor). Such swaps can be used by a fund to obtain a return that is economically nearly identical to a direct investment by the fund in the derivatives traded by the third-party trading manager for the managed account or entity.¹⁷² Absent a look-through to the derivatives transactions of the underlying reference vehicle, such structures could be used to avoid the exposure limitations that would be applicable under the proposed rule if the fund directly owned the managed account or securities issued by the reference entity.¹⁷³ Accordingly, for

supra note 160, at n.427 and accompanying text (stating that, for purposes of the *de minimis* threshold for registration of swap dealers, "notional standards will be based on 'effective notional' amounts when the stated notional amount is leveraged or enhanced by the structure of the swap or security-based swap").

¹⁷¹ Proposed rule 18f-4(c)(7)(iii)(B). The managed account or interests in the entity may be owned by the fund's counterparty (e.g., a swap dealer), which hedges its obligations under the derivative through its ownership of such account or interests. In some cases, the derivative contract may describe the reference asset as an index comprising the performance of transactions "notionally" entered into by the trading manager, or the "notional" performance of an index comprising the managed account or entity together with cash and/or other positions. The proposed rule's "look-through" for calculating notional amounts thus applies to derivatives transactions for which the underlying reference asset is a managed account or entity formed or operated primarily for the purpose of investing in or trading derivatives transactions, as well as an index that reflects the performance of such a managed account or entity. *Id.*

¹⁷² Some funds appear to use these swaps in such a way that nearly all of the fund's investment exposure is indirectly attributable to the derivatives traded by the third-party manager for the underlying managed account or entity, while the fund's direct investments (other than the swap) are limited to cash and cash equivalents.

¹⁷³ For example, a fund might enter into a swap having a notional value of \$10, corresponding to the

such derivatives transactions, the rule would require a fund to calculate the notional amount by reference to the fund's *pro rata* portion of the notional amounts of the derivatives transactions of the underlying reference vehicle, which in turn must be calculated in a manner consistent with the requirements of the proposed rule.¹⁷⁴ The provision thus would apply to transactions such as swaps on pooled investment vehicles that are formed or operated primarily for the purpose of investing in or trading derivatives transactions, which could include hedge funds, managed futures funds and leveraged ETFs, in order to prevent a fund from entering into a leveraged swap on the performance of shares or other interests issued by such vehicles and thereby indirectly obtain leverage in excess of what the rule would permit a fund to obtain directly.

Third, the proposed rule contains specific provisions for calculating the notional amount for certain defined complex derivatives transactions. As explained further below, the proposed rule includes these provisions because, for complex derivatives transactions, the notional amounts of such transactions determined without regard to these specific provisions may not serve as an appropriate measure of the underlying market exposure obtained by a fund.

The proposed rule would define a complex derivatives transaction as any derivatives transaction for which the amount payable by either party upon settlement date, maturity or exercise: (1) Is dependent on the value of the underlying reference asset at multiple points in time during the term of the transaction; or (2) is a non-linear function of the value of the underlying reference asset, other than due to optionality arising from a single strike price.¹⁷⁵ We address each of these provisions below.

value of an equity security issued by a trading entity. The fund's counterparty could then invest \$10 in the trading entity, which in turn could use these funds as margin or collateral for leveraged futures or currency forward transactions having a much larger aggregate notional amount, e.g., \$100. Proposed rule 18f-4(c)(7)(iii)(B) would require the fund to treat the swap in this example as having a notional amount of \$100 rather than \$10.

¹⁷⁴ Thus, for example, if a fund enters into a swap on the performance of a trading entity that, in turn, enters into a swap that provides a return based on the leveraged performance of an equity index, the notional amount of the equity index would need to be multiplied by the applicable leverage factor, consistent with the method set forth in proposed rule 18f-4(c)(7)(iii)(A), for purposes of calculating the fund's *pro rata* share of the notional amounts of the trading entity's derivatives transactions in accordance with proposed rule 18f-4(c)(7)(iii)(B).

¹⁷⁵ See proposed rule 18f-4(c)(1) (defining "complex derivatives transaction") and proposed rule 18f-4(c)(7)(iii)(C) (describing the method for

The first type of complex derivatives transaction is a derivatives transaction for which the amount payable by either party upon settlement date, maturity or exercise is dependent on the value of the underlying reference asset at multiple points in time during the term of the transaction.¹⁷⁶ This provision is designed to capture derivatives whose payouts are path dependent, *i.e.*, the payouts depend on the path taken by the value of the underlying asset during the term of the transaction. Many types of non-standard options exhibit path dependency.¹⁷⁷ An example of a path dependent derivative would be a barrier option. Barrier options (also known as knock-in or knock-out options) have a payoff that is contingent on whether the price of the underlying asset reaches some specified level prior to expiration.¹⁷⁸ Another example would be an Asian option, which has a payoff that depends on the average value of the underlying asset from inception until expiration.¹⁷⁹ By contrast, a standard put or call option having a single strike price would not be a complex derivatives transaction under this provision of the definition, because the payout of a standard put or call option depends on the value of the reference asset only upon exercise, *i.e.*, at a single point rather than multiple points in time during the term of the transaction.

The second type of complex derivatives transaction is a derivatives transaction for which the amount

calculating the notional amount for a complex derivatives transaction for purposes of the proposed rule).

¹⁷⁶ See proposed rule 18f-4(c)(1)(i).

¹⁷⁷ See Paul Wilmott, Paul Wilmott on Quantitative Finance (2nd ed. 2006) ("Wilmott"), at 371 (options that "have payoffs that depend on the path taken by the underlying asset, and not just the asset's value at expiration . . . are called path dependent." See also CESR Global Guidelines, *supra* note 162, at 12 (noting that "[c]ertain derivative instruments exhibit risk characteristics that mean the standard conversion approach is not appropriate as it does not adequately capture the inherent risks relating to this type of product. Some derivatives, for example, may exhibit path-dependency, such features emphasising the need to have both robust models for risk management and pricing purposes, but also to reflect their complexity in the commitment calculation methodology").

¹⁷⁸ Wilmott, *supra* note 177, at 371.

¹⁷⁹ *Id.* A third example would be an option with a lookback feature, which has a payoff that depends on whether a maximum or minimum value of the underlying asset occurred during some period prior to expiration. A lookback call option, for example, pays at settlement the difference between the final asset price and the lowest price of the asset observed during the term of the option. Because the payoff is contingent on two prices—the final asset price and the lowest observed price—a lookback call option would be a complex derivatives transaction. See *id.* at 383; see also Robert Whaley, Derivatives: Markets, Valuation, and Risk Measurement (2006) ("Whaley"), at 291.

payable by either party upon settlement date, maturity or exercise is a non-linear function of the value of the underlying reference asset, other than due to optionality arising from a single strike price.¹⁸⁰ Most types of derivatives traded on an exchange or with standardized terms (other than exchange-traded or standardized options) involve payment amounts between the parties that change on a dollar-for-dollar basis tracking changes in the value of the underlying reference asset. We refer to these calculations under relatively standardized terms as involving a linear function of the value of the underlying reference assets. An example of a “non-linear” derivatives transaction that would be a complex derivatives transaction under this provision of the definition would be a variance swap. A variance swap is an instrument that allows investors to profit from the difference between the current implied volatility and future realized volatility of an asset; however, the payoff for a variance swap is a function of the difference between current implied *variance* and future realized *variance* of the asset.¹⁸¹ Because variance is the square of volatility, the payment obligations under a variance swap are non-linear.¹⁸²

This second provision of the definition of complex derivatives transaction includes a carve-out that would exclude derivatives for which payout upon settlement date, maturity or exercise is non-linear due to optionality arising from a single strike price. This exception is designed to exclude standard put or call options from the complex derivatives transaction definition, which would otherwise be captured because their payout is non-linear. For example, the payout for a standard cash-settled written call option is either equal to zero (if the price of the underlying asset at maturity is less than or equal to the strike price) or equal to the difference between the value of the underlying asset and the strike price (if the price of the underlying asset at maturity is greater than the strike price), and is therefore non-linear. We believe that it is unnecessary to treat standard put and

call options as complex derivatives transactions because the method for determining the notional amount for such derivatives, *i.e.*, the market value of the underlying asset multiplied by its delta, serves as an appropriate measure of a fund’s exposure for purposes of the rule because it generally would result in a notional amount that reflects the market value of an equivalent position in the underlying reference asset for the derivatives transaction.¹⁸³

The proposed rule would include a special provision for calculating the notional amount of complex derivatives transactions for purposes of determining a fund’s exposure.¹⁸⁴ This provision is designed to address two primary concerns. The first is 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 limitation. For example, the notional amount of a variance swap is typically expressed in terms of “vega notional,” *i.e.*, a measure of volatility. This vega notional amount is used to calculate the payout for a variance swap, but it does not correspond to the market value or principal amount of a reference asset that can appropriately be compared against a fund’s net assets for purposes of the exposure-based portfolio limit.¹⁸⁵ A second concern is 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 in the proposed rule for complex derivatives transactions.¹⁸⁶

¹⁸³ See, e.g., Mark Rubinstein & Hayne E. Leland, *Replicating Options with Positions in Stock and Cash*, 51 Financial Analysts J. 113 (Jan./Feb. 1995) (demonstrating how a long or short position in a standard put or call can be replicated by holding a long or short position in a number of shares of the underlying stock corresponding to the option’s delta, which would have a value equal to the option delta multiplied by the underlying stock price).

¹⁸⁴ Proposed rule 18f-4(c)(7)(iii)(C).

¹⁸⁵ For example, a fund that invests in a total return swap on an equity index having a notional amount of \$100 can be said to have exposure similar to a \$100 investment in the index components. By contrast, it is not possible to draw a comparison between the notional amount of a variance swap on the same equity index and a direct investment in the index components.

¹⁸⁶ The UCITS Commitment Approach Guidelines express a similar concern. See CESR Global Guidelines, *supra* note 162, at 12 (noting that a common feature of non-standard derivatives is “the existence of a highly volatile delta which could, for example, result in significant losses” and therefore “many of these instruments will need to be assessed on a case by case basis”).

The proposed rule seeks to address these concerns by specifying an alternative approach for determining the notional amount for a complex derivatives transaction. Under this approach, the notional amount of a complex derivatives transaction would be equal to the aggregate notional amount(s) of other derivatives instruments, excluding other complex derivatives transactions (together, “substituted instruments”), reasonably estimated to offset substantially all of the market risk of the complex derivatives transaction at the time the fund enters into the transaction.¹⁸⁷ This approach is designed to address the difficulty of determining the notional amount for some complex derivatives transactions and the concern that the reference asset or metric may not by itself be an appropriate measure of the underlying market exposure, by substituting, in effect, the notional amounts of non-complex instruments that mirror the market risk of the complex derivatives transaction.¹⁸⁸ For example, a barrier option in some cases can be hedged using standard put and call options (which would not be complex derivatives transactions provided that they had a single strike price).¹⁸⁹ In that case, a fund could use the aggregate notional amount of such puts and calls (*i.e.*, the strike price multiplied by the delta) as the notional

¹⁸⁷ Proposed rule 18f-4(c)(7)(iii)(C). As discussed in section III.F below, the proposed rule would require the fund to maintain a written record demonstrating that immediately after the fund entered into any senior securities transaction, the fund complied with the portfolio limitation applicable to the fund immediately after entering into the senior securities transaction, including the fund’s aggregate exposure, among other things. Where the fund enters into a complex derivatives transaction, the fund, in documenting its exposure immediately after entering into the transaction, would be required to document the way it determined the notional amount of the complex derivatives transaction, that is, the notional amount(s) of substituted instruments that could reasonably be expected to offset substantially all of the market risk of the complex derivatives transaction at the time the fund entered into the transaction.

¹⁸⁸ The UCITS Global Exposure Guidelines similarly call for derivatives with complex structures to be “broken down into component parts” so that “the effect of layers of derivative exposures [can] be adequately captured.” CESR Global Guidelines, *supra* note 162, at 12. See also Wilcott, *supra* note 177, at 506 (stating, with regard to “exotic” derivatives, that “[i]f a contract can be decomposed into simpler, vanilla products, then that’s what you should do for pricing and hedging”).

¹⁸⁹ See generally Wilcott, *supra* note 177, at 969–987 (describing methods for hedging barrier options using “vanilla” exchange-traded options); see also Peter Carr, Katrina Ellis & Vishal Gupta, *Static Hedging of Exotic Options*, 53 J. of Fin. 1165, 1169 (June 1998) (describing methods for hedging barrier options, lookback options and other “exotic” options using standard put and call options).

¹⁸⁰ See proposed rule 18f-4(c)(1)(ii).

¹⁸¹ See, e.g., Sebastien Bossu, *Introduction to Variance Swaps*, Wilcott Magazine, available at http://www.wilcott.com/pdfs/111116_bossu.pdf, at 50–51.

¹⁸² See, e.g., Peter Allen, Stephen Eincomb & Nicolas Granger, *Variance Swaps*, JPMorgan Investment Strategies: No. 28 (Nov. 17, 2006), at 11 (noting that “variance swap strikes are quoted in terms of volatility, not variance; but pay out based on the difference between the level of variance implied by the strike (in fact the strike squared) and the subsequent realised variance”).

amount for purposes of determining the fund's exposure.¹⁹⁰

(2) Netting of Certain Derivatives Transactions

The proposed rule includes a netting provision that would permit a fund, in determining its aggregate notional exposure, to net any directly offsetting derivatives transactions that are the same type of instrument and have the same underlying reference asset, maturity and other material terms.¹⁹¹ This limited netting provision is designed to apply to those types of derivatives transactions for which, due to regulation, transaction structure or market practice, a fund typically would use an offsetting transaction to effectively settle all or a portion of the transaction prior to expiration or maturity, such as certain futures and forward transactions. It would also apply to situations in which a fund seeks to reduce or eliminate its economic exposure under a derivatives transaction without terminating the transaction. This may be the case, for example, if terminating the transaction would be more costly to the fund (for example, because the fund would need to pay an early termination fee) than entering into an offsetting transaction with another counterparty, or if terminating the transaction would cause the fund to realize gain or loss for tax purposes earlier than would be required if the fund entered into an offsetting transaction. The netting provision under the proposed rule accordingly would permit a fund to exclude from its aggregate exposure the notional amounts associated with transactions that are entered into by the fund to eliminate the fund's exposure under another transaction through a directly offsetting transaction as described under the proposed rule.¹⁹²

With respect to transactions that are directly offsetting but involve different counterparties, we note that, although a fund would remain exposed to counterparty risk, such offsetting

transactions could reasonably be expected to eliminate market risk associated with the offsetting transactions if they are the same type of instrument and have the same underlying reference asset, maturity and other material terms. Accordingly, we believe that such transactions are an appropriate means to eliminate or reduce market exposure under derivatives transactions even if entered into with different counterparties for purposes of the rule's exposure limits, which are designed to limit the extent of the fund's exposure.

By contrast, the netting provision would not apply to transactions that may have certain offsetting risk characteristics but do not have the same underlying reference asset, maturity and other material terms or involve different types of derivatives instruments. For example, while a long position in a March 2016 copper futures contract could directly offset a short position in the same March 2016 copper futures contract, it would not directly offset a short position with respect to copper options or April 2016 copper futures. Similarly, a purchased option would not offset a written option that has a different maturity date or a different underlying reference asset. With respect to transactions that do not have the same underlying reference asset, maturity and other material terms, we are concerned that these transactions may not merely have the effect of eliminating or reducing market exposure. For example, they might instead be used as paired "collar" or "spread" investment positions that could raise potential risks associated with strategies that seek to capture small changes in the value of such paired investments. We also believe that it would be difficult to develop standards for determining circumstances under which such transactions should be considered to have eliminated the market and leverage risks associated with the positions in a manner that would appropriately limit the potential for funds to incur excessive leverage or unduly speculative exposures.

ii. Exposure for Financial Commitment Transactions and Other Senior Securities

A fund also would be required to include, in calculating its exposure: (1) The amount of cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under any financial commitment transactions ("financial commitment obligations");¹⁹³ and (2) the aggregate

indebtedness (and with respect to any closed-end fund or business development company, involuntary liquidation preference) with respect to any other senior securities transaction entered into by the fund pursuant to section 18 or 61 of the Act without regard to the exemption provided by the proposed rule.¹⁹⁴ As explained below, these aspects of the exposure calculation are designed to require a fund that enters into derivatives transactions in reliance on the exemption provided by the proposed rule to include in its aggregate exposure all of the fund's indebtedness or exposure obtained through senior securities transactions.

Under the proposed rule, a fund would be required to include its exposure under these types of transactions in determining its compliance with the 150% exposure limit because, although we have determined to propose an exemption from the requirements of section 18 and 61 to permit funds to enter into derivatives and financial commitment transactions, we believe that, in order to address the investor protection purposes and concerns underlying section 18, a fund relying on the exemption should be subject to an overall limit on leverage. As discussed in more detail below in section III.B.1.b.2, we have proposed to set this limit at 150% of net assets (and at 300% of net assets for a fund operating under the risk-based portfolio limit) because we believe that is an appropriate limit on a fund's exposure from derivatives, financial commitment transactions, and other senior securities transactions.

If the proposed rule did not require exposure from all senior securities transactions to be included for purposes of calculating a fund's exposure, a fund relying on the exemption the rule would provide could obtain aggregate exposure in excess of the proposed rule's exposure limits. For example, a fund having net assets of \$100 that complies with the exposure-based portfolio limit might otherwise, in theory, obtain \$150 of leveraged exposure through

¹⁹⁰ The proposed rule would not require a fund to actually invest in substituted instruments instead of investing in the complex derivatives transaction, but rather would require a fund to use the notional amounts of substituted instruments in order to determine its exposure for purposes of the proposed rule's portfolio limitations.

¹⁹¹ Proposed rule 18f-4(c)(3)(i).

¹⁹² The netting provision under the proposed rule is not designed to enable a fund generally to disregard or subtract from the calculation of a fund's exposure the notional amount of transactions that the fund deems to be hedging or risk mitigating. See section III.B.1.d. The netting provision applies only to directly offsetting derivatives transactions that are the same type of instrument and have the same underlying reference asset, maturity and other material terms.

¹⁹³ Proposed rule 18f-4(c)(3)(ii).

¹⁹⁴ Proposed rule 18f-4(c)(3)(iii). This could include, for example, bank borrowings and, for a closed-end fund or BDC, the issuance of debt or preferred shares. Section 18(g) of the Act excludes from the definition of senior security "any such promissory note or other evidence of indebtedness in any case where such a loan is for temporary purposes only and in an amount not exceeding 5 per centum of the value of the total assets of the issuer at the time when the loan is made." Such borrowings that meet the requirements of the exclusion for temporary borrowings under section 18(g) would not be considered senior securities transactions for purposes of the proposed rule, and thus would not be included in the proposed rule's exposure calculations.

derivatives plus additional leverage in the form of financial commitment transactions and other borrowings. We have determined to address this concern by requiring a fund to include exposure from all senior securities transactions, but subject to a 150% limit, rather than proposing a substantially lower limit that might be appropriate if the exposure calculation were based solely on derivatives exposure.

We request comment on all aspects of the exposure determinations for derivatives transactions.

- Is the proposed rule's use of notional amounts as the basis for calculating a fund's exposure under a derivatives transaction appropriate? Does the notional amount of a derivatives transaction generally serve as an appropriate means of measuring a fund's exposure to the applicable reference asset or metric? Are there particular types of derivatives transactions or reference assets for which the notional amount would or would not be effective in this regard? For such derivatives, what alternative measures might be used and why would they be more appropriate? Would such alternative measures be easier for funds and compliance staff to administer?

- For derivatives transactions that provide a return based on the leveraged performance of an underlying reference asset, the rule would require the notional amount to be multiplied by the applicable leverage factor. Do commenters agree that this is appropriate?

- The proposed rule includes a "look-through" for calculating the notional amount in respect of derivatives transactions for which the underlying reference asset is a managed account or entity formed or operated primarily for the purpose of investing in or trading derivatives transactions, or an index that reflects the performance of such a managed account or entity. Do commenters agree that this is appropriate? Is this requirement sufficiently clear? Would the look-through provision capture swaps or other derivatives on reference entities or assets that should not be covered by this provision? Why or why not? Would a fund that uses these types of transactions be able to obtain information from its counterparty regarding the fund's *pro rata* portion of the notional amounts of the derivatives transactions of the underlying reference vehicle, in order for the fund to be able to determine its compliance with the exposure limitations under the proposed rule? Why or why not? Would funds that currently use these transactions find it necessary to amend

their existing contracts with counterparties in order to obtain such information? Are there other ways we should consider addressing the concern, noted above, that absent a look-through to the derivatives transactions of the underlying reference vehicle, such structures could be used to avoid the exposure limitations that would be applicable under the proposed rule if the fund directly owned the managed account or securities issued by the reference entity? We understand that the accounts or entities that serve as the reference assets for these transactions generally are actively managed, such that the notional amounts of the derivatives transactions of such accounts or entities may change frequently. In light of this, and given the concern that the look-through requirement seeks to address, should the proposed rule also require a fund to determine its compliance with the exposure limitations of the rule whenever the notional amount of the fund's *pro rata* portion of the notional amounts of the derivatives transactions of the underlying reference vehicle changes? Why or why not?

- To what extent do funds enter into derivatives transactions for which pooled investment vehicles (e.g., hedge funds or other registered funds, such as ETFs and mutual funds) serve as reference assets? For what purposes do funds enter into such derivatives transactions? To what extent do the referenced pooled investment vehicles themselves use derivatives, such that funds could use derivatives for which a pooled investment vehicle serves as a reference asset in order to obtain leverage in excess of the limits provided under the proposed rule? Would a fund that uses these types of derivatives transactions be able to obtain information from the underlying pooled investment vehicle regarding the notional amounts of the underlying pooled investment vehicle's derivatives transactions, in order for the fund to be able to determine its compliance with the exposure limitations under the proposed rule's look-through requirement? Why or why not? Should we specify standards for determining whether a pooled investment vehicle should be considered formed or operated primarily for the purpose of investing in or trading derivatives? What would be an appropriate standard?

- Do commenters agree with the proposed definition of "complex derivatives transaction"? Are there derivatives transactions that may be considered complex derivatives transactions under the proposed

definition but should not be, or vice versa? Does the method for calculating exposure for complex derivatives transactions create the potential for transactions to be structured to avoid this aspect of the rule? If so, how might that be avoided (e.g., by modifying the definition or through other means)?

- The proposed rule would require a fund to calculate the notional amount for a complex derivatives transaction by using the notional amount(s) of one or more instruments, excluding other complex derivatives transactions (collectively, "substituted instruments," as noted above), that could reasonably be expected to offset substantially all of the market risk of the complex derivatives transaction. Do commenters agree with this method for calculating exposure in respect of complex derivatives transactions? Should the rule specify a particular test or tests that a fund could elect to use, or be required to use, in order to establish that the notional amount it uses for a complex derivatives transaction meets this requirement? For example, should the rule provide that a group of substituted instruments will be deemed to reasonably be expected to offset substantially all of the market risk associated with a complex derivatives transaction if the fund can demonstrate, using a VaR model that meets the requirements of paragraph (c)(11)(ii)¹⁹⁵ of the proposed rule, that the combined VaR of the substituted instruments and the complex derivatives transaction is less than 1%, or some other percentage, of the VaR of the complex derivatives transaction by itself (in other words, if a complex derivative had a VaR of \$100 but the combined VaR of the complex derivatives transaction and the substituted instruments were less than \$1, the substituted instruments would be deemed to have offset substantially all of the market risk associated with the complex derivative)? What other approaches might a fund use?

- Are there complex derivatives transactions for which substantially all of the market risk cannot be offset using substituted instruments, and for which the fund would not be able to determine a notional amount under the proposed rule? What kinds of transactions, and do funds use such transactions? To the extent there are complex derivatives transactions for which a fund would not be able to offset substantially all of the market risks using substituted instruments, would the fund's inability to offset substantially all of the market risks using substituted instruments indicate that the fund would be unable

¹⁹⁵ See *infra* section III.B.2.b.

effectively to determine the degree of market risk inherent in the transaction? Would such transactions pose greater risks for funds because, for example, they are less liquid or more likely to expose funds to potential losses that may be difficult to quantify?

- We note that, under the CESR Global Guidelines, if the exposure for a non-standard derivative cannot be determined based on the market value of an equivalent position in underlying reference assets and such derivatives represent more than a negligible portion of the UCITS portfolio, a UCITS fund cannot use the commitment approach.¹⁹⁶ Should the proposed rule similarly restrict a fund's ability to use these kinds of transactions? Should the proposed rule prohibit a fund from using such transactions? If not, should the proposed rule provide an alternative method for determining the notional amount for a complex derivative for which substantially all of the market risk cannot be offset using substituted instruments? What method?

- Is the netting provision for calculating a fund's exposure appropriate? Are there other circumstances under which netting should be permitted? Are there transactions that the provision would permit to be netted but should not be?

- Are there other adjustments pertaining to the use of notional amounts for purposes of determining a fund's exposure appropriate that we should consider, either with respect to certain types of derivatives transactions or in general? For example, we understand that the notional amounts for Euribor and Eurodollar futures are often referenced by market participants by dividing the amount of the contract by four in order to reflect the three-month length of the interest rate transaction, and our staff took this approach in evaluating funds' notional exposures, as discussed in the DERA White Paper. For these very short-term derivatives transactions, calculating notional amounts without dividing by four would reflect a notional amount that could be viewed as overstating the magnitude of the fund's investment exposure. Should the proposed rule permit or require this practice? Why or why not? Would a derivative's notional amount adjusted in this way serve as a better measure of the fund's exposure than the derivative's unadjusted notional amount? Are there other futures contracts (or other standardized derivatives) for which an analogous

adjustment should be permitted? Why or why not?

- Should we consider permitting or requiring that the notional amounts for interest rate futures and swaps be adjusted so that they are calculated in terms of 10-year bond equivalents or make other duration adjustments to reflect the average duration of a fund that invests primarily in debt securities? Would this result in a better assessment of a fund's exposure to interest rate risk? Why or why not?

- Could derivatives transactions be restructured so that they provide a level of exposure to an underlying reference asset or metric that exceeds the notional amount as defined in our proposed rule, while nonetheless complying with the rule's conditions? If so, what modifications should we make to address this?

- Should the calculation of exposure be broadened to include not only derivatives that involve the issuance of senior securities (because they involve a payment obligation) but also derivatives that would not generally be considered to involve senior securities, such as purchased options, structured notes, or other derivatives that provide economic leverage, given that such instruments can increase the volatility of a fund's portfolio and thus cause an investment in a fund to be more speculative than if the fund's portfolio did not include such instruments?

- Should the proposed rule require a fund to include the exposure associated with certain so-called "basket option" transactions, which are derivatives instruments that may nominally be documented in the form of an option contract but are economically similar to a swap transaction? We understand that these types of basket option transactions often involve a deposit by an investor of a cash "premium" that functions as collateral for the transaction, and all or a portion of which may be returned to the investor depending on the performance of the basket of reference assets.¹⁹⁷ Should we require a fund to include the exposure associated with these transactions because they operate in a manner similar to swap transactions and differ significantly from the typical

purchased option contract with a non-refundable premium payment?¹⁹⁸

- Do commenters agree that it is appropriate to include exposure associated with a fund's financial commitment transactions and other senior securities transactions in the calculation of the fund's exposure for purposes of the 150% exposure limit in the exposure-based portfolio limit (and the 300% limit under the risk-based portfolio limit), as proposed, so that the exposure limit would include the fund's exposure from all senior securities transactions? Should we, instead, include only exposure associated with a fund's derivatives transactions but reduce the exposure limits so that a fund that would rely on the exemption provided by the proposed rule would be subject to a limit on leverage or potential leverage from all senior securities transactions? If we were to take this approach should we, for example, reduce the exposure limits to 50% in the case of the exposure-based portfolio limit and 100% in the case of the risk-based limit?

c. 150% Exposure Limit

As noted above, a fund that elects to comply with the exposure-based portfolio limit under the proposed rule would be required to limit its derivatives transactions, financial commitment transactions and obligations under other senior securities transactions, such that the fund's aggregate exposure under these transactions, immediately after entering into any senior securities transaction, does not exceed 150% of the fund's net assets.¹⁹⁹

The exposure-based portfolio limit is designed to impose a limit on the amount of leverage a fund may obtain through senior securities transactions while also providing flexibility for funds to use derivatives transactions for a variety of purposes.²⁰⁰ As discussed above, and as noted by several commenters to the Concept Release, many derivatives transactions result in investment exposures that are economically similar to direct

¹⁹⁸ These basket options, which typically have a strike price that is in-the-money at inception (reflecting the value of the initial premium payment) together with provisions that require the delivery of additional premium amounts or termination if the reference basket declines in value, thus function in a manner very similar to a swap that requires the delivery of collateral at inception and can be terminated if additional collateral is not delivered if the reference basket under the swap declines in value.

¹⁹⁹ Proposed rule 18f-4(a)(1)(i).

²⁰⁰ The proposed rule's portfolio limitations, although designed to impose a limit on leverage, also could help to address concerns about a fund's ability to meet its obligations. See *supra* note 152.

¹⁹⁶ See CESR Global Guidelines, *supra* note 162, at 7, 12.

¹⁹⁷ See *Abuse of Structured Financial Products: Misusing Basket Options to Avoid Taxes and Leverage Limits*, Report of the Permanent Subcommittee on Investigations, United States Senate (July 22, 2014), at p. 79 ("The hedge funds told the Subcommittee that, rather than tax, a major motivating factor behind their participation in the basket options was the opportunity to obtain high levels of leverage, beyond the federal leverage limit of 2:1 normally applicable to [regulatory margin requirements for] brokerage accounts, an assertion supported by the banks.").

investments in the underlying reference assets financed through borrowings. According to one commenter, for example, an equity total return swap “produces an exposure and economic return substantially equal to the exposure and economic return a fund could achieve by borrowing money from the counterparty in order to purchase the equities that are reference assets.”²⁰¹ Because derivatives transactions can readily be used for leveraging purposes, we believe that limiting the aggregate notional amount of a fund’s derivatives transactions (subject to certain adjustments under the proposed rule) can appropriately serve to limit the amount of leverage the fund could potentially obtain through such transactions. We also believe that an exposure limitation based, in part, on the aggregate notional amount of a fund’s derivatives transactions should be set at an appropriate amount that reflects the various ways in which funds may use derivatives, while also imposing a limit on the amount of leverage a fund may obtain through derivatives transactions (and other senior securities transactions), consistent with the investor protection purposes and concerns underlying section 18.

In determining to propose a 150% exposure limitation, we evaluated a range of considerations. First, we considered the extent to which a fund could borrow in compliance with the requirements of section 18. As discussed in more detail in section II, funds generally can incur indebtedness through senior securities under section 18 subject to the asset coverage requirement specified in that section,

which effectively permits a fund to incur indebtedness of up to 50% of the fund’s net assets.²⁰² For example, a mutual fund with \$100 in assets and with no liabilities or senior securities outstanding could borrow an additional \$50 from a bank. We therefore considered whether it would be appropriate to propose a 50% exposure limitation under the proposed rule, in order to limit a fund’s derivatives exposure to the same extent as section 18 limits a fund’s ability to borrow from a bank (or issue other senior securities representing indebtedness subject to section 18’s 300% asset coverage requirement).²⁰³ We also considered an exposure limitation of 100% of net assets, which would more closely track the level of exposure suggested by Release 10666 for the trading practices described in that release.²⁰⁴

We have not proposed these lower exposure limits of 50% or 100% of net assets primarily due to our consideration of the point made by numerous commenters that funds use derivatives for a range of purposes that may not, or may not be expected to, result in additional leverage for the fund.²⁰⁵ Commenters have noted that many funds use derivatives for hedging or risk-mitigation, or choose to use derivatives for reasons other than specifically to obtain leverage.²⁰⁶ Thus, although a lower exposure limit, like the 100% limitation suggested by Release 10666, may be appropriate for the trading practices described in that release, that exposure limit may not be appropriate when applied to

derivatives’ notional exposure. Such a lower exposure limit, as well as the 50% limitation we considered, could limit a fund’s ability to use derivatives transactions for purposes other than leveraging the fund’s portfolio that may be beneficial to the fund and its investors.²⁰⁷

As described in greater detail below in section III.B.1.d, we considered whether to reflect the different ways in which funds might use derivatives by excluding from that calculation any exposure associated with derivatives transactions that may arguably be used to hedge or cover other transactions. This would be similar to the guidelines that apply to UCITS funds, which generally are subject to an exposure limit of 100% of net assets, but are not required to include exposure relating to certain hedging transactions. For the reasons discussed in section III.B.1.d, however, we have determined not to propose to permit a fund to reduce its exposure for purposes of the rule’s portfolio limitations for particular derivatives transactions that may be entered into for hedging (or risk-mitigating) purposes or that may be “cover transactions.” As discussed in more detail in that section of this Release, we believe it would be difficult to develop a suitably objective standard for these transactions, and that confirming compliance with any such standard would be difficult, both for fund compliance personnel and for our staff. In addition, many hedges are imperfect, making it difficult to distinguish purported hedges from leveraged or speculative exposures or to provide criteria for this purpose in the proposed rule that would be appropriate for the diversity of funds subject to the proposed rule and the diversity of strategies and derivatives they use or may use in the future.

In addition to these considerations, we also note that, as discussed in section III.B.1.b.i, while an exposure-based test based on notional amounts could be viewed as a relatively blunt measurement, we believe that, on balance, a notional amount limitation would be more administrable, and thus more effective, as a means of limiting potential leverage from derivatives for purposes of the proposed rule than a limitation which seeks to define, and

²⁰¹ See Comment Letter of BlackRock on the FSOC Request for Comment (Mar. 25, 2015) (FSOC 2014–0001) (“BlackRock FSOC Comment Letter”), available at <http://www.blackrock.com/corporate/en-us/literature/publication/fsoc-request-for-comment-asset-management-032515.pdf>, at 8 (“[D]erivatives can be used to lever a portfolio, in essence creating additional economic exposure.”) See also BlackRock Concept Release Comment Letter, at 4 (noting that in circumstances where a derivative is effectively substituting for one or more ‘long’ physical security positions, “the full notional amount of the reference asset is at risk to the same extent as the principal amount of a physical holding, and any difference between the amount invested by the fund and the notional amount of the derivative is equivalent to a ‘borrowing.’”). See also Keen Concept Release Comment Letter, at 8 (noting that, except with respect to hedging transactions, “the notional amount of swaps should be treated as creating investment leverage and subject to any asset coverage requirement the Commission imposes on the issuance of senior securities by investment companies”). See also Morningstar Concept Release Comment Letter, at 2 (noting that, by using futures, a fund may only need \$5 of initial margin to obtain \$100 worth of notional exposure to the S&P 500 and that such position may represent “effectively a 100% equity investment”).

²⁰² See *supra* note 34.

²⁰³ We note that, at this level of exposure limitation, the corresponding limitation on BDCs could be set at 100% of net assets to reflect the increased borrowing capacity that Congress has permitted BDCs to obtain under section 61 of the Act.

²⁰⁴ One of the commenters to the Concept Release indicated that this level of exposure would be the effective limit under Release 10666 “[a]s originally conceived by the Commission,” explaining that, “[a]s a practical matter, requiring the segregation of assets but not limiting the permitted segregation to cash equivalents effectively permitted funds to incur investment leverage up to a theoretical limit equal to 100% of a fund’s net assets.” See Ropes & Gray Concept Release Comment Letter.

²⁰⁵ See, e.g., *infra* note 248 and accompanying text. See also BlackRock FSOC Comment Letter, at 8 (noting that in certain cases “derivatives are used to hedge (mitigate) risks and thus do not result in the creation of leverage and, in fact may specifically reduce economic leverage.”); BlackRock Concept Release Comment Letter, at 4–5 (noting that “in the context of an overall portfolio, a derivative holding may increase overall leverage, decrease overall leverage or have no effect on overall leverage”) (internal footnotes omitted).

²⁰⁶ In determining an appropriate exposure limit, we have also considered that, as noted below in section III.B.1.d, derivatives transactions that are intended to hedge or mitigate risks may not be effective, particularly in stressed market conditions.

²⁰⁷ We also note that the payment obligations and potential payment obligations associated with derivatives transactions differ in certain respects from the payment obligations under borrowings permitted under section 18, including in that the fund’s payment obligations under a derivatives transaction would vary depending on changes in market prices, volatility, and other market events related to the derivatives transaction’s reference asset. See also sections III.E and IV.E.

rely on, more precise measurements of leverage. We note that setting the exposure limitation at 150%, as proposed, would allow the fund to use derivatives transactions to obtain a level of indirect market exposure solely through derivatives transactions that could approximate the level of market exposure that would be possible through securities investments augmented by borrowings as permitted under section 18.²⁰⁸

We also considered whether higher exposure limitations might be appropriate, such as exposure levels ranging from 200% to 250% of net assets. We are concerned, however, that exposure levels in excess of 150% of net assets, if not tempered by the risk mitigating aspects of the VaR test as we have proposed under the risk-based limit, could be used to take on additional speculative investment exposures that go beyond what would be expected to allow for hedging arrangements, and thus could implicate the undue speculation and asset sufficiency concerns expressed in sections 1(b)(7) and 1(b)(8) of the Act.

Second, we considered the extent to which different exposure limits would affect funds' ability to pursue their strategies. In this regard we considered the extent to which different potential exposure limitations would affect funds and their investors, as well as section 18's strict limitations on senior securities transactions and the concerns we discuss above regarding funds' ability to obtain leverage through derivatives and other senior securities transactions. We also considered the extent to which different types of funds, and funds collectively, use senior securities transactions today. Given that, as discussed below, most funds use relatively low notional amounts of derivatives transactions (or do not use any derivatives), we have proposed an exposure limitation at a level that we believe would appropriately constrain funds that use derivatives to obtain highly leveraged exposures.

Third, we recognize and have considered that funds using any derivatives transactions can experience derivatives-related losses, including

funds with exposures below the limits we are proposing today as well as the other limits that we discuss above. In this regard, we recognize that the information available in the administrative orders described in section II.D.1.d indicates that some of the losses described as resulting from derivatives in those matters occurred at exposure levels below the exposure limits that we are proposing today.²⁰⁹ The proposed rule's exposure limits are not designed to prevent all derivatives-related losses, however. Importantly, the exposure limits would be complemented by the rule's asset segregation requirements, which would apply to all funds that engage in derivatives transactions in reliance on the rule, and the proposed rule's risk management requirements, which would apply to funds that have derivatives exposure exceeding a lower threshold of 50% of net assets or that use complex derivatives transactions.

Based on these considerations, we have determined to propose an exposure-based portfolio limit set at 150% of net assets, rather than a lower limit, including the 50% and 100% limits discussed above. We believe that a 150% exposure limit would account for the variety of purposes for which funds may use derivatives, including to hedge risks in the fund's portfolio and to make investments where derivatives may be a more efficient means to obtain exposure. As discussed in more detail below, we have determined not to permit funds to reduce their exposure for potentially hedging or cover transactions and, instead, have proposed an exposure limit that we believe would be high enough to provide funds sufficient flexibility to engage in these kinds of transactions.

We also believe that a 150% exposure limitation would appropriately balance the proposed rule's effects on funds and their investors, on the one hand, with concerns related to funds' ability to obtain leverage through derivatives and other senior securities transactions, on the other. We understand based on the DERA analysis that, although most funds would be able to comply with an exposure-based portfolio limit of 150% of net assets, the limit would constrain the use of derivatives by the small percentage of funds that use derivatives to a much greater extent than funds generally. The analysis also indicates that funds and their advisers generally would be able to continue to operate and to pursue a variety of investment

strategies, including alternative strategies.²¹⁰

As discussed in more detail in the DERA White Paper, DERA staff reviewed the portfolio holdings of a random sample of mutual funds (including a separate category of alternative strategy funds, which includes index-based alternative strategy funds²¹¹), closed-end funds, BDCs, and ETFs. DERA staff randomly selected 10% of the funds from each of these categories and reviewed the funds' schedule of investments included in their most recently filed annual reports to identify the fund's derivatives transactions, financial commitment transactions, and other senior securities transactions. DERA staff then calculated the funds' exposures under these transactions, using the notional amounts to calculate the funds' derivatives exposures and the amounts of the funds' obligations and contingent obligations under financial commitment transactions and other senior securities transactions, and compared the funds' aggregate exposures to the funds' reported net assets. Although we recognize that the review by DERA staff evaluated funds' investments as reported in the funds' then-most recent annual reports, DERA staff is not aware of any information that would provide any different data analysis of the current use of senior securities transactions by registered funds and business development companies.²¹²

This analysis showed that, for mutual funds other than alternative strategy funds (which we discuss separately below), more than 70% of the sampled mutual funds did not identify *any* derivatives transactions in their schedules of investments; about 6% of sampled mutual funds had derivatives exposures in excess of 50% of the funds' net assets; and about 99% of sampled mutual funds had aggregate exposures that were less than 150% of the funds' net assets.²¹³ None of the sampled closed-end funds had aggregate exposure in excess of 150% of net assets

²¹⁰ See *infra* note 211.

²¹¹ See *supra* note 87 (describing the funds included as alternative strategy funds as part of the staff's review).

²¹² We understand that, in stable environments, samples including longer periods of time are preferable because their larger sample sizes offer greater precision in estimating a given relation or characteristic. DERA staff analysis shows, however, that funds that make the greatest use of derivatives have received disproportionately large net inflows since the end of 2010. Extending DERA's sample back in time thus would tend to include data in the sample that is no longer consistent with industry practice with respect to derivatives usage as it exists today.

²¹³ DERA White Paper, *supra* note 73, at Figures 9.5 and 11.5.

²⁰⁸ For example, for a fund that determines to use derivatives as an alternative to investments in securities, this proposed exposure-based limit would permit a fund with \$100 in assets and with no liabilities or senior securities to obtain market exposure through a derivatives transaction with a notional amount of up to 150% of the fund's net assets, with the fund's non-derivatives assets invested in cash and cash equivalents. This would match the degree of market exposure the fund could obtain by borrowing up to \$50 from a bank as permitted under section 18 and investing the fund's \$150 in total assets in securities.

²⁰⁹ See *supra* notes 123–124 and 126.

(and only about 2% of those funds had aggregate exposures exceeding 100% of net assets).²¹⁴ None of the sampled BDCs reported any derivatives transactions, although some of them did report financial commitment transactions (and they also had issued other senior securities).²¹⁵ The sampled ETFs included alternative strategy ETFs and ETFs pursuing other strategies. Of the non-alternative strategy ETFs, only one of the sampled funds had aggregate exposure in excess of 150% of net assets, and the other sampled non-alternative strategy ETFs with relatively higher exposures had exposures of approximately 100% of net assets.²¹⁶ With respect to alternative strategy ETFs, the sampled funds with the highest exposures were leveraged ETFs; several of these funds had aggregate exposure exceeding 150% of net assets, with exposure ranging up to approximately 280% of net assets.²¹⁷ 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% exposure portfolio limitation without modifying their portfolios.

The sampled alternative strategy funds in DERA's analysis tended to be more significant users of derivatives.²¹⁸ Fifty-two percent of the sampled alternative strategy funds had at least 50% notional exposure from derivatives, and approximately 73% of these funds had aggregate exposure that represented less than 150% of net assets.²¹⁹ The approximately 73% of funds with exposure under 150% included at least one fund in every Morningstar alternative mutual fund category.²²⁰ The remaining approximately 27% of the sampled alternative strategy funds with aggregate

exposure of 150% or more pursued a variety of strategies including, among others, absolute return, managed futures, unconstrained bond, and currency strategies. The funds with the highest exposures in the sample generally followed managed futures strategies.

We believe the proposed 150% exposure limitation appropriately balances the proposed rule's effects on funds and their investors, on the one hand, with the concerns we discuss above concerning funds' ability to obtain leverage and incur obligations through derivatives transactions (and other senior securities transactions), on the other. The information provided in the DERA staff analysis indicates, as discussed above, that most funds in the DERA random sample would be able to comply with a 150% exposure limit without modifying their portfolios. The analysis also indicates that alternative strategy funds, the heaviest users of derivatives in the DERA random sample, generally would be able to continue to operate and to pursue a variety of alternative strategies. As noted above, approximately 73% of the sampled alternative strategy funds had less than 150% exposure and included funds in every alternative mutual fund category.²²¹ The majority of the sampled ETFs also had exposures of 150% or less of net assets. Our staff's analysis indicates that it should be possible to pursue, in some form, almost all existing types of investment strategies in compliance with a 150% exposure limitation.²²²

We recognize, however, that particular funds, including particular alternative strategy funds and certain leveraged ETFs, would need to modify their portfolios to reduce their use of derivatives in order to comply with a 150% exposure limitation, and that these funds may view it to be disadvantageous or less efficient to

reduce their use of derivatives and the potential returns that they may seek to obtain from such derivatives.²²³ On balance, however, we believe a 150% limit provides an appropriate amount of flexibility for funds to engage in derivatives transactions in reliance on the exemption the proposed rule would provide, which otherwise would be prohibited for mutual funds by section 18 (and limited for other types of funds).²²⁴

We believe it is appropriate, and consistent with the investor protection concerns underlying section 18, for funds that engage in derivatives securities transactions in reliance on the exemption that would be provided by proposed rule 18f-4 to be subject to an exposure limit, given that exposures resulting from borrowings and other senior securities are also subject to a limit under section 18. Funds with exposure in excess of the proposed 150% limit thus would have to reduce their exposure in order to rely on the rule. We recognize that a very small percentage of funds may find it difficult to modify their portfolios in order to comply with the proposed 150% exposure limit while pursuing their current strategies.

Some managed futures funds and currency funds, for example, pursue their strategies almost exclusively through derivatives transactions, with the funds' assets generally consisting of cash and cash equivalents. For example, four funds in DERA's sample had exposures in excess of 500% of net assets, and three of them were managed futures funds, with exposures ranging up to approximately 950% of net assets. These funds may find it impractical to reduce their exposures below the

²¹⁴ DERA White Paper, *supra* note 73, at Figure 9.7.

²¹⁵ DERA White Paper, *supra* note 73, at Figures 9.11 and 11.11.

²¹⁶ DERA White Paper, *supra* note 73, at Figures 4.6 and 9.9.

²¹⁷ DERA White Paper, *supra* note 73, at Figure 4.5.

²¹⁸ We refer to alternative strategy funds in the same manner as the staff classified "Alt Strategies" funds in the DERA White Paper, *supra* note 73, as including the Morningstar categories of "alternative," "nontraditional bond" and "commodity" funds.

²¹⁹ DERA White Paper, *supra* note 73, at Figures 9.4 and 11.4.

²²⁰ Our staff's experience suggests, however, that funds in one Morningstar alternative strategy category—Managed Futures—may find it difficult to limit their exposures to less than 150%. These funds generally obtain their investment exposures through derivatives transactions, and thus can be expected to have high derivatives exposures relative to net assets. This is consistent with DERA's analysis, in which the funds with the highest exposures were managed futures funds.

²²¹ See *supra* note 220 regarding funds in the Morningstar managed futures category.

²²² In this regard we note that our staff has observed that derivatives transactions may be used by a fund almost entirely to substitute for the purchase of physical securities, with the result that different funds may pursue the same strategy with one fund doing so primarily through derivatives and the other primarily through securities investments. For example, a long/short equity fund that engages in cash transactions could purchase long investment securities and borrow securities in connection with its short sale transactions. Alternatively, the long/short equity fund might invest primarily in Government securities or other short-term investments and pursue its long/short equity strategy solely through a few portfolio total return swaps, under which the fund designates long and short positions and receives the net performance on these reference securities in substantially the same manner as if the fund had invested directly in the reference securities.

²²³ We also discuss these and other implications of the proposed rule's 150% exposure limitation below in section IV of this Release. A fund with exposure in excess of 150% of net assets might be able to comply with the risk-based portfolio limit, discussed below, which includes an exposure limit of 300% of net assets. We note, however, that a fund that holds only cash and cash equivalents and derivatives—like certain alternative strategy funds and leveraged ETFs—would not be able to satisfy the VaR test because, in this case, the fund's derivatives, in aggregate, generally would add, rather than reduce, the fund's exposure to market risk and thus generally would not result in a full portfolio VaR that is lower than the fund's securities VaR, as required under the VaR test. See *infra* note 314 and accompanying text.

²²⁴ In this regard we also note that, as discussed above, the DERA staff analysis shows that approximately 73% of the sampled alternative strategy funds, which are as a group more substantial users of derivatives, had less than 150% exposure. Only those funds that used derivatives to a much greater extent than funds generally, including a limited percentage of alternative strategy funds, had exposures in excess of 150% of net assets.

proposed limit of 150%.²²⁵ As we discussed above in section II.D.1 of this Release, however, funds with derivatives notional exposures of almost ten times net assets and having the potential for additional exposures do not appear to be subject to a practical limit on leverage as we contemplated in Release 10666.

Certain ETFs and mutual funds expressly use derivatives to achieve performance results, over a specified period of time, that are a multiple of or inverse multiple of the performance of an index or benchmark. Certain of these funds have derivatives exposures exceeding 150% of net assets (e.g., a fund that seeks to deliver two or three times the inverse of a benchmark and achieves this exposure through derivatives transactions), as reflected in the DERA sample and noted above. These funds are sometimes referred to as trading tools because they seek to provide a specific level of leveraged exposure to a market index over a fixed period of time (e.g., a single trading day).

Initially only certain mutual funds pursued these strategies. Today, most of these funds are ETFs operating pursuant to exemptive orders granted by the Commission that provide relief from certain provisions of the Act other than section 18.²²⁶ The first exemptive order that contemplated leveraged ETFs, which was issued by the Commission in 2006,²²⁷ stated that the applicants intended to operate ETFs that would seek investment results of 125%, 150%, or 200% of the return of the underlying securities index on a daily basis (or an inverse return of 100%, 125%, 150%, or 200% of such index on a daily basis).²²⁸ Subsequent orders were issued for two other ETF sponsors seeking to launch and operate leveraged ETFs, some of which involved higher amounts of

leverage.²²⁹ No exemptive orders for leveraged ETFs have been issued since 2009.

The Commission and the staff have continued to consider funds' use of derivatives, including the use of derivatives by ETFs and leveraged ETFs. In August 2009, the staff of our Office of Investor Education and Advocacy and FINRA jointly issued an Investor Alert regarding leveraged ETFs, expressing certain concerns regarding such ETFs.²³⁰ In March 2010, we issued a press release announcing that the staff was conducting a review to evaluate the use of derivatives by registered investment companies, including ETFs, and we indicated that, pending completion of this review, the staff would defer consideration of exemptive requests under the Act relating to ETFs that would make significant investments in derivatives.²³¹ Although the staff is

²²⁹ Rydex ETF Trust, et al., Investment Company Release Nos. 27703 (Feb. 20, 2007) (notice) and 27754 (Mar. 20, 2007) (order); Rafferty Asset Management, LLC, et al., Investment Company Release Nos. 28379 (Sept. 12, 2008) (notice) and 28434 (Oct. 6, 2008) (order). See also ProShares Trust, et al., Investment Company Release Nos. Investment Company Release Nos. 28696 (Apr. 14, 2009) (notice) and 28724 (May 12, 2009) (order) (amending the applicant's prior order); Rafferty Asset Management, LLC, et al., Investment Company Release Nos. 28889 (Aug. 27, 2009) (notice) and 28905 (Sept. 22, 2009) (order) (amending the applicant's prior order). These orders (as amended) relate to leveraged ETFs that seek investment results of up to 300% of the return (or inverse of the return) of the underlying index.

²³⁰ Investor Alert and Bulletins, *Leveraged and Inverse ETFs: Specialized Products with Extra Risks for Buy-and-Hold Investors* (Aug. 18, 2009), available at <http://www.sec.gov/investor/pubs/leveragedetfs-alert.htm>. FINRA also has sanctioned a number of brokerage firms for making unsuitable sales of leveraged and inverse ETFs. See, e.g., FINRA News Release, *FINRA Orders Stifel, Nicolaus and Century Securities to Pay Fines and Restitution Totaling More Than \$1 Million for Unsuitable Sales of Leveraged and Inverse ETFs, and Related Supervisory Deficiencies* (Jan. 9, 2014), available at <https://www.finra.org/newsroom/2014/finra-orders-stifel-nicolaus-and-century-securities-pay-fines-and-restitution-totaling>; see also FINRA News Release, *FINRA Sanctions Four Firms \$9.1 Million for Sales of Leveraged and Inverse Exchange-Traded Funds* (May 1, 2012), available at <https://www.finra.org/newsroom/2012/finra-sanctions-four-firms-91-million-sales-leveraged-and-inverse-exchange-traded>. Following losses incurred by certain ETF investors during 2008–2009, a lawsuit was brought against one of the sponsors of leveraged ETFs alleging that the funds' registration statements contained material misstatements or omissions. The Circuit Court of Appeals for the Second Circuit affirmed the district court's dismissal of the plaintiffs' claims. In affirming, the court noted, among other things, that, as a disclosure matter, “[a]ll the ProShares I prospectuses make clear that ETFs used aggressive financial instruments and investment techniques that exposed the ETFs to potentially ‘dramatic’ losses ‘in the value of its portfolio holdings and imperfect correlation to the index underlying.’” In re ProShares Trust Securities Litigation, 728 F.3d 96 (2d Cir. 2013) (internal citations omitted).

²³¹ See SEC Press Release 2010–45, *SEC Staff Evaluating the Use of Derivatives by Funds* (Mar.

no longer deferring consideration of exemptive requests under the Act relating to all actively-managed ETFs that make use of derivatives,²³² the staff continues not to support new exemptive relief for leveraged ETFs.

Funds that do not wish to rely on the proposed rule may wish to consider deregistering under the Investment Company Act, with the fund's sponsor offering the fund's strategy as a private fund or as a public (or private) commodity pool, which do not have statutory limitations on the use of leverage.²³³ These alternative fund structures would be marketed to a more targeted investor base (i.e., those with higher incomes or net worth, in the case of private funds, and those familiar with commodity pool investment partnerships, in the case of public commodity pools) and would not be expected by their investors to have the protections provided by the Investment Company Act. We also note that our staff has observed that certain of these highly leveraged funds (e.g., managed futures funds) often do not make significant investments in securities and the securities investments they do make generally do not meaningfully contribute to their returns.

We request comment on all aspects of the proposed exposure-based portfolio limit of 150% of a fund's net assets.

- Is 150% an appropriate exposure limit? If not, should it be higher or lower, for example 200% or 100%? Does the 150% exposure limit, together with the rule's other limitations, achieve an appropriate balance between providing flexibility and limiting the amount of leverage a fund could obtain (and thus the potential risks associated with leverage)? Does the 150% exposure limit effectively address the varying ways in which funds use derivatives, including for hedging purposes?

- Are certain types of funds likely to use the 150% exposure limit exclusively for leveraging purposes? If so, do commenters believe that such a level of exposure would be inappropriate? Should any concerns about a fund using

25, 2010), available at <http://www.sec.gov/news/press/2010/2010-45.htm>.

²³² See *Derivatives Use by Actively-Managed ETFs* (Dec. 6, 2012), available at <http://www.sec.gov/divisions/investment/noaction/2012/moratorium-lift-120612-etf.pdf> (announcing that the staff will no longer defer consideration of exemptive requests under the Act relating to actively-managed ETFs that make use of derivatives provided that they include representations to address some of the concerns expressed in the March 2010 press release).

²³³ See section IV below for a discussion of possible effects associated with funds' decision to deregister under the Investment Company Act and for their sponsors to offer the fund's strategy as private funds or commodity pools.

²²⁵ We note that managed futures funds account for approximately 3% of alternative mutual fund assets under management, and 0.09% of mutual fund assets under management. We thus expect that, although the proposed rule would have a greater effect on managed futures funds than most other types of funds, the effect would be small relative to alternative fund assets under management, and especially small relative to overall mutual fund assets under management.

²²⁶ The applicants did not seek, and their orders do not provide, any exemption from the requirements of section 18. The proposed rule, if adopted, would prohibit funds, including leveraged ETFs, from obtaining exposure in excess of the proposed rule's exposure limits.

²²⁷ ProShares Trust, et al., Investment Company Release Nos. 27323 (May 18, 2006) (notice) and 27394 (June 13, 2006) (order).

²²⁸ In this Release we generally refer to ETFs that seek to achieve performance results, over a specified period of time, that are a multiple of or inverse multiple of the performance of an index or benchmark collectively as “leveraged ETFs.”

derivatives transactions exclusively for leveraging purposes be addressed through a reduced exposure limitation? Conversely, would the other conditions and requirements of the rule, including the requirement to have a derivatives risk management program meeting specified requirements (discussed in section III.D below), address concerns regarding the leverage that the fund might be able to obtain under the 150% exposure limit, in light of the policy concerns underlying section 18 of the Act?

- Do commenters agree that the proposed 150% exposure limitation appropriately balances concerns regarding, on the one hand, the extent to which the exposure limit would affect funds' investment strategies and, on the other hand, section 18's limitations on the issuance of senior securities and the concerns we discuss above concerning funds' ability to obtain leverage through derivatives transactions and other senior securities transactions?

- As discussed above, our staff's analysis indicates that certain funds, including certain alternative funds, today have exposures exceeding 150% of their net assets. What types of modifications would these funds be required to make and how would the modifications affect their investors? Would they be able to make such modifications? Are there other types of funds that also would expect to have exposure exceeding 150%? If so, what kinds of funds and what types of modifications would they be required to make and how would the modifications affect their investors? What types of costs would funds that need to modify their investment strategies in order to comply with the 150% limit be likely to incur? Would funds that would be required to make modifications to comply with a 150% exposure limit generally be able to follow the same investment strategy as they do today after making any modifications? How would such modifications likely affect such funds?

- What types of funds would be unable to modify their investment program in order to comply with the 150% exposure limit? Would these funds be likely to continue their investment programs as private funds or public (or private) commodity pools? What would be the effects, positive and negative, on the funds' investors in these cases?

- The 150% exposure limit (and the 300% exposure limit in the risk-based portfolio limit) would apply to all funds without regard to the type of fund or the fund's strategy. Are there certain types

of funds for which a higher or lower exposure limit would be appropriate?

- Should we consider a higher limit for ETFs (or other funds) that seek to replicate the leveraged or inverse performance of an index? Would a higher exposure limit be appropriate for these funds because they may operate as trading tools that seek to provide a specific level of leveraged exposure to a market index over a fixed period of time, and because the amount of leverage is an integral part of their strategy? Conversely, do those same considerations suggest that these funds—which are not restricted to sophisticated investors—should be subject to the same exposure limitations as other types of funds? Some of these funds are ETFs that operate pursuant to exemptive orders granted by the Commission. Would it be more appropriate to consider these funds' use of derivatives transactions in the exemptive application context, based on the funds' particular facts and circumstances, rather than in rule 18f-4, which would apply to funds generally? Would the exemptive application process be a more appropriate way to evaluate these funds in order to consider their use of leverage together with other features of these products (such as their objective of seeking daily returns) that are not shared by funds generally?

- As discussed in more detail above, some managed futures funds and currency funds pursue their strategies almost exclusively through derivatives transactions, with the funds' other assets generally consisting of cash and cash equivalents. Managed futures and currency funds with derivatives exposures substantially in excess of the funds' net assets may find it impractical to reduce their exposures below the proposed limit of 150%. Do commenters agree that it may be feasible, for the reasons discussed above, for funds that do not wish to rely on the proposed rule to deregister under the Investment Company Act and for the fund's sponsor to offer the fund's strategy as a private fund (which can be offered solely to a limited range of investors) or as a public or private commodity pool? Are these alternatives, which do not have statutory limitations on the use of leverage, feasible vehicles for these types of strategies? Conversely, should we permit managed futures or currency funds (or other specified fund categories) to obtain exposure in excess of 150% of the funds' net assets under the exposure-based portfolio limit? If so, what limit and what other restrictions or limitations on their use of derivatives would be appropriate? Are there ways

that we could permit such funds to obtain additional exposure while still addressing the undue speculation concern expressed in section 1(b)(7) and the asset sufficiency concern expressed in section 1(b)(8)? How could we permit such funds to obtain additional exposure while also imposing an effective limit on leverage and on the speculative nature of such funds?

- Section 61 permits a BDC to issue senior securities to a greater extent than other types of funds in that BDCs are subject to a lower asset coverage requirement of 200% (as opposed to the 300% asset coverage requirement that applies to other types of funds).²³⁴ The proposed rule would not restrict the ability of a BDC to continue to issue senior securities pursuant to section 61 subject to a 200% asset coverage requirement. The proposed rule would, however, require a BDC that engages in derivatives transactions in reliance on the proposed rule to comply with the rule's aggregate exposure limitations, which would include exposure associated with senior securities issued by a BDC pursuant to section 61 (as well as exposure from financial commitment transactions entered into by a BDC pursuant to the proposed rule). Should the proposed rule provide BDCs greater exposure limits under the rule in recognition of the greater latitude that BDCs have to issue senior securities provided by section 61? Would any increase be needed given that our staff's review suggests BDCs do not use derivatives to any material extent?

- Are there other types of funds for which, or circumstances under which, we should provide higher or lower exposure limits? What kinds of funds or circumstances and why? Should we provide for differing exposure limits based on characteristics of the fund's derivatives? Which characteristics and how should they affect the level of exposure the fund should be permitted to obtain?

- Should we grandfather funds that are operating in excess of the proposed rule's portfolio limits as of a specified date? If we were to grandfather funds, which funds should we grandfather and why? Should we apply any grandfathering to funds that are operating on the date of this proposal, for example? Alternatively, should we, for example, grandfather leveraged ETFs on the basis that they operate pursuant to the terms and conditions of exemptive orders granted by the Commission? If we were to grandfather funds, should the grandfathering be subject to conditions? Should any

²³⁴ See *supra* notes 34–36 and accompanying text.

grandfathered funds be required to comply with some, but not all, aspects of the proposed rule? For example, should they be required to comply with the proposed rule's asset segregation requirements and the requirement to have a formalized derivatives risk management program? Should they be required to comply with any other conditions?

d. Treatment of Hedging and Cover Transactions

We believe that the 150% exposure-based portfolio limit would permit funds to engage in derivatives transactions to an extent that we believe is appropriate when done in compliance with the proposed rule's other conditions, and would permit a fund relying on the rule to use derivatives for a variety of purposes under the proposed rule, including to seek to hedge or mitigate risks. We have not separately included any provision in the proposed rule to permit a fund to reduce its exposure for purposes of the rule's portfolio limitations for particular derivatives transactions that may be entered into for hedging (or risk-mitigating) purposes or that may be "cover transactions" as described below.²³⁵ We believe that the DERA staff analysis, discussed in section III.B.1.c, suggests that such a reduction is not necessary in order to permit the use of derivatives for hedging or risk-mitigating purposes because most of the funds in DERA's sample did not have aggregate exposure in excess of 150% of net assets. In addition, while we expect that the proposed rule's exposure limitation would be applied relatively consistently across funds, we believe that providing for a hedging reduction may hinder our efforts toward establishing a consistent and effective approach toward the regulation of funds' use of derivatives, and that the exposure limits under the proposed rule are more easily administrable than some other potential alternatives that could entail a more tailored approach.

One substantial concern regarding any hedging or cover transaction exception is that we believe it would be difficult to develop a suitably objective standard for these transactions, and that confirming compliance with any such standard would be difficult, both for fund compliance personnel and for our

staff.²³⁶ Our staff has noted that funds may enter into a variety of derivatives transactions based on their portfolio managers' views of the expected performance correlations between such transactions and other investments (including other derivatives instruments) made by the funds, and these relationships may be difficult to describe effectively and comprehensively in an exemptive rule of general applicability such as the proposed rule.²³⁷ In addition, many hedges are imperfect,²³⁸ which makes it difficult to distinguish purported hedges from leveraged or speculative exposures. For example, while a fund might use interest rate or currency derivatives primarily for hedging particular investments, the same instruments could be used by the fund to obtain, or could inadvertently result

²³⁶ As discussed in section IV.E, the CESR commitment approach for UCITS funds permits funds to reduce their calculated derivatives exposure for certain netting and hedging transactions, while providing for a lower exposure limit (100% of net assets) than the proposed rule. We note, however, that the challenges of distinguishing between hedging and speculative activity have been considered in numerous regulatory and financial contexts. One recent regulatory example is the exemption for certain risk-mitigating hedging activities from the prohibition on proprietary trading by banking entities in the final rules implementing section 13 of the Bank Holding Company Act (commonly known as the "Volcker Rule"). See Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships With, Hedge Funds and Private Equity Funds, Release No. BHCA-1 (Dec. 10, 2013) [79 FR 5536 (Jan. 31, 2014)] ("Volcker Rule Adopting Release"), at 5629, 5627. The complexity of distinguishing hedging from speculation in this context is notable because the exemption is designed for entities that would not otherwise be engaged in speculative activity. We believe it would be even more difficult to make such a distinction in the context of funds that in the ordinary course are permitted, and often likely, to use derivatives for both speculative and hedging purposes.

²³⁷ See, e.g., MFDF Concept Release Comment Letter, at 4 (noting that "in recent years, funds have adopted more complex and more nuanced investment strategies, and thus are using derivatives—and sometimes the same type of derivative—in many different ways, including as a way of hedging and mitigating other risks present in fund portfolios. Therefore, any detailed and purportedly all-inclusive approach to regulations governing funds' use of derivatives is almost necessarily destined to be out-of-date the moment it is issued.").

²³⁸ See, e.g., Federal Reserve Bank of Chicago, *Understanding Derivatives: Markets and Infrastructure* (Aug. 2013), available at <https://www.chicagofed.org/publications/understanding-derivatives/index>, at 27–28 (noting that exchange-traded contracts often give rise to basis risk, i.e., the risk that arises when "the exposure to the underlying asset, liability or commodity that is being hedged and the hedge contract (the derivatives contract) are imperfect substitutes" and that mitigating basis risk may necessitate OTC derivatives that can be tailored to meet specific requirements).

in, leveraged or speculative exposures in a fund's portfolio.²³⁹

The Concept Release sought comment on the "cover transaction" alternative to liquid asset segregation first addressed by our staff in the Dreyfus Letter as a means of limiting a fund's leverage and risk of loss from derivatives.²⁴⁰ In the Dreyfus Letter, our staff stated that it would not object to a fund covering its obligations by entering into certain other transactions that were intended to position the fund to meet its obligations under the derivatives transaction to be covered or by holding the asset (or the right to acquire the asset) that the fund would be required to deliver under certain derivatives, rather than following the segregated account approach set forth in Release 10666. While commenters to the Concept Release generally argued for retaining the flexibility offered by the cover transaction approach, they also raised numerous issues that demonstrate the difficulties in identifying transactions that should be viewed as providing adequate coverage.²⁴¹

One commenter noted that, although entering into cover transactions "can mitigate the potential for loss and thus the effect of indebtedness leverage," the determination of which transactions actually offset others can be "very complicated."²⁴² Other issues raised by commenters and in the 2010 ABA Derivatives Report included: Whether transactions involving two different counterparties could provide adequate cover for each other; whether positions that are "substantially correlated" could offset each other; whether transactions

²³⁹ One commenter to the Concept Release offered the following hypothetical: A fund holds euro-denominated shares with a market value of €2 million and hedges against exchange rate fluctuations by entering into a 3-month forward contract to sell €2 million for \$2.75 million. If the euro value of the shares falls below the notional amount of the currency contract, then it could be viewed as a form of investment leverage, but the alternative—requiring the fund to continuously adjust its hedge to match the value of its security position—could be prohibitively expensive and contrary to the best interest of the fund's shareholders. See Keen Concept Release Comment Letter, at 11.

²⁴⁰ See Dreyfus No-Action Letter, *supra* note 55. See also Concept Release, *supra* note 3, at nn.70–71 and accompanying text (discussing circumstances under which the staff has provided guidance with respect to whether certain "obligations may be covered by funds transacting in futures, forwards, written options, and short sales").

²⁴¹ In contrast to the types of hedging (or risk-mitigating) or cover transactions that we discuss in this section, we believe that the proposed rule's netting provision is sufficiently limited in scope and purpose such that allowing netting would be unlikely to raise the concerns discussed in this section. See *supra* section III.B.1.b.i.2.

²⁴² See ICI Concept Release Comment Letter, at 14.

²³⁵ See *infra* note 244. The proposed rule would, however, permit a fund to net certain transactions when determining its exposure, as noted above, where the transactions to be netted are directly offsetting derivatives that are the same type of instrument and have the same underlying reference asset, maturity and other material terms. See proposed rule 18f-4(c)(3)(i).

that are “demonstrably fully or partially offsetting” could cover each other; and whether the cover transaction approach extended to, or should be extended to, other transactions not addressed in the Dreyfus Letter, such as whether a currency forward could be covered with a currency swap, or whether a written CDS could be covered by holding the underlying reference bond.²⁴³

Some commenters endorsed a “principles-based approach” to these questions, broadly advocating that we allow funds to determine which transactions should be deemed to cover the exposure of another derivatives transaction.²⁴⁴ Our staff has found through examinations that funds have expanded their reliance on a cover transaction approach for a variety of different strategies involving written and purchased options and long and short futures, which in the staff’s view raises concerns regarding whether the risks under such complex combinations of derivatives are in fact covered. We note in this regard that an incorrect determination that two or more transactions are actually covered could leave a fund unprotected against the risks relating to these transactions and could result in undue speculative activity. A principles-based approach to these issues could also implicate a concern raised by one commenter that “different funds could end up with different determinations, perhaps some taking more aggressive positions to allow for greater use of derivatives to drive performance.”²⁴⁵ We therefore do not believe it would be appropriate to permit funds broad discretion under the proposed rule to determine, based on their own interpretations, the types of derivatives transactions that should be exempt from the restrictions underlying section 18 based on their different characteristics purportedly covering the risks associated with other derivatives transactions.

For all of these reasons, we believe it would be more effective to provide for a 150% exposure-based portfolio limit that we believe would provide funds sufficient flexibility to use derivatives for a variety of purposes, including to

hedge or mitigate risks as discussed above, rather than proposing a lower exposure limit that includes exceptions for potentially hedging or cover transactions.

We request comment on our determination not to provide for exclusions for hedging and offsetting transactions in the proposed rule.

- As discussed above, the proposed rule generally would not permit a fund to reduce its exposure for purposes of the rule’s portfolio limitations for particular types of potentially hedging, risk-mitigating or cover transactions, and instead would seek to provide funds sufficient flexibility to engage in these transactions by permitting a fund to have exposure of up to 150% of net assets (or 300% under the risk-based limit discussed below). Do commenters agree that this is an appropriate approach?

- Should we, instead, reduce the amount of aggregate exposure a fund would be permitted to obtain but permit funds to reduce their exposure for particular derivatives transactions that are entered into for hedging or risk-mitigating purposes or that are cover transactions? If we were to take this approach, what would be an appropriate exposure limit? Should we, for example, limit a fund’s exposure under this approach to 100% of the fund’s net assets? Would it be possible to provide comprehensive guidance or prescribe in a rule the types of transactions that appropriately should be permitted to reduce a fund’s exposure without requiring the kinds of instrument-by-instrument determinations required under the current approach? If so, how?

2. Risk-Based Portfolio Limit

As an alternative to the exposure-based portfolio limit, the proposed rule includes a risk-based portfolio limit that would permit a fund to enter into derivatives transactions, and obtain exposure in excess of that permitted under the exposure-based portfolio limit, if the fund complies with the VaR-based test described below (the “VaR test”). The risk-based portfolio limit, including the VaR test, is designed to provide an indication of whether a fund’s derivatives transactions, in aggregate, have the effect of reducing the fund’s exposure to market risk, as measured by the VaR test. A fund that elects the risk-based portfolio limitation under the proposed rule would also be subject to an exposure limit, but would be permitted to obtain exposure under its derivatives transactions and other

senior securities transactions of up to 300% of the fund’s net assets.²⁴⁶

As discussed in section II.B above, the concerns underlying section 18 include the undue speculation concern expressed in section 1(b)(7) of the Act that “excessive borrowing and the issuance of excessive amounts of senior securities” may “increase unduly the speculative character” of a fund’s common stock.²⁴⁷ As we noted in Release 10666, leveraging a fund’s portfolio through the issuance of senior securities “magnifies the potential for gain or loss on monies invested” and therefore “results in an increase in the speculative character” of the fund’s outstanding securities. Section 18 seeks to address this concern by limiting the obligations a fund could incur through senior securities transactions. However, although derivatives transactions involve the issuance of senior securities, funds can use derivatives in ways that may not necessarily magnify a fund’s potential for gain or loss, or result in an increase in the speculative character of the fund. For example, commenters have indicated that some fixed-income funds use a range of derivatives, including CDS, interest rate swaps, swaptions and futures, and currency forwards, and that these derivatives are being used, in part, to seek to mitigate the risks associated with a fund’s bond investments, or to achieve particular risk targets, such as a specified duration.²⁴⁸ Such strategies, or other strategies that funds currently use or may develop in the future, may involve the use of derivatives that, in the aggregate, have relatively high notional amounts, but which are used in a manner that could be expected to reduce a fund’s potential for gain or loss due to market movements and thereby result in a fund being less speculative than if the fund did not use derivatives. We believe that it may be appropriate for a fund to be able to obtain exposure in excess of that permitted under a portfolio limitation focused solely on the level of a fund’s exposure where the fund’s use of derivatives, in aggregate,

²⁴⁶ Proposed rule 18f-4(a)(1)(ii).

²⁴⁷ See section 1(b)(7) of the Investment Company Act; see also *supra* section II.B.

²⁴⁸ See, e.g., BlackRock Concept Release Comment Letter, at 25 (noting “the use of a derivative to mitigate some or all of the risk inherent in physical positions held in a fund portfolio, such as purchase of a put option on a stock ‘to provide downside price protection, use of an interest rate swap to shorten the duration of a bond portfolio or the sale of a currency forward to reduce the currency exposure of a bond denominated in a currency other than US dollars’”); ICI Concept Release Comment Letter, at 25 (“[f]ixed income funds frequently use derivatives to structure and control duration, yield curve, sector, and/or credit exposures”).

²⁴³ See, e.g., ICI Concept Release Comment Letter, at 14; 2010 ABA Derivatives Report, at 19; Oppenheimer Concept Release Comment Letter, at 5; SIFMA Concept Release Letter, at 8.

²⁴⁴ See, e.g., T. Rowe Price Concept Release Comment Letter, at 3 (“Under a principles-based approach, the SEC should also acknowledge that it is possible for a fund to conclude that in certain cases, transactions that are not identical can be offset for coverage purposes (factors that may impact this conclusion are the credit quality of the counterparties, expected correlation between the two transactions, etc.).”).

²⁴⁵ AQR Concept Release Comment Letter, at 4.

has the effect of reducing the fund's exposure to market risk.²⁴⁹

The risk-based alternative under the proposed rule therefore is designed to provide an alternative portfolio limitation that focuses primarily on a risk assessment of a fund's use of derivatives, in contrast to the exposure-based portfolio limit, which focuses solely on the level of a fund's exposure.²⁵⁰ The risk-based portfolio limit reflects our belief that if a fund's use of derivatives, in the aggregate, can reasonably be expected to result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives—if the fund's derivatives use reduces rather than magnifies the potential for loss from market movements—then the fund's derivatives use is also less likely to implicate the undue speculation concern expressed in section 1(b)(7). As discussed further below, we believe that the VaR test would be an appropriate way to evaluate if a fund's derivatives use, in the aggregate, decreases the fund's overall exposure to market risk, and that it therefore may be appropriate

for the proposed rule to allow a fund that satisfies the VaR test to have greater exposure under its derivatives transactions than would be permitted for a fund operating under the exposure-based portfolio limit.

a. VaR Test Under the Risk-Based Portfolio Limit

To satisfy the VaR test under the risk-based portfolio limit, a fund's full portfolio VaR would have to be less than the fund's securities VaR immediately after the fund enters into any senior securities transaction.²⁵¹ A fund's "full portfolio VaR" would be defined as the VaR of the fund's entire portfolio, including securities, derivatives transactions and other investments.²⁵² A fund's "securities VaR" would be defined as the VaR of the fund's portfolio of securities and other investments, but excluding any derivatives transactions.²⁵³ As explained below, we believe that the determination by a fund that its full portfolio VaR is less than its securities VaR would be an appropriate indication that the fund's derivatives use, in the aggregate, decreases the fund's overall exposure to market risk.

The proposed rule defines 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," which we believe is generally consistent with definitions of VaR that are used in other regulatory regimes as well as in academic literature.²⁵⁴ While VaR can be

calculated using several different approaches and a wide range of parameters (as discussed further below), VaR has certain characteristics that we believe make it an appropriate metric, when used as part of the VaR test, for assessing the effect of derivatives use on a fund's exposure to market risk.

First, VaR generally enables risk to be measured in a comparable and consistent manner across diverse types of instruments that may be included in a fund's portfolio, and provides a means of integrating the market risk associated with different instruments into a single number that provides an overall indication of market risk.²⁵⁵ By contrast, many other risk metrics used by funds are suited to particular categories of instruments and, given the diverse investment portfolios of many funds, may be less suitable as a means of assessing risk for purposes of the risk-based alternative under the proposed rule.²⁵⁶ For example, risk measures for government bonds can include duration, convexity and term-structure models; for corporate bonds, ratings and default models; for stocks, volatility, correlations and beta; for options, delta, gamma and vega; and for foreign exchange, target zones and spreads.²⁵⁷ Because proposed rule 18f-4 is intended to apply generally to all funds that use derivatives, however, and because VaR can be applied across diverse types of instruments that may be included in the portfolios of funds that pursue different strategies, we believe that VaR is a more appropriate metric for purposes of the proposed rule.²⁵⁸

²⁴⁹ As used in this Release, "market risk" refers to the risk of financial loss resulting from movements in market prices, and includes both *general* market risk, which refers to the risk associated with movements in the markets as a whole, and *specific* market risk, which refers to the risk associated with movements in the price of a particular asset. See, e.g., Edward Platen & Gerhard Stahl, *A Structure for General and Specific Market Risk*, 18 Computational Statistics 355 (Sept. 2003), available at http://www.fe-tokyo.kier.kyoto-u.ac.jp/symposium/platen/sympo_platen_02.pdf; see also Gregory Brown & Nishad Kapadia, *Firm-Specific Risk and Equity Market Development*, 84 J. of Fin. Econ. 358 (May 2007), available at <http://www.sciencedirect.com/science/article/pii/S0304405X06002145>.

²⁵⁰ We believe that the inclusion of the risk-based alternative in the proposed rule, and in particular its use of the VaR test, is consistent with the views expressed by some commenters to the Concept Release and the FSO Notice suggesting that concerns about leverage be addressed by using risk-based measures, such as VaR, as an alternative or supplement to traditional leverage metrics. See, e.g., Comment Letter of Nuveen Investments to the FSO Request for Comment (Mar. 25, 2015) ("Nuveen FSO Comment Letter"), available at <http://www.regulations.gov/#/documentDetail;D=FSOC-2014-0001-0051>, at 6–7 (noting the firm's use of "different tools to measure the effects of leverage and its accompanying risks," and noting, when using VaR, that "[i]t is helpful, for example, to 'determine the VaR of a fund's portfolio both before and after the addition of leverage, to compare both the unleveraged and leveraged metrics to those of the benchmark'"); Oppenheimer Concept Release Comment Letter, at 3 (advocating for "the use of VaR for measuring and mitigating the potential exposure and risks of derivatives in an investment company's portfolio for funds making sophisticated and extensive use of derivatives"). Some commenters also suggested the use of VaR as a means of determining asset segregation requirements for funds. See, e.g., SIFMA Concept Release Comment Letter, at 7; BlackRock Concept Release Comment Letter, at 5; ICI Concept Release Comment Letter, at 12.

²⁵¹ Proposed rule 18f-4(a)(1)(ii).

²⁵² Proposed rule 18f-4(c)(11)(i)(B).

²⁵³ Proposed rule 18f-4(c)(11)(i)(A). Although the proposed rule uses the term "securities VaR," some instruments that a fund could hold, and that would need to be included in the fund's securities VaR, may not be "securities" for all purposes under the federal securities laws. For example, a fund's securities VaR would include any direct holdings of non-U.S. currencies. A fund's securities VaR would also include derivative instruments that do not entail a future payment obligation for a fund (and thus are not "derivatives transactions" as defined in the rule), such as most purchased options.

²⁵⁴ Proposed rule 18f-4(c)(11). See, e.g., Form PF (defining VaR as "[f]or a given portfolio, the loss over a target horizon that will not be exceeded at some specified confidence level"). See also Volcker Rule Adopting Release, *supra* note 236, at Appendix A (defining Value-at-Risk as "the commonly used percentile measurement of the risk of future financial loss in the value of a given set of aggregated positions over a specified period of time, based on current market conditions." See also Darrell Duffie & Jun Pan, *An Overview of Value at Risk*, 4 The J. of Derivatives 7 (Spring 1997) ("For a given time horizon t and confidence level p , the value at risk is the loss in market value over the time horizon t that is exceeded with probability $1-p$ "). See also Michael Minnich, Perspectives on Interest Rate Risk Management for Money Managers and Traders (Frank Fabozzi, ed.) ("Minnich"), at 39

("VAR can be defined as the maximum loss a portfolio is expected to incur over a specified time period, with a specified probability").

²⁵⁵ See Kevin Dowd, An Introduction to Market Risk Measurement (Oct. 2002) ("Dowd"), at 10 (VaR "provides a *common* consistent measure of risk across different positions and risk factors. It enables us to measure the risk associated with a fixed-income position, say, in a way that is comparable to and consistent with a measure of the risk associated with equity positions"). See also Zvi Weiner, *Introduction to VaR (Value-at-Risk)* ("Weiner") (May 1997), available at <http://pluto.msc.huji.ac.il/~mswiener/research/Intro2VaR3.pdf> (noting that VaR provides "an integrated way to deal with different markets and different risks and to combine all of the factors into a single number" that indicates the overall risk level).

²⁵⁶ See Weiner, *supra* note 255.

²⁵⁷ See *id.* We have proposed to require certain funds to report some of these metrics on proposed Form N-PORT, such as portfolio-level duration (DV01 and SDV01) and position-level delta, because we believe that such information would be useful to the Commission and to investors. See Investment Company Reporting Modernization Release, *supra* note 138.

²⁵⁸ See, e.g., Katerina Simons, *The Use of Value at Risk by Institutional Investors* ("Simons"), New Eng. Econ. Rev. 21 (Nov./Dec. 2000), available at <http://www.bostonfed.org/economic/neer/neer2000/neer600b.pdf> (noting that VaR is "particularly

Second, VaR can be used to assess the effect of the addition of a position, or group of positions, on the overall market risk of a portfolio. If the addition of a position to a portfolio increases VaR, the position can generally be viewed as adding to a fund's exposure to market risk, while if the addition of a position decreases VaR, it can be viewed as reducing the fund's exposure to market risk.²⁵⁹

We believe that these characteristics allow the VaR test to be used as a means of evaluating whether a fund uses derivatives in a manner that would be less likely to implicate the concerns underlying section 18. Section 18 does not restrict a fund's ability to invest in securities and other investments that would be included in a fund's securities VaR, but rather, restricts the ability of a fund to leverage its exposure to such investments by borrowing, or issuing debt or preferred equity, through senior securities. This reflects the concern that the addition of leverage generally will cause a fund to become more speculative and expose investors to potentially greater risk of loss due to market movements than if the fund were unlevered. As discussed above, a fund's use of derivatives transactions may cause a fund to become more speculative or expose investors to greater risk of loss, but may also be used to mitigate risks in the fund's portfolio.

Whether a fund's use of derivatives exposes the fund to greater risk or less risk than if the fund did not use derivatives requires consideration of the risk characteristics of a fund's non-derivatives investments and its derivatives transactions, and the interaction of the risk characteristics of these investments and transactions with each other. The VaR test provides a means for making such an assessment, by providing an indication of whether the market risk associated with a fund's portfolio of securities and other investments exclusive of derivatives (as

useful" for an investor that "has a multi-asset-class portfolio and needs to measure its exposure to a variety of risk factors. VaR can measure the risk of stocks and bonds, commodities, foreign exchange, and structured products such as asset-backed securities and collateralized mortgage obligations (CMOs), as well as off-balance sheet derivatives such as futures, forwards, swaps, and options." See also *infra* section III.B.2.b.

²⁵⁹ See Dowd, *supra* note 255, at 117–118 (defining incremental VaR (or "IVaR") as the change in VaR associated with the addition of a new position to a portfolio, and noting that "IVaR gives us an indication of how [portfolio] risks change when we change the portfolio itself. In practice, we are often concerned with how the portfolio risk changes when we take on a new position, in which case the IVaR is the change in portfolio VaR associated with adding the new position to our portfolio.").

measured by the fund's securities VaR), is greater than or less than the market risk associated with the fund's portfolio as a whole (as measured by the fund's full portfolio VaR), inclusive of derivatives transactions and taking into account the offsetting risk characteristics of different instruments in a fund's portfolio. If a fund's full portfolio VaR is less than its securities VaR—i.e., if the fund can satisfy the VaR test—we believe that the fund's derivatives use, in the aggregate, can be viewed as decreasing the fund's overall exposure to market risk.²⁶⁰ In this way, we believe that a fund's compliance with the VaR test would indicate that the fund's derivatives transactions do not, in the aggregate, result in an increase in the speculative character of the fund, and that the fund's use of derivatives transactions thus would be less likely to implicate the undue speculation concern expressed in section 1(b)(7).²⁶¹

We also believe permitting a fund to use derivatives transactions in these circumstances, and subject to the other requirements in the proposed rule, is broadly consistent with the policies and provisions of the Investment Company Act, which seeks to prevent funds from becoming unduly speculative by means of leveraging their assets through the issuance of senior securities, but generally does not impose limitations on a fund's ability to invest in risky or volatile securities instruments.²⁶² Similarly, the VaR test is designed to limit a fund's ability to use derivatives transactions in order to address undue speculation concern expressed in section 1(b)(7) of the Act, but does not

²⁶⁰ See also, e.g., Nuveen FSOC Comment Letter, at 6 (noting the firm's use of different "tools to measure the effects of leverage and its accompanying risks," and noting, when using VaR, that "[i]t is helpful, for example, to determine the VaR of a fund's portfolio both before and after the addition of leverage, to compare both the unleveraged and leveraged metrics to those of the benchmark").

²⁶¹ By contrast, if a fund used derivatives transactions solely for the purpose of leveraging its physical portfolio—for example, by holding a long-only portfolio of large cap equity and obtaining further exposure to those securities through a basket total return swap—the additional market risk incurred by the fund would cause the fund's full portfolio VaR to be greater than its securities VaR. See, e.g., Jacques N. Gordon & Elysia Wai Kuen Tse, *VaR: A Tool to Measure Leverage Risk*, 29 *The J. of Portfolio Management* 62 (Summer 2003) (demonstrating how VaR increases as the degree of leverage added to a portfolio increases and noting that "[b]y comparing the value at risk of different leverage levels to the unleveraged result, we can calculate the incremental risk due to leverage").

²⁶² See, e.g., 1994 Report, *supra* note 32, at 27 (noting that the Act "imposes few substantive limits on mutual fund investments" and that funds "generally are permitted to make investments without regard to their volatility").

seek to limit the risk or volatility of the fund's investments more generally.

An additional benefit of using VaR in the risk-based portfolio limit is that, based on outreach conducted by our staff, we understand that VaR calculation tools are widely available and that many advisers already use risk management or portfolio management platforms that include VaR capability.²⁶³ We expect that the funds that would rely on the risk-based portfolio limit are funds with exposure approaching, or in excess of, the 150% exposure limit included in the exposure-based portfolio limit, and advisers to the funds that use derivatives more extensively may be particularly likely to already use risk management or portfolio management platforms that include VaR capability. Further, as discussed in section III.B.2.b below, VaR models also can be tailored in numerous ways in order to incorporate and reflect the risk characteristics of a fund's particular strategy and investments.²⁶⁴

The following example demonstrates how the VaR test would be used under the proposed rule to assess whether a fund's derivatives, in aggregate, result in an investment portfolio that is subject to more or less market risk than if the fund did not use such derivatives. Suppose that a fund has a net asset value of \$100 million and holds a portfolio of non-U.S. debt securities, and that the fund calculates the VaR of such securities, using a VaR model that meets the requirements of the proposed rule, to be \$3 million. Suppose further that the fund wishes to hedge some of its credit risk by purchasing CDS, adjust its duration by entering into interest rate swaps, and enter into currency forwards both to obtain exposure to certain foreign currencies and to hedge some of

²⁶³ See, e.g., BNY Mellon, *Risk Roadmap: Hedge Funds and Investors' Evolving Approach to Risk* (Aug. 2012), available at <http://www.thehedgefundjournal.com/sites/default/files/riskroadmap.pdf> (noting that third-party administrators to hedge funds "provide advanced risk functions" to investors such as "[d]aily VaR analysis using multiple models". See also Christopher L. Culp, Merton H. Miller & Andres M. P. Neves, *Value at Risk: Uses and Abuses*, 10 *J. of Applied Corp. Fin.* 26 (Jan. 1998) (VaR is "used regularly by nonfinancial corporations, pension plans and mutual funds, clearing organizations, brokers and futures commission merchants, and insurers").

²⁶⁴ See *infra* section III.B.2.b. For example, fund advisers that manage UCITS funds may already be using VaR to comply with the requirements of the "relative VaR" and "absolute VaR" approaches under the UCITS regulatory scheme (discussed below in this section and in section IV.E.). See, e.g., AQR Concept Release Comment Letter (noting that the firm is "familiar with the 'value at risk' or VaR methodologies, both through [its] management of UCITS funds and as an effective tool for day-to-day overall firm risk management").

its exposure to euro and yen currency risk. If the VaR of its full portfolio (*i.e.*, its securities investments plus its derivatives transactions) immediately after entering into these derivatives transactions is less than \$3 million, the fund would comply with the risk-based portfolio limit's VaR test.

The VaR test under the risk-based portfolio limit is similar in certain ways to the "relative VaR" approach used by some UCITS funds. Under the relative VaR approach, the VaR of the UCITS fund's portfolio cannot be greater than twice the VaR of an unleveraged benchmark securities index (referred to as a "reference portfolio").²⁶⁵ In contrast to the relative VaR approach for UCITS funds, the VaR test under the proposed risk-based portfolio limit would use a fund's own portfolio of securities and other investments (exclusive of derivatives) as the baseline against which the fund's full portfolio VaR (inclusive of derivatives) would be compared. For the reasons discussed below, we believe the proposed rule's VaR test offers advantages over a relative VaR approach based on a hypothetical reference portfolio.²⁶⁶

First, we believe that the VaR test under the proposed rule is more consistent with the policies and provisions of the Investment Company Act, which restricts in section 18 a fund's ability to issue senior securities but otherwise generally does not impose limitations on a fund's ability to invest in risky or volatile securities investments, provided that such investments are consistent with the investment strategy described to investors. Using the fund's own portfolio as the baseline for the VaR test under the proposed rule—and thus providing a risk assessment of the fund's use of derivatives in the context of the fund's investment strategy disclosed to investors, which may include risky or volatile securities—would be more consistent with the Act. A relative VaR test, by contrast, could be viewed as a limitation on risk or volatility generally—as opposed to a limitation on the issuance of senior securities—because it would measure

the VaR of a fund's portfolio, including non-senior securities investments, against a hypothetical reference portfolio, and such non-senior securities investments could cause the fund to fail a relative VaR test.²⁶⁷ Second, we are also concerned that under a relative VaR approach it would be difficult, in light of the wide range of fund strategies and potential benchmarks, to require funds to select benchmarks that are appropriate (particularly in connection with alternative strategies),²⁶⁸ are unleveraged,²⁶⁹ and would otherwise serve as an appropriate baseline against which the relative VaR should be measured.²⁷⁰

While we believe that there are significant benefits to using VaR in the risk-based portfolio limit, we also recognize that significant attention has been given (especially since the 2007–2009 financial crisis) to the limitations of VaR and the risks of overreliance on

VaR as a risk management tool.²⁷¹ One widely expressed concern with VaR is that it does not adequately reflect "tail risks" (*i.e.*, the size of losses that may occur on the trading days during which the greatest losses occur).²⁷² Another concern is that VaR calculations may underestimate the risk of loss under stressed market conditions.²⁷³

Under the proposed rule, however, VaR would be used to focus primarily on the relationship between a fund's securities VaR and its full portfolio VaR, rather than on the absolute magnitude of the potential loss of any particular investment or the fund's portfolio as a whole. We believe that this use of VaR—to assess whether a fund's derivatives as a whole directionally increase or mitigate risk, rather than to precisely estimate potential losses—mitigates some of the concerns that have been

²⁶⁷ For example, a sector-focused equity fund (*e.g.*, focusing on financial or commodity-focused stocks) that used a broad-based large cap equity index as its benchmark under a relative VaR test could potentially fail to comply with the test if the sector experienced a period of unexpected volatility, even if the fund did not use a significant amount of derivatives. In this case the volatility associated with the fund's equity investments, rather than its derivatives transactions, could cause the fund to fail the relative VaR test.

²⁶⁸ The difficulty of identifying appropriate benchmarks for purposes of assessing the performance of alternative funds illustrates some of the potential challenges that identifying an appropriate benchmark for purposes of a relative VaR test could entail. For example, our staff has noted that many alternative funds use LIBOR or a Treasury bill rate of interest plus a spread (*e.g.*, 4 percentage points) for their performance benchmark. It has been observed, however, that although such benchmarks reflect return, they may understate risk, which raises concerns that they may not be effective for purposes of a test that would compare a fund's VaR to a benchmark VaR. See Richard J. Harper, *Absolute Tracking: Moving Past Absolute Return for Hedge Fund Benchmarking* (May 2013), available at http://www.nepc.com/writable/research_articles/file/2013_03_nepc_absolute_tracking_update.pdf (noting that the "fundamental problem with absolute return benchmarks" is that they "reflect only return" and "understate risk").

²⁶⁹ Our staff has observed that some alternative funds use hedge fund indices for performance benchmarking, but such indices would not be appropriate for comparing a fund's VaR to the benchmark VaR because the hedge funds included in the benchmark generally can be expected to use leverage. See *id.* (hedge fund benchmarks "vary widely with regard to long/short exposure, leverage, capitalization, sector focus, international diversification, and optionality").

²⁷⁰ See Daisy Maxey, *Benchmarking Alternative Funds an Inexact Science*, Wall Street Journal (Apr. 10, 2014), available at <http://www.wsj.com/articles/SB10001424052702304058204579493590377289408> (citing statement from Morningstar's director of alternative funds research that "more often than not, there is no single good measure" for benchmarking alternative funds and therefore "multiple benchmarks must be used").

²⁷¹ See, *e.g.*, James O'Brien & Pawel J. Szerszen, *An Evaluation of Bank VaR Measures for Market Risk During and Before the Financial Crisis*, Federal Reserve Board Staff Working Paper (Mar. 7, 2014) ("[c]riticism of banks' VaR measures became vociferous during the financial crisis as the banks' risk measures appeared to give little forewarning of the loss potential and the high frequency and level of realized losses during the crisis period"). See also Pablo Triana, *VaR: The Number That Killed Us*, Futures Magazine (Dec. 1, 2010), available at <http://www.futuresmag.com/2010/11/30/var-number-killed-us> (noting that "in mid-2007, the VaR of the big Wall Street firms was relatively quite low, reflecting the fact that the immediate past had been dominated by uninterrupted good times and negligible volatility").

²⁷² In the regulatory context, VaR gained widespread usage by banks and other financial institutions following the 1996 Market Risk Amendment to the Basel II Capital Accords (the "Market Risk Amendment"), which set forth a framework of qualitative and quantitative standards for allowing banks to determine capital charges for market risks they incurred, by using proprietary internal models. The Basel Committee on Bank Supervision (BCBS) modified this framework in 2009, by introducing an additional capital charge based on a "stressed VaR" calculation—that is, VaR calibrated to a period of significant financial stress.

More recently, the BCBS has proposed the use of "stressed expected shortfall". Expected shortfall is similar to VaR but differs from VaR in that it accounts for tail risk by taking the average or expected losses beyond the specified confidence level; "stressed" expected shortfall refers to expected shortfall calculated using a model that is calibrated to a period of significant financial stress. The BCBS has recognized that, while it believes that a shift to stressed expected shortfall would "account[] for the tail risk in a more comprehensive manner, considering both the size and likelihood of losses above a certain threshold", it also presents challenges, including the difficulty of identifying a stress period using a full set of risk factors for which historical data is available and potentially greater sensitivity of expected shortfall to extreme outlier losses. See Bank for International Settlements, Basel Committee on Banking Supervision, *Fundamental review of the trading book: A revised market risk framework* (Oct. 2013) ("BCBS Trading Book Review—Oct. 2013).

²⁷³ See, *e.g.*, Amit Mehta, Max Neukirchen, Sonja Pfetsch & Thomas Poppensieker, *Managing Market Risk: Today and Tomorrow*, McKinsey Working Papers on Risk, No. 32 (May 2012).

²⁶⁵ See *infra* section IV.E.

²⁶⁶ We understand that some UCITS funds also may use an absolute VaR approach, which limits the maximum VaR that a UCITS fund can have relative to its net assets, generally at 20 percent of the UCITS fund's net assets. See section IV.E. As discussed in more detail below, we believe that our proposed rule's use of VaR—to assess whether a fund's derivatives as a whole directionally increase or mitigate risk, rather than to precisely estimate potential losses—may be a more effective way to use VaR to provide a risk assessment of a fund's use of derivatives for purposes of section 18 of the Investment Company Act.

expressed about the use of VaR.²⁷⁴ In addition, the VaR test under the risk-based portfolio limit would be coupled with an outside limit on exposure, which, as discussed in section III.B.2.c below, would provide an independent limit on a fund's use of senior securities transactions under the proposed rule that would not be based on VaR.

We also recognize that funds may use measures other than VaR in order to assess the risks posed by a fund's derivatives and other investments.²⁷⁵ The VaR test is designed to serve as a means of limiting a fund's ability to leverage its assets in a manner that would implicate the undue speculation concern in section 1(b)(7) of the Act, but it is not intended as a substitute for other measures that a fund may consider in connection with its derivatives risk management. For example, those funds that are subject to the requirement to have formalized derivatives risk management programs should consider other appropriate measures to assess risk, including stress tests that are tailored to a fund's particular characteristics, as part of their derivatives risk management programs, as discussed in section III.D below.²⁷⁶

²⁷⁴ See *infra* section III.B.2.b (discussing the proposed rule's requirements concerning the VaR models that a fund would be permitted to use for purposes of the VaR test and the requirement that, regardless of which VaR model the fund chooses, the fund must use the same VaR model, and apply it consistently, in the calculation of the fund's securities VaR and full portfolio VaR).

²⁷⁵ See, e.g., Frank J. Ambrosio, *An Evaluation of Risk Metrics*, Vanguard Investment Counseling & Research (2007), available at <https://personal.vanguard.com/pdf/flgerm.pdf> (discussing various risk metrics used by fund managers, including absolute risk measures such as standard deviation (the degree of fluctuation in a portfolio's return), risk of loss (the percentage of outcomes below a certain total return level) and shortfall risk (the probability that an investment's value will be less than is needed to meet portfolio objectives), and relative risk measures such as excess return (a security's return above or below that of a benchmark or risk-free asset), tracking error (the standard deviation of excess return), Sharpe ratio (a measurement of how much return is being obtained for each theoretical unit of risk), information ratio (the risk-adjusted return of a portfolio versus a benchmark), beta (the magnitude of an investment's price fluctuations relative to the ups and downs of the overall market) and Treynor ratio (the risk-adjusted return of a portfolio or security versus the market).

²⁷⁶ As discussed below in section III.D, the proposed rule would require a fund that relies on proposed rule 18f-4 to enter into derivatives transactions to have a formalized risk management program unless the fund limits its exposure from derivatives transactions to 50% or less of the fund's net assets (and does not use complex derivatives transactions). We expect that all funds that would operate under the risk-based limit would have derivatives exposure in excess of 50% of net assets, and thus would be required to have risk management programs, because funds with derivatives exposure of 50% or less would be able to comply with the 150% exposure limit and have

We also recognize that the use of derivatives poses other risks, such as counterparty risk and liquidity risk, that may not be addressed by the VaR test under the proposed rule; however, we believe, as discussed in section III.D below, that funds making significant use of derivatives generally should address these risks as part of their risk management programs.²⁷⁷ We have proposed that the risk-based portfolio limit include a VaR-based test because of the characteristics of VaR we discussed above, which we believe allow VaR to be used as part of the VaR test to provide an indication of whether a fund's derivatives as a whole directionally increase or mitigate risk.

We request comment immediately below on the proposed rule's inclusion of a risk-based portfolio limitation based on VaR and, in section III.B.2.b below, we request comment on the proposed rule's requirements regarding funds' use of particular VaR models in connection with the VaR test and the proposed rule's requirements for any VaR model chosen by the fund.

- Do commenters agree that the proposed rule should include, in addition to the exposure-based portfolio limit, an alternative portfolio limitation that focuses primarily on a risk assessment of a fund's use of derivatives? Do commenters agree that, where a fund's derivatives transactions, in the aggregate, result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives, it would be appropriate to permit the fund to engage in derivatives transactions to a greater extent than would be permitted under any exposure-based portfolio limit?

- As noted above, we are proposing to include the risk-based portfolio limit in the proposed rule because we recognize that, because derivatives transactions may be used for a variety of purposes, some funds may make use of derivatives that in the aggregate result in relatively high notional amounts, but which are not used to leverage the fund's assets in a manner that increases the fund's exposure to market risk. What types of funds have or could have exposure in excess of the limit provided in the exposure-based portfolio limit (150% of net assets) but use derivatives

no need to avail themselves of the higher 300% exposure limit for funds that comply with the risk-based portfolio limit.

²⁷⁷ Proposed rule 22e-4 also would require a fund subject to that rule to assess and periodically review the fund's liquidity risk, considering various factors specified in the rule, including the fund's use of borrowings and derivatives for investment purposes. See *supra* note 81 and accompanying text.

transactions that, in the aggregate, result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives? Are there funds that today use derivatives in amounts greater than the exposure-based portfolio limit but could comply with the risk-based portfolio limit? If so, what kinds of funds? If funds would have to restructure their portfolios to comply with the risk-based portfolio limit, how would they do so? Would they be able to pursue strategies or obtain investment exposures similar to their current strategies and exposures? If not, what types of strategies or investment exposures would not be possible?

- The proposed rule would use the VaR test to determine if a fund's derivatives transactions, in aggregate, result in an overall portfolio that is subject to less market risk than if the fund did not use such derivatives. Do commenters agree that VaR, as used in the VaR test, is an effective approach for this purpose? Are there other measures we should permit a fund to use, either in lieu of or in addition to VaR, to assess whether the fund's derivatives transactions, in the aggregate, have the effect of mitigating the fund's exposure to market risk? For example, would absolute risk measures (such as standard deviation, risk of loss or shortfall risk), relative risk measures (such as excess return, tracking error, Sharpe ratio, information ratio, beta or Treynor ratio), or stress testing/scenario generation, better address the purposes that the VaR test is intended to fulfill? ²⁷⁸ If so, how would such risk measures be incorporated into a test for purposes of the risk-based portfolio limit?

- As discussed above, we believe that the manner in which VaR would be used under the proposed rule, which focuses on the relationship between a fund's securities VaR and its full portfolio VaR, would mitigate some of the concerns that have been expressed regarding the risks and limitations of relying on VaR as a risk measure. Do commenters agree? If not, what alternative measures could be implemented to address these concerns? For example, would these concerns be addressed by requiring funds to comply with a test that is similar to the VaR test, but that uses expected shortfall instead of VaR (*i.e.*, that would require a fund to compare the expected shortfall of its

²⁷⁸ See *supra* note 275 (discussing different types of absolute and relative risk measures).

securities portfolio with the expected shortfall of its full portfolio)?²⁷⁹

- The risk-based portfolio limit would require a fund's full portfolio VaR to be less than its securities VaR. Should the test be more restrictive or less restrictive? For example, should we permit a fund's full portfolio VaR to exceed its securities VaR up to a specified limit (e.g., allow the fund's full portfolio VaR to exceed its securities VaR by not more than a specified percentage)? For example, would it be appropriate for the fund's full portfolio VaR to exceed its securities VaR by 10% or 20%? Conversely, should we make the test more restrictive and require that the fund's full portfolio be less than the fund's securities VaR by an amount specified in the rule? Should we, for example, require that the full portfolio VaR be 10% or 20% less than the fund's securities VaR?

- For purposes of the risk-based portfolio limit, should the proposed rule use an approach such as (or similar to) the relative VaR or absolute VaR approach for UCITS funds, instead of or as an alternative to the proposed VaR test? Why or why not? Would it be more efficient to allow funds to use such an approach—e.g., because some advisers already use this approach for UCITS funds? Under a relative VaR approach, what sort of benchmarks would or would not be appropriate, and how should the benchmarks be chosen? Under an absolute VaR approach, what would be an appropriate VaR limit (e.g., 20%, as for UCITS funds, or a higher or lower limit)? Would a relative VaR or absolute VaR approach appropriately address the undue speculation concern underlying section 18? Why or why not?

- A fund's securities VaR would be the VaR of the fund's investments other than derivatives transactions which, as defined in the proposed rule, would include derivatives transactions that involve the issuance of a senior security. The VaR associated with derivatives that do not involve the issuance of a senior security, such as a typical purchased option, would be included in the fund's securities VaR. Although section 18 does not limit a fund's ability to acquire such derivatives, they could be volatile and thus could generate a securities VaR that would provide the fund additional latitude to engage in derivatives transactions under the risk-based portfolio limit. Should we, therefore, require the fund to exclude the VaR associated with *all* of the fund's derivatives from the securities VaR,

whether or not they involve the issuance of a senior security, and, if so, how should we define "derivatives" for this purpose? If so, what would be the effects on funds' strategies?

- Should we place other limitations on a fund's ability to use borrowings or other financial commitment transactions to obtain leveraged exposures if the fund elects to use derivatives at the higher level permitted under the risk-based portfolio limit? Should we, for example, further restrict a fund's ability to use financial commitment transactions or other borrowings, the proceeds of which could be used by the fund to purchase securities investments that would increase the fund's securities VaR?

- Are there certain types of securities, derivatives or other instruments that would be difficult to model using VaR (taking into account the requirements for a fund's VaR model, discussed in section III.B.2.b below)? For example, would it be difficult for a fund to model an investment in a private fund, or in other types of illiquid investments that lack frequent valuations or transparency? Are there ways that we should modify the VaR test to allow a fund that invests in instruments that are difficult to model using VaR to demonstrate in some other way that its derivatives, in aggregate, are risk mitigating?

b. Choice of Model and Parameters for VaR Test

The proposed rule defines 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 interval."²⁸⁰ We believe that this is generally consistent with the commonly understood definition of VaR as a risk measure.²⁸¹ We also believe that, while VaR can be calculated using a number of different approaches and a wide range of parameters, this definition is broad enough to encompass most methods of calculating VaR. However, while we believe it is appropriate for funds to have flexibility in the selection of a VaR model and its parameters for purposes of the risk-based portfolio limit, we also believe that a fund's VaR model should meet certain minimum requirements. As discussed further below, the proposed rule therefore would require a fund's VaR model to take into account and incorporate all significant, identifiable market risk factors associated with a fund's

investments.²⁸² In addition, the proposed rule would require a fund to use a minimum 99% confidence interval,²⁸³ a time horizon of not less than 10 and not more than 20 trading days,²⁸⁴ and a minimum of three years of historical data to estimate historical VaR.²⁸⁵ A fund would also be required to apply its VaR model consistently when calculating its securities VaR and full portfolio VaR.²⁸⁶ We discuss these aspects of the proposed rule below.

First, the proposed rule would require a fund's VaR model to take into account and incorporate all significant, identifiable market risk factors associated with a fund's investments.²⁸⁷ Absent this requirement, the fund's VaR calculations, when used in the VaR test, may not provide a reliable indication of whether the fund's derivatives, in aggregate, are increasing or decreasing the fund's overall portfolio's exposure to market risk. The proposed rule provides a non-exclusive list of risk factors that may be relevant in light of a fund's strategy and investments, including equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk,²⁸⁸ material risks arising from the nonlinear price characteristics of options and positions with embedded optionality,²⁸⁹ and the sensitivity of the market value of the fund's derivatives to changes in volatility or other material market risk factors.²⁹⁰

We understand that VaR models are often categorized into three methods—historical simulation,²⁹¹ Monte Carlo

²⁸² Proposed rule 18f-4(c)(11)(ii)(A).

²⁸³ Proposed rule 18f-4(c)(11)(ii)(B).

²⁸⁴ Proposed rule 18f-4(c)(11)(ii)(B).

²⁸⁵ Proposed rule 18f-4(c)(11)(ii)(C).

²⁸⁶ Proposed rule 18f-4(c)(11)(i)(C).

²⁸⁷ Proposed rule 18f-4(c)(11)(ii)(A). "Market risk" for this purpose includes both general market risk and specific market risk. See *supra* note 249.

²⁸⁸ Proposed rule 18f-4(c)(11)(ii)(A)(1).

²⁸⁹ Proposed rule 18f-4(c)(11)(ii)(A)(2).

²⁹⁰ Proposed rule 18f-4(c)(11)(ii)(A)(3).

²⁹¹ Historical simulation models rely on past observed historical returns to estimate VaR. Historical VaR involves taking a fund's current portfolio, subjecting it to changes in the relevant market risk factors observed over a prior historical period, and constructing a distribution of hypothetical profits and losses. The resulting VaR is then determined by looking at the largest (100 minus the confidence level) percent of losses in the resulting distribution. See, e.g., Dowd, *supra* note 255, at 56–68. See also Thomas J. Linsmeier & Neil D. Pearson, *Value at Risk*, Fin. Analysts J. (Mar.–Apr. 2000) ("Linsmeier & Pearson"), at 50–53.

²⁷⁹ See *supra* note 272 (discussing the use of expected shortfall under BCBS proposal).

²⁸⁰ Proposed rule 18f-4(c)(11).

²⁸¹ See *supra* note 280.

simulation,²⁹² or parametric models.²⁹³ We also understand that each method has certain benefits and drawbacks, which may make a particular method more or less suitable, depending on a fund's strategy, investments and other factors. In particular, some VaR methodologies may not adequately incorporate all of the material risks inherent in particular investments, or all material risks arising from the nonlinear price characteristics of certain derivatives.²⁹⁴ While the proposed rule does not specify that a fund must use any particular type of VaR model, the proposed rule would require that any VaR model used by the fund take into account and incorporate all significant, identifiable market risk factors associated with the fund's investments, as discussed above, and to meet the rule's other requirements for a VaR model.

As discussed below in section III.D, the proposed rule would require funds that are subject to the requirement to have a formalized derivatives risk management program under the proposed rule to periodically review and update any VaR calculation models used by the fund, in order to evaluate their effectiveness and reflect changes in risks over time.²⁹⁵ As part of its derivatives risk management program, a fund that relies on the risk-based

portfolio limit may wish to consider periodic backtesting or other procedures to assess the effectiveness of its VaR model, and in particular, may wish to use such testing to periodically assess whether its VaR model takes into account and incorporates all significant, identifiable market risk factors associated with the fund's investments.²⁹⁶

The proposed rule would require a fund using historical VaR to have at least three years of historical market data.²⁹⁷ We understand that the availability of data is a key consideration when using historical simulation to estimate VaR, and that the length of the data observation period may significantly influence the results of a VaR calculation. For example, a shorter observation period means that each observation will have a greater influence on the result of the VaR calculation (as compared to a longer observation period), such that periods of unusually high or low volatility could result in unusually high or low VaR estimates.²⁹⁸ Longer observation periods, however, can lead to data collection problems, if sufficient historical data is not available.²⁹⁹ By requiring a fund using historical VaR to have at least three years of historical market data, the proposed rule is designed to require a fund to base its VaR estimates on a sufficient number of observations, while also recognizing the concern that requiring a longer historical period could make it difficult for a fund to obtain sufficient historical data to estimate VaR for the instruments in its portfolio.³⁰⁰

²⁹⁶ Backtesting refers to "the application of quantitative, typically statistical, methods to determine whether a model's risk estimates are consistent with the assumptions on which a model is based." Dowd, *supra* note 255, at 141. If backtesting indicates that a model consistently overestimates or underestimates VaR, it may be because a fund's VaR model is not taking into account and incorporating the appropriate market risk factors associated with the fund's investments.

²⁹⁷ Proposed rule 18f-4(c)(11)(ii)(C).

²⁹⁸ See Linsmeier & Pearson, *supra* note 291, at 59 (noting that, because historical simulation relies directly on historical data, "[a] danger is that the price and rate changes in the last 100 (or 500 or 1,000) days might not be typical. For example, if by chance the last 100 days were a period of low volatility in market rates and prices, the VAR computed through historical simulation will understate the risk in the portfolio.").

²⁹⁹ See Dowd, *supra* note 255, at 68 (noting that "[a] long sample period can lead to data collection problems. This is a particular concern with new or emerging market instruments, where long runs of historical data don't exist and are not necessarily easy to proxy.").

³⁰⁰ See also Minnich, *supra* note 254, at 43 (noting that for historical simulation, "[l]onger periods of data have a richer return distribution while shorter periods allow the VAR to react more quickly to changing market events" and that

The proposed rule would also require a fund to use a 99% confidence level for its VaR test.³⁰¹ Many regulatory schemes that use VaR require a 99% confidence level, which can be expected to result in higher estimates of absolute losses than a lower confidence interval.³⁰² As discussed above, the VaR test under the proposed rule's risk-based portfolio limit is designed to focus on the relationship between a fund's securities VaR and its full portfolio VaR, rather than to serve as an absolute measure of potential losses. Although the VaR test is not designed to provide an estimate of a fund's potential absolute losses, we believe that a 99% confidence interval would be more appropriate, as compared to a lower confidence interval, because a higher confidence level would provide a stronger indication that a fund's derivatives use, in aggregate, can be expected to have a risk-mitigating effect on the fund's exposure to market risk on the days on which the fund's securities portfolio would be expected to incur the greatest losses.

The proposed rule also would require a fund to calculate VaR using a time horizon of at least 10 trading days but not more than 20 trading days.³⁰³ We understand that when VaR is used for risk management purposes, the time horizon that is selected by the user typically reflects the expected holding period for an instrument (or portfolio of instruments).³⁰⁴ The holding period, in turn, may depend on factors such as the liquidity of an instrument and the purpose for which it is held, which may vary across different types of instruments in a portfolio.³⁰⁵ When VaR

"[t]hree to five years of historical data are typical.") See also Darryll Hendricks, *Evaluation of Value-at-Risk Models Using Historical Data*, FRBNY Econ. Policy Rev. (Apr. 1996), at 44 (finding that, when using historical VaR, "[e]xtreme [confidence interval] percentiles such as the 95th and particularly the 99th are very difficult to estimate accurately with small samples" and that the complete dependence of historical VaR models on historical observation data "to estimate these percentiles directly is one rationale for using long observation periods.").

³⁰¹ Proposed rule 18f-4(c)(11)(ii)(B).

³⁰² For example, UCITS funds that use the relative VaR or absolute VaR approach are required to calculate the fund's VaR using a 99% confidence interval. See CESR Global Guidelines, *supra* note 162, at 26 (requiring funds that use the relative VaR or absolute VaR approach to calculate VaR using a "one-tailed confidence interval of 99%"). As noted in section III.B.2.a above and in section IV.E below, the VaR test under the risk-based portfolio limit is similar in certain respect to the relative VaR approach for UCITS funds.

³⁰³ Proposed rule 18f-4(c)(11)(ii)(B).

³⁰⁴ See, e.g., *infra* at discussion accompanying notes 295–296.

³⁰⁵ See, e.g., Bank for International Settlements, Basel Committee on Banking Supervision, *Messages* Continued

²⁹² Monte Carlo simulation uses a random number generator to produce a large number (often tens of thousands) of hypothetical changes in market values that simulate changes in market factors. These outputs are then used to construct a distribution of hypothetical profits and losses on the fund's current portfolio, from which the resulting VaR is ascertained by looking at the largest (100 minus the confidence level) percent of losses in the resulting distribution. See, e.g., Dowd, *supra* note 255, at 221; Linsmeier & Pearson, *supra* note 291, at 53–56 (discussing the "delta-normal approach," a form of parametric method).

²⁹³ Parametric methods to calculating VaR rely on estimates of key parameters (such as the mean returns, standard deviations of returns, and correlations among the returns of the instruments in a fund's portfolio) to create a hypothetical statistical distribution of returns for a fund, and use statistical methods to calculate VaR at a given confidence level. See, e.g., Dowd, *supra* note 255, at 37; Linsmeier & Pearson, *supra* note 291, at 56–57.

²⁹⁴ For example, some parametric methodologies may be more likely to yield misleading VaR estimates for assets or portfolios that exhibit non-linear returns, due, for example, to the presence of options or instruments that have embedded optionality (such as callable or convertible bonds). See, e.g., Linsmeier & Pearson, *supra* note 291, at 57 (noting that historical and Monte Carlo simulation "work well regardless of the presence of options and option-like instruments in the portfolio. In contrast, the standard [parametric] delta-normal method works well for instruments and portfolios with little option content but not as well as the two simulation methods when options and option-like instruments are significant in the portfolio.").

²⁹⁵ Proposed rule 18f-4(a)(3)(i)(D).

is used for regulatory purposes, however, the applicable regulation typically specifies a time horizon or range of permissible time horizons (even in cases where the regulated entity may hold instruments or a portfolio having a longer or shorter expected holding period), in order to promote consistency across regulated entities and use a time horizon for the VaR calculation is appropriate in light of the underlying regulatory purpose.³⁰⁶ In light of this, we considered the factors discussed below in determining to propose a 10- to 20-day time horizon for a fund's VaR model under the proposed rule.

First, we understand that very short time horizons (e.g., one day) can be less effective at capturing the effects of fluctuations in risk factors on VaR, particularly with respect to out-of-the-money options (or implicit options, for securities and other investments that contain option-like features). At the same time, we understand that, while VaR estimates of potential losses typically increase as the time horizon increases over short- to medium-term periods, over longer periods VaR estimates of potential losses may eventually decrease.³⁰⁷ Thus, we considered that if the proposed rule did not specify a time horizon or range of acceptable time horizons, some funds that rely on the risk-based portfolio limit could select a time horizon for their VaR model that is either too short or too long and thereby underestimate potential losses, as reflected in the VaR test. In light of these concerns, we believe it would be appropriate for the proposed rule to place some limitations on a fund's ability to use shorter or longer time horizons that could produce less reliable VaR estimates, while also providing some flexibility for a fund to select a time horizon that is appropriate

based on the fund's particular characteristics.³⁰⁸

Second, we considered that the VaR test is designed to provide an indication, through a fund's comparison of its securities VaR to its full portfolio VaR, that the fund's derivatives transactions, in aggregate, have the effect of reducing the fund's exposure to market risk. This means that the VaR test requires a portfolio-level calculation, and for such purposes the fund would need to select a single time horizon, even if the fund expected to hold different instruments in its portfolio for different lengths of time.³⁰⁹ A consequence of this is that even if a fund uses VaR for internal risk-management purposes and applies different time horizons to different types of instruments for such purposes, the fund nevertheless would need to select a single holding period for purposes of the VaR test.

Third, we considered the time horizons in other regulatory regimes that use VaR. In this regard, we noted that the most commonly used time horizons appear to be either 10 days or 20 days. For example, the 1996 Market Risk Amendment to the Basel II Capital Accord, which contemplated banks' use of internal models for measuring market risk, incorporated a 10-day time horizon.³¹⁰ For UCITS funds that rely on the relative VaR or absolute VaR approach, the CESR Global Exposure Guidelines specify a 20-day time horizon.³¹¹ A consequence of the use of 10- and 20-day time horizons under these regimes is that we believe that these time horizons are widely used by

funds and other financial market participants.

In light of these considerations, including balancing concerns about a time horizon potentially being too long or too short with the benefit of providing some level of flexibility for funds to select a time horizon in light of their particular characteristics, we believe the proposed rule's requirement that the time horizon for the VaR model used by a fund that complies with the risk-based portfolio limit is appropriate.

Finally, regardless of which VaR model the fund chooses, the fund must apply its VaR model consistently when calculating the fund's securities VaR and the fund's full portfolio VaR. This requirement is designed to prevent a fund from using different models to manipulate the results of the VaR test—for example, by overestimating the fund's securities VaR using one VaR model and underestimating its full portfolio VaR using a different model in order to take on riskier derivatives positions. In addition, because the VaR test would be used to focus on the relationship between the fund's securities VaR and its full portfolio VaR as discussed above, requiring the fund to use the same VaR model for purposes of the VaR test would help to ensure that the test generates comparable estimates of the fund's securities VaR and full portfolio VaR.

We request comment on the proposed rule's minimum requirements concerning the VaR model used by the fund.

- Do funds today use VaR models for risk management purposes or otherwise that would meet the proposed rule's minimum requirements? If funds use VaR models that would not meet these requirements, how do they differ?

- Should the proposed rule specify a particular VaR model(s) that funds must use (i.e., a historical simulation, Monte Carlo simulation, or parametric methodology)? If so, which methodology (or methodologies) and why?

- A fund would only be permitted to use a historical VaR methodology if at least three years of historical data is available. Do commenters agree that this is an appropriate requirement? Would requiring three years of historical data make it difficult to model some instruments? Should we require that a fund have additional historical return data in order to use a historical VaR methodology? Conversely, would less than three years of historical return data be sufficient?

- The proposed rule would require that the VaR model used by the fund (whether based on the historical

from the *Academic Literature on Risk Measurement for the Trading Book*, Working Paper No. 19 (Jan. 31, 2011) ("Basel Risk Measurement Working Paper") (noting, based on a survey of academic literature on VaR-based approaches to risk management, that "[t]here seems to be consensus among academics and the industry that the appropriate horizon for VaR should depend on the characteristics of the position").

³⁰⁶ The underlying regulatory purpose could include, for example, limiting the amount of market risk that could be incurred by an investment vehicle and thus mitigating the risk of potential losses that investors would bear, or establishing capital requirements. See *infra* at notes 310–311 and accompanying text.

³⁰⁷ See, e.g., Dowd, *supra* note 255, at 73–74 (showing how parametric VaR can initially result in increasing estimates of loss as the time horizon increases, but that estimates of loss can decrease over longer time horizons). Estimated VaR losses over longer time horizons can also be affected by the tendency of volatility to be mean-reverting over time. See generally Stephen Figlewski, *Estimation Error in the Assessment of Financial Risk Exposure* (2003).

³⁰⁸ Thus, for example, a fund that invests a greater proportion of its assets in liquid instruments and trades frequently might choose a 10-day holding period, while a fund that invests in less liquid instruments or trades less frequently might choose a longer holding period (but not longer than 20 days).

³⁰⁹ While a fund could in theory model different instruments using different VaR time horizons, it is not clear that a fund would be able to incorporate different time horizons into a portfolio-wide VaR test. See, e.g., Basel Risk Measurement Working Paper, *supra* note 305 (noting, based on a survey of academic literature on VaR-based approaches to risk management, that "[a]t present, there is no widely accepted approach for aggregating VaR measures based on different horizons").

³¹⁰ See BCBS Trading Book Review—Oct. 2013, *supra* note 272. The BCBS has implemented and continues to develop new standards which, among other things, would call for five different "liquidity horizon categories" for broad categories of risk factors, ranging from 10 days to one year. As noted above, however, the VaR test under the proposed rule effectively requires a fund to select a single time horizon. See *supra* note 272 and accompanying text.

³¹¹ See CESR Global Guidelines, *supra* note 162, at 26 (requiring funds that use the relative VaR or absolute VaR approach to calculate VaR using a "holding period equivalent to 1 month (20 business days)"). See also *infra* section IV.E.

simulation, Monte Carlo simulation, or parametric method) incorporate all significant, identifiable market risk factors associated with a fund's investments. Do commenters agree that this is an appropriate standard? Is it sufficiently clear?

- The proposed rule would provide a non-exclusive list of risk factors that may be relevant in light of a fund's strategy and investments, including equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk, all material risks arising from the nonlinear price characteristics of options, and positions with embedded optionality, and the sensitivity of the market value of the fund's derivatives to changes in volatility or other material market risk factors. Do commenters agree that these are appropriate risk factors? Are there others we should include? Rather than include a non-exclusive list of risk factors that funds must consider, should we specify in any final rule the particular risk factors that must be included in specified circumstances? Would it be possible to do so in a way that would address the diversity of funds and their strategies?

- The proposed rule would require a fund to use a 99% confidence level for its VaR test. Do commenters agree that this is an appropriate confidence level? In particular, should we permit funds to use a lower confidence interval? Why or why not?

- The proposed rule would require a fund to calculate VaR using a time horizon of at least 10 trading days, but not more than 20 trading days. Do commenters agree that it is appropriate to provide a range of trading days, to give funds some flexibility in selecting a time horizon based on the fund's own particular characteristics? Do commenters agree that a range of 10 to 20 trading days would be appropriate? Should the number of trading days be lower than 10, or higher than 20? Should the number of trading days be a specific number, instead of a range? Why or why not? If so, which specific number would be appropriate? Should we, for example, specify 10 or 20 trading days?

- Regardless of which VaR model the fund chooses, the proposed rule would require the fund to apply its VaR model consistently when calculating the fund's securities VaR and the fund's full portfolio VaR. Do commenters agree that this requirement is appropriate? If not, how could we otherwise prevent the VaR test from being easily manipulated?

- We believe that the proposed rule affords appropriate flexibility for funds to tailor the VaR test in light of a fund's

strategy, investments and other relevant factors. Does this flexibility increase the risk that funds will be able to game or manipulate the test in order to obtain riskier investment exposures? If so, should the rule impose more specific requirements on a fund's VaR model or its parameters, and how?

- Should the proposed rule place restrictions on a fund's ability to change its VaR model? For example, should changes be permitted only with the approval of the fund's derivatives risk manager, or subject to other approval or oversight requirements?

c. 300 Percent Exposure Limit Under the Risk-Based Portfolio Limitation

A fund that relies on the risk-based portfolio limit would be required to limit its exposure to not more than 300% of the fund's net assets, rather than 150% (as would be required under the exposure-based portfolio limit). While we believe that the VaR test generally would indicate that the fund's derivatives transactions do not, in the aggregate, result in an increase in the speculative character of the fund as discussed above, we also believe it is appropriate for the risk-based portfolio limit to include an outside limit on exposure as discussed in this section.

If the risk-based portfolio limit did not include an outside limit on exposure, a fund might be able to use strategies that may not produce significant measurable amounts of VaR during normal market periods, but which employ derivatives exposures at a level that could subject a fund to a significant speculative risk of loss if markets become stressed. For example, some funds use strategies that entail large long and short notional exposures, with the expectation that the risk of the fund's long positions is largely offset by the fund's short positions during normal market conditions, and this may result in the fund having a low full portfolio VaR. During periods of market stress, however, correlations across different positions may break down, leading to the possibility of significant losses and payment obligations with respect to the fund's derivatives transactions.³¹²

Although a fund pursuing such a strategy might be considered hedged or balanced, we believe that its activities may be speculative—and that its use of derivatives could implicate the undue speculation concern expressed in section 1(b)(7) of the Act—if the fund's derivatives exposures are very large in comparison to the fund's net assets. In these circumstances the fund's use of

derivatives could create an amount of leverage—and a resulting potential for large losses and payment obligations under derivatives—that we believe under some circumstances or market conditions could “increase unduly the speculative character” of the fund's securities issued to common shareholders. Coupling the VaR test with a 300% exposure limit, instead of permitting such a fund to obtain unlimited exposures, is designed to address these considerations by placing an outside limit on the fund's exposure that is not based on a VaR or other risk-based assessment.

We believe that the proposed rule's outside exposure limit of 300% is important to address possible concerns regarding the effectiveness of the VaR test in all possible circumstances and market conditions while also preserving the utility of the risk-based portfolio limit for funds that use derivatives, in aggregate, to result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives. In determining to propose a 300% exposure limit as part of the risk-based portfolio limit we considered, as discussed above in connection with the exposure-based portfolio limit, that the vast majority of funds would be able to comply with a 150% exposure limit without modifying their portfolios. In considering the extent to which the risk-based portfolio limit should permit a fund to obtain additional exposure, in light of the derivatives' aggregate reduction in the fund's exposure to market risk, we also considered the extent to which funds included in the DERA sample with exposures exceeding 150% of net assets would appear to be able to satisfy the VaR test (including by modifying their portfolios to a certain extent in order to do so). Although the information disclosed by the sampled funds and otherwise available to our staff was not sufficient to allow our staff to calculate the funds' securities VaRs and full portfolio VaRs,³¹³ the available information about the funds does provide an indication of whether the funds reasonably could be expected to comply with the VaR test.

As discussed above, most of the funds included in the analysis conducted by DERA staff with the highest exposures were alternative strategy funds, with

³¹² See, e.g., *supra* note 128 and accompanying discussion.

³¹³ While we have proposed in the Investment Company Reporting Modernization Release to obtain additional information regarding derivatives transactions on proposed Form N-PORT, we do not currently have sufficient information in a structured format to evaluate derivatives holdings in the DERA sample of funds discussed in the White Paper to estimate those funds' securities VaRs and full portfolio VaRs.

approximately 27% of these funds having exposures in excess of 150% of net assets, with the funds' exposures ranging up to approximately 950% of net assets. The funds with the highest exposures were managed futures funds—as noted above, three of the four funds in DERA's sample with exposures exceeding 500% of net assets were managed futures funds with exposures ranging from a little over 500% to approximately 950% of net assets. Managed futures funds, and other funds that use derivatives primarily to obtain market exposure (rather than to reduce the fund's exposure to market risk) and whose physical holdings consist mainly of cash and cash equivalents, would not satisfy the VaR test.³¹⁴

Alternative strategy funds with exposures exceeding 150% that potentially could choose to use derivatives in a manner that would satisfy the VaR test had lower exposures. Funds in this group with lower exposures included those with unconstrained bond and multi-alternative strategies; the exposures of funds within these strategies that were in excess of 150% ranged from around 175% to just under 350% of net assets. These funds, and particularly unconstrained bond funds, may have securities investments that involve market risks that could be reduced by derivatives transactions, and thus could consider electing to comply with the risk-based portfolio limit (including by modifying their portfolios to a certain extent in order to do so). We believe that including a 300% exposure limit as part of the risk-based portfolio limit thus would appear to provide a limit that may be appropriate for the kinds of funds that could seek to operate under the risk-based portfolio limit. We note that the 300% exposure limit is only expected to serve as an adjunct limitation on a fund given the primary importance of the VaR test with respect to the risk-based portfolio limit. While we are seeking comment regarding the sufficiency of this exposure limit, we note that setting the exposure limit higher than 300% of net assets—in addition to potentially raising concerns about a fund operating with exposures at that level—would not appear to further the purposes of the risk-based

portfolio limit. This is because funds in the DERA sample that have exposures substantially in excess of 300% of net assets would not appear to be able to satisfy the VaR test in any event, as discussed above. Accordingly, we believe that the 300% exposure limit is appropriate as a meaningfully higher limit than the 150% portfolio limit while providing an upper bound that does not appear to unduly constrain funds that may use derivatives on balance for risk-mitigating purposes.

We believe, based on these considerations and those discussed above in section III.B.1, that the proposed rule's outside exposure limit of 300% would address the concerns that led us to propose an exposure limit as part of the risk-based portfolio limit, while also preserving the utility of the risk-based portfolio limit for funds that use derivatives, in aggregate, to result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives.

We request comment on all aspects of the proposed risk-based portfolio limitation's inclusion of an outside limit of 300% of net assets.

- Do commenters agree that an outside limit on exposure can mitigate the concerns we discuss above concerning fund's use of strategies that could be considered hedged or balanced but that might experience speculative losses under certain circumstances? Why or why not? Are there other means to address these concerns that we should consider either in addition to or in lieu of an outside limit on the fund's exposure?

- Do commenters agree that the proposed 300% outer limit on exposure is appropriate? Do commenters agree that a 300% exposure limit would address the concerns we discuss above while also preserving the utility of the risk-based portfolio limit for funds that use derivatives, in aggregate, to result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives? Should we make it higher or lower, for example 250% or 350%, and how would a different limit address the concerns we discuss above?

3. Implementation and Operation of Portfolio Limitations

The proposed rule would require, to the extent that a fund elects to rely on the rule, the fund's board of directors, including a majority of the directors who are not interested persons of the fund, to approve which of the two alternative portfolio limitations will apply to the fund.³¹⁵ We believe that

requiring a fund's board, including a majority of the fund's independent directors, to approve the fund's portfolio limitation would appropriately focus the board's attention on the nature and extent of a fund's use of derivatives and other senior securities transactions as part of its investment strategy. We believe that requiring the fund's board to approve a fund's portfolio limitation would be an appropriate role for the board.³¹⁶

A fund relying on the rule would be required to comply with the applicable portfolio limitation after entering into any senior securities transaction, that is, any derivatives transaction or financial commitment transaction entered into by the fund pursuant to the proposed rule, or any other senior security transaction entered into by the fund pursuant to section 18 or 61 of the Act.³¹⁷ A fund therefore would not be required to terminate or otherwise unwind a senior securities transaction solely because the fund's exposure subsequently increased beyond the exposure limits included in either of the portfolio limitations. The fund, however, would not be permitted to enter into any additional senior securities transactions while relying on the exemption provided by the rule unless the fund would be in compliance with the applicable portfolio limitation immediately after entering into the transaction. This aspect of the proposed rule is designed to prevent a fund from having to unwind or terminate a senior securities transaction that the fund was permitted to enter into under the proposed rule at a later time when terminating or unwinding the transactions may be disadvantageous to the fund.³¹⁸ The Act and our rules

³¹⁶ Other exemptive rules under the Act similarly require the fund's board to take certain actions in order for the fund to rely on the exemption provided by the rule. *See, e.g.*, rules 18f-3, 17a-7, 10f-3, and 2a-7.

³¹⁷ Proposed rule 18f-4(a)(1)(i) and (ii).

³¹⁸ We similarly proposed an acquisition test (in contrast to a maintenance test) in proposed rule 22e-4, under which a fund would not be permitted to acquire any less liquid asset if, immediately after the acquisition, the fund would have invested less than its three-day liquid asset minimum in three-day liquid assets. Proposed rule 22e-4(b)(2)(iv)(C). In the Liquidity Release we noted that forced sales required under a maintenance test could require the fund to sell the less liquid assets at prices that incorporate a significant discount to the assets' stated value, or even at fire sale prices; we also noted that, if a fund needed to rebalance its portfolio frequently to maintain a specified percentage of the fund's net assets invested in three-day liquid assets, this could produce unnecessary transaction costs adversely affecting the fund's NAV, and could cause a fund to sell portfolio assets when it is not advantageous to do so (*e.g.*, when an asset's price is low, or when sales of an asset would have an undesirable tax impact). *See* Liquidity Release, *supra* note 5, at text accompanying nn.344-48. We similarly believe that requiring a

³¹⁴ A fund that holds only cash and cash equivalents and derivatives would not be able to satisfy the VaR test. In this case the fund's securities VaR would reflect the VaR of the cash and cash equivalents, and thus would be very low. The fund's derivatives, in aggregate, generally would add to, rather than reduce, the fund's exposure to market risk and thus generally would not result in a full portfolio VaR that is lower than the fund's securities VaR, as required under the VaR test.

³¹⁵ Proposed rule 18f-4(a)(5)(i).

similarly measure compliance with certain portfolio limitations immediately after a fund acquires a security.³¹⁹ However, if a fund's exposure exceeded the applicable exposure limit and the fund entered into a new senior securities transaction, including a new senior securities transaction that was intended to reduce the fund's exposure, the fund would be required to reduce its exposure so that in the aggregate, its exposure was in compliance with the exposure limit.³²⁰

We request comment on all aspects of the operation of the proposed portfolio limitations.

- Does requiring a fund to comply with the proposed rule's portfolio limitations immediately after entering into any senior securities transaction pose any operational challenges, for example, in determining the notional amount of the transaction, the fund's net assets, or the fund's securities VaR or full portfolio VaR (if applicable)?

- The proposed rule would not require a fund to terminate a derivatives transaction if the fund complied with the applicable portfolio limitation immediately after entering into the transaction, even if, for example, the fund's net assets later declined with the result that the fund's exposure at that later time exceeded the relevant exposure limit. Do commenters agree

fund to unwind or otherwise terminate derivatives transactions as a result of subsequent changes in the fund's net assets could have adverse consequences for the fund.

³¹⁹ This acquisition test (in contrast to a maintenance test) reflects approaches that Congress and the Commission have historically taken in other parts of the Investment Company Act and the rules thereunder. See, e.g., Investment Company Act section 5(c) (a registered diversified company that at the time of its qualification meets the diversification requirements specified in Investment Company Act section 5(b)(1) shall not lose its status as a diversified company because of any subsequent discrepancy between the value of its various investments and the requirements of section 5(b)(1), so long as any such discrepancy existing immediately after its acquisition of any security or other property is neither wholly nor partly the result of such acquisition); rule 2a-7(d)(3) (portfolio diversification requirements of rule 2a-7 are determined at the time of portfolio securities' acquisition); rule 2a-7(d)(i) (limit on a money market fund's acquisition of illiquid securities if, immediately after the acquisition, the money market fund would have invested more than 5% of its total assets in illiquid securities); rule 2a-7(d)(4)(ii) and (iii) (minimum daily liquidity requirement and minimum weekly liquidity requirement of rule 2a-7 are determined at the time of portfolio securities' acquisition).

³²⁰ For example, suppose that a fund's exposure was initially 140% but subsequently increased to 160% solely due to losses in the value of the fund's securities portfolio. The fund would not be required to unwind its senior securities transactions in order to bring its exposure below 150%. However, if the fund entered into any new senior securities transaction then, immediately after entering into such transaction, the fund would be required to be in compliance with the 150% exposure limit.

that this is appropriate? Conversely, should we instead require a maintenance test for notional amounts such that funds would be required to adjust their derivatives transactions if the exposure exceeds 150% of net assets for longer than a certain period of time, even if the fund has not entered into any senior securities transactions? If so, should we consider including a cushion amount—for example, by only requiring a fund to adjust its positions if its exposure reaches a higher level, such as 175%? Should we limit the time period (e.g., to 30 days, 60 days, or 90 days) in which a exposure could exceed 150% of net assets (or 300% under the risk-based portfolio limit) as a result of changes in the fund's net assets so that a fund cannot persistently exceed the rule's exposure limits? Would such an approach better promote investor protection? Would there be operational challenges with this requirement?

- If a fund's exposure were to exceed the applicable exposure limit, should the proposed rule permit the fund to engage in a series of derivatives transactions where those transactions ultimately would reduce the fund's exposure below the applicable exposure limit, even if the fund's exposure were not below the applicable limit immediately after entering into certain of these transactions, in order to make it easier for funds to reduce their exposure under multiple derivatives transactions on a *pro rata* basis? If so, how would we permit these kinds of transactions without providing a means for funds to maintain exposure levels in excess of the applicable exposure limit for long periods of time? Should we, for example, permit funds to engage in a group of substantially contemporaneous derivatives transactions where the fund's exposure is below 150% immediately after entering into the group of transactions? Should we permit a fund to engage in derivatives transactions that reduce the fund's exposure, even if the reduced exposure still exceeds the applicable exposure limit? Could funds use such a provision to maintain exposure amounts in excess of the rule's limits for long periods of time? Could we address that concern by, for example, permitting a fund to engage in these exposure-reducing derivatives transactions provided that the fund brings its exposure below the applicable limit within a specified period of time, like thirty days?

C. Asset Segregation Requirements for Derivatives Transactions

In addition to requiring funds to comply with one of two alternative portfolio limitations designed to impose

a limit on the amount of leverage a fund could obtain through derivatives transactions and other senior securities transactions as described in section III.B.1.c above, the proposed rule would require a fund that enters into derivatives transactions in reliance on the rule to manage the risks associated with its derivatives transactions by maintaining an amount of certain assets (defined in the proposed rule as "qualifying coverage assets") designed to enable the fund to meet its obligations arising from such transactions.³²¹ This requirement is designed to address the asset sufficiency concern reflected in section 1(b)(8) of the Act.³²² In addition, the asset segregation requirement in the proposed rule would help to address the undue speculation concern reflected in section 1(b)(7) of the Act to the extent that funds limit their derivatives usage in order to comply with the asset segregation requirements.³²³

To rely on the proposed rule, a fund would be required to manage the risks associated with its derivatives transactions by maintaining a certain amount of qualifying coverage assets for each derivatives transaction, determined pursuant to policies and procedures approved by the fund's board of directors.³²⁴ For each derivatives transaction, a fund would be required to maintain qualifying coverage assets with a value equal to the amount that would be payable by the fund if the fund were to exit the derivatives transaction as of the time of determination and an

³²¹ Proposed rule 18f-4(a)(2), (c)(6), (c)(8), (c)(9).

³²² See section 1(b)(8) of the Investment Company Act. The asset segregation requirements in the proposed rule also are based in part on the considerations that informed our guidance in Release 10666 that maintaining assets in the segregated account would help "assure the availability of adequate funds to meet the obligations" arising from the trading practices described in that release. See Release 10666, *supra* note 20, at n.8.

³²³ See section 1(b)(7) of the Investment Company Act. Under the proposed rule, a fund would be required to maintain a certain amount of qualifying coverage assets—which generally would be required to be cash and cash equivalents—with respect to its derivatives transactions. A fund could determine not to enter into derivatives transactions that would otherwise be permitted under the proposed rule's exposure limits in order to avoid having to maintain qualifying coverage assets for the transactions. In addition, under certain circumstances, the asset segregation requirements could limit a fund's ability to enter into a derivatives transaction that would otherwise be permitted under the proposed rule's exposure limits because the fund does not have and is unable to acquire sufficient qualifying coverage assets to comply with the proposed rule. The proposed rule also would address concerns about leverage directly, though the proposed rule's portfolio limitations discussed in section V.B.1.

³²⁴ See proposed rule 18f-4(a)(2), (a)(5)(ii), (c)(6), (c)(8), (c)(9).

additional amount that represents a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions.³²⁵

Qualifying coverage assets for derivatives transactions would need to be identified on the books and records of the fund at least once each business day.³²⁶ With certain exceptions, the proposed rule would define qualifying coverage assets for derivatives transactions to mean cash and cash equivalents because, as further described below, these assets are extremely liquid and may be less likely to experience volatility in price or decline in value in times of stress than other types of assets.³²⁷ The proposed rule, by requiring a fund to hold a sufficient amount of these types of assets, is designed to enable the fund to meet its obligations under its derivatives transactions.³²⁸

The proposed rule's approach to asset segregation is designed to provide a flexible framework that would allow funds to apply the requirements of the proposed rule to particular derivatives transactions used by funds at this time as well as those that may be developed in the future as financial instruments and investment strategies change over time. As discussed in more detail below, the proposed rule's approach to asset segregation is designed to provide this flexibility by requiring funds to determine the amount of qualifying

coverage assets in a way that can be applied by funds to various types of transactions and by permitting these amounts to be determined in accordance with board-approved policies and procedures. The proposed rule's approach to asset segregation also is consistent with the views expressed by many commenters on the Concept Release, as discussed below.³²⁹

We believe that requiring the fund's board to approve the policies and procedures for asset segregation, including a majority of the fund's independent directors, appropriately would focus the board's attention on the fund's management of its obligations under derivatives transactions and the fund's use of the exemption provided by the proposed rule. We believe that requiring the fund's board to approve these policies and procedures, in conjunction with the board's oversight of the fund's investment adviser more generally, would be an appropriate role for the board.³³⁰

1. Coverage Amount for Derivatives Transactions

Under the proposed rule, a fund would be required to manage the risks associated with its derivatives transactions by maintaining qualifying coverage assets for each derivatives transaction in an amount equal to the sum of (1) the amount that would be payable by the fund if the fund were to exit the derivatives transaction at the time of determination (the "mark-to-market coverage amount"), and (2) a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions (the "risk-based coverage amount").³³¹ The proposed rule's asset coverage requirements reflect that, although a fund will be able to determine its current mark-to-market payable under a derivatives transaction on a daily basis, the fund's investment in the derivatives transaction can involve future losses, and thus potential payments by the fund to counterparties, that will depend on future changes related to the derivative's reference asset or metric.

The proposed rule's asset coverage requirements for derivatives transactions also are consistent in many respects with the approach suggested by many commenters to the Concept

Release.³³² These commenters suggested that, for derivatives transactions, a fund should segregate its daily mark-to-market liability as well as an additional amount, sometimes referred to as a "cushion" by commenters, designed to address future potential losses.

a. Mark-to-Market Coverage Amount

Under the proposed rule, the "mark-to-market coverage amount" for a particular derivatives transaction, at any time of determination, would be equal to the amount that would be payable by the fund if the fund were to exit the derivatives transaction at such time.³³³ We expect that the mark-to-market coverage amount generally would be consistent with a fund's valuation of a derivatives transaction because the amount of a fund's mark-to-market coverage amount would generally correspond to the amount of the fund's

³³² See, e.g., ICI Concept Release Comment Letter, at 11 ("The optimal amount of cover for many instruments may be somewhere in between full notional and mark to market amounts. It should be an amount expected to cover the potential loss to the fund, determined with a reasonably high degree of certainty. This amount—mark-to-market plus a 'cushion'—is more akin to the way portfolio officers and risk managers assess the portfolio risks created through the use of derivatives."); SIFMA Concept Release Comment Letter, at 4 ("... the AMG recommends that the Commission formulate a standard for asset segregation that would be calculated as the sum of (i) the current mark-to-market value of the derivative (representing the indebtedness on the instrument), plus (ii) a 'cushion' amount that would reflect potential future indebtedness); Comment Letter of AlphaSimplex Group, LLC on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("AlphaSimplex Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-41.pdf>, at 5 ("So long as the derivative in question has daily liquidity and daily margin calls . . . a fund may segregate assets equal to the sum of the daily marked-to-market obligation of the fund plus an allowance for some daily price move that could increase the fund's outstanding obligations . . ."); BlackRock Concept Release Comment Letter, at 5 ("Under a principles-based approach, the amount that would need to be segregated is the net payment amount to which the fund is potentially exposed under plausible scenarios, plus a risk premium."); Vanguard Concept Release Comment Letter, at 7 ("In our view, a fund's potential future exposure is the market value of the derivative (calculated daily) plus an additional amount that takes into account the derivative's potential intra-day price changes based on its volatility during reasonably foreseeable market conditions.").

³³³ Proposed rule 18f-4(c)(6). In some cases the fund would not be required to make any payments if the fund were to exit the derivatives transaction, such as where the fund invested in a swap that appreciates in value and the fund determines that it would receive a payment if it were to exit the transaction at that time. In this case the mark-to-market coverage amount would be equal to zero, but the fund would still be required to consider the risk-based coverage amount for such transaction, as discussed below. The mark-to-market coverage amount should reflect any accrued but unpaid premiums or other similar periodic payments owed under the derivatives transaction, as these amounts would influence the amount the fund would pay if it were to exit the derivatives transaction.

³²⁵ Proposed rule 18f-4(a)(2), (c)(6), (c)(8), (c)(9).

³²⁶ Proposed rule 18f-4(a)(2).

³²⁷ See proposed rule 18f-4(c)(8); *infra* note 369 and accompanying text. The exceptions to the requirement to maintain cash and cash equivalents, discussed below, are for derivatives transactions under which a fund may satisfy its obligation by delivering a particular asset, in which case that particular asset would be a qualifying coverage asset. See proposed rule 18f-4(c)(8).

³²⁸ We note that, pursuant to proposed rule 22e-4, funds subject to that rule would be required to consider, in assessing the liquidity of a position in a particular portfolio asset, whether the fund invests in the asset because it is connected with an investment in another portfolio asset. See proposed rule 22e-4(b)(2)(ii)(I). As explained in more detail in the Liquidity Release, assets segregated to cover derivatives and other transactions would be classified, for purposes of rule 22e-4, using the liquidity of the transaction they are covering because such assets would only be available for sale to meet fund redemptions once the related transaction is disposed of or unwound. See Liquidity Release, *supra* note 5, at section III.B.2. Thus, for purposes of proposed rule 22e-4, the liquidity of qualifying coverage assets segregated pursuant to proposed rule 18f-4 to cover derivatives transactions would be classified using the liquidity of the corresponding derivatives transactions. Similarly, the liquidity of qualifying coverage assets segregated pursuant to proposed rule 18f-4 to cover a financial commitment transaction would be classified using the liquidity of the corresponding financial commitment transaction.

³²⁹ See *infra* note 332.

³³⁰ Other exemptive rules under the Act similarly require the fund's board to take certain actions in order for the fund to rely on the exemption provided by the rule. See, e.g., rules 18f-3, 17a-7, 10f-3, and 2a-7.

³³¹ Proposed rule 18f-4(a)(2), (c)(6), (c)(9).

liability with respect to the derivatives transaction.³³⁴ The proposed rule's requirement that the fund manage the risks associated with its derivatives transactions by maintaining qualifying coverage assets with a value equal to the fund's mark-to-market coverage amount thus is designed to require the fund to have assets sufficient to meet its obligations under the derivatives transaction, which may include margin or similar payments demanded by the fund's counterparty as a result of mark-to-market losses, or payments that the fund may make in order to exit the transaction. A fund would be required to calculate the mark-to-market coverage amount at least once each business day under the proposed rule in order to provide the fund with a reasonably current estimate of the amount that may be payable by the fund with respect to the derivatives transaction.³³⁵

For example, if a fund has a swap position that has moved against the fund (*i.e.*, decreased in value) as a result of a change in the market value of the underlying reference asset, the fund's mark-to-market coverage amount would generally be equal to the fund's liability with respect to the swap because that would be the amount payable by the fund if the fund were to exit the swap at that time. The mark-to-market coverage amount thus would reflect the amount that would be payable by the fund based on market values and conditions existing at the time of determination. We understand that in many cases funds can readily calculate such amounts because they are already calculating their liability under the derivatives transaction for purposes of

determining their net asset value, and that such mark-to-market amounts may reflect the amounts that would be payable by the fund at such time if the fund were to exit the derivatives transaction due to a default or pursuant to other actions by the fund, such as a negotiated agreement with the fund's counterparty, a transfer to another party, or a close out of the position through execution of an offsetting transaction.

As another example, if a fund has written an option, it will generally have received a premium payment that would represent the option's fair value at that time. The amount of the premium initially received by the fund for writing the option thus would represent the fund's mark-to-market coverage amount at the inception of the transaction because it would represent the amount that would be payable by the fund at that time if the fund were to exit the transaction (in this case, by purchasing an offsetting option).³³⁶ The fund generally would be able to satisfy the proposed rule's requirement to maintain qualifying coverage assets with a value equal to the fund's mark-to-market coverage amount at the inception of the trade by maintaining the premium it received for writing the option because the mark-to-market coverage amount, at that time, would generally equal the amount of such premium received. If the option moved against the fund, however, the amount that would be payable by the fund if the fund were to exit the transaction would increase, and this increased amount would represent the fund's mark-to-market coverage amount.

Under the proposed rule, if a fund has entered into a netting agreement that allows the fund to net its payment obligations with respect to multiple derivatives transactions, the mark-to-market coverage amount for all derivatives transactions covered by the netting agreement could be calculated on a net basis, to the extent such calculation is consistent with the terms of the netting agreement.³³⁷ This aspect

of the proposed rule thus is designed so that the mark-to-market coverage amount more accurately reflects the fund's current net amounts payable with respect to the derivatives transactions covered by such netting agreements.³³⁸ The proposed rule would only allow a fund to net derivatives transactions for purposes of determining mark-to-market coverage if the fund has a netting agreement that allows the fund to net its payment obligations with respect to such transactions because, absent such an agreement, the fund generally would not have the right to net its payment obligations and could be required to tender the full amount payable under all of its derivatives transactions.

The proposed rule would also allow a fund to reduce the mark-to-market coverage amount for a derivatives transaction by the value of any assets that represent variation margin or collateral to cover the fund's mark-to-market loss with respect to the transaction.³³⁹ This aspect of the proposed rule would allow a fund to receive credit for assets that the fund posts to cover the fund's current obligations under the derivatives transaction, and which would be applied as security for, or to satisfy, those obligations under the derivatives transaction.³⁴⁰ For example, if a fund that has entered into an OTC swap and has delivered collateral equal to its mark-to-market loss on the OTC swap, the fund generally would not also be required to segregate qualifying coverage assets with respect to the swap's mark-to-market coverage amount, because the collateral delivered

³³⁴ We believe that the mark-to-market coverage amount also would generally be consistent with the practices of funds that segregate the mark-to-market liability associated with a derivatives transaction. *See, e.g.*, Rafferty Concept Release Comment Letter, at 12 ("For example, because the swap transactions in which the Direxion Trusts engage are fully cash settled, the Direxion Trusts segregate: (1) The amount (if any) by which the swap is out of the money to the fund (*i.e.*, the estimated amount that the fund would be required to pay upon an early termination, hereinafter referred to as the "fund's out of the money amount"), marked-to-market daily, plus (2) the amount of any accrued but unpaid premiums or similar periodic payments, net of any accrued but unpaid periodic payment payable by the counterparty."); Loomis Concept Release Comment Letter (indicating that the mark-to-market value of the derivative contract covers "the amount of the unrealized gain or loss on the transaction").

³³⁵ Proposed rule 18f-4(a)(2). We expect that funds would calculate their mark-to-market coverage amount as part of their determination of their net asset value, for those funds that calculate their net asset value each day. In addition, although the proposed rule does not require a fund to calculate the mark-to-market coverage amount more than once each business day, a fund may determine to calculate this amount more frequently.

³³⁶ *See, e.g.*, Options Clearing Corporation, *Understanding Stock Options* (1994), available at <http://www.cboe.com/learncenter/pdf/understanding.pdf>, at 8 (noting that the holder or writer of an exchange-traded option "can close out his position at any time simply by making an offsetting, or closing, transaction" which "cancels out an investor's previous position as the holder or writer of the option").

³³⁷ Proposed rule 18f-4(c)(6)(i). Under the proposed rule, the total amount of a fund's qualifying coverage assets must equal at least the sum of the fund's aggregate mark-to-market coverage amounts and risk-based coverage amounts. Proposed rule 18f-4(a)(2). Thus, qualifying coverage assets could not be used to cover more than one derivatives transaction unless the transactions are subject to a netting agreement and the fund

calculates its coverage amounts with respect to such transactions on a net basis. In addition, qualifying coverage assets used to cover a derivatives transaction could not also be used to cover a financial commitment transaction. Proposed rule 18f-4(c)(8).

³³⁸ *See also* section III.D.

³³⁹ Proposed rule 18f-4(c)(6)(ii).

³⁴⁰ The custody of fund assets is regulated by section 17(f) of the Act and the rules thereunder. Section 17(f) generally requires a fund to place and maintain its securities and similar investments in the custody of a qualified custodian of the type specified in section 17(f) and the rules thereunder. When we refer in this Release to assets being "posted" or "delivered," as margin or collateral, we are referring to a fund's posting or delivering those assets in compliance with the requirements of section 17 and the rules thereunder. We understand, for example, that in order to comply with these requirements in respect of non-centrally cleared OTC derivatives, funds generally do not deliver collateral directly to their counterparties, but instead hold posted collateral in a custody account (maintained with the fund's bank custodian) that is administered pursuant to a tri-party control agreement among the fund, its custodian and its counterparty, under which the counterparty maintains a security interest in the collateral, but may only have access to the collateral in the event of a fund's default.

would equal the amount payable by the fund, based on market conditions, if the fund were to exit the transaction at that time. As another example, if a fund that has invested in a futures contract posts variation margin to settle its daily margin obligations under the futures contract, the fund would not be required to also segregate qualifying coverage assets under the proposed rule to cover this same mark-to-market amount under the proposed rule.³⁴¹

In order to reduce the mark-to-market coverage amount, the assets must represent variation margin or collateral to cover the mark-to-market exposure of the transaction. Thus, initial margin (sometimes referred to as an “independent amount” with respect to certain OTC derivatives transactions) would not reduce the fund’s mark-to-market coverage amount with respect to the derivatives transaction because 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.³⁴² Initial margin amounts would not be expected to be available to satisfy the fund’s variation margin requirements under a derivatives contract absent a default by the fund—and thus the fund would need additional assets to cover these mark-to-market payments—withstanding that the fund had previously posted initial margin with respect to such derivatives transaction.³⁴³

We expect that funds will be readily able to determine their mark-to-market coverage amounts because they are already engaging in similar calculations on a daily basis. For example, as

described in more detail in section II.D.1 above, funds today are determining their current mark-to-market losses, if any, each business day with respect to the derivatives for which they currently segregate assets on a mark-to-market basis.³⁴⁴ Funds also already calculate their liability under derivatives transactions on a daily basis for various other purposes, including to satisfy variation margin requirements and to determine the fund’s NAV. Funds also calculate their liability under derivatives transactions on a periodic basis in order to provide financial statements to investors. We generally expect that funds would be able to use these calculations to determine their mark-to-market coverage amounts.

We request comment on all aspects of the proposed rule’s requirements concerning the mark-to-market coverage amount.

- Is the definition of “mark-to-market coverage amount” sufficiently clear? Are there any derivatives transactions for which the definition of mark-to-market coverage amount would not provide an appropriate calculation of the amounts payable by the fund if the fund were to exit the transaction? Are there types of derivatives transactions for which funds may not be able to determine a mark-to-market coverage amount at least once each business day as proposed?

- Although we have not incorporated accounting standards with respect to the determination of mark-to-market coverage amount in the proposed rule, the mark-to-market coverage amount generally would be consistent with a fund’s valuation of a derivatives transaction, as noted above. Should we instead define a fund’s mark-to-market coverage amount based on accounting standards? Should we, for example, define the term mark-to-market coverage amount to mean the amount of the fund’s liability under the derivatives transaction? Would this approach result in mark-to-market coverage amounts that would differ from mark-to-market coverage amounts determined as proposed? If so, how would they differ? If we were to define a fund’s mark-to-market coverage amount based on accounting standards, are there adjustments to these accounting standards that we should make for purposes of the proposed rule?

- The proposed rule would allow a fund to determine its net mark-to-market coverage amount for multiple derivatives transactions if a fund has entered into a netting agreement that

allows the fund to net its payment obligations for the transactions. Is this appropriate? Should we impose further limitations on a fund’s ability to net transactions, including, for example, prohibiting netting across asset classes or across different types of derivatives? Should we, in contrast, permit netting more extensively? Are there other situations in which funds today net their obligations with derivatives counterparties that would not be permitted under the proposed rule and for which funds believe netting would be appropriate? Should we include specific parameters in the rule regarding the enforceability of the agreement in a bankruptcy or similar proceeding?

- The proposed rule would allow a fund to reduce its mark-to-market coverage amount by the value of assets that represent variation margin or collateral. Is this appropriate? Should we instead restrict this provision to variation margin or collateral that meets certain minimum requirements (e.g., cash, cash equivalents, high-quality debt securities)? Should we permit the fund to reduce its mark-to-market coverage for initial margin?

- Should we permit a fund to reduce its mark-to-market coverage amount in circumstances not involving netting or posting of margin or collateral? Should we, for example, permit funds to reduce their mark-to-market coverage amount for a derivatives transaction to reflect gains in other transactions that the fund believes would mitigate such losses? If we were to permit a fund to reduce its mark-to-market coverage amount in these circumstances, what limitations should we impose to assure that a fund would have liquid assets to meet its obligations under a particular derivatives transaction if a counterparty to a potentially mitigating transaction were to default on its obligation to the fund or that transaction did not perform in a way that would mitigate such losses?

- As noted above, we believe that many funds will be readily able to determine their mark-to-market coverage amounts because they today are determining their liability, if any, each business day with respect to the derivatives for which they apply mark-to-market segregation or for other purposes. Should the mark-to-market coverage amount be determined more than once per day? Is once per day too frequent? Should we require funds to make this determination at the same time they determine their NAV? Should closed-end funds or BDCs or both be subject to different requirements? If we were to permit closed-end funds or BDCs or any other fund to determine

³⁴¹ Depending on the rules of the applicable futures exchange and local law, a variation margin payment with respect to a futures transaction may be deemed to settle the fund’s liability for the daily mark-to-market loss on the futures transaction, and such a payment once made would also eliminate the fund’s liability under the futures transaction. A fund that paid variation margin to settle the full amount of its mark-to-market loss on a futures transaction would not, at that time, have to pay any additional amount if the fund were to exit the transaction. If, at the time the fund determines its mark-to-market coverage amount, the fund would be required to pay an additional amount in excess of variation margin to exit the futures transaction, then the fund would need to have qualifying coverage assets in respect of such additional amount in order to comply with the mark-to-market coverage requirement.

³⁴² If the fund has posted variation margin or collateral in excess of its current liability under the derivatives transaction, such excess amount would not under the proposed rule reduce the fund’s mark-to-market coverage amount for other derivatives transactions, except as otherwise permitted under a netting agreement as described above.

³⁴³ The proposed rule would, however, allow a fund to reduce a derivative’s risk-based coverage amount by the value of assets posted as initial margin, as discussed below.

³⁴⁴ See *supra* section II.D.1.

their mark-to-market coverage amounts less frequently, what additional limitations, if any, should we impose to assure that the funds would have liquid assets to meet their obligations under derivatives transactions?

b. Risk-Based Coverage Amount

As discussed above, the mark-to-market coverage amount generally represents the amount that would be payable by the fund if the fund were to exit the derivatives transaction at such time. The fund's payment obligations under a derivatives transaction could vary significantly over time, however, potentially resulting in a significant gap between the mark-to-market coverage amount, if any, and the fund's future payment obligations under the derivatives transaction.³⁴⁵ The mark-to-market coverage amount, if any, may thus be substantially smaller than the potential amounts payable by the fund in the future under the derivatives transaction.³⁴⁶ We observed the argument in the Concept Release that segregating only the mark-to-market liability "may understate the risk of loss to the fund"³⁴⁷ and many commenters suggested that we require funds to segregate assets in addition to a derivative's mark-to-market liability.³⁴⁸

Because the fund's mark-to-market coverage amount for a derivatives transaction would not reflect the potential amounts payable by the fund in the future under the derivatives transaction, the proposed rule would require a fund to segregate an additional amount called the "risk-based coverage amount" that would represent a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions.³⁴⁹ A fund would be required to determine this amount at least once each business day, consistent with the timing applicable to the calculation of the mark-to-market coverage amount as described above, in order to provide the fund with a reasonably current estimate of the potential amounts payable under the derivatives transaction, based on the

current market values and conditions existing at the time the fund makes this determination.

This risk-based coverage requirement in the proposed rule is consistent with the views expressed by several commenters to the Concept Release that funds should segregate, not only their current liability under the contract, but also an additional amount meant to cover future losses.³⁵⁰ Several commenters recognized that a fund may be obligated to make future payments in excess of its current liabilities under a derivatives transaction.³⁵¹ For example, one commenter stated that funds should "segregate not just the mark-to-market value, but also an additional amount calculated using a measure of potential future losses."³⁵² Another commenter also noted that requiring funds to segregate a mark-to-market amount under the contract as well as an additional amount meant to cover future losses "is more akin to the way portfolio managers and risk officers assess the portfolio risks created through the use of derivatives."³⁵³

Under the proposed rule, the risk-based coverage amount for each derivatives transaction would be determined in accordance with policies and procedures approved by the fund's board of directors.³⁵⁴ By requiring funds to establish appropriate policies and procedures, rather than prescribing specific segregation amounts or methodologies, the proposed rule is designed to allow funds to assess and determine risk-based coverage amounts based on their specific derivatives transactions, investment strategies and associated risks. We expect that funds may be best situated to evaluate and determine the appropriate risk-based coverage amount for each of their derivatives transactions based on a careful assessment of their own particular facts and circumstances.

We believe an approach to asset segregation that is based, in part, on a fund's assessment of its own particular facts and circumstances would be more appropriate than a requirement to segregate only a fund's mark-to-market liability, on one hand, or the full notional amount, on the other. As we noted in the Concept Release, "both

notional amount and a mark-to-market amount have their limitations."³⁵⁵ A fund's segregation only of any mark-to-market liability, if any, may not effectively assure the fund will have sufficient assets to meet its obligations under the derivatives transaction for the reasons we discuss above in section II.D.1.c. A fund's segregation of the full notional amount for all of its derivatives transactions, in contrast, could in some cases require funds to hold more liquid assets than may be necessary to address the investor protection purposes and concerns underlying section 18 because the notional amount of a derivatives transaction does not necessarily equal, and often will exceed, the amount of cash or other assets that fund ultimately would likely be required to pay or deliver under the derivatives transaction. The proposed rule seeks to address these concerns, which also were shared by commenters on the Concept Release, by requiring a fund to segregate the mark-to-market and risk-based coverage amounts associated with its derivatives transactions.

Under the proposed rule, a fund's policies and procedures for determining the risk-based coverage amount for each derivatives transaction would be required to take into account, as relevant, the structure, terms and characteristics of the derivatives transaction and the underlying reference asset.³⁵⁶ The fund's risk-based coverage amount for a derivatives transaction, therefore, would be an amount determined in accordance with the fund's policies and procedures that takes into account these and any other relevant factors in determining a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions. This may include, for example, consideration of the fund's ability to terminate the trade or otherwise exit the position under stressed conditions, which could include an assessment of the derivative's terms and the fund's intended use of the derivative in connection with its investment strategy. We note 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

³⁴⁵ See, e.g., 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 (July 6, 2010) ("2010 ABA Derivatives Report"); SIFMA Concept Release Comment Letter.

³⁴⁶ Moreover, there may be no mark-to-market coverage amount if, as a result of the appreciation of a derivatives transaction, the fund would not be required to make a payment (but rather would receive a payment from its counterparty) if the fund were to exit the derivatives transaction at such time.

³⁴⁷ See Concept Release, *supra* note 3, at n.83.

³⁴⁸ See *supra* note 332.

³⁴⁹ Proposed rule 18f-4(a)(2), (c)(9).

³⁵⁰ See, e.g., ICI Concept Release Comment Letter, *supra* note 8; Comment Letter of the Asset Management Group of the Securities Industry and Financial Markets Association (Nov. 23, 2011) (File No. S7-33-11).

³⁵¹ See SIFMA Concept Release Comment Letter; ICI Concept Release Comment Letter; Loomis Sayles Concept Release Comment Letter; BlackRock Concept Release Comment Letter.

³⁵² See SIFMA Concept Release Comment Letter.

³⁵³ See ICI Concept Release Comment Letter.

³⁵⁴ Proposed rule 18f-4(a)(2), (a)(5), (c)(9).

³⁵⁵ See Concept Release, *supra* note 3, at n.27.

³⁵⁶ Proposed rule 18f-4(c)(9).

may be payable by the fund under the derivatives transaction. In any case, the risk-based coverage amount must be a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions, regardless of whether the fund is currently required to make such payments under the terms of the derivatives contract.

The requirements that we are proposing with respect to a fund's determination of the risk-based coverage amount are intended to permit a fund to tailor its procedures for determining the risk-based coverage amount to respond to the particular risks and circumstances associated with a fund's derivatives transactions. In developing policies and procedures to determine the risk-based coverage amount, a fund could use one or more financial models to determine the risk-based coverage amount, provided that the calculation reflects a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions and takes into account, as relevant, the structure, terms and characteristics of the derivatives transaction and the underlying reference asset, as required by the proposed rule. These tools may be useful in estimating the potential amounts payable by the fund under certain derivatives transactions, and may be an efficient way for a fund to determine the risk-based coverage amount for its derivatives, particularly for those funds that already use such methods for other purposes.

For example, as discussed in section III.D.2 below, a fund's policies and procedures under its derivatives risk management program could include stress testing. A fund that uses stress testing could consider using this approach to estimate the potential amount payable by the fund to exit a derivatives transaction by estimating the effects of various adverse events. Alternatively, a fund's policies and procedures could provide that, for a particular type of derivatives transaction, the fund's adviser would use a stressed VaR model to estimate the potential loss the fund could incur, at a given confidence level, under stressed conditions.³⁵⁷

³⁵⁷ Stressed VaR refers to a VaR model that is calibrated to a period of market stress. As noted in section III.B.2.a, a concern that has been recognized with VaR is that it may not adequately reflect "tail risks," *i.e.*, the size of losses that may occur on the trading days on which the greatest losses occur, and that VaR may underestimate the risk of loss under stressed market conditions. However, by calibrating VaR to a period of market stress, stressed VaR may better reflect the potential losses that a fund could incur through a derivatives transaction, and thus

As noted above, a fund's policies and procedures for determining its risk-based coverage amount would be required to take into account, as relevant, the structure, terms and characteristics of the derivatives transaction and the underlying reference asset. In calculating its risk-based coverage amount, a fund may take into account considerations in addition to these factors. For example, if a fund elects to conduct stress testing for other purposes and such stress tests incorporate factors other than those specified under the proposed rule, the fund should consider incorporating the results of this stress testing into the determination of its risk-based coverage amount.

As with the calculation of mark-to-market coverage amounts, if the fund has entered into a netting agreement that allows the fund to net its payment obligations with respect to multiple derivatives transactions, the proposed rule would allow a fund to calculate its risk-based coverage amount on a net basis for all derivatives transactions covered by the netting agreement, in accordance with the terms of the netting agreement.³⁵⁸ This aspect of the proposed rule is designed to recognize that if a fund has a netting agreement in effect, the potential amounts payable by the fund under a derivatives transaction covered by such agreement could be reduced by any future payments owed to the fund under other derivatives transactions covered by the netting agreement, with the fund being required to pay only the net amount. Thus, the proposed rule would allow the fund to calculate its risk-based coverage amount for all derivatives transactions covered by the netting agreement on a net basis. For example, if a fund has two derivatives transactions that are covered by a netting agreement, and one of the transactions is inversely correlated with the other position, the fund could determine its risk-based coverage amount for both derivatives transactions on a net basis, taking into account anticipated gains that it reasonably expects may reduce potential amounts payable by the fund under stressed conditions under other derivatives transactions covered by the same netting agreement. The proposed rule would only allow a fund to net derivatives transactions for purposes of determining risk-based coverage if the fund has a netting agreement that allows the fund

serve as an appropriate method for determining a reasonable estimate of the potential amount payable by the fund if the fund were to exit the transaction under stressed conditions.

³⁵⁸ Proposed rule 18f-4(c)(9)(i).

to net its payment obligations with respect to such transactions because, absent such an agreement, the fund may not have the right to reduce its payment obligations and could potentially be required to tender the full amount payable under each derivatives transaction.

The proposed rule would also 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 in respect of such derivatives transaction.³⁵⁹ This would allow a fund to receive credit for assets that are already posted as a security guarantee to cover potential future amounts payable by the fund under the derivatives transaction, and which could ultimately be used by the fund's counterparty to satisfy those obligations if needed. In order to reduce the risk-based coverage amount, the assets must represent initial margin or collateral to cover the fund's future potential amounts payable by the fund under the derivatives transaction.³⁶⁰ Further, initial margin or collateral can only reduce the risk-based coverage amount for the specific derivatives transaction for which such assets were posted.³⁶¹

The proposed rule therefore would give a fund credit for initial margin by not requiring the fund to maintain risk-based coverage assets in respect of future amounts payable that could be satisfied by the fund's initial margin. We believe that giving a fund credit for initial margin in this way is more appropriate than an approach suggested by at least one commenter under which we would provide that a fund's "cushion" would be equal to the required initial margin for a particular transaction.³⁶² Final rules regarding the

³⁵⁹ Proposed rule 18f-4(c)(9)(ii).

³⁶⁰ Assets that represent variation margin are used to satisfy the fund's current mark-to-market liability under the derivatives transaction and would not be available to cover the fund's potential future liabilities under the transaction. Thus, assets that represent variation margin would not reduce the fund's risk-based coverage amount with respect to the derivatives transaction. We believe it is appropriate to count only initial margin given that the risk-based coverage amount is designed to cover potential future amounts payable by the fund.

³⁶¹ The proposed rule requires the fund to calculate risk-based coverage amounts on a transaction-by-transaction basis in respect of each of the fund's derivatives transactions. Assets delivered as collateral for a particular derivatives transaction thus cannot be used to cover other derivatives transactions unless the transactions are covered by a netting agreement. In the event that a fund posts initial margin or collateral to cover multiple derivatives transactions, the risk-based coverage amount for all derivatives transactions covered by such initial margin or collateral cannot be reduced by more than the total amount of the initial margin or collateral.

³⁶² See SIFMA Concept Release Comment Letter.

margin requirements for OTC swaps have not been adopted by all federal agencies, and we note that not all funds may be required to post initial margin for their OTC swaps under those rules.³⁶³ Therefore, while these margin requirements may provide benchmarks that may assist a fund in the evaluation of risk-based coverage amounts, they do not appear to provide a means of implementing a risk-based coverage amount requirement for all funds that engage in the use of derivatives.³⁶⁴

A fund could, however, consider any applicable initial margin requirements when determining its risk-based coverage amount for a derivatives transaction. But if a fund determines that its risk-based coverage amount—that is, a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions—is greater than the initial margin the fund would be required to post, the fund would need to maintain qualifying coverage assets equal to such greater

amount in order to comply with the proposed rule.

We request comment on all aspects of the proposed rule's requirement that a fund manage the risks associated with its derivatives transactions by maintaining qualifying coverage assets equal to the fund's aggregate risk-based coverage amounts for its derivatives transactions.

- Is the definition of risk-based coverage amount sufficiently clear to allow a fund to develop policies and procedures to determine a risk-based coverage amount for all derivatives transactions?
- Rather than determining the risk-based coverage amount in accordance with policies and procedures approved by the board, should we prescribe risk-based coverage amounts in the proposed rule? Should we, for example, provide that the risk-based coverage amount must be determined based on a specific financial model (*i.e.*, VaR at a particular confidence level)? Should we specify a percentage of the derivative's notional value? If so, what percentage should we choose? Should it vary for different types of derivatives? For example, should the proposed rule include a standardized schedule that specifies the risk-based coverage amount for particular derivatives transactions? If so, should the schedule be similar to, or different from, the standardized schedules under rules that have been proposed or adopted for swap entities that are required to collect initial margin and elect to use a standardized schedule approach instead of an internal model approach? If so, should the standardized schedule approach be in addition to, or in place of, the approach currently described in the proposed rule? Why or why not?

- Should we retain the proposed rule's approach that the risk-based coverage amount be determined in accordance with board-approved policies and procedures, but also provide funds the option to use certain prescribed standards for the calculation of the risk-based coverage amount? In other words, should the proposed rule prescribe a specific financial model or amount of the derivative's notional amount that could be used by funds to determine the risk-based coverage amount without the need for additional policies and procedures? If so, which models or notional amounts should we specify? Should we provide, for example, that a fund may use as its risk-based coverage amount for a particular derivatives transactions the VaR calculated using a VaR model that meets the minimum criteria for a VaR model

under the proposed rule and that provides stressed VaR estimates?

- Are there additional items that a fund should be required to consider when preparing policies and procedures in respect of the risk-based coverage amount?

- The risk-based coverage amount as proposed would be a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions. Is the term "stressed conditions" clear? If not, how could the term "stressed conditions" be made more clear? Is "stressed conditions" an appropriate standard? Is there an alternative standard that would be more appropriate? Should it be an estimate that does not involve stressed conditions?

- The proposed rule would allow a fund to net derivatives transactions for purposes of determining the risk-based coverage amount if a fund has a netting agreement in effect that would allow the fund to net its payment obligations for such transactions. Is this appropriate? Should we impose further limitations on a fund's ability to net transactions, including, for example, prohibiting netting across asset classes or different types of derivatives? Should we, in contrast, permit netting more extensively? Are there situations in which initial margin for funds is calculated on a net basis that would not be permitted under the proposed rule and for which funds believe netting would be appropriate? Are there other situations in which funds today net their obligations with derivatives counterparties that would not be permitted under the proposed rule and for which funds believe netting would be appropriate? Should we include specific parameters in the rule regarding the enforceability of the agreement in a bankruptcy or similar proceeding?

- In situations not involving a netting agreement, should we allow a fund to reduce its risk-based coverage amount for a derivatives transaction to reflect anticipated or actual gains in other transactions that the fund believes are likely to produce gains for the fund at the same time as other derivatives experience losses? If so, what parameters or guidelines should we prescribe to address market risk, counterparty risk or other payment risks if netting is permitted under the proposed rule for these separate transactions?

- The proposed rule would allow a fund to reduce its risk-based coverage amount by the value of assets that represent initial margin or collateral. Is this appropriate? Should we instead

³⁶³ See Prudential Regulator Margin and Capital Adopting Release, *supra* note 160; CFTC Margin Proposing Release, *supra* note 160; *cf.* Capital, Margin, and Segregation Requirements for Security-Based Swap Dealers and Major Security-Based Swap Participants and Capital Requirements for Broker-Dealers, Exchange Act Release No. 68071 (Oct. 18, 2012) [77 FR 70214 (Nov. 23, 2012)] ("Margin and Capital Proposing Release"). Under rules adopted by the banking regulators and rules proposed by the CFTC, initial margin may be calculated using either an internal models approach (under which initial margin would be calculated using an approved model calibrated to a period of stress conditions) or a standardized initial margin approach (under which initial margin would be calculated using a standardized initial margin schedule). Under these rules, however, not all funds would be required to post initial margin. For example, under rules adopted by the banking regulators, a covered swap entity, such as a bank, would only be required to collect initial margin from a swap counterparty, such as a fund, if the fund has "material swaps exposure," which is a threshold under the rule that would apply if a fund and its affiliates have average daily aggregate notional exposure from swaps, security-based swaps, foreign exchange forwards, and foreign exchange swaps that exceeds \$8 billion. See Prudential Regulator Margin and Capital Adopting Release, *supra* note 160. The rules proposed by the CFTC have a similar threshold and would only require a covered swap entity to collect initial margin from a swap counterparty, such as a fund, if the fund has material swaps exposure that exceeds \$3 billion. See CFTC Margin Proposing Release, *supra* note 160. Thus, these rules would generally only require a fund to post initial margin if the fund has average daily exposure to swaps in excess of \$8 billion or \$3 billion. See Prudential Regulator Margin and Capital Adopting Release, *supra* note 160; CFTC Margin Proposing Release, *supra* note 160. (The initial margin rules proposed by the Commission for uncleared security-based swaps do not impose minimum thresholds for the collection of initial margin. See Margin and Capital Proposing Release, *supra*).

³⁶⁴ See Prudential Regulator Margin and Capital Adopting Release, *supra* note 160; CFTC Margin Proposing Release, *supra* note 160.

restrict this reduction to initial margin or collateral that meets certain minimum requirements (e.g., cash, cash equivalents, high-quality debt securities)? Should we, in contrast, give the fund more flexibility to reduce its risk-based coverage?

- Should we require the risk-based coverage amount to be calculated based expressly on initial margin

requirements, rather than requiring funds to determine these amounts in accordance with policies and procedures, as proposed, which could be informed by margin requirements? Should we require the risk-based coverage amount to be no less than the initial margin requirement, without regard to minimum transfer amounts or limits that would apply to a particular fund?

- Should we require any type of stress testing or back-testing with respect to the calculation of the risk-based coverage amount?

- Should the risk-based coverage amount be determined more than once per day? Is once per day too frequent?

- The risk-based coverage amount as proposed would generally be determined on an instrument-by-instrument basis (but would permit the fund to determine risk-based coverage amounts on a net basis in certain circumstances as discussed above). Should we, instead, permit or require funds to determine the risk-based coverage amount on a fund's entire portfolio? Alternatively, should we permit the risk-based coverage amount to be determined on a net basis with respect to particular subsets of the portfolio? For example, should we allow a fund to calculate separate risk-based coverage amounts for instruments that fall within different broad risk categories, such as equity, credit, foreign exchange, interest rate, and commodity risk? If so, how should funds calculate such risk-based coverage amounts? Would either of these approaches be more or less effective at assuring funds will have liquid assets to meet their obligations under their derivatives transactions? Would either of these approaches be more or less cost efficient for funds?

2. Qualifying Coverage Assets

As described above, the proposed rule would require a fund to manage the risks associated with its derivatives transactions by maintaining qualifying coverage assets, identified on the books and records of the fund and determined at least once each business day, in respect of each derivatives transaction. Under the proposed rule, "qualifying coverage assets" in respect of a

derivatives transaction would be fund assets that are either: (1) Cash and cash equivalents; or (2) with respect to any derivatives transaction under which the fund may satisfy its obligations under the transaction by delivering a particular asset, that particular asset. The total amount of a fund's qualifying coverage assets could not exceed the fund's net assets.³⁶⁵

a. Cash and Cash Equivalents

Under the proposed rule, a fund would generally be required to segregate cash and cash equivalents as qualifying coverage assets in respect of its coverage obligations for its derivatives transactions.³⁶⁶ 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.³⁶⁷ Examples of items commonly considered to be cash equivalents include certain Treasury bills, agency securities, bank deposits, commercial paper, and shares of money market funds.³⁶⁸

We believe that cash and cash equivalents are appropriate qualifying coverage assets for derivatives transactions because these assets are extremely liquid because they are cash or could be easily and nearly immediately converted to known amounts of cash without a loss in value.³⁶⁹ Other types of assets, in

³⁶⁵ Proposed rule 18f-4(c)(8).

³⁶⁶ Proposed rule 18f-4(c)(8). The proposed rule would not require funds to place qualifying coverage assets in a separate segregated account. In this Release when we refer to assets that a fund would "segregate" under the proposed rule, these are assets that the fund would identify as qualifying coverage assets on the fund's books and records determined at least once each business day, as noted above.

³⁶⁷ FASB Accounting Standards Codification paragraph 305-10-201; *see also* Money Market Fund Reform; Amendments to Form PF, Investment Company Act Release No. 31166 (July 23, 2014) [79 FR 47736 (Aug. 14, 2014)] ("2014 Money Market Fund Reform Adopting Release"), at sections III.A.7 and III.B.6 (clarifying that the reforms to the regulation of money market funds adopted by the Commission in 2014 should not preclude an investment in a money market fund from being classified as a cash equivalent under U.S. GAAP under normal circumstances).

³⁶⁸ *See* Liquidity Release, *supra* note 5; FASB Accounting Standards Codification paragraph 305-10-201; Form PF: Glossary of Terms (defining "cash and cash equivalents").

³⁶⁹ *See* Liquidity Release, *supra* note 5, at 123 ("Cash and cash equivalents are extremely liquid (in that they either are cash, or could be easily and nearly immediately converted to cash without a loss in value), and significant holdings of these instruments generally decrease a fund's liquidity risk because the fund could use them to meet redemption requests without materially affecting the fund's NAV.").

contrast, may be more likely to experience volatility in price or to decline in value in times of stress, even if subject to a haircut. We are not proposing to include as qualifying coverage assets other types of assets, such as equity securities or other debt securities, because we are concerned about the risk that such assets could decline in value at the same time the fund's potential obligations under the derivatives transactions increase, thus increasing the possibility that such assets could be insufficient to cover the fund's obligations under derivatives transactions. In addition, we understand that cash and cash equivalents are commonly used for posting collateral or margin for derivatives transactions. For example, ISDA reported in a 2015 survey that cash represented 77% of collateral received for uncleared derivatives transactions (with government securities representing an additional 13% percent), while for cleared OTC transactions with clients, cash represented 59% of initial margin received (with government securities representing an additional 39%) and 100% of variation margin received.³⁷⁰ 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

³⁷⁰ ISDA Margin Survey 2015 (Aug. 2015), available at <https://www2.isda.org/functional-areas/research/surveys/margin-surveys>. The ISDA Margin Survey included 41 ISDA members, approximately 90% of whom were banks or broker-dealers, in the Americas (32%), Europe/Middle East Africa (53%) and Asia (16%). Figures for uncleared margin reflect responses of large firms, *i.e.*, those having more than 3,000 active non-cleared ISDA collateral agreements. Under the ISDA Margin Survey, government agency and government sponsored entity securities, US municipal bonds and supranational bonds were categorized separately from the "government securities" category and therefore are not included in the percentages cited above. As previously noted, examples of items commonly considered to be "cash equivalents" include certain Treasury bills, agency securities, bank deposits, commercial paper, and shares of money market funds (*see supra* note 368 and accompanying text). In light of the global nature of the survey and the types of entities surveyed, we request comment below on whether cash and cash equivalents are the assets most commonly used by funds for posting initial and variation margin to their counterparties.

assets to cash and cash equivalents would be appropriate.

We note that some commenters on the Concept Release opposed a more restrictive requirement for asset segregation, such as the one we are proposing today, stating that a more restrictive approach could limit certain funds' ability to use derivatives.³⁷¹ However, we note that these comments were made in the context of the Concept Release, which sought comment on the appropriate amount of segregated assets for a derivatives transaction in the context of the current approach, under which funds segregate the full notional amount for some types of derivatives transactions. The proposed rule, however, would not require funds to segregate a derivative's full notional amount, and instead would require the fund to segregate its mark-to-market and risk-based coverage amounts. Given the proposed rule's requirement to segregate these amounts with respect to their derivatives transactions, we believe it is appropriate to require that the segregated assets be assets that are extremely liquid.

b. Assets Required To Be Delivered Under the Derivatives Transaction

With respect to any derivatives transaction under which a fund may satisfy its obligations under the transaction by delivering a particular asset, the proposed rule would allow the fund to segregate that particular asset as a qualifying coverage asset.³⁷² Because, in such derivatives transactions, the fund could satisfy its obligations by delivering the asset itself, we believe that these assets would be an appropriate qualifying coverage asset for such transactions. For example, if the fund has written a call option on a particular security that the fund owns, then the security could be considered a qualifying coverage asset in respect of the written option.³⁷³ In that example,

the fund's delivery of such security would satisfy its obligations under the written option and any change in the value or liquidity of such security should not affect the ability of the fund to satisfy its payment obligation under the call option.

Under the proposed rule, the *particular asset* that the fund may deliver to satisfy its obligations under the derivatives transaction would be a qualifying coverage asset. However, a qualifying coverage asset for a derivatives transaction generally would not include a derivative that provides an offsetting exposure. For example, if a fund has written a CDS on a bond, a purchased CDS on the same bond entered into with a different counterparty generally would not be considered a qualifying coverage asset in respect of the written CDS because the fund would be exposed to the risk that its counterparty could default or fail to perform its obligation under the purchased CDS, thereby potentially leaving the fund without sufficient assets to satisfy its obligations under the written CDS.³⁷⁴ Such a result would be inconsistent with the purpose of the asset segregation requirement in the proposed rule, which is designed to enable the fund to meet its obligations arising from the derivatives transaction. In addition, and as discussed in more detail in section III.B.1.d above, we have not included in the proposed rule provisions for particular types of potential hedging and other cover transactions. The same considerations we discuss above in section III.B.1.d similarly weigh against our including

risk-based coverage amount for such written option is equal to the value of the security. Thus, the fund could satisfy the asset segregation requirements of the proposed rule by segregating the security itself, without segregating additional qualifying coverage assets.

³⁷⁴ We note, however, that if a fund entered into two transactions that were covered by a netting agreement, the proposed rule would permit the mark-to-market coverage amount and risk-based coverage amount to be determined on a net basis, which could result in a reduction in the amount of qualifying coverage assets that the fund would need to segregate if such transactions were offsetting. As discussed in section III.B.1.b.ii, for purposes of the exposure limits under the proposed rule, a fund may net directly offsetting derivatives transactions that are the same type of instrument and have the same underlying reference asset, maturity and other material terms, even if those transactions are entered into with different counterparties and without regard to whether those transactions are subject to a netting agreement. See proposed rule 18f-4(c)(3)(i). We believe that it is appropriate to allow such netting for purposes of the proposed rule's exposure limits because in those circumstances, netting can be expected to eliminate a fund's market exposure. By contrast, the proposed rule's asset coverage requirements are designed to address a different primary concern, namely, the ability of a fund to meet its obligations arising from derivatives transactions.

exceptions to the asset coverage requirements in the proposed rule for these kinds of transactions.

We recognize that commenters to the Concept Release generally advocated for retaining the flexibility offered by the cover transaction approach.³⁷⁵ The proposed rule is designed instead to provide some flexibility to funds to determine the appropriate risk-based coverage amount (rather than a derivative's full notional amount), and in this context, we believe that additional flexibility regarding particularized cover transactions (other than those covered by a netting agreement as described above) may not address the asset sufficiency concern under the Act.

c. Limit on the Total Amount of Qualifying Coverage Assets

Under the proposed rule, the total amount of a fund's qualifying coverage assets could not exceed the fund's net assets.³⁷⁶ This aspect of the proposed rule is designed to require a fund to have sufficient qualifying coverage assets to meet its obligations under its derivatives transactions and also prohibit a fund from entering into a financial commitment transaction or otherwise issuing senior securities pursuant to section 18 or 61 of the Act and then using the additional assets resulting from such leveraging transactions to support an additional layer of leverage through senior securities transactions. Thus, if a fund borrowed from a bank, for example, the aggregate amount of the fund's assets that the fund might otherwise use as qualifying coverage assets for derivatives transactions would be reduced by the amount of the outstanding bank borrowing. We believe it is appropriate for a fund that enters into derivatives transactions in reliance on the proposed rule to have qualifying coverage assets in excess of the amounts the fund owes to other counterparties so that the fund's qualifying coverage assets would be available to satisfy the fund's obligations under its derivatives transactions if necessary. Therefore, under the proposed rule, the total amount of a fund's qualifying coverage assets could not exceed the fund's net assets.

We request comment on all aspects of the proposed rule's definition of qualifying coverage assets.

- For derivatives transactions, the proposed rule contains the same

³⁷¹ See, e.g., AQR Concept Release Comment Letter, at 4 ("If the Merrill Lynch Letter were withdrawn, we believe investors in certain funds would be harmed. Equity funds or high yield funds, for example, would find it difficult to utilize derivatives because these funds do not usually hold large quantities of cash and high grade debt obligations that could be used as collateral."); BlackRock Concept Release Comment Letter, at 5 ("Holding cash and U.S. Government securities to satisfy asset coverage requirements may be in conflict with the stated investment objectives of a fund and effectively would prevent many equity and certain bond funds from being able to use derivatives when derivatives are the most effective ways of implementing portfolio strategies.").

³⁷² Proposed rule 18f-4(c)(8).

³⁷³ We note that, in this type of "covered call" transaction where a fund owns the security that is required to be delivered under the written option, the fund could reasonably conclude that the sum of the mark-to-market coverage amount and the

³⁷⁵ See, e.g., ICI Concept Release Comment Letter; SIFMA Concept Release Comment Letter; Oppenheimer Concept Release Comment Letter.

³⁷⁶ Proposed rule 18f-4(c)(8).

requirements for qualifying coverage assets in respect of the mark-to-market coverage amount and the risk-based coverage amount. Should there be a difference in the requirements for qualifying coverage assets in respect of the mark-to-market coverage amount and the risk-based coverage amount? If so, what changes should be made? Should we, for example, permit funds to use a broader range of assets as qualifying coverage assets with respect to a fund's risk-based coverage amount because that amount reflects potential amounts payable by the fund, rather than the mark-to-market payable amounts represented by the fund's mark-to-market coverage amount?

- Under the proposed rule, a fund would generally be required to segregate cash and cash equivalents. Is the range of assets that would be included as cash and cash equivalents sufficiently clear? Are there other types of assets that commenters believe are cash equivalents that we should identify by way of example? Should we instead define "cash equivalents" in the proposed rule? If so, how should we define "cash equivalents"?

- Should we allow funds to segregate other types of assets in addition to cash and cash equivalents? If so, what other types of assets should we allow? For example, should we permit funds to segregate any U.S. government security (i.e. any security issued or guaranteed as to principal and interest by the U.S. government)? Should we allow funds to segregate high grade debt obligations as discussed in Release 10666? If so, how should we define high grade debt obligations for this purpose? Should we permit funds to segregate assets that would be eligible as collateral for margin under the rules that have been proposed or adopted for swap entities? Should we instead allow funds to segregate any Three-Day Liquid Asset as defined in proposed rule 22e-4? If we were to permit funds to segregate other types of assets in addition to cash and cash equivalents, should we place restrictions on these other types of assets to protect against the risk that the gains and losses on these coverage assets held by the fund may be correlated with the performance of reference assets underlying the fund's derivatives transactions in such a way that they could lose value in stressed market conditions when the fund's liabilities under derivatives transactions may be increasing?

- If we were to allow funds to segregate other assets as qualifying coverage assets (whether for all purposes or only the fund's risk-based coverage amount), what additional

measures, if any, should we require funds to undertake in order to protect against potential changes in the value and/or liquidity of such assets? For example, should we impose haircuts on such assets? If so, how should we determine the appropriate haircut? For example, should we incorporate the haircuts described in the SEC's proposed margin requirements for security-based swap dealers and major security-based swap participants?³⁷⁷ Or, should we incorporate the haircut schedule included in the rules adopted by the banking regulators for covered swap entities?³⁷⁸ Is there a different haircut schedule that would be more appropriate for the proposed rule?

- If we were to allow funds to segregate other assets as qualifying coverage assets (whether for all purposes or only the fund's risk-based coverage amount), should we impose additional restrictions if the assets are closely correlated with the exposure created by the derivatives transaction? What types of requirements should we impose for assessing these correlations?

- Under the proposed rule, qualifying coverage assets for derivatives transactions generally would not include a derivative that provides an offsetting exposure. Is this appropriate? Why or why not?

- Some commenters to the Concept Release stated that requiring funds to segregate cash and other high-quality debt obligations could make it difficult for certain funds to use derivatives.³⁷⁹ Given that the proposed rule would not require funds to segregate assets equal to the full notional value of its derivatives transactions, and would permit a fund to reduce its mark-to-market and risk-based coverage amounts to take account of margin posted by the fund, do such concerns remain?

- Under the proposed rule, the total amount of a fund's qualifying coverage assets could not exceed the fund's net assets. Do commenters agree that this is appropriate? Should we, instead, specify that qualifying coverage assets must not be "otherwise encumbered"? Is there a different approach we should take to prevent a fund from using assets to cover multiple different obligations or potential obligations?

- The proposed rule's asset segregation requirements for derivatives

³⁷⁷ See Margin and Capital Proposing Release, *supra* note 363.

³⁷⁸ See Prudential Regulator Margin and Capital Adopting Release, *supra* note 160.

³⁷⁹ See Basel Committee on Banking Supervision & Board of the International Organization of Securities Commissions, *Margin Requirements for Non-Centrally Cleared Derivatives* (Mar. 2015), available at <http://www.bis.org/bcbps/publ/d317.pdf>.

transactions, although designed primarily to enable the fund to meet its obligations arising from its derivatives transactions, also could serve to limit a fund's ability to obtain leverage through derivatives transactions to the extent that a fund limits its derivatives usage in order to comply with the asset segregation requirements. As noted above, a fund might limit its derivatives transactions in order to avoid having to maintain qualifying coverage assets for the transactions, and the asset segregation requirements may limit a fund's ability to enter into a derivatives transaction if the fund does not have, and cannot acquire, sufficient qualifying coverage assets to engage in additional derivatives transactions. To what extent do commenters believe that the proposed rule's asset segregation requirements would impose a practical limit on the amount of leverage a fund could obtain?

D. Derivatives Risk Management Program

The use of derivatives can pose a variety of risks to funds and their investors, although the extent of the risk may vary depending on how a fund uses derivatives as part of the fund's investment strategy. As discussed previously, these risks can include the risk that a fund may operate with excessive leverage or without adequate assets and reserves, which are both core concerns of the Act.³⁸⁰ Other potential risks associated with derivatives use can include market, counterparty, leverage, liquidity, and operational risk. While many of these risks are not limited to derivatives investments, the complexity and character of derivatives investments may heighten such risks.³⁸¹

The proposed rule's portfolio limitations and asset coverage requirements are intended to help limit the extent of the fund's exposure to many of these risks. These requirements are designed both to impose a limit on the amount of leverage a fund may obtain from derivatives and to require the fund to manage its risks by having qualifying coverage assets to meet its obligations while providing funds with flexibility to engage in a wide variety of derivatives transactions and investment strategies. These restrictions on funds' use of derivatives are generally intended to provide limits on the magnitude of funds' derivatives exposures, and in the case of a fund operating under the risk-

³⁸⁰ See, e.g., Investment Company Act sections 1(b)(7), 1(b)(8), 18(a), and 18(f); see also section I.B.1.

³⁸¹ See, e.g., 2008 IDC Report, *supra* note 72. See also *Mutual Funds and Derivative Instruments*, Division of Investment Management.

based limit, to require that the fund's derivatives transactions, in the aggregate, have the effect of reducing the fund's exposure to market risk. These limits and associated risk management requirements would be complemented by the proposed rule's formalized derivatives risk management program requirement, which would require funds that engage in more than a limited amount of derivatives transactions, or that use complex derivatives transactions as defined in the proposed rule, to also have a formalized program that includes policies and procedures reasonably designed to assess and manage the particular risks presented by the fund's use of derivatives.

We have observed that fund investments in derivatives can pose risk management challenges, and poor risk management may cause significant harm to funds and their investors.³⁸² We understand that, today, the advisers to many funds whose investment strategies could entail derivatives risk routinely conduct risk management to evaluate a fund's derivatives usage.³⁸³ A fund's use of derivatives presents challenges for its investment adviser and board of directors in managing derivatives transactions so that they are employed in a manner consistent with the fund's investment objectives, policies, and restrictions, its risk profile, and relevant regulatory requirements, including those under the federal securities laws.³⁸⁴ Funds and their advisers may face liability under the antifraud provisions of the federal securities laws if their use of derivatives is inconsistent with these constraints. Accordingly, we understand that advisers to many funds whose investment strategies entail the use of derivatives already assess and manage such risk.

Fund advisers that today engage in active risk management of their derivatives may use a variety of tools. Depending on the fund and its derivatives use, these tools might include a formalized derivatives risk management program led by a dedicated risk manager or risk committee, the use of other checks and balances put in place by a fund's portfolio management

team, or other tools.³⁸⁵ We understand that many fund boards oversee the fund adviser's risk management process as part of their general oversight of the fund.³⁸⁶ As a result, we believe that the proposed program would likely have the effect of enhancing practices that are in place at many funds today by specifying requirements for funds that rely on the rule to evaluate the risks associated with the funds' use of derivatives and to inform the funds' boards of directors about these risks as part of a regular dialogue with officers of the fund or its adviser.

The proposed measures will help enhance derivatives risk management by requiring that any fund that engages in more than a limited amount of derivatives transactions pursuant to the proposed rule, or that uses complex derivatives transactions, adopt and implement a formalized derivatives risk management program (a "program").³⁸⁷ The program's requirements would be in addition to the requirements related to derivatives risk management that would apply to every fund that enters into derivatives transactions, including, for example, the requirement to manage derivatives risk through determining the risk-based coverage amounts on a daily basis, and the requirement to monitor compliance with the proposed portfolio limit under which the fund's derivatives exposure may not exceed 50% of net assets and the fund may not enter into complex derivatives transactions. The formalized risk management program condition would require a fund to have policies and procedures reasonably designed to:

- Assess the risks associated with the fund's derivatives transactions, including an evaluation of potential leverage, market, counterparty, liquidity, and operational risks, as applicable, and any other risks considered relevant;
- Manage the risks of the fund's derivatives transactions, including by monitoring the fund's use of derivatives transactions and informing portfolio management of the fund or the fund's board of directors, as appropriate,

regarding material risks arising from the fund's derivatives transactions;

- Reasonably segregate the functions associated with the program from the portfolio management of the fund; and
- Periodically (but at least annually) review and update the program.³⁸⁸

The program, which would be administered by a designated derivatives risk manager, would require funds, at a minimum, to adopt policies and procedures reasonably designed to implement certain specified elements, and would include administration and oversight requirements. The program is expected to be tailored by each fund and its adviser to the particular types of derivatives used by the fund and the manner in which those derivatives relate to the fund's investment portfolio and strategy. Funds that make only limited use of derivatives would not be subject to the proposed condition requiring the adoption of a formalized derivatives risk management program under the proposed rule.

Proposed rule 18f-4 would include board oversight provisions related to the derivatives risk management program requirement. Specifically, a fund's board would be required to approve the fund's derivatives risk management program, any material changes to the program, and the fund's designation of the fund's derivatives risk manager (who cannot be a portfolio manager of the fund).³⁸⁹ The board also would be required to review written reports prepared by the designated derivatives risk manager, at least quarterly, that review the adequacy of the fund's derivatives risk management program and the effectiveness of its implementation.³⁹⁰ A fund might, as it determines appropriate, expand its derivatives risk management procedures beyond the required program elements and should consider doing so whenever it would be necessary to ensure effective derivatives risk management.

The proposed derivatives risk management program would serve as an important complement to the other conditions of proposed rule 18f-4. We expect that the rule's portfolio limitations and asset coverage requirements would provide "guard rails" designed to impose a limit on leverage and to require funds to have qualifying coverage assets to meet their obligations, which should help to limit funds' exposure to some of the risks associated with the use of derivatives. Nonetheless, for funds that engage in more than a limited amount of

³⁸² See *supra* section I.L.D.1.d.

³⁸³ See, e.g., *Mutual Fund Derivative Holdings: Fueling the Need for Improved Risk Management*, JPMorgan Thought Magazine (Summer 2008) ("2008 JPMorgan Article"), available at <http://www.jpmorgan.com/cm/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1158494213964&blobheader=application%2Fpdf&blobnocache=true&blobheadername1=Content>; 2008 IDC Report, *supra* note 72.

³⁸⁴ See *supra* note 27 and accompanying text.

³⁸⁵ See, e.g., 2008 IDC Report, *supra* note 72; *Fund Board Oversight of Risk Management*, Independent Directors Council (Sept. 2011) ("2011 IDC Report"), available at http://www.ici.org/pdf/pub_11_oversight_risk.pdf.

³⁸⁶ See, e.g., 2011 IDC Report, *supra* note 385, at 9.

³⁸⁷ Proposed rule 18f-4(a)(3). As discussed in greater detail below, the derivatives risk management program requirement that we are proposing today would only apply to "derivatives transactions," and not to other senior securities transactions, such as financial commitment transactions as defined under the rule.

³⁸⁸ See proposed rule 18f-4(a)(3).

³⁸⁹ Proposed rule 18f-4(a)(3)(ii).

³⁹⁰ Proposed rule 18f-4(a)(3)(ii)(B).

derivatives use, or that use complex derivatives, we believe that the outside limits set by the proposed portfolio limitations and the protections provided by the asset coverage requirements should be coupled with a formalized risk management program tailored to the ways which funds use derivatives and the specific risks to which funds are exposed.

While we recognize that many funds already engage in significant risk management of their derivatives transactions, we have observed that the quality and extent of such practices vary among funds in that some funds have carefully structured risk management programs with clearly allocated functions and reporting responsibilities while others are left largely to the discretion of the portfolio manager. In light of the dramatic growth in the volume and complexity of the derivatives markets over the past two decades, and the increased use of derivatives by certain funds, we believe that in connection with providing exemptive relief from section 18, it is appropriate to require certain funds to have a formalized risk management program focused on the particular risks of these transactions. We believe that requiring a risk management program that meets the requirements in the proposed rule should serve to establish a standardized level of risk management for funds that engage in more than a limited amount of derivatives use or that use complex derivatives, and thus should provide valuable additional protections for the shareholders of such funds.

1. Funds Subject to the Proposed Risk Management Program Condition

We are proposing that funds that exceed a 50% threshold of notional derivatives exposure would be subject to the specific risk management program condition discussed here. Under section 18, open- and closed-end funds are permitted to engage in certain senior securities transactions, as discussed above, subject to a 300% asset coverage requirement or a 200% coverage requirement for closed-end fund issuance of preferred equity. A mutual fund therefore can borrow from a bank (and a closed-end fund can issue other senior securities) under section 18 provided that the amount of such borrowings (or other senior securities) does not exceed one-third of the fund's total assets, or 50% of the fund's net assets.³⁹¹ This threshold represents a

determination by Congress of an appropriate amount of senior security transactions that funds may achieve through bank borrowings (and certain other transactions in the case of closed-end funds).³⁹²

As discussed previously, for a number of reasons we have determined to propose to permit a fund to engage in derivatives transactions provided it complies with all of the conditions in proposed rule 18f-4. Under the proposal, if a fund exceeds a threshold of 50% notional amount of derivatives transactions, that fund must adopt and implement a formalized risk management program.³⁹³ We believe that a threshold analogous to the statutorily defined threshold for senior securities under section 18 represents a level of derivatives use, which if exceeded, should be managed through such a derivatives risk management program.³⁹⁴ Because we expect that a risk management program should help mitigate the risks associated with a fund incurring obligations from the use of derivatives above the statutory defined level that would be permitted for borrowings, we believe that this requirement is consistent with the exemption we are providing today for these transactions.

While we are proposing that a formalized risk management program would be a requirement only for those funds that exceed the 50% threshold or

value of the total assets of such issuer, less all liabilities and indebtedness not represented by senior securities, bears to the aggregate amount of senior securities representing indebtedness of such issuer." Take, for example, an open-end fund with \$100 in assets and with no liabilities or senior securities outstanding. The fund could, while maintaining the required coverage of 300% of the value of its assets subject to section 18 of the Act, borrow an additional \$50 from a bank; the \$50 in borrowings would represent one-third of the fund's \$150 in total assets, measured after the borrowing (or 50% of the fund's \$100 net assets).

³⁹² As discussed in section III.B.1.c above, we also have considered whether the 50% limitation that Congress established for obligations and leverage through the use of bank borrowings should also be applied to limit the use of derivatives transactions and have noted that derivatives differ in certain respects from borrowings permitted under section 18. See *supra* note 207 and accompanying text.

³⁹³ We note that under the proposed rule, the threshold for implementing a derivatives risk management program would be triggered by the notional exposure of the fund's derivatives transactions only, and would not include the exposure to a fund's financial commitment or other senior securities transactions. This is in contrast to other aspects of the proposed rule's calculations of exposure, which would include in the calculation all senior securities transactions, not just derivatives. Rule 18f-4(a)(4). We are taking this approach because, as discussed throughout this Release, the risks of derivatives transactions often differ in magnitude and kind from the risks of other senior securities transactions.

³⁹⁴ See *supra* section II.D.1.d. See also *supra* note 207 and accompanying text.

that use complex derivatives transactions, all funds that enter into derivatives transactions in reliance on the proposed rule would also be required to manage risks relating to their derivatives transactions through compliance with various other requirements of the proposed rule and other rules under the Act. For example, under our proposal, a fund that engages in even a *single* derivatives transaction would be required to manage the risks of those derivatives transactions by segregating qualifying coverage assets determined at least once each business day.³⁹⁵ This would require the fund each business day to determine the risk-based coverage amount for each of its derivatives transactions which we believe would enable the funds to better manage their risks relating to the use of derivatives. This risk-based coverage amount would be determined in accordance with policies and procedures approved by the fund's board and would represent a reasonable estimate of the amount payable by the fund if it were to exit the derivatives transaction under stressed conditions. Thus, the fund would be required to monitor and manage the potential risk of loss associated with each of its derivatives transactions on a daily basis as part of the fund's determination of its risk-based coverage amounts, and all funds would therefore be required under the proposed rule to make an assessment of potential losses associated with their derivatives transactions under stressed conditions. This risk management requirement applies to every fund that uses derivatives, regardless of whether it is also subject to the formalized derivatives risk management program condition.

In addition, a fund that is not required to establish a formalized risk management program must comply, and monitor its compliance, with the portfolio limitation under which the fund may not permit its derivatives exposure to exceed 50% of the fund's net assets immediately after entering into any derivatives transactions and may not enter into any complex derivatives transactions.³⁹⁶ A fund that uses *any* derivatives would be required to monitor the types and notional amounts of the fund's derivatives transactions and the fund's aggregate exposure to prevent the fund's derivatives exposure from exceeding 50% of net assets and to prevent the fund from entering into complex

³⁹¹ Under section 18(h), "asset coverage" of a class of senior security representing an indebtedness of an issuer means the ratio which the

³⁹⁵ This risk management requirement is discussed in detail in section III.C of this Release.

³⁹⁶ Proposed rule 18f-4(4).

derivatives transactions.³⁹⁷ Thus, funds that are not subject to the proposed formalized risk management program condition would nevertheless need to manage risks relating to their use of derivatives through their compliance with the risk assessment, monitoring, and other regulatory requirements discussed above.

The risks and potential impact of derivatives transactions on a fund's portfolio generally increase as the fund's level of derivatives usage increases.³⁹⁸ When derivatives are used to a significant extent, we expect the risks relating to their use, and the challenge of managing risks relating to expected or intended interactions among derivatives and other investments and managing relationships with counterparties, may increase. Complex derivatives also may involve more significant risks and potential impacts. Conversely, for funds that make only limited use of derivatives and do not use complex derivatives, we expect that the risks and potential impact of these funds' derivatives transactions may not be as significant in comparison to the risks of the funds' overall investment portfolios and may be appropriately addressed by the rule's other requirements, including the requirement to determine risk-based coverage amounts.³⁹⁹ Therefore, we

believe that a formalized risk management program that includes the specific program elements included in the proposed rule is most appropriate for funds that meet a threshold level of derivatives usage (or that use complex derivatives transactions).

Accordingly, proposed rule 18f-4 would not require that a fund adopt a formalized derivatives risk management program if the fund's board determines that the fund will comply, and monitor its compliance, with a portfolio limitation under which the fund limits its aggregate exposure to derivatives transactions to no more than 50% of its NAV and does not use complex derivatives transactions as defined in the rule.⁴⁰⁰ We believe that a fund that limits its exposure to derivatives in such a way (in conjunction with the other requirements of the rule) should be able to limit the derivatives' associated risk so that their usage is consistent with the concerns of the Act.⁴⁰¹ Requiring a formalized program for managing derivatives when a fund engages in non-complex derivatives transactions below the statutorily defined limit established by Congress with respect to senior securities transactions could potentially require funds (and therefore their shareholders) to incur costs that might be disproportionate to the resulting benefits, and thus we are not proposing to require that all funds that use derivatives to any extent implement one. Nonetheless, as discussed in greater detail below, we request comment on whether the risks of derivatives use are significant enough (or significantly different from securities investments) that we should require funds that engage in any derivative use at all to comply with the proposed formalized risk management program condition.

To identify the number of funds that would need to adopt a program under this condition we evaluated the DERA White Paper data and evaluated which funds would be likely to be subject to this proposed condition. Based on this analysis, approximately 10% of the sampled open-end funds (representing

about 10% of such funds' assets under management ("AUM")) and approximately 9% of the sampled closed-end funds (representing about 13% of their AUM) would be required to adopt a program.⁴⁰² We further note that this condition also would effectively sort funds that would need to adopt a program based on fund strategy. For example, approximately 52% of sampled alternative strategy funds (representing around 70% of AUM) would need to implement a program. On the other hand, the analysis shows that only about 6% of sampled funds (representing about 8% of their AUM) that employ more traditional strategies use derivatives in excess of a 50% level.⁴⁰³

This 50% exposure condition would include exposures from derivatives transactions entered into by a fund in reliance on the proposed rule, but would not include exposure from financial commitment transactions or other senior securities transactions entered into by the fund pursuant to section 18 or 61 of the Act. We are proposing to focus this exposure threshold on exposures from derivatives transactions for several reasons. Derivatives transactions generally can pose different kinds of risks than many other kinds of senior securities transactions, in that the amount of a fund's market exposure and payment obligations under many derivatives transactions often will be more uncertain than for other types of senior securities transactions. In contrast, the fund's payment obligation may be largely known and fixed at the time the fund enters into many financial commitment transactions, such as reverse repurchase agreements or firm commitment agreements. In addition, the proposed rule would require a fund that engages in financial commitment transactions in reliance on the rule to maintain qualifying coverage assets equal in value to the fund's conditional and unconditional obligations under its financial commitment transactions.⁴⁰⁴ Requiring a fund to maintain qualifying coverage assets sufficient to cover its full obligations under a financial commitment transaction may effectively address many of the risks that otherwise would be managed through a risk

³⁹⁷ In addition, rule 38a-1 would also require funds to have policies and procedures reasonably designed to prevent the fund from exceeding any other applicable portfolio limitation under the proposed rule. See Compliance Programs of Investment Companies and Investment Advisers, Release Nos. 1A-2204 and 1C-26299 (December 17, 2003). If a fund were to breach the portfolio limitation established by the board, this would likely be a material compliance matter that would be required to be disclosed in writing to the fund's board in the CCO's annual report to the board. We expect that this may serve to further enhance funds' risk management practices. In addition, a fund's exceeding its portfolio limit also could be a serious compliance issue that should be brought to the board's attention promptly. See *infra* note 449.

³⁹⁸ We acknowledge that derivatives can be used for both hedging and speculative purposes, but even if primarily used for hedging purposes, we believe that significant use of derivatives instruments poses additional risks that may need to be assessed, monitored, and managed. See, e.g., David Weinberger, et al., *Using Derivatives: What senior managers must know*, Har. Bus. Rev. (Jan.-Feb. 1995), available at <https://hbr.org/1995/01/using-derivatives-what-senior-managers-must-know>; Sergey Chernenko & Michael Faulkender, *The Two Sides of Derivatives Usage: Hedging and Speculating with interest rate swaps*, J. of Fin. and Quantitative Analysis, (Dec. 2011), available at http://journals.cambridge.org/download.php?file=%2FJFQ%2FJFQ46_06%2FS0022109011000391a.pdf&code=0d15622321dedaa274f024857fd4885c.

³⁹⁹ Funds that are not required to adopt and implement a derivatives risk management program should generally still consider the risks of derivatives, because even small amounts of derivatives may pose significant risks if engaged in by an entity that is an inexperienced user of such instruments or when adverse market events occur.

See, e.g., Rene M. Stulz, *Should we fear derivatives?*, J. of Econ. perspectives (Summer 2004), available at <http://fisher.osu.edu/supplements/10/10402/Should-We-Fear-Derivatives.pdf>.

⁴⁰⁰ Proposed rule 18f-4(a)(4).

⁴⁰¹ Although we believe that any fund that engages in derivatives would likely evaluate the risks of such transactions as part of the adviser's management of the fund's portfolio, we are not proposing that funds that keep their use of derivatives below the 50% threshold be subject to the proposed program requirements under rule 18f-4 unless the fund uses complex derivatives transactions, as discussed below.

⁴⁰² We note that no BDC's identified in the DERA White Paper used derivatives at any level, and thus we do not expect that any BDCs would be required to implement a program under the proposed condition.

⁴⁰³ We note the exception of certain leveraged index ETFs that serve as trading tools and that commonly have notional exposure of 200 or 300% of assets.

⁴⁰⁴ Proposed rule 18f-4(b).

management program. The mark-to-market segregation approach would not be permitted under the proposed rule for financial commitment transactions. Finally, commenters on the Concept Release and on the FSOC Request for Comment have suggested that funds obtain leverage primarily from the use of derivatives and not financial commitment transactions, further indicating that derivatives use poses a different set of challenges than other types of senior securities transactions.⁴⁰⁵

We also are proposing to require a fund that engages in *any* complex derivatives transaction as defined under the proposed rule to implement a program. We believe that complex derivatives transactions pose special risk management challenges in light of their complicated structure and the difficulties they can pose in evaluating their impact on a fund's portfolio. As discussed in more detail above in section III.B.1, a complex derivatives transaction may expose a fund to greater risk of loss and can have market risks that are difficult to estimate due to the effect of multiple contingencies, path dependency or other non-linear factors associated with complex derivatives. We believe that a fund that engages in complex derivatives transactions under the proposed rule should be required to implement a derivatives risk management program to manage these risks as they are more complex and difficult to assess and manage than typical derivatives. Because of their potentially highly asymmetric and unpredictable outcomes, complex derivatives transactions may pose risks that are not as correlated to the size of a fund's exposure, and thus we believe that if a fund engages in any of these transactions, those risks should be assessed and managed through a formalized derivatives risk management program overseen by a risk manager and the funds' board. Accordingly, we are proposing that a fund that engages in any amount of complex derivatives

transactions adopt a derivatives risk management program.

We request comment on our proposed approach for identifying funds that must comply with the program requirement for funds that engage in a limited amount of derivatives transactions.

- Should the formalized derivatives risk management program apply not just to derivatives transactions, but to all senior securities transactions? Should it apply to just derivatives and financial commitment transactions? Do commenters agree that derivatives transactions generally can pose different kinds of risks than many other kinds of senior securities transactions, and that requiring a fund to maintain qualifying coverage assets sufficient to cover its full obligations under a financial commitment transaction may effectively address many of the risks that otherwise would be managed through a risk management program?

- As we are proposing, should we exclude from the formalized program requirement funds that engage in a limited amount of derivatives transactions? Are the risks associated with derivatives use significant enough (or significantly different from securities investments) that a fund should be required to adopt a program if it engages in any derivatives transactions? Should we instead require any fund that engages in derivatives transactions to any extent be subject to the program requirement?

- Should we require a formalized risk management program for funds that engage in even lower levels of derivatives use than under the proposed condition if they rely on the proposed rule? Should this condition not be based on the statutory threshold but instead on a different threshold? For example, are the risks of derivatives use significant enough that we should require a fund to have a program at a lower threshold, for example at 0%, 10%, 25%, or 33% of net assets? On the other hand, are the risks of derivatives use manageable enough that we should increase the threshold to avoid requiring funds to incur costs associated with a derivatives risk management program unless they make more extensive use of derivatives? For example, should the threshold for exposure instead be 66% or 75% of net assets? If we were to use a higher threshold, would that permit funds to obtain levels of derivative exposure that could pose more substantial risks to the fund before the fund would be required to establish a formalized derivatives risk management program?

- The 50% exposure condition only includes exposure from a fund's

derivatives transactions but not its financial commitment transactions or other senior securities transactions. Do commenters agree that it is appropriate to exclude exposures from other senior securities transactions in determining whether to require a formalized derivatives risk management program? Should we treat particular types of derivatives transactions or financial commitment transactions differently for purposes of the 50% exposure condition? Should we, for example, require a fund to include the exposure associated with financial commitment transactions other than reverse repurchase agreements, which may be more similar to bank borrowings and thus may not involve some of the risks and uncertainties associated with other senior securities transactions?

- Should we vary the condition based on fund characteristics or the types of derivatives transactions? For example, should we provide tiered thresholds based on a fund's assets under management, requiring funds of a larger size to be subject to a lower threshold? Would such a tiered threshold provide material protections for investors at a reasonable cost? Would it create disparate competitive effects on different sized funds? Is the size of the fund an appropriate metric to scale requirements designed to manage the risk of derivatives use? Should we provide for higher thresholds if a fund engages only in certain kinds of derivatives transactions? If so, then what types of derivatives transactions would be expected to present less risk?

- Should we use some test other than an exposure threshold for excluding funds that make a limited use of derivatives from the program requirement? For example, should we use a risk-based test? If so, should we specify what kind of test (e.g., VaR, expected shortfall, or some other metric) and what threshold should we use? Should we require a specified threshold at all, or should we instead allow a board to determine a risk-based threshold?

- As we are proposing, should we require that all funds that engage in any complex derivatives transactions implement a program? Why or why not? Should we instead permit funds to obtain a limited amount of exposure through complex derivatives transactions (e.g., 1% or 5% of net assets) before being required to implement a derivatives risk management?

As discussed above, a risk management program should be tailored to the scale of the fund's usage of derivatives, as well as the particular

⁴⁰⁵ See, e.g., Comment Letter of T. Rowe Price Associates, Inc. on the FSOC Request for Comment (Mar. 25, 2015) (FSOC 2014-0001) ("T. Rowe Price FSOC Comment Letter"), available at <http://www.regulations.gov/#!documentDetail;D=FSOC-2014-0001-0038>, at 3; Comment Letter of State Street Corporation on the FSOC Request for Comment (Mar. 25, 2015) (FSOC 2014-0001) ("State Street FSOC Comment Letter"), available at <http://www.regulations.gov/#!documentDetail;D=FSOC-2014-0001-0042> at 11; Oppenheimer Concept Release Comment Letter, at 1-2; Comment Letter of Independent Directors Council on Concept Release (Nov. 7, 2011) (File No. S7-33-11) ("IDC Concept Release Comment Letter"), available at <http://www.sec.gov/comments/s7-33-11/s73311-24.pdf>, at 2-4.

risks of the derivatives used by the fund. Therefore, funds that engage in significant amounts of derivatives transactions, or that use complex derivatives transactions, are likely to have more detailed and complex programs, while funds that make more minimal use or limit their use to more standard derivatives may have more streamlined programs tailored to their particular usage. As proposed, all of the elements of the proposed risk management program, however, would apply equally to all funds that exceed the 50% threshold.⁴⁰⁶ We expect that providing a single set of requirements for all funds that engage in more than a limited amount of derivatives transactions or that use complex derivatives transactions should provide a consistent baseline for these funds' risk management programs. Nonetheless, we acknowledge that this approach may cause certain funds to bear higher costs in complying with all of the requirements of the program than if we were to further scale or otherwise tailor the program depending on the amount or type of fund derivatives use.

- We request comment on whether we should further tailor or scale the program depending on the fund's use of derivatives. For example, should we have multiple tiered thresholds, with differing program requirements tailored to each level of use? If so, which thresholds should we use and which program elements should be included at each level? Should we otherwise tier or scale the program such as, for example, by requiring certain additional program elements for funds that engage in specific types of derivatives? If so, how should we tailor such a requirement? For example, should we require funds that only engage in certain simple types of derivatives not to have a derivatives risk manager?

- If we were to eliminate the proposed 50% threshold and require funds that engage in any amount of derivatives transactions to comply with the risk management program condition, should we provide a more streamlined or simpler program that does not include all of the elements of the full program we are proposing today? If so, which elements should we not include in such a more limited program? If we were to provide for a more limited

program for such funds, should we continue to require all of the proposed program elements for funds that use derivatives above the proposed 50% threshold?

2. Required Elements of the Program

Under the proposal, a derivatives risk management program must include, at a minimum, four specified elements, discussed in detail below.

a. Assessment of Risks

The first proposed element of the program would be to require funds subject to the condition to have policies and procedures reasonably designed to assess the risks associated with the fund's derivatives transactions, including an evaluation of potential leverage, market, counterparty, liquidity, and operational risks, as applicable, and any other risks considered relevant.⁴⁰⁷ This element would require funds to engage in a process of identifying and evaluating the potential risks posed by their derivatives transactions. This element provides flexibility for funds to customize their derivatives risk management programs so that the scope, and related costs and burdens, of such programs are appropriate to manage the anticipated derivatives risks faced by a particular fund. Thus, in complying with this element, a fund generally should identify the types of derivatives it currently uses, as well as any potential derivatives transactions it reasonably expects to use in the future and then evaluate the risks of engaging in those transactions as contemplated.

This program element would require policies and procedures for evaluating certain identified potential risks that are common to most derivatives transactions, as appropriate.⁴⁰⁸ The first

is the potential leverage risks associated with a fund's derivatives transactions. Leverage risk, which includes the risk associated with potential magnified effects on a fund resulting from changes in the market value of assets underlying its derivatives transactions where the value of the underlying assets exceeds the amount paid by the fund under the derivatives transactions, would need to be assessed under the fund's risk management program.⁴⁰⁹ Leverage can be calculated in different ways, and the appropriateness of a leverage metric used by the fund, if any, to assess leverage risk may depend on various factors, such as a fund's strategy, the fund's particular investments and investment exposures, and the historical and expected correlations among the fund's investments.⁴¹⁰

While the proposed exposure limitations included in each of the portfolio limitations are designed to provide a limit on the amount of leverage a fund may obtain by placing an outside limit on the overall amount of market exposures that a fund can achieve through derivatives transactions, the exposure limitations are not designed to be used as a precise measure of the leverage used by funds. A fund, in assessing the leverage risk associated with its derivatives, could consider using metrics for measuring the extent of its leverage, and which metrics to use, in light of these and other relevant factors.⁴¹¹ Assessing leverage risks might include, for example, a review of the fund's derivatives transactions to evaluate the leverage resulting from the fund's derivatives transactions, whether such leverage is consistent with any

⁴⁰⁹ See, e.g., 2008 IDC Report, *supra* note 72, at 12.

⁴¹⁰ See, e.g., An Overview of Leverage, *supra* note 167 (distinguishing between financial, construction and instrument leverage and measurement of leverage using gross market exposure vs. net market exposure). See also Off-Balance-Sheet Leverage IMF Working Paper, *supra* note 79 (discussing means of measure leverage in various derivatives and other off-balance-sheet transactions). See also Ang, Gorovyy & Inwegen, *supra* note 72 (discussing differences among gross leverage, net leverage and long-only leverage calculations as applied to long-only, dedicated long-short, general leveraged and dedicated short funds).

⁴¹¹ We note that commenters have suggested a variety of methods of calculating leverage for various purposes. For example, one commenter on our recent proposal to modernize reporting for investment companies suggested a possible methodology for calculating leverage that might be reported to the Commission. See, Comment Letter of Blackrock on Data Gathering Release (Aug. 11, 2015) (File No. S7-09-15), available at <http://www.sec.gov/comments/s7-09-15/s70915-39.pdf>, at 20. We request comment below in section II.G on whether we should require the reporting of leverage (including potentially using this approach) to us on N-PORT.

⁴⁰⁶ Although, as discussed previously, we note that all funds, even those not subject to the formalized risk management condition, would be required to manage the risks associated with their derivative transactions through compliance with our regulatory requirements, and we request comment on whether we should apply the program's requirements to all funds that engage in derivatives transactions at any level.

⁴⁰⁷ While these risks are not unique to a fund's use of derivatives and may be associated with the fund's investments in other instruments as well, the proposed condition would require that the program assess and manage the risks associated with the derivatives transactions engaged in by the fund, but would not generally apply to other fund transactions. Proposed rule 18f-4(a)(3).

⁴⁰⁸ Proposed rule 18f-4(a)(3)(i)(A). See also *Comprehensive Risk Management of OTC Derivatives: A Tricky Endeavour*, Numerix (July 16, 2013) ("Comprehensive Risk Management of OTC Derivatives"), available at <http://www.numerix.com/comprehensive-risk-management-otc-derivatives-tricky-endeavor>; *Statement on best practices for managing risk in derivatives transactions*, RMA ("Statement on best practices for managing risk in derivatives transactions"), available at <http://www.rmahq.org/securities-lending/best-practices>; 2008 IDC Report, *supra* note 72; *Derivatives Danger: Internal auditors can play a role in reigning in the complex risks associated with financial instruments*, Lawrence Metzger, FSA Times ("FSA Times Derivatives Dangers"), available at <http://www.theiaa.org/fsa/2011-features/derivatives-danger>.

guidelines established by the fund, and whether the leverage used by the fund is consistent with its disclosure to investors.⁴¹²

The second risk that the fund would be required to have policies and procedures reasonably designed to evaluate is the market risk associated with its derivatives transactions. Market risk includes the risk related to the potential that markets may move in an adverse direction in relation to the fund's derivatives positions and so adversely impact fund returns and the fund's obligations and exposure.⁴¹³ Evaluating market risk could include examining any models or metrics used to measure and monitor market movements, reviewing historical market movements to help develop an understanding of the potential impact of future market movements, and assessing the method and sources for receiving information about current events that may have market impacts. Scenario or stress testing can also serve as an important tool in assessing market risk. To effectively monitor market risk, the adequacy of any assumptions and parameters underlying a fund's techniques for estimating potential market risk should generally be reviewed periodically against actual experience and updated market information, especially during periods of heightened market volatility.⁴¹⁴

The third risk the fund would be required to have policies and procedures reasonably designed to evaluate is counterparty risk. This might include, for example, an evaluation of the risk that the counterparty on a derivatives transaction may not be willing or able to perform its obligations under the derivatives contract, and the related risks of having a concentration of transactions with any one such

counterparty. Assessing counterparty risk could involve reviewing the creditworthiness or financial position of significant derivatives counterparties, understanding the level of counterparty concentration in the fund, and evaluating contractual protections, such as collateral or margin requirements, netting agreements and termination rights.⁴¹⁵

The fourth risk the fund would be required to have policies and procedures reasonably designed to evaluate is liquidity risk. Under this program element, a fund should assess the potential liquidity of the fund's derivatives positions, an evaluation which might include both normal and stressed scenarios.⁴¹⁶ Assessing liquidity risk could involve understanding the secondary market liquidity of the fund's derivatives holdings; whether the fund has the right to terminate a particular derivative or the ability to enter into offsetting transactions; the relationship between a particular derivative and other portfolio positions of the fund, including whether the derivative is intended to hedge risks relating to other positions; and the potential effect of market stress events on the liquidity of the fund's derivatives transactions.

In addition to the liquidity of the derivatives positions themselves, assessing liquidity risk generally should include an evaluation of the potential liquidity demands that may be imposed on the fund in connection with its use of derivatives. As discussed in more detail above in section III.C, each fund would be required under the proposed rule to manage the risks associated with its derivatives transactions by maintaining qualifying coverage assets to cover the funds' mark-to-market coverage amount and risk-based coverage amount with respect to the fund's derivatives transactions. In addition, counterparties or applicable regulations generally require funds to

post variation margin when derivatives positions move against the fund, and the coverage amounts required under the proposed rule can be expected to increase during periods of increased market stress or volatility. A risk management program, as part of the assessment of liquidity risk, generally should consider how the fund would address potential liquidity demands during reasonably foreseeable stressed market periods.⁴¹⁷

Finally, the fund would be required to have policies and procedures reasonably designed to assess the operational risks associated with the fund's derivatives transactions. Operational risk encompasses a wide variety of possible events, including risks related to potential documentation issues, settlement issues, systems failures, inadequate controls, and human error.⁴¹⁸ Policies and procedures for evaluating such risks could include, for example, assessments of the robustness of relevant systems and procedures and reviews of training processes.

These five identified potential categories of risk discussed above are common to many derivatives transactions. However, this proposed element would not limit this assessment to an examination of only those identified risks. This element should also generally include evaluation of other applicable risks associated with derivatives transactions. For example, some derivatives transactions could pose certain idiosyncratic risks, such as the legal risk associated with the potential that a bespoke OTC contract⁴¹⁹ or netting agreement might not be held to be legally valid or binding or compliant with other legal requirements, or that have provisions that may be one-sided or difficult to enforce in the event of a counterparty's default.⁴²⁰ Such risks should also be

⁴¹² See *supra* note 167 and section III.B.1.d regarding ways that commenters have noted that they engage in an evaluation of leverage used by funds.

⁴¹³ Market risk should be considered together with leverage risk because leveraged exposures can magnify such impacts. See, e.g., Derivatives and Risk Management Made Simple, NAPP (Dec. 2013), available at https://www.jpmmorgan.com/cm/BlobServer/is_napfms2013.pdf?blobkey=id&blobwhere=1320663533358&blobheader=application/pdf&blobheadername1=Cache-Control&blobheadervalue1=private&blobcol=urldata&blobtable=MungoBlobs.

⁴¹⁴ See, e.g., *Top ten best practices for managing model risk*, FinCAD, available at <http://www.fincad.com/resources/resource-library/whitepaper/top-10-best-practices-managing-model-risk>. In addition, as discussed in more detail below, one of the elements of the proposed program would require the fund to adopt and implement written policies and procedures to periodically review and update the program and any tools that are used as part of the program. See *infra* section III.D.2.d.

⁴¹⁵ See, e.g., Nils Beier, et al., *Getting to Grips with Counterparty Risk*, McKinsey Working Papers on Risk, Number 20 (June 2010).

⁴¹⁶ We have recently proposed a comprehensive set of reforms designed to enhance funds' liquidity management processes, which includes evaluating the liquidity of fund derivative holdings, as well as a definition of liquidity risk. See *Liquidity Release*, *supra* note 5. If we were to adopt the liquidity risk management program, we expect that such program would serve as a complement to the proposed derivatives risk management program with respect to assessing the liquidity of fund derivatives and that these programs might coordinate and overlap regarding assessment of liquidity risk for derivatives. We note that overlapping activities associated with the program would not need to be duplicated for each program, but that a fund might assess and monitor liquidity risk in a holistic way, consistent with the individual requirements of each program.

⁴¹⁷ See, e.g., Peter Neu & Pascal Vogt, *Liquidity Risk Management*, The Boston Consulting Group (Oct. 2010), available at <http://www.bostonconsulting.com.au/documents/file93481.pdf>; Board of the International Organization of Securities Commissions, *Principles of Liquidity Risk Management for Collective Investment Schemes*, OICU-IOSCO (Mar. 2013), available at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD405.pdf>.

⁴¹⁸ See, e.g., 2008 IDC Report, *supra* note 72; Statement on best practices for managing risk in derivatives transactions, *supra* note 408.

⁴¹⁹ Because derivatives contracts that are traded over the counter are not standardized, they bear a certain amount of legal risk in that poor draftsmanship, changes in laws, or other reasons may cause the contract to not be legally enforceable against the counterparty. See, e.g., *Comprehensive Risk Management of OTC Derivatives*, *supra* note 408.

⁴²⁰ For example, many derivatives contracts and prime brokerage agreements that hedge funds and other counterparties had entered into with Lehman

included in the fund's risk assessment, if applicable.

We request comment on all aspects of this proposed element of the program.

- Should we require policies and procedures to include an assessment of particular risks based on an evaluation of certain identified risk categories as proposed? If not, why?

- Are the categories of risks that we have identified in the proposed rule appropriate? Should we remove any of the identified risk categories? Should we provide further guidance regarding the assessment of any of these risks?

- Should we add any other categories of required risks that would be required for each fund to have policies and procedures reasonably designed to evaluate as part of its program? If so what additional categories and why?

- Should we require policies and procedures for any additional evaluation of derivatives positions that are used by a fund to provide a hedge for, or otherwise reduce risks with respect to, other investments by the fund, to evaluate the effectiveness of the hedging or risk reduction?

b. Management of Risks

The second proposed element of the program would be a requirement that the fund have policies and procedures reasonably designed to manage the risks of its derivatives transactions, including by monitoring whether those risks continue to be consistent with any investment guidelines established by the fund or the fund's investment adviser, the fund's portfolio limitation established under the proposed rule, and relevant disclosure to investors, and informing portfolio management of the fund or the fund's board of directors, as appropriate, regarding material risks arising from the fund's derivatives transactions.⁴²¹ Implementing this element might include building or enhancing portfolio tracking systems, exception reporting, or other mechanisms designed to monitor the risks associated with the fund's derivatives transactions and provide current information regarding those

Brothers included cross-netting that allowed for payments owed to and from different Lehman affiliates to be offset against each other, and cross-liens that granted security interests to all Lehman affiliates (rather than only the specific Lehman entity entering into a particular transaction). In 2011, the U.S. Bankruptcy Court for the Southern District of New York held that cross-affiliate netting provisions in an ISDA swap agreement were unenforceable against a debtor in bankruptcy. *In re Lehman Brothers Inc.*, Bankr. Case No. 08-01420 (JPM) (SIPA), 458 B.R. 134, 1135-137 (Bankr. S.D.N.Y. Oct. 4, 2011).

⁴²¹ Proposed rule 18f-4(a)(3)(i)(B).

risks to relevant personnel.⁴²² We believe that various kinds of stress testing may also be useful tools to monitor and manage risks.

Under this element, a fund would be required to have policies and procedures reasonably designed to manage the risks of derivatives transactions, but this element would not require a fund to impose particular risk limits.⁴²³ Instead, it would require a fund to have policies and procedures reasonably designed to manage the risks of derivatives transactions so that they are consistent with any investment guidelines established by the fund or the fund's investment adviser and the fund's portfolio limitations, disclosure, and investment strategy.⁴²⁴

Funds may use a variety of approaches in developing policies and procedures to manage the risks associated with the fund's derivatives transactions.⁴²⁵ As a preliminary step, a fund would likely review its relevant disclosure and investment guidelines to establish the appropriate risks that the fund could undertake through derivatives transactions (for example through specified allowable types of derivatives transactions or overall limits). This review could involve establishing an appropriate limit for allowable fund risk, and its relationship to the risks associated with the derivatives transactions in which the

⁴²² Such systems may provide notifications of red flags, such as frequent or unusual overrides of policies. Funds may wish to consider whether such monitoring mechanisms are sophisticated enough to identify outlier activity caused by unapproved employee activity (such as a rogue trader). See, e.g., Geoff Kates, *No Surprises-Combating Rogue Trading*, LEPU, available at http://www.isda.org/c_and_a/ppt/Rogue_Traders_presentation.ppt; Banking Tech, *Stopping the rogues: Reactions to the UBS rogue trader* (Oct. 6, 2011), available at <http://www.bankingtech.com/48103/Stopping-the-rogues-Reactions-to-the-UBS-rogue-trader/>.

⁴²³ See, e.g., Mutual Fund Directors Forum, *Risk Principles for Fund Directors: Practical Guidance for Fund Directors on Effective Risk Management Oversight* (Apr. 2010) ("MFDF Guidance"), available at http://www.mfdf.org/images/Newsroom/Risk_Principles_6.pdf.

⁴²⁴ Investment guidelines may be established by the fund or the adviser and approved by the board and typically provide a set of limits on the fund's investment activities. These guidelines may be of varying degrees of specificity and typically are distinct from the fund's disclosure to investors. The rule does not require funds to establish such guidelines, but we understand that most funds do have such guidelines in place. This element would require that funds manage the risks of their derivatives transactions so that they are consistent with any such established guidelines, as well as being consistent with relevant portfolio limitations and disclosure.

⁴²⁵ See, e.g., Comprehensive Risk Management of OTC Derivatives, *supra* note 408; Statement on best practices for managing risk in derivatives transactions, *supra* note 408; 2008 IDC Report, *supra* note 72.

fund engages.⁴²⁶ Funds today use a variety of models or methodologies to measure the risks associated with these transactions (for example, VaR, stress testing, or horizon analysis) to help manage those risks.

In managing and monitoring the relevant risks, a fund might consider establishing written guidelines describing the scope and objectives of the fund's use of derivatives. A fund could also consider establishing an "approved list" of specific derivative instruments or strategies that may be used, as well as a list of persons authorized to engage in the transactions on behalf of the fund.⁴²⁷ Funds may also wish to consider establishing corresponding investment size controls or limits for approved transactions across the fund, along with appropriate risk measurement monitoring mechanisms designed to prevent the fund from violating any portfolio limitations or investment guidelines, along with implementing tools to monitor such restrictions. Establishing clear risk management processes for approving exceptions to any established limits, with oversight and approval of any exceptions from senior management, generally is also a key aspect of effective risk management, and something funds may wish to consider implementing. Effective risk management generally also may include evaluation of counterparties, for example, through review of their financial position, overall trading relationship with the fund, and total credit exposure.⁴²⁸ Funds may wish to consider establishing an approved list of counterparties, or trade-by-trade decision making in some cases.⁴²⁹ In addition, counterparty risk mitigation also could include requirements related to the type and amount of collateral posted.

Managing derivatives transaction risk could also involve reviewing existing, and potentially establishing new, contingency plans and tools in case of adverse market or system events. This could include establishing committed

⁴²⁶ This could also include creating maximum effective leverage limits for the fund, if such limits are determined to be useful tools for managing the risks of derivatives transactions.

⁴²⁷ Funds may wish to provide new instruments (or instruments newly used by a fund) additional scrutiny. See, e.g., MFDF Guidance, *supra* note 423, at 8.

⁴²⁸ See, e.g., Christina Ginfida, *Mitigating Counterparty Risk in Derivatives Trades*, Treasury & Risk (June, 2013), available at <http://www.treasuryandrisk.com/2013/06/19/mitigating-counterparty-risk-in-derivatives-trades>.

⁴²⁹ An important consideration may be whether a counterparty is a central counterparty or a counterparty dealing in over the counter instruments.

reserve lines of credit, evaluating potential legal remedies in the case of counterparty default, and having robust systems (including back-ups as appropriate) across front, mid, and back office operations. Funds may also consider establishing processes to manage the particular accounting, custody, legal, and other operational risks posed by derivatives transactions.

The element also would require policies and procedures for informing the portfolio manager or board of risks associated with the fund's derivatives transactions.⁴³⁰ We believe that such communication would generally be a key part of any risk management and monitoring program, because information about relevant risks should not remain solely with the derivatives risk manager, but should be shared up the chain as needed so that appropriate action to address risks can be taken if warranted. We understand that funds today use various tools (for example, risk dashboards) to identify evolving risks that may serve as a key signal indicating when information should be provided to relevant parties. We believe that this communication requirement should help ensure that information about derivatives transactions risks is not siloed, but instead is shared with parties who can take actions as needed to mitigate risks. This requirement is also intended to encourage the derivatives risk manager to engage in communication with relevant parties on a current and ongoing basis as needed, and not limit communication solely to quarterly reports.

The potential risk management and monitoring mechanisms discussed above are just examples of the techniques funds might consider including in their policies and procedures to manage the risks of their derivatives transactions under this proposed element. To effectively manage its own particular risks, a fund generally should carefully review its current and planned use of derivatives well as any relevant limitations (including internal limitations established by the fund's adviser), and develop risk management tools and processes effectively tailored to its own circumstances.

We request comment on the proposed element of the program requiring funds to have policies and procedures reasonably designed to manage the risks of the derivatives transactions.

- Should we establish any additional risk management requirements within the program element itself, or should we keep it generally principles based as we

are proposing? For example, should we specifically require the creation of approved transactions lists or derivative size controls? Should we require that funds use specific risk management tools such as stress testing? If so, what tools should we require?

- Should we require that a fund institute specific investment guidelines regarding its use of derivatives transactions? If so what would those guidelines be?

- Should we require the derivatives risk manager to provide material risk information to portfolio management or the board as appropriate, or would this be generally included in the quarterly reports provided by the officer to the board? If we did not include such an information requirement, would risk information potentially become stale and not be acted upon in a timely manner?

c. Segregation of Functions

We are also proposing to require, as an element of the program, that a fund have policies and procedures reasonably designed to reasonably segregate the functions associated with the program from the portfolio management of the fund.⁴³¹ We believe that independence of risk management from portfolio management should promote objective and independent risk assessment to complement and cross check portfolio management,⁴³² and that maintaining separation of these functions should enhance the protections provided by the program. We understand that funds today often make efforts to reasonably segregate risk management from portfolio management and believe that this proposed requirement would therefore be consistent with existing practices. Many commentators have observed that independent oversight of derivatives activities by compliance and internal audit functions is valuable.⁴³³ Because fund management personnel may be compensated in part based on the returns of the fund they manage, the incentives of portfolio managers may not always be consistent with the restrictions imposed by a risk management program. Thus, we believe that keeping the functions separate should help mitigate the possibility that

the program's effectiveness could be diminished if it were not independent of portfolio management. Separation of functions creates important checks and balances and can be instituted through a variety of methods such as independent reporting chains, oversight arrangements, or separate monitoring systems and personnel.⁴³⁴

However, this segregation of functions is not meant to indicate that the derivatives risk manager and portfolio management should be subject to a communications "firewall."⁴³⁵ We recognize the important perspective and insight to the fund's use of derivatives that the portfolio manager can provide and would expect that the derivatives risk manager would work closely with portfolio management as he or she implements all aspects of the program. We believe that regular communication between the risk manager and portfolio management should be a part of any well-functioning program. Indeed, as discussed above, the derivatives risk management program would require that risk management personnel monitor the risks associated with the fund's derivatives transactions and inform portfolio management (or the fund's board) regarding those risks as appropriate.

We request comment on the proposed element requiring funds to maintain controls reasonably segregating the program functions from portfolio management.

- Do commenters agree that segregation of risk management functions from portfolio management would enhance the protections provided by the proposed derivatives risk management program requirement?

- Would this element pose difficulties for particular entities, for example, funds managed by small advisers? Should we provide any additional clarification of what it means to have reasonable segregation of

⁴³⁴ Another important segregation tool may be ensuring that the compensation of the risk management oversight personnel is not tied to or dependent on the performance of the fund. *See, e.g.,* Raffaele Scalcione, *The Derivatives Revolution: a trapped innovation and a blueprint for change* (2011), at 334.

⁴³⁵ In particular, we recognize that this segregation requirement may pose challenges for certain entities that may have a limited number of employees. In such cases, the program should still have policies and procedures designed to reasonably segregate the functions of the program from fund portfolio management. As noted previously, however, the proposed rule would require reasonable segregation, not complete segregation of functions. We also note that the derivatives risk manager would not be permitted to be a portfolio manager of the fund, which we believe is likely to encourage reasonable segregation of functions as a result of such separation of roles.

⁴³¹ Proposed rule 18f-4(a)(3)(i)(C).

⁴³² *See, e.g.,* Comptroller of the Currency Administrator of National Banks, *Risk Management of Financial derivatives: Comptroller's handbook*, (Jan. 1997), at 9 (discussing the importance of independent risk management functions in the banking context).

⁴³³ *See, e.g.,* COSO, *Internal Control Issues in Derivatives Usage*, available at <http://coso.org/documents/Internal%20Control%20Issues%20in%20Derivatives%20Usage.pdf>; *see also*, FSA Times Derivatives Dangers, *supra* note 408.

⁴³⁰ Proposed rule 18f-4(a)(3)(i)(B)(iii).

functions in such cases? If so, what changes should we make?

- Are there other ways to incentivize objective and independent risk assessment of portfolio strategies that we should consider?

d. Periodic Review

The fourth element of the proposed program is that a fund would need to have policies and procedures reasonably designed to periodically (but at least annually) review and update the program, including any models (including any VaR calculation models used during the covered period), 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.⁴³⁶ Under the proposed derivatives risk management program requirement, each fund would need to develop and adopt policies and procedures to review the fund's derivatives risk, tailored as appropriate to reflect the fund's particular facts and circumstances. As part of this program, funds are likely to use a variety of models, tools, and policies and procedures as part of its implementation. The derivatives markets are dynamic and evolving, and tools and processes should be reviewed and modified as appropriate.

We believe that the periodic review of a fund's derivatives risk management program is necessary to determine whether, in light of current circumstances, these risks are appropriately being addressed. The proposed program review requirement would require each fund to develop and adopt procedures to annually review and update the fund's derivatives risk management program. This review and update would need to include any models (including any VaR calculation models used during the covered period),⁴³⁷ measurement tools, or policies and procedures that are part of, or used in, the program to evaluate their effectiveness and reflect changes in risks relating to the use of derivatives. However, beyond this, proposed rule 18f-4 would not include prescribed review procedures or incorporate specific developments that a fund must consider as part of its review. A fund might generally consider whether its periodic review procedures should

include procedures for evaluating regulatory, market-wide, and fund-specific developments affecting its program.

We are also proposing that this periodic review take place at least annually. We believe that the program should be reviewed and updated on at least an annual basis because the risks of derivatives transactions and tools available change and evolve rapidly. An annual review is a minimum requirement, but a fund should consider whether more frequent reviews are appropriate depending on the circumstances. We expect that such a review and update should take place frequently enough to take into account the particular risks that may be presented by the fund's use of derivatives, including the potential for rapid or significant increases in risks in changing market conditions.

We request comment on the proposed element requiring funds to periodically review and update the program.

- Do commenters agree that the rule should specifically require that a fund periodically review and update the program and any tools that are used as part of the program as proposed?
- As proposed, should we require this review to take place at least annually, or should we require a more frequent review, such as quarterly (to coincide with proposed reporting to the fund's board discussed below)? Should we instead not prescribe a minimum frequency for the periodic review and update?
- Are there certain review procedures that the Commission should require and/or on which the Commission should provide guidance? Should the Commission expand its guidance on regulatory, market-wide, and fund-specific developments that a fund's review procedures might cover?

3. Administration of the Program

Proposed rule 18f-4 would expressly require a fund to designate an employee or officer of the fund or the fund's investment adviser (who may not be a portfolio manager of the fund) responsible for administering the policies and procedures of the derivatives risk management program, whose designation must be approved by the fund's board of directors, including a majority of the directors who are not interested persons of the fund.⁴³⁸ We

believe that having a designated individual responsible for managing the program should enhance its accountability and effectiveness. The derivatives risk manager may also have other roles, including, for example, serving as the fund's chief compliance officer or chief risk manager (if it has one).⁴³⁹ Under the proposed rule, the derivatives risk manager must be an employee of the fund or its investment adviser, but may not be a portfolio manager for the fund.⁴⁴⁰ We recognize that some small advisers may have a limited number of employees or officers who are not portfolio managers of the fund. In such a case, the fund's chief compliance officer might be designated as the program's risk manager (with assistance from third parties as appropriate) or the fund or adviser may determine that they need to hire new personnel to administer the program. In any event, the derivatives risk manager should generally be sufficiently knowledgeable about the risks and use of derivatives that he or she can effectively fulfill the responsibilities of their position.

For the same reasons discussed above regarding the maintenance of controls that segregate functions of the program from portfolio management, we believe that independence of the derivatives risk manager is important for a well-functioning program.⁴⁴¹ If a derivatives risk manager were a person making portfolio management decisions, the risk manager may be influenced to selectively apply or otherwise weaken or not fully comply with the program's requirements if the restrictions of the program potentially conflict with the preferred investment strategy of the portfolio manager.

Unlike the chief compliance officer under rule 38a-1, proposed rule 18f-4

the derivatives risk management program condition would apply only to a limited subset of funds that choose to use derivatives to obtain exposure exceeding 50% of the fund's net assets (or that choose to use complex derivatives), while all open-end funds (other than money market funds) and ETFs would be required to have a liquidity program under proposed rule 22e-4. As noted above, we believe that the risks of derivatives transactions are complex and significant. Having a specific person designated as responsible for administering the program rather than a committee or group should help to more clearly delineate lines of responsibility and oversight over these risks for those funds that choose to engage in them.

⁴³⁹ See, e.g., Investment Company Institute, *Chief Risk Officers in the Mutual Fund Industry: Who are they and what is their role within the organization* (2007), available at <http://www.ici.org/pdf/21437.pdf>.

⁴⁴⁰ A fund could also formally designate an employee or officers of the fund's sub-adviser to be responsible for administering the derivatives risk management program.

⁴⁴¹ See, e.g., MFDF Guidance, *supra* note 423.

⁴³⁶ Proposed rule 18f-4(a)(3)(i)(D).

⁴³⁷ Because of the importance of VaR calculations in the proposed rule for funds that operate under the risk-based portfolio limitation, the proposed element would specifically require that any VaR models used by the fund during the covered period be included as part of this periodic review and update.

⁴³⁸ Proposed rule 18f-4(a)(3)(ii)(C). This would differ from the approach taken in our recent liquidity rulemaking proposal, which would not require the designation of a specific person to administer the program, but would instead allow the designation of the fund's adviser or multiple employees to administer the program. We note that

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.⁴⁴²

We request comment on the proposed requirement that a program be administered by a derivatives risk manager.

- Under the proposed rule, the derivatives risk manager may not act as a portfolio manager of the fund. Do commenters agree that this is appropriate and would improve the effectiveness of the program? If not, why?

- Under the proposed rule, a specific person who is an employee or officer of the fund or its adviser would be designated as the risk manager. Is this appropriate? Should we instead allow the fund to designate the adviser as a whole or a group of people (such as a risk committee) as the program's risk manager?

- Is it appropriate to specify that the derivatives risk manager may not be a portfolio manager for the fund and must be an employee or officer of the fund or its adviser? Would any small fund complexes have difficulty meeting the proposed requirement?

- Rule 38a–1(c) prohibits officers, directors, and employees of the fund and its adviser from, among other things, coercing or unduly influencing a fund's CCO in the performance of their duties. Should we include such a prohibition on unduly influencing a fund's derivatives risk officer in the proposed risk management condition? Why, or why not? Should the Commission prohibit any officers, directors, or employees of a fund and its adviser from, directly or indirectly, taking any action to coerce, manipulate, mislead, or fraudulently influence the derivatives risk officer in the performance of his or her responsibilities?

- This requirement would effectively bar funds from outsourcing the administration of the derivatives risk manager to third parties. Is this appropriate, or should we instead allow third parties to administer the program

as some funds and investment advisers do with respect to their chief compliance officer? Would allowing third parties to act as risk managers enhance the program by allowing specialized personnel to administer the program or detract from it by allowing for a risk manager who may not be as focused on the specific risks of the particular fund and its program?

- If we were not to require the independence between the derivatives risk manager and the fund's portfolio managers, how could we ensure that the program management is not unduly influenced by portfolio management personnel who may have conflicting incentives?

- Do commenters agree that it would be appropriate to require a fund to designate the fund's derivatives risk manager, subject to board approval?

- Should we require the derivatives risk manager to be removable only by the fund's board and the manager's compensation to be approved by the board as is the case with the chief compliance officer of a fund? If so why? Would such a requirement pose significant burdens on fund boards?

- Should we include any other administration requirements? For example, should we include a requirement for training staff responsible for day-to-day management of the program, or for portfolio managers, senior management, and any personnel whose functions may include engaging in, or managing the risk of, derivatives transactions? If we require such training, should that involve setting minimum qualifications for staff responsible for carrying out the requirements of the program? Should training and education be required with respect to any new derivatives instruments that a fund may trade?

4. Board Approval and Oversight

Under the proposed rule, the fund's derivatives risk management program would be administered by the derivatives risk manager, with oversight provided by the board. Requiring the derivatives risk manager to be responsible for the day-to-day administration of the fund's derivatives risk management program, subject to board oversight, is consistent with the way we believe many funds currently manage derivatives risk.

We believe that boards should understand the derivatives risk management program and the risks it is designed to manage.⁴⁴³ Accordingly,

proposed rule 18f–4 would require each fund to obtain initial approval of its written derivatives risk management program from the fund's board of directors, including a majority of independent directors.⁴⁴⁴ Directors, and particularly independent directors, play a critical role in overseeing fund operations, although they may delegate day-to-day management to a fund's adviser.⁴⁴⁵ Given the board's historical oversight role, we believe it is appropriate to require a fund's board to approve the fund's derivatives risk management program. This requirement is designed to facilitate scrutiny by the board of directors of the derivatives risk management program—an area where there may potentially be conflicts of interest between the investment adviser and the fund with respect to the use of derivatives by the fund.

In considering whether to approve the program or any material changes to it, boards generally should consider the types of derivatives transactions in which the fund engages or plans to engage, their particular risks, and whether the program sufficiently addresses the fund's compliance with its investment guidelines, any applicable portfolio limitation, and relevant disclosure. Boards generally should consider the adequacy of the program from time to time in light of past experience (both by the fund in particular and with market derivatives use in general) and recent compliance experiences. Boards may also wish to consider best practices used by other fund complexes, or consult with other experts familiar with derivatives risk management by similar funds or market participants. Directors may satisfy their obligations with respect to this initial approval by reviewing summaries of the derivatives risk management program prepared by the fund's derivatives risk manager, legal counsel, or other persons familiar with the derivatives risk management program. The summaries might familiarize directors with the salient features of the program and provide them with an understanding of how the derivatives risk management program addresses the fund's use of derivatives. In considering whether to approve a fund's derivatives risk management program, the board may

Derivatives-Key Areas of Risk on Which I Would Focus (Nov. 2007), available at <http://www.sec.gov/news/speech/2007/spch110807gg.htm>.

⁴⁴⁴ In this Release, we refer to directors who are not "interested persons" of the fund as "independent directors." Section 2(a)(19) of the Investment Company Act identifies persons who are "interested persons" of a fund.

⁴⁴⁵ See, e.g., Liquidity Release, *supra* note 5, at 175.

⁴⁴² This approach is also consistent with the designation process we recently proposed in the liquidity rulemaking proposal. See Liquidity Release, *supra* note 5.

⁴⁴³ See, e.g., 2011 IDC Report, *supra* note 385, at 9; MFDF Guidance, *supra* note 423. See also, Gene Gohlke, *If I Were a Director of a Fund Investing in*

wish to consider the nature of the fund's derivatives risk exposures. A board also may wish to consider the adequacy of the fund's derivatives risk management program in light of recent experiences regarding the fund's use of derivatives.⁴⁴⁶

Proposed rule 18f-4 also would require each fund to obtain approval of any material changes to the fund's derivatives risk management program from the fund's board of directors, including a majority of independent directors. As with the initial approval of a fund's derivatives risk management program, the requirement to obtain approval of any material changes to the fund's derivatives risk management program from the board is designed to facilitate independent scrutiny of material changes to the derivatives risk management program by the board of directors.

The fund's board would be required under the proposed rule to review a written report from the fund's derivatives risk manager, provided no less frequently than quarterly, that reviews the adequacy of the fund's derivatives risk management program and the effectiveness of its implementation.⁴⁴⁷ We believe regular reporting to the board should assist boards in being adequately informed about the effectiveness and implementation of the program, enhancing their oversight ability.⁴⁴⁸ To the extent that a serious compliance issue arises under the program, it should be brought to the board's attention promptly.⁴⁴⁹ Regular reporting will also help to reduce the risk that issues are not addressed promptly and increase the likelihood that the derivatives risk manager is actively involved in addressing issues as they arise. We believe that this reporting should take place on at least a quarterly basis, rather than an annual one, in light of the significant impact that derivatives transactions can have on a fund over a short period of time.

⁴⁴⁶ See also Liquidity Release, *supra* note 5 (which provides similar board oversight of liquidity risk management).

⁴⁴⁷ Proposed rule 18f-4(a)(3)(ii)(B).

⁴⁴⁸ The derivatives risk manager generally should consider whether significant issues should be reported to the adviser or board more quickly than in the quarterly report, for example pursuant to the requirement laid out in proposed rule 18f-4(a)(3)(i)(B)(ii).

⁴⁴⁹ See Compliance Programs of Investment Companies and Investment Advisers Release No. 2204, at n.84 (Dec. 17, 2003) [68 FR 74714 (Dec. 24, 2003)] ("2003 Adopting Release") (noting, in the case of a rule 38a-1 compliance program, that "[s]erious compliance issues must, of course, always be brought to the board's attention promptly").

We request comment on the proposed board approval and oversight requirements.

- Should the board be required to approve the program and any material changes as proposed? If not, why? In the absence of such board approval, would a board be able to effectively oversee the adequacy of a program?

- Should we require reporting to the board about the effectiveness of the program as proposed? Should we require a frequency other than quarterly? If so, how frequent and why? Should we not require a frequency but instead require periodic reporting as appropriate?

- Instead of requiring boards to review the report, should we instead take an approach similar to rule 38a-1 and require reports to be submitted to the board?

E. Requirements for Financial Commitment Transactions

The proposed rule also would address and limit funds' use of financial commitment transactions. 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.⁴⁵⁰ The requirements applicable to financial commitment transactions in the proposed rule thus would address funds' use of the trading practices described in Release 10666, as well as short sales of securities.

The proposed rule would require a fund that engages in financial commitment transactions in reliance on the rule to maintain qualifying coverage assets equal in value to the amount of cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under each of its financial commitment transactions.⁴⁵¹ The proposed rule thus is designed to require the fund to maintain qualifying coverage assets equal in value to the fund's full obligations under its financial commitment transactions. Because in many cases the timing of the fund's payment obligations under a financial commitment transaction may be specified under the terms of the transaction or the fund may otherwise have a reasonable expectation regarding

⁴⁵⁰ Proposed rule 18f-4(c)(4). The rule includes, as 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 at the discretion of the fund's general partner.

⁴⁵¹ Proposed rule 18f-4(b)(1), (c)(5).

the timing of the fund's payment obligations with respect to its financial commitment transactions, the proposed rule would allow the fund to maintain as qualifying coverage assets certain other assets in addition to cash and cash equivalents, as generally required for derivatives transactions.⁴⁵² Qualifying coverage assets for each financial commitment transaction would need to be identified on the books and records of the fund at least once each business day.

By requiring the fund to maintain qualifying coverage assets to cover the fund's full potential obligation under its financial commitment transactions, the proposed rule generally would take the same approach to these transactions that we applied in Release 10666, with some modifications. As we discussed above in section III.A, requiring a fund to segregate assets equal in value to the fund's full obligations under financial commitment transactions may be an effective way both to impose a limit on the amount of leverage a fund could obtain through those transactions, and to require the fund to have adequate assets to meet its obligations. The asset segregation requirement in the proposed rule is designed to limit the amount of leverage the fund could obtain through financial commitment transactions because the fund could not incur obligations under those transactions in excess of the fund's qualifying coverage assets. This would limit a fund's ability to incur obligations under financial commitment transactions to an amount not greater than the fund's net assets. This approach also is designed to help the fund to have adequate assets to meet its obligations under financial commitment transactions by requiring the fund to have qualifying coverage assets equal in value to those obligations.

Under the proposed rule, the fund's board of directors (including a majority of the directors who are not interested persons of the fund) would be required to approve policies and procedures reasonably designed to provide for the fund's maintenance of qualifying coverage assets. We believe that requiring the fund's board to approve the policies and procedures, including a majority of the fund's independent directors, appropriately would focus the board's attention on the fund's management of its obligations under financial commitment transactions and the fund's use of the exemption provided by the proposed rule. We

⁴⁵² Proposed rule 18f-4(c)(8)(iii) (defining "qualifying coverage assets" for purposes of financial commitment transactions).

believe that requiring the fund's board to approve these policies and procedures, in conjunction with the board's oversight of the fund's investment adviser more generally, would be an appropriate role for the board.⁴⁵³

1. Coverage Amount for Financial Commitment Transactions

Under the proposed rule, a fund would be required to maintain qualifying coverage assets for each financial commitment transaction with a value equal to at least the amount of the financial commitment obligation associated with the transaction.⁴⁵⁴ The proposed rule would define the term "financial commitment obligation" to mean the amount of cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under a financial commitment transaction.⁴⁵⁵ Thus, for example, if a fund commits, conditionally or unconditionally, to purchase a security for a stated price at a later time under a firm or standby commitment agreement or similar agreement, the fund would be required to maintain qualifying coverage assets equal in value to the stated purchase price.⁴⁵⁶

In addition, where the fund is conditionally or unconditionally obligated to deliver a particular asset, the financial commitment obligation under the proposed rule would equal the value of the asset, determined at least once each business day.⁴⁵⁷ Thus, for example, if a fund commits to return a security at a later time under a short sale borrowing, the fund would be required to maintain qualifying coverage assets equal to the value of the security, determined at least once each business day. If the fund owns the security it would be required to deliver under the short sale borrowing, the fund would satisfy the proposed rule's asset segregation requirement by segregating that particular security for the same reasons we discuss above in section III.C.2.b.⁴⁵⁸

The proposed rule would require the fund to maintain qualifying coverage assets to cover the full amount of the fund's obligations under its financial commitment transactions, rather than a mark-to-market and risk-based coverage amount as proposed for derivatives transactions, because a fund may in many cases be required to fulfill its full obligation under a financial commitment transaction as compared to a derivatives transaction. For example, if a fund enters into a firm commitment agreement under which it is obligated to purchase a security in the future, the fund is required under the agreement, and must be prepared, to have sufficient assets to complete the transaction. Similarly, if a fund borrows a security from a broker as part of a short sale borrowing, the fund is obligated to return the security to the broker at the termination of the transaction and must be prepared to meet this obligation, either by owning the security or having assets available to purchase it in the market. By contrast, under many types of derivatives transactions, a fund would generally not expect to make payments or deliver assets equal to the full notional amount.

We recognize that certain financial commitment transactions, such as standby commitment agreements, are contingent in nature and may not always require a fund to fulfill its full potential obligation under the transaction. We also recognize that certain derivatives transactions, such as written options, could result in a fund having to fulfill its full potential obligation under the contract. On balance, however, we believe it would be appropriate to require a fund to maintain qualifying coverage assets to cover its financial commitment obligations, as proposed, to require the fund to have assets to meet its financial commitment obligations. We also note that, as discussed in more detail below, the proposed rule would permit a fund to use assets other than cash and cash equivalents as qualifying coverage assets for financial commitment transactions. In this way the proposed rule is designed both to require a fund to have assets to meet its financial commitment obligations and to address concerns that might be raised if the fund were required to maintain cash and cash equivalents for the fund's longer-term financial commitment obligations. We also believe that this approach would be

consistent with funds' current practices in that we understand that funds that rely on Release 10666 when entering into financial commitment transactions generally segregate assets to cover the funds' full potential obligations under these transactions.

In addition, by requiring the fund to maintain qualifying coverage assets equal in value to the fund's aggregate financial commitment obligations, the proposed rule also would impose a limit on the amount of leverage a fund could obtain through financial commitment transactions. This is because a fund relying on the rule would not be permitted to incur obligations under financial commitment transactions in excess of the fund's qualifying coverage assets. As noted in section III.C.2.c, the total amount of a fund's qualifying coverage assets could not exceed the fund's net assets.⁴⁵⁹ As a result, the fund's financial commitment obligations could not exceed the fund's net assets under the proposed rule.

We have proposed to limit the total amount of fund assets available for use as qualifying coverage assets because, absent this provision, the proposed rule would not impose an effective limit on the amount of leverage a fund could obtain through financial commitment transactions. This is because, in addition to creating a liability for the fund, some financial commitment transactions also generate proceeds that increase the total assets of the fund. If the total amount of a fund's qualifying coverage assets was not reduced to reflect the fund's liability from these transactions, the requirement to maintain qualifying coverage assets would not provide an effective limit on the fund's ability to enter into those transactions because a financial commitment transaction can generate fund assets that could otherwise be used as qualifying coverage assets.

Take, for example, a fund that has \$100 in assets and no liabilities or senior securities outstanding. The fund then borrows a security from a broker and sells it short, generating \$10 on the sale. The fund would then have \$110 in total assets and a corresponding liability of \$10. If the fund were not required to reduce the total amount of its qualifying coverage assets by the amount of the liability from this transaction, the fund would have \$110 in total assets that potentially could be used as qualifying coverage assets if they otherwise met the rule's requirements for qualifying coverage assets; the fund's selling a security short could be viewed as increasing the fund's ability to engage in

⁴⁵³ Other exemptive rules under the Act similarly require the fund's board to take certain actions in order for the fund to rely on the exemption provided by the rule. See, e.g., rules 2a-7, 10f-3, 17a-7, and 18f-3.

⁴⁵⁴ Proposed rule 18f-4(b)(1).

⁴⁵⁵ Proposed rule 18f-4(c)(5).

⁴⁵⁶ Similarly, if a fund commits, conditionally or unconditionally, to pay cash or other assets as an additional loan or contribution to an existing portfolio company under an agreement, the fund would be required to maintain qualifying coverage assets equal in value to the stated commitment amount.

⁴⁵⁷ Proposed rule 18f-4(c)(5).

⁴⁵⁸ Proposed rule 18f-4(b)(1), (c)(5), (c)(8)(ii). As described in more detail below, if the fund has pledged assets with respect to the short sale

borrowing and such assets could be expected to satisfy the fund's obligation under the transaction, the fund could also satisfy the proposed rule's asset segregation requirement by segregating such pledged assets. See proposed rule 18f-4(c)(8)(iii).

⁴⁵⁹ Proposed rule 18f-4(c)(8).

transactions requiring asset segregation under the proposed rule because the transaction itself generated assets. The proposed rule would require the fund to reduce the amount of otherwise available qualifying coverage assets by the amount of the liability from the short sale in this example (*i.e.*, \$10) so that the requirement to maintain qualifying coverage assets would impose an effective limit on the amount of leverage a fund could obtain through financial commitment transactions.⁴⁶⁰

Finally, as noted above, a fund's qualifying coverage assets for its financial commitment transactions, like the qualifying coverage assets for the fund's derivatives transactions, would be required to be identified on the fund's books and records and determined at least once each business day.⁴⁶¹ This requirement is designed so that the fund's assessments of the extent of its financial commitment obligations and the eligibility of its segregated assets as qualifying coverage assets (discussed below) remain reasonably current because the value of certain qualifying coverage assets and the amount of certain financial commitment obligations may fluctuate on a daily basis. Based on staff experience, we believe that this frequency of determination would be consistent with funds' current practices because funds that engage in financial commitment transactions today do so in reliance on Release 10666.⁴⁶²

We request comment on all aspect of the proposed rule's requirement that a fund maintain assets in respect of the financial commitment obligation for its financial commitment transactions and the requirement that the fund's qualifying coverage assets be identified on the fund's books and records and determined at least once each business day.

- The proposed rule's approach to financial commitment transactions, as discussed above, is based on the approach we took in Release 10666 for financial commitment transactions and is designed to impose a limit on the amount of leverage a fund could obtain through those transactions, and to require the fund to have adequate assets

to meet its obligations. Do commenters agree with the proposed rule's approach to financial commitment transactions? Do commenters believe that it would be effective in addressing concerns about leverage and adequacy of assets in connection with a fund's use of financial commitment transactions?

- Is the definition of financial commitment transaction obligation sufficiently clear to allow a fund to determine the amount of assets necessary to comply with the rule? Does the definition adequately capture all of a fund's potential obligations under a financial commitment transaction?

- Should we continue to require funds to segregate their full potential obligation under financial commitment transactions, consistent with Release 10666? Or, should we instead treat financial commitment transactions similar to derivatives transactions and require funds to segregate the mark-to-market coverage amount and a risk-based coverage amount for each financial commitment transaction? If we were to take this approach, are there types of financial commitment transactions for which it may be difficult to determine a mark-to-market coverage amount because, for example, there are not market prices available for the transactions?

- Under the proposed rule, all financial commitment transactions would be subject to the same asset segregation requirement, regardless of whether the fund's obligation under the transaction is conditional or whether the amount of the financial commitment obligation could fluctuate over time. Should we treat conditional financial commitment transactions, such as standby commitment agreements, differently than financial commitment transactions where the obligations are not conditional? If so, how should the asset segregation requirement differ? Should these conditional financial commitment transactions be treated like derivatives transactions? Should we treat short sales, which have a financial commitment obligation that can vary over time, differently than other financial commitment transactions that have a fixed financial commitment obligation amount? If so, how should the asset segregation requirement differ? Should short sales be treated like derivatives transactions and require a risk-based coverage amount or some other amount designed to address future losses?

- The asset segregation requirement in the proposed rule would effectively impose a limit on the fund's ability to enter into financial commitment transactions by limiting the total

amount of a fund's qualifying coverage assets and providing that qualifying coverage assets shall not exceed the fund's net assets. Does the proposed rule appropriately limit the extent to which funds should be permitted to enter into financial commitment transactions? Should the proposed rule include a separate portfolio limitation, similar to the 150% portfolio limitation on derivatives transactions in the exposure-based portfolio limit, rather than limiting the extent to which a fund could incur obligations under financial commitment transactions indirectly through the asset segregation requirement? If so, should that limit be 100% of the fund's net assets (consistent with the proposed rule's limit on the total amount of qualifying coverage assets)? Should it be lower, such as 50% of the fund's net assets, or higher, such as the 150% limitation applicable to derivatives transactions under the exposure-based portfolio limit? Are there other limits, higher or lower, that would be appropriate?

- The proposed rule would require a fund to identify and determine its qualifying coverage assets for its financial commitment obligations at least once each business day. Should the proposed rule instead require the fund to identify and determine these qualifying coverage assets more or less frequently?

2. Qualifying Coverage Assets for Financial Commitment Transactions

Under the proposed rule, "qualifying coverage assets" in respect of a financial commitment transaction would be fund assets that are: (1) Cash and cash equivalents; (2) with respect to any financial commitment transaction under which the fund may satisfy its obligations under the transaction by delivering a particular asset, that particular asset; or (3) assets that 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 such obligation or that have been pledged with respect to the financial commitment obligation and can be expected to satisfy such obligation, determined in accordance with policies and procedures approved by the fund's board of directors.⁴⁶³ The total amount of a fund's qualifying coverage assets could not exceed the fund's net assets.⁴⁶⁴

⁴⁶³ Proposed rule 18f-4(c)(8).

⁴⁶⁴ Proposed rule 18f-4(c)(8). In addition, qualifying coverage assets used to cover a financial commitment transaction could not also be used to

Continued

⁴⁶⁰ In addition, and as discussed in more detail in section III.C.2.c, the limit on the total amount of a fund's qualifying coverage assets also is designed to prohibit a fund from entering into financial commitment transactions or issuing other senior securities and then using the proceeds of such leveraging transactions as assets that would then support an additional layer of leverage through financial commitment transactions or derivatives transactions under the proposed rule.

⁴⁶¹ Proposed rule 18f-4(b)(1).

⁴⁶² See Release 10666, *supra* note 20, at discussion of "Segregated Account."

For financial commitment transactions, the proposed rule would permit a fund to maintain assets in addition to cash and cash equivalents, as proposed for derivatives transactions, as qualifying coverage assets for the fund's financial commitment transactions.⁴⁶⁵ This is because we understand that funds use financial commitment transactions for a variety of financial and investment purposes, including obtaining financing for investments acquired (or to be acquired) by the fund and establishing contractual relationships under which the fund agrees to make or acquire loans, debt securities or additional interests in portfolio companies in the future. In many cases, the timing of the fund's payment obligations may be specified under the terms of the financial commitment or the fund may otherwise have a reasonable expectation regarding the timing of the fund's payment obligations with respect to its financial commitment transactions. In addition, certain financial commitment transactions require a fund to pledge assets having an aggregate value that is greater than the financial commitment obligation and, given that the amount and value of these assets will have been evaluated both by the fund and its counterparty, we believe that such assets would generally be expected to satisfy the fund's obligation under such financial commitment transaction unless there subsequently occurs a material reduction in the value of such assets.

The proposed rule therefore would permit a fund to maintain assets that 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 its financial commitment obligation or that have been pledged with respect to a financial commitment obligation and can be expected to satisfy such obligation, determined in accordance with policies and procedures approved by the fund's board of directors.⁴⁶⁶ For example, if a fund enters into a firm commitment agreement whereby the fund agrees to purchase a security from a counterparty at a future date and at a stated price, the fund would know at the outset of the transaction the date on which the

obligation is due and the full amount of the obligation. Rather than being required to maintain cash and cash equivalents equal in value to the amount of this obligation—which the fund may not be required to pay for some time—the proposed rule would permit the fund to maintain assets that are convertible to cash or that will generate cash prior to the date on which the fund can be expected to be required to pay such obligation, determined in accordance with board-approved policies and procedures.

In this example, if the purchase price of the firm commitment is \$100 and the transaction will be completed on a fixed date, the fund, if consistent with its policies and procedures relating to qualifying coverage assets, could segregate a fixed-income security with a value of \$100 or more that would pay \$100 or more upon maturity and would mature in time for the fund to use the principal payment to complete the firm commitment transaction. As another example, the fund could, if consistent with its policies and procedures relating to qualifying coverage assets, segregate a fixed-income security with a value of \$100 or more that would generate \$100 or more in interest payments that the fund could use to complete the firm commitment agreement.

Qualifying coverage assets under the proposed rule include assets that are convertible to cash or able to 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 such obligation.⁴⁶⁷ Where the fund can be expected to pay the obligation on a short-term basis, the assets maintained by the fund as qualifying coverage assets also would have to be convertible to cash or able to generate cash on a short-term basis. For example, if the fund has entered into a standby commitment agreement and the fund could be expected to be required to pay the purchase price under the agreement on a short-term basis, the fund would need to segregate assets that could be convertible to cash or able to generate cash in a short period of time to enable the fund to meet its expected obligation. We would expect these assets to be highly liquid assets given the short-term nature of the fund's obligation under the transaction and the proposed rule's requirement that qualifying coverage assets be convertible to cash or 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 such obligation.

The proposed rule would require that an asset's convertibility to cash or the ability to generate cash, and the date on which the fund can be expected to be required to pay the financial commitment obligation, be determined in accordance with policies and procedures approved by the fund's board of directors.⁴⁶⁸ By requiring funds to establish appropriate policies and procedures, rather than prescribing specific segregation methodologies, the proposed rule is designed to allow funds to assess and determine when they can be required to pay financial commitment obligations and their assets' convertibility to cash or ability to generate cash based on the funds' specific financial commitment transactions and investment strategies. As with respect to the determination of risk-based coverage amounts for derivatives transactions, we believe that funds are best situated to evaluate their obligations under their financial commitment transactions and the eligibility of their assets to be used as qualifying coverage assets based on an assessment of their own particular facts and circumstances.

We note that, if we adopt proposed rule 22e-4, funds subject to that rule already would be considering their assets' convertibility to cash in order to comply with rule 22e-4, as explained in more detail in the Liquidity Release.⁴⁶⁹ In classifying and reviewing the liquidity of portfolio positions, proposed rule 22e-4 would require the fund to consider the number of days within which the fund's position in a portfolio asset (or portions of a position in a particular asset) would be convertible to cash at a price that does not materially affect the value of that asset immediately prior to sale.⁴⁷⁰ Proposed rule 22e-4 would require the fund to consider certain specified factors in classifying the liquidity of its portfolio positions.⁴⁷¹ Funds

⁴⁶⁸ Proposed rule 18f-4(c)(8).

⁴⁶⁹ Proposed rule 22e-4(b)(2)(i).

⁴⁷⁰ Liquidity Release, *supra* note 5.

⁴⁷¹ Liquidity Release, *supra* note 5. Specifically, proposed rule 22e-4 would require the fund to consider the following factors, to the extent applicable: (1) Existence of an active market for the asset, including whether the asset is listed on an exchange, as well as the number, diversity, and quality of market participants; (2) frequency of trades or quotes for the asset and average daily trading volume of the asset (regardless of whether the asset is a security traded on an exchange); (3) volatility of trading prices for the asset; (4) bid-ask spreads for the asset; (5) whether the asset has a relatively standardized and simple structure; (6) for fixed income securities, maturity and date of issue; (7) restrictions on trading of the asset and limitations on transfer of the asset; (8) the size of

cover a derivatives transaction. Proposed rule 18f-4(c)(8).

⁴⁶⁵ Proposed rule 18f-4(c)(8).

⁴⁶⁶ Proposed rule 18f-4(c)(8)(iii). As noted above, where the fund is conditionally or unconditionally obligated to deliver a particular asset, the fund also could satisfy the proposed rule's asset segregation requirements by segregating that particular asset. Proposed rule 18f-4(c)(8)(ii).

⁴⁶⁷ Proposed rule 18f-4(c)(8).

undertaking this analysis for purposes of rule 22e-4 thus already would have considered their assets' convertibility to cash and could use this analysis (and related policies and procedures) for purposes of rule 18f-4.

Although not every fund that would be subject to proposed rule 18f-4 would be subject to proposed rule 22e-4, to the extent that fund advisers and third-party service providers develop methodologies or other tools for assessing positions' convertibility to cash in a manner consistent with proposed rule 22e-4, we anticipate that such tools could be used by all funds subject to proposed rule 18f-4 in assessing convertibility to cash for purposes of rule 18f-4. Thus, closed-end funds and BDCs, which are not within the scope of proposed rule 22e-4 but which may enter into financial commitment transactions, could nevertheless employ tools that were developed in response to proposed rule 22e-4 in determining whether an asset is a qualifying coverage asset.⁴⁷² In sum, although proposed rule 18f-4 would not require the fund's policies and procedures to include the factors specified in proposed rule 22e-4, funds may find it efficient to consider those factors and methodologies and tools designed to address them.

The proposed rule would also allow a fund to use, as qualifying coverage assets, assets that have been pledged with respect to a financial commitment obligation and can be expected to satisfy such obligation.⁴⁷³ For example, assets that are pledged by a fund to its broker in connection with a short sale borrowing that can be expected to

satisfy the fund's obligations under such transaction could, if consistent with the fund's policies and procedures relating to qualifying coverage assets, be segregated on the fund's books and records as qualifying coverage assets for such short sale transaction. 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.

We request comment on all aspects of the proposed rule's requirements for qualifying coverage assets for financial commitment transactions.

- Do commenters agree that it is appropriate to permit a fund to maintain assets in addition to cash and cash equivalents as qualifying coverage assets for the fund's financial commitment transactions? Should we, instead, require funds to use cash and cash equivalents, as proposed for derivatives transactions, or otherwise specify the types or liquidity profiles of assets that may be used? Should we specify that certain types of assets should not be included as qualifying coverage assets?

- Do commenters agree that, in many cases, the timing of the fund's payment obligations may be specified under the terms of the financial commitment or the fund may otherwise have a reasonable expectation regarding the timing of the fund's payment obligations with respect to its financial commitment transactions? If so, do commenters agree that the proposed rule appropriately recognizes this aspect of many types of financial commitment transactions by permitting a fund to segregate assets that are convertible to cash or that will generate cash prior to the date on which the fund can be expected to be required to pay its financial commitment obligations, determined in accordance with board-approved policies and procedures?

- Under the proposed rule, qualifying coverage assets in respect of a financial commitment transaction would include fund assets that have been pledged by the fund with respect to the financial commitment obligation and can be expected to satisfy such obligation. Do commenters agree that such assets should be considered qualifying coverage assets? Does the proposed rule appropriately describe such assets? Are

there additional requirements that we should impose on the use of such assets as qualifying coverage assets?

- The proposed rule would require that an asset's convertibility to cash or the ability to generate cash, and the date on which the fund can be expected to be required to pay the financial commitment obligation, be determined in accordance with policies and procedures approved by the fund's board of directors. Do commenters agree that it is appropriate to allow funds to assess and determine when they can be expected to be required to pay financial commitment obligations and their assets' convertibility to cash or ability to generate cash based on the funds' specific financial commitment transactions and investment strategies?

- The proposed rule would not specify the particular factors that must be included in a fund's policies and procedures for purposes of determining an asset's convertibility to cash or the ability to generate cash, and the date on which the fund can be expected to be required to pay the financial commitment obligation. Are there particular factors we should specify in any final rule? We noted above that, in developing these policies and procedures, a fund could consider the factors specified in proposed rule 22e-4. Should we specifically require that a fund's policies and procedures include the factors specified in rule 22e-4 if we adopt that rule? If so, should only those funds subject to the requirements of proposed rule 22e-4 be required to include those factors? Should we specify additional factors? If so, what factors should be specified?

- The proposed rule would allow a fund to segregate as qualifying coverage assets any assets that are convertible to cash or that will generate cash equal in amount equal to the financial commitment obligation prior to the date on which the fund can be expected to be required to pay such obligation. Should we instead allow a fund to segregate specific types of assets subject to a haircut? If so, how should we determine the appropriate haircut? For example, should we incorporate the haircuts described in the SEC's proposed rule on Capital, Margin, and Segregation Requirements for Security-Based Swap Dealers and Major Security-Based Swap Participants and Capital Requirements for Broker-Dealers?⁴⁷⁴ Or should we incorporate the haircut schedule included in the rules adopted by the banking regulators for covered

the fund's position in the asset relative to the asset's average daily trading volume and, as applicable, the number of units of the asset outstanding; and (9) relationship of the asset to another portfolio asset. See *Id.*, at section III.A.

⁴⁷² Money market funds also are not proposed to be subject to the requirements of proposed rule 22e-4 because they are subject to extensive requirements concerning the liquidity of their portfolio assets under rule 2a-7. See Liquidity Release, *supra* note 138. Under rule 2a-7, money market funds are required to limit their investments to short-term, high-quality debt securities that fluctuate very little in value under normal market conditions. Money market funds thus do not engage in derivatives transactions, but may enter into certain financial commitment transactions to the extent permitted under rule 2a-7. Although money market funds could choose to evaluate their assets' convertibility to cash using the factors in proposed rule 22e-4, we generally would expect that they would not need to do so for purposes of proposed rule 18f-4 because we expect that a money market fund, in order to comply with the conditions of rule 2a-7 (including the rule's liquidity requirements and limitations on the maturity of portfolio assets), already would be evaluating when its assets will generate cash (or be convertible to cash) and when it could be expected to pay its financial commitment obligations.

⁴⁷³ Proposed rule 18f-4(c)(8)(iii).

⁴⁷⁴ See Margin and Capital Proposing Release, *supra* note 363.

swap entities?⁴⁷⁵ Is there a different haircut schedule that would be more appropriate for the proposed rule?

F. Recordkeeping

Proposed rule 18f-4 also would include certain recordkeeping requirements relating to the fund's selection of a portfolio limitation; its compliance with the other requirements of the proposed rule; and if the fund is required to implement a formalized derivatives risk management program, records of the program's policies and procedures, and any materials provided to the board of directors related to its operation.⁴⁷⁶ All the records would be required to be kept for 5 years (the first 2 years in an easily accessible place).⁴⁷⁷

First, the proposed rule would require a fund to maintain a record of each determination made by the fund's board that the fund will comply with one of the portfolio limitations under the proposed rule, which would include the fund's initial determination as well as a record of any determination made by the fund's board to change the portfolio limitation.⁴⁷⁸ Such a record should allow our examiners to better evaluate compliance with the proposed exemptive rule.

Second, the proposed rule would require the fund to maintain certain records so that the fund's ongoing compliance with the conditions of the proposed rule can be evaluated by our examiners or the fund's board or compliance personnel. Specifically, the fund would be required to maintain a written copy of the policies and procedures approved by the board

regarding the fund's maintenance of qualifying coverage assets, as required under the proposed rule.⁴⁷⁹ The fund also would be required to maintain a written record demonstrating that immediately after the fund entered into any senior securities transaction, the fund complied with the portfolio limitation applicable to the fund immediately after entering into the senior securities transaction, reflecting the fund's aggregate exposure, the value of the fund's net assets and, if applicable, the fund's full portfolio VaR and its securities VaR.⁴⁸⁰

The fund also would be required to maintain written records reflecting the fund's mark-to-market and risk-based coverage amounts and the fund's financial commitment obligations, and identifying the qualifying coverage assets maintained by the fund to cover these amounts.⁴⁸¹ For derivatives transactions, the fund would be required to maintain written records identifying the qualifying coverage assets maintained by the fund to cover the aggregate amount of its mark-to-market and risk-based coverage amounts—rather than identifying the qualifying coverage assets maintained in respect of each specific derivatives transaction—because the proposed rule generally would require the fund to maintain cash and cash equivalents for its derivatives transactions.⁴⁸² For financial commitment transactions, the fund would be required to maintain written records identifying the specific qualifying coverage assets maintained by the fund to cover each financial commitment transaction in order to allow our examination staff to evaluate whether, as required under the proposed rule, the qualifying coverage assets maintained for specific financial commitment transactions are assets that 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 such

obligation or that have been pledged with respect to the financial commitment obligation and can be expected to satisfy such obligation, determined in accordance with the fund's policies and procedures.⁴⁸³

Finally, the proposed rule would require a fund to maintain records relating to the derivatives risk management program, if the fund is required to adopt and implement a derivatives risk management program.⁴⁸⁴ The proposed rule would require funds to maintain a written copy of the policies and procedures approved by the board.⁴⁸⁵ It would also require funds to maintain records of any materials provided to the board in connection with its approval of the program, as well as any written reports provided to the board relating to the program⁴⁸⁶ and records documenting periodic updates and reviews required as part of the risk management program.⁴⁸⁷ Such records should serve to provide data about the operation of a fund's program to better allow our examiners and compliance personnel to evaluate compliance with the conditions of the proposed rule.

We request comment on the proposed rule's recordkeeping requirements.

- Should we require such recordkeeping provisions? Are there any other records relating to a fund's senior securities transactions that a fund should be required to maintain?

- The proposed rule's recordkeeping requirements generally are designed to allow our examiners or the fund's board or compliance personnel to evaluate the fund's ongoing compliance with the proposed rule's conditions. Do commenters believe that the proposed rule's recordkeeping requirements

⁴⁷⁵ See Prudential Regulator Margin and Capital Adopting Release, *supra* note 160.

⁴⁷⁶ Proposed rule 18f-4(a)(6).

⁴⁷⁷ The proposed recordkeeping time period is consistent with the retention periods in rule 38a-1 and proposed rule 22e-4. As we explained in the Liquidity Release with respect to proposed rule 22e-4, we believe consistency in these retention periods is appropriate because funds currently have program-related recordkeeping procedures in place incorporating a five-year retention period, which we believe would lessen the compliance burden to funds slightly, compared to choosing a different retention period, such as the six-year recordkeeping retention period under rule 31a-2 under the Act. Taking this into account, we believe a five-year retention period is a sufficient period of time for our examination staff to evaluate whether a fund is in compliance (and has been in compliance) with the proposed rule and anticipate that such information would become less relevant if extended beyond a five-year retention period. Furthermore, we believe that the proposed five-year retention period appropriately balances recordkeeping-related burdens on funds. See Liquidity Release, *supra* note 5, concerning the five-year retention periods included in proposed rule 22e-4.

⁴⁷⁸ See proposed rule 18f-4(a)(6)(i). The fund would be required to maintain this record for a period of not less than five years (the first two years in an easily accessible place) following each determination.

⁴⁷⁹ See proposed rule 18f-4(a)(6)(ii) (derivatives transactions); proposed rule 18f-4(b)(3) (financial commitment transactions). The fund would be required to maintain these policies and procedures that are in effect, or at any time within the past five years were in effect, in an easily accessible place.

⁴⁸⁰ See proposed rule 18f-4(a)(6)(iv). The fund would be required to maintain this record for a period of not less than five years (the first two years in an easily accessible place) following each senior securities transaction.

⁴⁸¹ See proposed rule 18f-4(a)(6)(v); proposed rule 18f-4(b)(3)(ii). The fund would be required to determine these amounts and identify qualifying coverage assets at least once each business day, and would be required to maintain these records for a period of not less than five years (the first two years in an easily accessible place).

⁴⁸² See proposed rule 18f-4(a)(6)(v).

⁴⁸³ See proposed rule 18f-4(b)(3)(ii).

⁴⁸⁴ See proposed rule 18f-4(a)(6)(iii).

⁴⁸⁵ See proposed rule 18f-4(a)(6)(iii)(A). The fund would be required to maintain a written copy of the policies and procedures that are in effect, or at any time within the past five years were in effect, in an easily accessible place.

⁴⁸⁶ See proposed rule 18f-4(a)(6)(iii)(B). The fund would be required to maintain these records for at least five years after the end of the fiscal year in which the documents were provided to the fund's board, the first two years in an easily accessible place.

⁴⁸⁷ Specifically, the fund would be required to maintain records documenting the periodic reviews and updates conducted in accordance with paragraph (a)(3)(i)(D) of the proposed rule (including any updates to any VaR calculation models used by the fund and the basis for any material changes thereto), for a period of not less than five years (the first two years in an easily accessible place) following each review or update. See Proposed rule 18f-4(a)(6)(iii)(C). We note that, because of the importance of VaR models under the rule, this provision would require funds to maintain records explaining the basis for any material changes to the VaR calculation models used during the covered period.

would appropriately balance recordkeeping-related burdens on funds? Are there feasible alternatives to the proposed recordkeeping requirements that would minimize recordkeeping burdens, including the costs of maintaining the required records?

- We specifically request comment on any alternatives to the proposed recordkeeping requirements that would minimize recordkeeping burdens on funds, on the utility and necessity of the proposed recordkeeping requirements in relation to the associated costs and in view of the public benefits derived, and on the effects that additional recordkeeping requirements would have on funds' internal compliance policies and procedures. Are the record retention time periods that we have selected appropriate? Should we require records to be maintained for a longer or shorter period? If so for how long?

G. Amendments to Proposed Forms N-PORT and N-CEN

On May 20, 2015, in an effort to modernize and enhance the reporting and disclosure of information by investment companies, we issued a series of proposals, including proposals for two new reporting forms. First, our proposal would require registered management investment companies and ETFs organized as unit investment trusts, other than registered money market funds or small business investment companies, to electronically file with the Commission monthly portfolio investment information on proposed Form N-PORT.⁴⁸⁸ As we discussed in the Investment Company Reporting Modernization Release, we believe that the information that would be filed on proposed Form N-PORT would enhance the Commission's ability to effectively oversee and monitor the activities of investment companies in order to better carry out its regulatory functions. We also stated that we believe that the information on proposed Form N-PORT would allow investors and other potential users to better understand investment strategies and risks, and help investors make more informed investment decisions.⁴⁸⁹

Among other things, proposed Form N-PORT would require funds to disclose certain risk metrics—

specifically, the delta for derivatives instruments with optionality,⁴⁹⁰ as well as the portfolio's interest rate risk (DV01)⁴⁹¹ and credit spread risk (SDV01/CR01/CS01).⁴⁹² As we stated in the Investment Company Reporting Modernization Release, disclosure of delta—a measure of the sensitivity of an option's value to changes in the price of the referenced asset—would provide the Commission, investors, and other potential users with an important measurement of the impact, on a fund or group of funds that hold options on an asset, of a change in such asset's price. Moreover, disclosure of delta would assist the Commission and others with measuring exposure to leverage through options, which would allow the Commission, investors, and other potential users to better understand the risks that the fund faces as asset prices change, because the use of this type of leverage can magnify losses or gains in assets.

Second, all registered investment companies, including money market funds but excluding face amount certificate companies, would be required to file annual reports on proposed Form N-CEN.⁴⁹³ Proposed Form N-CEN would require these registered investment companies to provide census-type information that would assist our efforts to modernize the reporting and disclosure of information by registered investment companies and enhance the staff's ability to carry out its regulatory functions, including risk monitoring and analysis of the industry.⁴⁹⁴ Among other things, proposed Form N-CEN would require funds to report whether they relied upon certain enumerated rules under the Act during the reporting period.⁴⁹⁵ We proposed to collect this information to better monitor reliance on exemptive rules and assist us with our accounting, auditing and oversight functions, including, for some rules, compliance with the Paperwork Reduction Act.⁴⁹⁶

1. Reporting of Risk Metrics by Funds That Are Required To Implement a Derivatives Risk Management Program

In the Investment Company Reporting Modernization Release, we requested

comment on our proposal to require funds to report on Form N-PORT certain portfolio- and position-level risk metrics. We also requested comment on additional risk metrics such as gamma, which enables more precise position-level estimation of sensitivity to underlying price movements, and vega, which provides position-level sensitivity to volatility. The proposal requested comment on whether gamma and vega would enhance the utility of the derivatives information reported in Form N-PORT and the costs and burdens to funds and benefits to investors and other potential users of requiring funds to report such risk metrics.

We received several comment letters relating to our proposal to require funds to report certain portfolio- and position-level risk metrics. Some commenters reflected positively on our proposal, noting that risk metrics could allow the Commission to better understand the risks associated with investments in derivatives.⁴⁹⁷ However, another commenter questioned the utility of reporting risk metrics, such as delta, given the time-lag associated with reporting on Form N-PORT.⁴⁹⁸ Others expressed concern with making specific risk metrics public, as, given the inherent subjectivity of computing risk metrics, disclosure could be of limited utility and potentially confusing for investors.⁴⁹⁹

⁴⁹⁷ See, e.g., Comment Letter of CFA Institute on Investment Company Reporting Modernization (Aug. 10, 2015) (File No. S7-08-15), available at <http://www.sec.gov/comments/s7-08-15/s70815-228.pdf>, at 6-7; Comment Letter of Interactive Data Pricing and Reference Data LLC on Investment Company Reporting Modernization (Aug. 10, 2015) (File No. S7-08-15), available at <http://www.sec.gov/comments/s7-08-15/s70815-329.pdf>, at 1, 9-11; Comment Letter of State Street Corporation on Investment Company Reporting Modernization (Aug. 11, 2015) (File No. S7-08-15), available at <http://www.sec.gov/comments/s7-09-15/s70915-27.pdf>, at 3-4 (specifically recommending, among other risk metrics, that Form N-PORT require disclosure of vega); Comment Letter of Pioneer Investments (Aug. 11, 2015) (File No. S7-08-15), available at <http://www.sec.gov/comments/s7-08-15/s70815-302.pdf>, at 13 (supporting the Commission's desire to standardize disclosure and increase transparency regarding a fund's derivative usage, and recommending that derivative reporting be subject to a de minimis threshold).

⁴⁹⁸ See, e.g., Comment Letter of Dreyfus Corporation on Investment Company Reporting Modernization (Aug. 11, 2015) (File No. S7-08-15), available at <http://www.sec.gov/comments/s7-08-15/s70815-333.pdf>, at 3, 10.

⁴⁹⁹ See, e.g., Comment Letter of Investment Company Institute on Investment Company Reporting Modernization (Aug. 12, 2015) (File No. S7-08-15), available at <http://www.sec.gov/comments/s7-08-15/s70815-315.pdf>, at 7, 21-22, 41-42, 46-47; Comment Letter of Vanguard on Investment Company Reporting Modernization (Aug. 11, 2015) (File No. S7-08-15), available at <http://www.sec.gov/comments/s7-08-15/s70815-315.pdf>.

⁴⁸⁸ Submissions on Form N-PORT would be required to be submitted no later than 30 days after the close of each month. Only information reported for the third month of each fund's fiscal quarter on Form N-PORT would be publicly available, and such information would not be made public until 60 days after the end of the third month of the fund's fiscal quarter. See Investment Company Reporting Modernization Release, *supra* note 138.

⁴⁸⁹ See *id.*

⁴⁹⁰ See Item C.11.c.iii.1 of proposed Form N-PORT.

⁴⁹¹ See Item B.3.a of proposed Form N-PORT.

⁴⁹² See Item B.3.b of proposed Form N-PORT.

⁴⁹³ See Investment Company Reporting Modernization Release, *supra* note 138.

⁴⁹⁴ *Id.*

⁴⁹⁵ Item 31 of proposed Form N-CEN.

⁴⁹⁶ See Investment Company Reporting Modernization Release, *supra* note 138, at Part II.E.4.c.iv.

We recognize that collecting and reporting alternative risk metrics, such as vega and gamma, could be more burdensome than reporting delta only. However, we believe that requiring funds to report information about the fund's exposures with metrics such as vega and gamma would assist the Commission in better assessing the risk in a fund's portfolio. In consideration of the additional burdens of reporting selected risk metrics to the Commission and the benefits of more complete disclosure of a fund's risks, we are proposing to limit the reporting of vega and gamma to only those funds that are required to implement a formalized derivatives risk management program as required by proposed rule 18f-4(a)(3).⁵⁰⁰ Our reasons for limiting the reporting of vega and gamma are two-fold: First, we understand that there are added burdens to reporting risk metrics and we are therefore proposing to limit the reporting of these risk metrics to only those funds who are engaged in more than a limited amount of derivatives transactions or that use certain complex derivatives transactions, as opposed to funds that engage in a more limited use of derivatives. Second, based on staff experience regarding portfolio management practices and outreach to service providers that calculate risk metrics we believe many of the funds that would be required to implement a derivatives risk management and that invest in derivatives as part of their investment strategy currently calculate risk metrics for their own internal risk management programs, or have risk metrics calculated for them by a service provider, albeit, for internal reporting purposes.

2. Amendments to Proposed Form N-PORT

Part C of proposed Form N-PORT would require a fund and its consolidated subsidiaries to disclose its schedule of investments and certain information about the fund's portfolio of investments. We propose to add Item C.11.c.viii to Part C of proposed Form N-PORT, which would require funds that are required to implement a formalized risk management program under proposed rule 18f-4(a)(3) to provide the gamma and vega for options

and warrants, including options on a derivative, such as swaptions.⁵⁰¹

As discussed above, gamma measures the sensitivity of delta⁵⁰² in response to price changes in the underlying instrument. Thus, gamma, in concert with delta, facilitates sensitivity analysis, which would provide the Commission and others with a more precise estimate of the effect of underlying price changes on a fund's investments, particularly for large price movements in the underlying reference asset.

Vega, which measures the amount that an option contract's price changes in relation to a one percent change in the volatility of an underlying asset, would assist the Commission and others with measuring an investment's volatility. This would permit the Commission and others to, among other things, estimate changes in a portfolio based on changes in market volatility, as opposed to changes in asset prices. Vega would accordingly give the Commission and others the tools necessary to construct more comprehensive risk analyses as appropriate.

We anticipate that the enhanced reporting proposed in these amendments would help our staff better monitor price and volatility trends and various funds' risk profiles. Risk metrics data reported on Form N-PORT that is made publicly available also would inform investors and assist users in assessing funds' relative price and volatility risks and the overall price and volatility risks of the fund industry—particularly for those funds that use investments in derivatives as an important part of their trading strategy. For example, third-party data analyzers could use the reported information to produce useful metrics for investors about the relative price and volatility risks of different funds with similar strategies. Moreover, gamma, vega, and delta would help the Commission, investors, and others determine the source of a fund's risk and return. We recognize that determining certain of the inputs that go into computing gamma and vega inherently involve some level of judgment and that some commenters expressed concern that this type of information could be confusing to investors.⁵⁰³ Nevertheless, for the reasons discussed above, we believe that the reporting of gamma and vega would provide valuable information to us and market participants about current fund expectations regarding their use of certain derivatives and better

understand the risks that the fund faces as asset prices and volatility change.

3. Amendments to Proposed Form N-CEN

As discussed above, proposed rule 18f-4 would require funds that engage in derivatives transactions to comply with one of two alternative portfolio limitations: The exposure-based portfolio limit under proposed rule 18f-4(a)(1)(i) or the risk-based portfolio limit under proposed rule 18f-4(a)(1)(ii).⁵⁰⁴ We are proposing to amend Item 31 of Part C of proposed Form N-CEN to require a fund to identify the portfolio limitation on which the fund relied during the reporting period.⁵⁰⁵ This information would allow the Commission to identify funds that rely on the exemptions under proposed rule 18f-4.

4. Request for Comment

We seek comment on each of the Commission's proposed amendments to proposed Form N-PORT and proposed Form N-CEN.⁵⁰⁶

- How, if at all, should we modify the scope of the proposed requirements to report gamma or vega? For example, as we discussed above, in the Investment Company Modernization Release, we requested comment on whether we should require all funds to report gamma and vega. Our current proposal would limit the reporting of gamma and vega to funds that are required to implement a derivatives risk management program. Is this appropriate, or should we require all funds that invest in derivatives with optionality to report these metrics? Alternatively, should we require reporting of these risk metrics for funds with a higher or lower exposure than 50%? Additionally, should we require funds that are required to have a risk management program by virtue of the complexity of the derivatives they invest in, as proposed, to report such metrics, even if their exposure falls below 50%?

- We are also proposing to limit the reporting of gamma and vega to options and warrants, including options on a derivative, such as swaptions. Are there other investment products for which we should require disclosure of gamma and vega? If so, which products and why?

⁵⁰⁴ See *supra* Section III.B.

⁵⁰⁵ Items 31(k) and 31(l) of Proposed Form N-CEN. If a fund relied on the exposure based portfolio limit during part of the reporting period, and the risk-based portfolio limit during part of the same reporting period, it would be required to so indicate.

⁵⁰⁶ Comments regarding the proposed amendments to Forms N-PORT and N-CEN should be submitted to the comment file for this Release.

<http://www.sec.gov/comments/s7-09-15/s70915-28.pdf>, at 3 (recommending that the Commission omit risk metrics from Form N-PORT, and, instead, use the raw data reported in Form N-PORT to perform its own calculation of risk metrics in order to ensure comparable results between funds); BlackRock Modernization Comment Letter, at 3.

⁵⁰⁰ See *supra* section III.D.; see also proposed rule 18f-4(a)(3).

⁵⁰¹ Item C.11.c.viii of proposed Form N-PORT.

⁵⁰² Item C.11.c.vii of proposed Form N-PORT.

⁵⁰³ See *supra* note 499 and accompanying text.

For example, should we require funds to report gamma and vega for convertible bonds? To what extent would the inputs and assumptions underlying the methodology by which funds calculate gamma and vega affect the values reported? Are there potential liability or other concerns associated with the reporting of such measures according to such inputs and assumptions? For example, how would the comparability of information reported between funds be affected if funds used different inputs and assumptions in their methodologies?

- Are there additional or alternative metrics that we should consider requiring to be reported? Would the disclosure of risk metrics such as theta—the change in value of an option with changes in time to expiration—enhance the utility of the derivatives information reported in Form N–PORT? What would be the costs and burdens to funds and benefits to investors and other potential users of requiring funds to report such additional or alternative metrics? How would the comparability of information reported by different funds be affected if funds used different inputs and assumptions in their methodologies, such as different assumptions regarding the values of the funds' portfolios?

- We believe that funds that would be required to implement a derivatives risk management program already track certain derivative risk metrics, such as gamma and vega. Is our assumption correct? To the extent this is correct, what would be the incremental cost and burden of reporting such information to the Commission? As discussed above, in the Investment Company Reporting Modernization Release, we proposed that portfolio-level risk metrics and the delta for relevant investments be disclosed on each report on Form N–PORT that is made public (*i.e.*, quarterly). Likewise, we are proposing that gamma and vega be made publicly available. Should gamma and vega be made public? Are the factors that the Commission should consider when determining whether to make such measures public the same as for the other risk metrics proposed in the Investment Company Modernization Release, or are there additional factors relevant to gamma and vega that we should consider?

- As discussed above, proposed rule 18f–4 would require funds that engage in derivatives transactions to comply with one of two alternative portfolio limitations: The exposure-based portfolio limit or the risk-based portfolio limit. While we are proposing to require that funds maintain certain records

relating to their compliance with the applicable portfolio limitation, we are not proposing that they report to the public or the Commission the funds' aggregate exposure or, for funds that operate under the risk-based portfolio limit, the results of the funds' VaR tests. Would there be a benefit to publicly reporting this information? Should we require funds to report on proposed Form N–CEN or Form N–PORT either or both of the funds' aggregate exposures or their securities' VaRs and full portfolio VaRs (if applicable)? Additionally, as proposed, the derivative risk management program would apply to funds with an aggregate exposure to derivatives transactions that exceeds 50% of net assets. Should funds be required to report on proposed Form N–CEN or Form N–PORT their aggregate exposure to derivatives transactions?

- Form N–PORT also requires funds to report their notional amounts for certain derivatives transactions. Should we define “notional amount” for purposes of Form N–PORT with the same definition as proposed by rule 18f–4?

- Our proposal would require funds to identify in reports on Form N–CEN whether they relied upon the proposed rule by identifying the portfolio limitation(s) on which the fund relied during the reporting period. Do commenters agree that this is appropriate? Should we instead require a fund to only identify if it relied upon rule 18f–4 during the reporting period, rather than requiring the fund to identify the specific portfolio limitation(s) on which the fund relied? Are there other mediums, such as the Statement of Additional Information, that would be more appropriate to report such information?

- Should we provide a compliance period for the proposed amendments to Forms N–PORT and N–CEN? If so, what factors should we consider, if any, when setting the compliance dates for the proposed amendments to Forms N–PORT and N–CEN? How long of a compliance period would be appropriate for the proposed amendments? If we provide a compliance period for the proposed amendments, should we provide a tiered compliance date for entities based on their size?

H. Request for Comments

We request and encourage any interested person to submit comments regarding the proposed rule and the proposed amendments to Form N–PORT and Form N–CEN, specific issues discussed in this Release, and other matters that may have an effect on the

proposed rule and the proposed changes to Form N–PORT and Form N–CEN. With regard to any comments, we note that such comments are of particular assistance to our rulemaking initiative if accompanied by supporting data and analysis of the issues addressed in those comments.

I. Proposed Rule 18f–4 and Existing Guidance

If we adopt proposed rule 18f–4, we would rescind Release 10666 and our staff's no-action letters addressing derivatives and financial commitment transactions. Funds would only be permitted to enter into derivatives transactions and financial commitment transactions to the extent permitted by, and consistent with the requirements of, rule 18f–4 or section 18 or 61. At this time, however, we are not rescinding Release 10666 or any no-action letters issued by our staff, and funds may continue to rely on Release 10666, our staff no-action letters, and other guidance from our staff.

A fund would be able to rely on the rule after its effective date as soon as the fund could comply with the rule's conditions. We would, in addition, expect to provide a transition period during which we would permit funds to continue to rely on Release 10666, our staff no-action letters, and other guidance from our staff, including with respect to derivatives transactions and financial commitment transactions entered into by a fund after the rule's effective date but before the end of any transition period.

We request comment on any transition period:

- Do commenters agree that a transition period would be appropriate?
- What would be an appropriate amount of time for us to provide before rescinding Release 10666 and our staff's no-action letters?

- In recently proposed rule 22e–4, we proposed tiered compliance dates for funds that would be required to establish liquidity risk management programs under that rule, generally proposing to provide a compliance period of 18 months for larger entities and an extra 12 (or 30 total months) for smaller entities.⁵⁰⁷ Would these time periods provide sufficient time for funds to transition to proposed rule 18f–4?

⁵⁰⁷ See Liquidity Release, *supra* note 5 (generally categorizing funds that together with other investment companies in the same “group of related investment companies” have net assets of \$1 billion or more as of the end of the most recent fiscal year as larger entities and funds that together with other investment companies in the same “group of related investment companies” have net assets of less than \$1 billion as of the end of the most recent fiscal year as smaller entities).

Would they provide more time than may be necessary or appropriate?

- Would it be appropriate, for purposes of a transition period (rather than setting a compliance date), to provide different periods of time for larger and smaller entities? Would it be appropriate to instead require all funds that engage or seek to engage in derivatives or financial commitment transactions to do so in reliance on proposed rule 18f-4 after a period of time that would be the same for all affected funds, for example 18 months after any adoption of proposed rule 18f-4?

- Should we provide a longer transition period for particular types of funds? If so, which kinds of funds and how much time should we provide? Should we, for example, provide a longer transition period for leveraged ETFs on the basis that they operate pursuant to the terms and conditions of exemptive orders granted by the Commission? In section III.B.1.c, we requested comment as to whether it would be more appropriate to consider these funds' use of derivatives transactions in the exemptive application context, based on the funds' particular facts and circumstances, rather than in rule 18f-4. If commenters believe this would be appropriate, would a longer transition period for these funds also be appropriate in order to provide time for these funds to prepare, and for the Commission to consider, any exemptive applications?

IV. Economic Analysis

A. Introduction and Primary Goals of Proposed Regulation

The Commission is sensitive to the economic effects that could result from proposed rule 18f-4 and the proposed amendments to proposed Forms N-PORT and N-CEN. The economic effects of proposed rule 18f-4 include the benefits and costs of the proposed rule, as well as effects on efficiency, competition, and capital formation. The economic effects of the proposed rule are discussed below in the context of the primary goals of the proposed regulation. We discuss the benefits, costs, and economic effects associated with our proposed amendments to proposed Forms N-PORT and N-CEN in sections IV.D.6 and IV.D.7, below.

In summary, and as discussed in greater detail throughout this Release, the proposed rule would require a fund that enters into derivatives transactions in reliance on the rule to:

- Comply with one of two alternative portfolio limitations designed to impose a limit on the amount of leverage the

fund may obtain through derivatives transactions and other senior securities transactions;⁵⁰⁸

- Manage the risks associated with its derivatives transactions by maintaining qualifying coverage assets in an amount designed to enable the fund to meet its obligations under its derivatives transactions; and

- Establish a formalized derivatives risk management program (unless otherwise exempt based on the extent of its derivatives usage).

The proposed rule would also require a fund that enters into financial commitment transactions in reliance on the rule to maintain qualifying coverage assets equal in value to the fund's full obligations under those transactions.

As discussed above in section II.D.1.a, we have determined to propose a new approach to funds' use of derivatives in order to address the investor protection purposes and concerns underlying section 18 of the Act and to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives transactions. The investor protection purposes and concerns include the concern that leveraging an investment company's portfolio through the issuance of senior securities magnifies the potential for gain or loss and therefore results in an increase in the speculative character of the investment company's outstanding securities. In Release 10666, we permitted funds to engage in the transactions described in that release using the segregated account approach, notwithstanding the limitations in section 18, because we believed that the segregated account approach would address the investor protection purposes and concerns underlying section 18 by imposing a practical limit on the amount of leverage a fund may undertake and assuring the availability of adequate assets to meet the fund's obligations arising from such transactions.

As we discussed above, the current regulatory framework, including application of the segregated account approach enunciated in Release 10666 to derivatives transactions, has developed over the years since we issued Release 10666 as funds and our staff sought to apply our statements in Release 10666 to various types of

derivatives and other transactions on an instrument-by-instrument basis. One significant result of this process has been funds' expanded use of the mark-to-market segregation approach with respect to various types of derivatives, together with the segregation of a variety of liquid assets. Funds' use of the mark-to-market segregation approach with respect to various types of derivatives, plus the segregation of any liquid asset, enables funds to obtain leverage in amounts that may not be consistent with the concerns underlying section 18 of the Act. As we noted above, segregating only a fund's daily mark-to-market liability—and using any liquid asset—enables the fund, using derivatives, to obtain exposures substantially in excess of the fund's net assets. In addition, a fund's segregation of any asset that the fund deems sufficiently liquid to cover a derivative's daily mark-to-market liability may not effectively result in the fund having sufficient liquid assets to meet its future obligations under the derivative.

The proposed rule is designed to address the investor protection purposes and concerns underlying section 18 and to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives transactions in light of the dramatic growth in the volume and complexity of the derivatives markets over the past two decades and the increased use of derivatives by certain funds. Under the proposed rule, funds would be permitted to enter into derivatives transactions and financial commitment transactions in reliance on the rule, subject to its conditions.

The proposed rule provides both for an outside limit on the magnitude of funds' derivatives exposures designed primarily to address concerns about excessive leverage and undue speculation and a requirement to manage risks associated with its derivatives transactions by maintaining qualifying coverage assets that is designed primarily to address concerns about a fund's ability to meet its obligations in connection with its derivatives and financial commitment transactions. The proposed rule also seeks to provide a balanced and flexible approach by permitting funds to obtain additional derivatives exposure (under the risk-based portfolio limit) where the fund's derivatives, in the aggregate, have a risk-mitigating effect on the fund's overall portfolio.

As noted above, the proposed rule includes asset segregation requirements for both derivatives transactions and financial commitment transactions. With regard to derivatives, a fund would

⁵⁰⁸ As discussed above, the proposed rule would limit indebtedness leverage created through derivatives transactions that involve the issuance of senior securities (*i.e.*, because these transactions involve a payment obligation). The proposed rule would not limit economic leverage created through derivatives (*e.g.*, purchased options) that would generally not be considered to involve the issuance of senior securities (*i.e.*, because these transactions do not involve a payment obligation).

be required to assess both the current and future payment obligations (and therefore, potential losses) arising from its derivatives transactions. With regard to financial commitment transactions, a fund would be required to maintain qualifying coverage assets equal in value to the fund's full obligations under those transactions.

Finally, except for funds that engage in only a limited amount of derivatives transactions and that do not use certain complex derivatives transactions, the fund would be required to establish a derivatives risk management program, including the appointment of a derivatives risk manager. The derivatives risk management program requirement is designed to complement the portfolio limitations and asset coverage requirements by requiring a fund subject to the requirement to assess and manage the particular risks presented by the fund's use of derivatives.

B. Economic Baseline

The proposed rule would affect funds and their investors, investment advisers, and market participants engaged in the issuance, trading, and servicing of derivatives, financial commitment transactions, and securities. Market participants include fund counterparties and other third-party service providers such as fund custodians and administrators.⁵⁰⁹ The effects on all of these parties are discussed below in the discussion of the costs and benefits of the proposed rule.

The economic baseline of the proposed rule is the current industry practice established in light of Commission and staff positions that funds rely upon when determining whether they are permitted under the Act to engage in derivatives transactions and financial commitment transactions. As discussed above in section II.B.3, funds that engage in these types of transactions typically segregate "liquid" assets using one of two general practices: Notional amount segregation or mark-to-market segregation. The current approach has developed over the years since we issued Release 10666

as funds and our staff sought to apply our statements in Release 10666 to various types of derivatives and other transactions. We understand that, in determining how they will comply with section 18, funds consider various no-action letters issued by our staff. These staff letters, issued primarily in the 1970s through 1990s, addressed particular questions presented to the staff concerning the application of the approach enunciated in Release 10666 to various types of derivatives on an instrument-by-instrument basis. We understand that funds also consider, in addition to these letters, other guidance they may have received from our staff and the practices that other funds disclose in their registration statements. The current approach's development on an instrument-by-instrument basis, together with the dramatic growth in the volume and complexity of the derivatives markets over the past two decades, has resulted in situations for which there is no specific guidance from us or our staff with respect to various types of derivatives.

Our staff economists have analyzed recent industry-wide trends and certain funds' portfolio holdings in order to provide information about funds' use of derivatives and to inform our consideration of the proposed rule and assess its economic effects.⁵¹⁰ Below we discuss the size and recent growth of the U.S. fund industry generally, as well as the growth of specific fund types within the industry. As discussed below, the fund industry has grown significantly since 2010 and certain funds that make greater use of derivatives have received a disproportionately large share of fund inflows. This information highlights the importance of a new approach to regulating derivatives transactions under section 18 and, together with the information we discuss below concerning the extent to which certain funds use derivatives, has helped to shape the scope and substance of the proposed rule, as well as identify the benefits, costs, and effects on efficiency, competition, and capital formation.

According to Morningstar, at the end of June 2015, there were 9,707 registered open-end funds, 560 closed-end funds, and 1,706 ETFs (11,973 total funds) with a total reported AUM of \$17.9 trillion.⁵¹¹ Of that total, open-end funds

held \$15.9 trillion, closed-end funds held \$250 billion, and ETFs held \$1.8 trillion. In terms of fund categories, 3,361 US equity funds held the largest percentage (38%) of industry AUM, followed by 2,073 taxable bond funds (19%), 1,914 allocation funds (17%), and 1,877 international equity funds (15%). As of June 2015, there were 537 money market funds with an estimated \$3.0 trillion in AUM.⁵¹² In addition, based on Commission records (Form 10-Ks and 10-Q's), at the end of June 2015, there were 88 active business development companies ("BDCs") with an estimated \$52.3 billion in AUM.

Although not large in terms of industry AUM (less than 3% as of June 2015⁵¹³), the growth in AUM of alternative strategy funds, which tend to be greater users of derivatives, is notable. In 2010, there were a total of 591 alternative strategy funds with a total AUM of \$320 billion.⁵¹⁴ By the end of 2014 those numbers had risen to 1,125 funds with a total AUM of \$469 billion. The annual growth rate in the AUM of alternative strategy funds from the end of 2010 through the end of 2014 was 10%.⁵¹⁵ Excluding commodity funds (which had a negative growth rate during this period), alternative strategy funds had an annual growth rate of 22%. During this four-year period, alternative strategy funds received the largest net inflows (14% annually) relative to their total asset base. Excluding commodity funds, alternative strategy funds had an annual net inflow of 28%.⁵¹⁶ Over the four-year period

conditions. Money market funds thus do not engage in derivatives transactions, but may enter into certain financial commitment transactions to the extent permitted by rule 2a-7. *See supra* note 472. Similarly, BDCs, based on the DERA sample, do not appear to enter into derivatives transactions to a material extent (no sampled BDC reported any derivatives transactions in its then-most recent annual report). BDCs do, however, appear to enter into financial commitment transactions as defined in the proposed rule based on the DERA sample. We provide aggregate figures for money market funds and BDCs separately. *See infra* note 578.

⁵¹² Data taken from reports filed on Form N-MFP for June 2015.

⁵¹³ DERA White Paper, *supra* note 73, Table 1. We refer to alternative strategy funds in the same manner as the staff classified "Alt Strategies" funds in the DERA White Paper as including the Morningstar categories of "alternative," "nontraditional bond" and "commodity" funds.

⁵¹⁴ DERA White Paper, *supra* note 73, Table 2.

⁵¹⁵ During the 2010–2014 time period, the annual growth rate of US equity funds was 14%, the sector equity funds growth rate was 18%, the international equity fund growth rate was 9%, the allocation fund growth rate was 16%, the taxable bond fund growth rate was 10%, and the municipal bond fund growth rate was 6%.

⁵¹⁶ During the 2010–2014 time period, annual net flows as a percent of fund AUM were 0% for US equity funds, 10% for sector equity funds, 6% for international equity funds, 7% for allocation funds,

Continued

⁵⁰⁹ Throughout the economic analysis we discuss the potential effects of the proposed rule and estimate the costs to funds to perform the enumerated types of activities that we anticipate would be required to comply with the proposed rule's specific requirement(s). We note that these costs may be incurred, in whole, or in part, by a fund, its investment adviser, or one of its service providers (e.g., fund custodian, or fund administrator). Except where addressed specifically below, we do not, however, have information available to us to reasonably estimate how the costs for such activities may be allocated among these parties.

⁵¹⁰ This analysis is included in the DERA White Paper, *supra* note 73. *See* text surrounding *supra* note 87.

⁵¹¹ DERA White Paper, *supra* note 73, Table 1. These figures do not include money market funds or BDCs. Under rule 2a-7 of the Act, money market funds are required to limit their investments to short-term, high-quality debt securities that fluctuate very little in value under normal market

since 2010, alternative strategy funds also received a disproportionate share of net fund flows. These funds received 10% of all industry net inflows while comprising only 3% of industry AUM as of 2010. Excluding commodity funds, alternative strategy funds received 11% of all industry net inflows while comprising only 1.6% of industry AUM as of 2010.

DERA staff manually collected data regarding derivatives, financial commitment transactions, and other senior security transactions from the then-latest fund annual reports of a 10% random sample of all registered management investment companies as well as business development companies as of June, 2015.⁵¹⁷ As discussed above, we recognize that the review by DERA staff evaluated funds' investments as reported in the funds' then-most recent annual reports. DERA staff, however, is not aware of any information that would provide any different data analysis of the current use of senior securities transactions by registered funds and business development companies. DERA staff prepared an analysis of each sampled fund's aggregate exposure by aggregating, for each fund: (1) The notional amounts of the fund's derivatives transactions, as defined in the proposed rule; (2) the financial commitment obligations associated with the fund's financial commitment transactions, as defined in the proposed rule; and (3) the indebtedness associated with any other senior securities transactions.⁵¹⁸

In the resulting sample of 1,188 funds, 68% (53% in AUM) had zero exposure to derivatives and approximately 89%

7% for taxable bond funds, 1% for municipal bond funds, and – 2% for commodity funds.

⁵¹⁷ DERA staff included in its sample open-end funds (including ETFs), closed-end funds, and BDCs, but excluded money market funds (because these funds do not invest in derivatives transactions). For the alternative strategy funds, DERA staff required in its sample a minimum of three funds selected from each Morningstar subcategory. Morningstar subcategories include, among others, managed futures, multicurrency, bear market, multialternative, market neutral, long/short equity, trading inverse and trading leveraged.

⁵¹⁸ The aggregate notional amount for derivatives in the DERA random sample is approximately \$350 billion. The Bank for International Settlements reports that the aggregate notional amount for derivatives worldwide at the end of 2014 was approximately \$688 trillion (\$58 trillion exchange traded and \$630 trillion over-the-counter). See http://www.bis.org/statistics/about_derivatives_stats.htm?m=6v32. BIS data on exchange-traded derivatives is collected from over 50 organized exchanges and includes information on interest rate and foreign exchange derivatives only. BIS data on OTC derivatives is from large dealers in 13 countries and includes forwards, swaps, and options on foreign exchange, interest rates, and equities.

(90% in AUM) had less than 50% exposure as a percentage of NAV.⁵¹⁹ Approximately 96% (95% in AUM) of the funds had aggregate exposures below 150%.⁵²⁰ As a result, we expect that a majority of funds would not be required to modify their portfolios in order to comply with the proposed rule because a substantial majority of funds do not appear (based on the DERA sample) to engage in derivatives transactions or financial commitment transactions and thus may not need to rely on the exemption the proposed rule would provide, or do not appear to engage in those transactions at a level that would exceed the proposed rule's exposure limitations.⁵²¹ Funds that do engage in derivatives transactions and financial commitment transactions would, however, need to rely on the proposed rule to continue to engage in these transactions.

DERA examined the detailed holdings for every fund in its sample and found that alternative strategy funds hold the most derivatives and have the highest exposure (expressed as aggregate notional amounts relative to fund net asset value). Among alternative strategy funds, 73% had at least some exposure to derivatives and 52% had greater than 50% exposure to derivatives.⁵²² For traditional mutual funds, 29% had at least some exposure to derivatives and 6% had greater than 50% exposure to derivatives. Not only did alternative strategy funds have greater derivatives exposures, but their holdings also were larger (as measured in terms of notional amount relative to fund net asset value). For alternative strategy funds with derivatives, mean and median notional values of derivatives were 167% and 99% of net assets, respectively.⁵²³ As a point of comparison, for traditional mutual funds, the comparable numbers were 36% and 10%, respectively. Approximately 27% of alternative strategy funds had 150% or greater

aggregate exposure, compared to less than 2% for traditional mutual funds.⁵²⁴

As noted above, as of June 2015, there were 560 closed-end funds with total AUM of \$250 billion. In DERA's random sample of the funds, 47% of closed-end funds had some exposure to derivatives.⁵²⁵ Nine percent of closed-end funds had at least a 50% exposure to derivatives. No closed-end fund had aggregate exposure over 150% of net assets.⁵²⁶

Also as noted above, as of June 2015, there were 1,706 ETFs and 88 BDCs with total AUM of \$1.8 trillion and \$52.3 billion, respectively. In DERA's random sample of the funds, 29% of ETFs and zero BDCs had some exposure to derivatives.⁵²⁷ Eighteen percent of ETFs had exposure to derivatives of 50% or more (86% among alternative strategy ETFs). Eight percent of ETFs had aggregate exposure over 150% of net assets.⁵²⁸

Our staff also analyzed, through a review of recent N-SAR filings, the extent to which funds are permitted (as stated in fund disclosure documents) to use certain derivatives as part of their investment objective or strategy.⁵²⁹ In each case, more alternative funds⁵³⁰ were authorized to invest in derivatives than other funds.⁵³¹ For example, the number of alternative funds permitted to invest in options on equities, options on stock indices, stock index futures, and options on index futures was 20% greater than the number of traditional mutual funds.⁵³² Although not all of

⁵²⁴ DERA White Paper, *supra* note 73, Figures 9.4, 9.5.

⁵²⁵ DERA White Paper, *supra* note 73, Figure 11.7.

⁵²⁶ DERA White Paper, *supra* note 73, Figure 9.7.

⁵²⁷ DERA White Paper, *supra* note 73, Figures 11.10, 11.11.

⁵²⁸ DERA White Paper, *supra* note 73, Figure 9.10.

⁵²⁹ DERA White Paper, *supra* note 73. This portion of the DERA analysis used a sample consisting of all funds filing form N-SAR for 2014 (12,360 in total). Form N-SAR, filed with the Commission and made publicly available, is filed semi-annually by all registered investment companies and provides census-type data about the registrant (recently, the Commission proposed new rules that would rescind Form N-SAR and replace it with a more modernized and updated census form, proposed Form N-CEN). See Investment Company Reporting Modernization Release, *supra* note 138. Form N-SAR requires funds to answer questions with respect to whether they are allowed to invest in the following derivatives: Options on equities, options on debt securities, options on stock indices, interest rate futures, stock index futures, options on futures, options on index futures, and other commodity futures.

⁵³⁰ Morningstar U.S. category "Alternative funds."

⁵³¹ DERA White Paper, *supra* note 73, Table 3, Panel A.

⁵³² DERA White Paper, *supra* note 73, Table 3, Panel A. The comparable differences for options on debt securities, interest rates futures, options on futures, and other commodity options are 8%, 12%, 16%, and 21%, respectively.

⁵¹⁹ DERA White Paper, *supra* note 73, Figures 11.1, 12.1.

⁵²⁰ DERA White Paper, *supra* note 73, Figures 9.1, 10.1.

⁵²¹ See *supra* note 212 and accompanying text. We recognize that some of the funds in DERA's sample that had no exposure to derivatives or financial commitment transactions in their then-most recent annual reports also may engage in these transactions to some extent. As discussed above, DERA staff is not aware of any information that would provide any different data analysis of the current use of senior securities transactions by registered funds and business development companies.

⁵²² DERA White Paper, *supra* note 73, Figure 11.4.

⁵²³ DERA White Paper, *supra* note 73, Table 6, Panel D.

these instruments would be deemed a “derivatives transaction” under the proposed rule (e.g., a purchased option), information about the extent to which funds are permitted to invest in these instruments may provide an indication of the extent to which funds engage in strategies that would involve the use of derivatives transactions subject to the proposed rule.

Under the current regulatory framework, funds that invest in derivatives and other senior securities generally segregate certain assets with respect to those transactions. While our staff has observed that some funds have interpreted the guidance differently in certain cases, we assume for purposes of establishing the baseline that funds generally segregate sufficient assets to cover at least any mark-to-market liabilities on the funds’ derivatives transactions, with some funds segregating more assets for certain types of derivatives and transactions (sufficient to cover the full notional amount of the transaction or an amount in between the transaction’s full notional amount and any mark-to-market liability).

There is currently no requirement for funds that invest in derivatives to have a risk management program with respect to their derivatives transactions, although we understand that the advisers to many funds whose investment strategies could entail derivatives already assess and manage the risks associated with derivatives transactions. Funds’ current risk management practices may not meet the proposed rule’s specific risk-management program requirements, however, and therefore we believe that the baseline for the derivatives risk management program requirement would be that all funds that would be subject to the requirement would need to establish such a program or conform their current practices to satisfy the requirements in the proposed rule.

C. Economic Impacts, Including Effects on Efficiency, Competition, and Capital Formation

Below, we discuss anticipated economic impacts, including effects on efficiency, competition, and capital formation that may result from our proposals. Where possible, we have attempted to quantify the costs, benefits, and effects of the proposed rule and amendments to Forms N-PORT and N-CEN. In many cases, however, we are unable to quantify the economic effects because we lack the information necessary to provide a reasonable estimate.

As discussed above, there is substantial diversity in the types and strategies of funds and how and to what extent funds use derivatives. Moreover, for those funds that do use derivatives, there is substantial variability in how they comply with current Commission positions and staff guidance on compliance with section 18 (including asset segregation). There is also substantial variability in how any given fund may react to the proposed rule, if adopted, and how the market may react in turn. A fund that uses a moderate amount of derivatives may increase or decrease its derivative usage, or shift within types of derivatives (e.g., from cash-settled to physically-settled). A fund may alter its investment strategy in order to comply with one of the proposed rule’s portfolio exposure limitations by reducing use of derivatives and not substituting other instruments to achieve equivalent exposures. To the extent that a fund alters its investment strategy, this change may represent an opportunity cost to investors. Such opportunity costs depend on investors’ individual preferences and are, as a result, difficult to quantify. Alternatively, a fund may shift the composition of its portfolio away from derivatives covered by the proposed rule, either by using derivatives not covered by the proposed rule, or by substituting the purchase of derivatives with a purchase of the underlying assets (or similar assets). Such a shift in portfolio composition would involve transactions costs. Those transactions costs would depend on both the amount of the portfolio to be traded, as well as the liquidity of the assets to be traded, both of which are likely to vary widely from fund to fund (and thus are difficult to quantify). Finally, a fund may seek to operate in a structure not subject to the limitations of section 18.⁵³³ We discuss these potential economic impacts in more detail below. Although much of the following discussion is qualitative in nature, we have sought to quantify certain costs, benefits, and effects of the proposed rule, where possible.⁵³⁴

⁵³³ We quantify estimated costs related to a fund that chooses to deregister under the Investment Company Act and liquidate and/or offer the fund’s strategy as a private fund or commodity pool. See *infra* note 554 and accompanying text.

⁵³⁴ We discuss below in section IV.D, other potential benefits and quantified costs that we anticipate may result from certain core aspects of the proposed rule, including the exposure-based and risk-based portfolio limitations, the asset segregation requirements, the derivatives risk management program, requirements for financial commitment transactions, and amendments to proposed Forms N-PORT and N-CEN.

We believe that the proposed rule is likely to strengthen investor protection. First, the proposed rule would limit the amount of leverage that a fund may obtain through derivatives transactions and other senior securities transactions. Under the proposed rule, a fund that seeks to comply with the exposure-based portfolio limit would be required to limit its aggregate exposure to 150% of the fund’s net assets, and a fund that seeks to comply with the risk-based portfolio limit would be required to demonstrate, through a value-at-risk-based test,⁵³⁵ that its use of derivatives reduces the fund’s exposure to market risk, and limit its aggregate exposure to 300% of the fund’s net assets. The proposed aggregate exposure limitations are likely to reduce, but not eliminate, the risk that investors will experience losses associated with leveraged investment exposures that significantly exceed a fund’s net assets. Second, the proposed rule would require that a fund manage risks associated with its derivatives transactions by maintaining an amount of certain assets, defined in the proposed rule as “qualifying coverage assets,” designed to enable the fund to meet its obligations under its derivatives transactions (and financial commitment transactions). We expect that, to the extent the proposed rule strengthens investor protection, the proposed rule should also both sustain and promote investors’ willingness to participate in the market. This could lead to increased investment in funds, which in turn could lead to increased demand for securities which could, in turn, promote capital formation.

As we have discussed above, leverage magnifies losses that may result from adverse market movements. As a result, a fund that obtains leverage through derivatives and other senior securities transactions may suffer those magnified losses and, because losses on a fund’s derivatives transactions can create payment obligations for the fund, the losses can force a fund’s adviser to sell the fund’s investments to generate liquid assets in order for the fund to meet its obligations. This could force the fund to enter into forced sales in stressed market conditions, resulting in

⁵³⁵ The proposed rule would require that a fund seeking to comply with the risk-based portfolio limit satisfy the VaR test included in that portfolio limit, that is, limit its use of derivatives transactions so that, immediately after entering into any senior securities transaction, the fund’s “full portfolio VaR” is less than the fund’s “securities VaR,” as those terms are defined in the proposed rule. A fund would also be required to limit its aggregate exposure to 300% of the fund’s net assets.

large losses or even liquidation.⁵³⁶ The proposed rule, by effectively imposing a limit on the amount of leverage a fund may obtain through derivatives, should reduce the possibility of fund losses attributable to leverage. This can have investor protection benefits as well as reduce the risk of adverse effects on fund counterparties. More robust asset segregation requirements also may have the effect of increasing a fund's liquidity, decreasing default risk, and decreasing the risk that a fund may be forced to sell securities in a falling market to meet its obligations under its derivatives transactions (e.g., to meet margin calls). For these reasons, we believe that the proposed rule should encourage capital formation by promoting investors' willingness to invest in funds (or to remain invested in them even in a falling market) and market stability.

The proposed rule may reduce costs and promote efficiency with respect to certain uses of derivatives by replacing the current regulatory framework that depends upon interpretation of Commission and staff guidance with a more transparent and comprehensive regulatory framework that addresses more effectively the purposes underlying section 18. The proposed rule would eliminate disparities under the current regulatory framework, where funds segregate the full notional amount for certain derivatives and segregate only the mark-to-market liability for other types of derivatives. For example, current staff guidance generally calls for a fund to segregate liquid assets equal in value to the full notional amount of a physically settled futures contract. A fund that wishes to avoid encumbering a large portion of its liquid assets might be incentivized to instead enter into a cash settled OTC swap on the same futures contract and segregate only its

mark-to-market liability (if any) under the swap, even if the swap entails higher transaction costs, is less liquid, and/or poses greater counterparty risk. The risk may be compounded further because the mark-to-market segregation approach potentially enables the fund to obtain a level of leverage that is many times greater than its net assets. By contrast, under the proposed rule's portfolio limitations, a physically settled futures contract and a cash-settled swap on the futures contract, both of which have the same notional amount, would be subject to the same treatment. This approach should serve to reduce the likelihood that a fund would choose a less efficient instrument to obtain its investment exposures and also reduce the uncertainty that exists regarding treatment of new products that are not addressed specifically in existing Commission or staff guidance. By providing consistency in how funds treat different derivatives transactions, we believe that the proposed rule should reduce opportunities for regulatory arbitrage where a fund prefers "cheap-to-cover" derivatives—those for which a fund applies the mark-to-market segregation approach—and therefore promote a more efficient use of derivatives instruments by funds when implementing their portfolio strategies.

As discussed above in section III.C.1, the proposed rule would require that a fund maintain qualifying coverage assets, for each derivatives transaction, in an amount equal to the sum of (1) the amount that would be payable by the fund if the fund were to exit the derivatives transaction at the time of the determination (the "mark-to-market coverage amount"), and (2) an amount that represents an estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions (the "risk-based coverage amount"). The proposed rule is designed to be flexible enough to allow a fund to determine these amounts both for existing types of derivatives transactions and for new derivatives instruments that are created in the future. For example, the proposed rule provides that a derivatives transaction's risk-based coverage amount would be an amount that represents an estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions, determined in accordance with policies and procedures that address certain considerations specified in the rule. The proposed rule thus does not prescribe the particular methodology that a fund must use to calculate its risk-based

coverage amount when segregating assets on its derivatives transactions. Instead, the proposed rule permits a fund to make such determinations in accordance with policies and procedures approved by the fund's board, based on a fund's particular facts and circumstances. We believe that this flexible approach would permit, and may promote, appropriate innovation in the development and use of new derivative instruments that may be beneficial for funds and investors. We also believe that this may increase investor protection by requiring that funds assess the risk of their derivatives transactions and segregate assets to cover an amount in addition to the mark-to-market liability.

Many of the impacts of the proposed rule will depend on how funds react to the conditions it imposes. As an initial matter, based on the DERA staff analysis, which shows that a substantial majority of funds in the DERA sample did not use derivatives or used derivatives to a limited extent, the portfolio limits under the proposed rule are not expected to affect the investment activities of a majority of funds.⁵³⁷ Funds that react to the rule, however, may do so in several different ways.

Some funds will not be compelled by the proposed rule to modify their derivatives exposure, but they might nonetheless respond to the proposed rule's treatment of derivatives by modifying their derivatives holdings. For example, because funds today apply the notional amount segregation approach to certain derivatives, such as physically settled Treasury futures or CDS, there exists, as discussed above, an incentive for funds to invest in derivatives for which funds apply the mark-to-market segregation approach. Because the proposed rule would remove the disparate treatment for different derivatives with the same notional amounts, it is possible that the proposed rule may result in greater use of the types of derivatives that funds today may use less extensively because of the need to apply the notional amount segregation approach. By contrast, funds that today only segregate the mark-to-market liability for their derivatives would need to segregate a greater quantity of assets and, if the fund had not been segregating cash and cash equivalents, would generally be required to segregate assets that are more liquid. Such a fund could determine to reduce its derivatives exposure to avoid segregating a greater quantity of assets that are cash and cash equivalents. Similarly, funds that use

⁵³⁶ See Thurner, Farmer & Geanakoplos, *Leverage Causes Fat Tails and Clustered Volatility* (May 2012) (discussing investments collateralized by margin and noting that "[t]he nature of the collateralized loan contract thus sometimes turns buyers of the collateral into sellers, even when they might think it is the best time to buy. . . . When the funds are unleveraged, they will always buy into a falling market, i.e. when the price is dropping they are guaranteed to be buyers, thus damping price movements away from the fundamental value. When they are sufficiently leveraged, however, this situation is reversed they sell into a falling market, thus amplifying the deviation of price movements away from fundamental value."). See also Off-Balance-Sheet Leverage IMF Working Paper, *supra* note 79 ("[A] more leveraged investor facing a given adverse price movement may be forced by collateral requirements (i.e. margin calls) to unwind the position sooner than if the position were not leveraged. The unwinding decision of an unleveraged investor depends merely on the investor's risk preferences and not on potentially more restrictive margin requirements.").

⁵³⁷ DERA White Paper, *supra* note 73, Table 6.

derivatives in an amount that minimally exceeds the threshold for implementing a risk management program may reduce derivatives use below that threshold in order to avoid that cost. To the extent that any funds were hesitant to use derivatives (or any particular type of derivative) given the lack of specific Commission or staff guidance addressing certain derivatives, these funds might become more willing to use those derivatives under the proposed rule. Thus, the proposed rule may lead to an increase or decrease in the use of particular derivatives or an increase or decrease in derivatives use by particular funds.

Because we do not know to what extent the current regulatory framework for derivatives may have been influencing funds' use of derivatives—for example, the extent to which differences in the two approaches to asset segregation may have been distorting funds' choices of products in the current market—we do not know to what extent funds would change existing positions, or would enter into different positions going forward, under the proposed rule. Accordingly, we cannot quantify this potential effect. We discuss the potential effects of each directional option (decreasing derivatives use, shifting portfolio composition, or increasing derivatives use) below.

A fund may incur costs to reduce derivatives use if it pays a penalty or other amount to a counterparty to unwind a position, or if the fund sells its position to a third party (or the fund enters into a directly offsetting position to make use of the netting provision in the proposed rule.) To the extent that a fund uses derivatives for directional exposure, reducing the use of derivatives could reduce returns to the fund's shareholders. This could potentially make the fund (1) less attractive to existing shareholders who desire greater market exposure; or (2) more attractive to new shareholders who prefer lower levels of exposure (or encourage current shareholders to increase their investment in the fund because of the lower derivatives exposure). To the extent that a fund uses derivatives for hedging, reducing derivatives use could change the risk profile of the fund's portfolio, depending on the derivative position that the fund determines to close as well as other related changes the fund determines to make to its portfolio.⁵³⁸

⁵³⁸ We discuss below potential limitations on a fund's ability to use derivatives for hedging purposes.

A fund that determines to shift the composition of derivatives used, for example toward physically-settled derivatives, would incur transaction costs in modifying the portfolio—the costs to exit prior positions and to enter into new ones. But the benefits to the fund of holding a more “optimal” (from its perspective) composition of derivatives—*i.e.*, one that is not influenced by the differential regulatory treatment of certain derivatives—could offset in whole or in part, or even exceed, those costs.

A fund that determines to increase its use of derivatives would incur transaction costs to enter into the new positions and, if those new positions were to cause the fund's exposure to exceed 50% of net asset value, the fund would be required to adopt and implement a formalized derivatives risk management program under the proposed rule and incur the associated costs. The impacts to the funds' investors would be different from those experienced by investors in funds that determine to reduce derivatives exposure. If the derivatives are used for directional exposure, the increase in leverage increases the potential for increased returns but also increases risk of loss, which some investors might prefer and others might not. If the derivatives are used for hedging, the increase in derivatives could increase or decrease the level of risk (and thus potential return) that the fund assumes, depending on the particular derivatives entered into.

With respect to each of the possibilities listed above, and for several additional options discussed in greater detail below, we describe the existence of transaction costs for the fund to terminate or transfer existing obligations, and to enter into new ones. These costs include fees, and operational and administrative costs, as well as the spread paid to intermediaries and the market impact on prices, if any. The degree of mark-ups and market impact can turn on the transparency and liquidity of the market, as well as the size of other market participants (*i.e.*, counterparties) and competitiveness in the market. There may also be tax costs. We lack the data to quantify these potential transaction costs. While some of the derivatives instruments are exchange-traded, many of these instruments are bilaterally negotiated. We believe costs would generally be lower for more liquid, exchange-traded derivatives when compared with more complicated, bespoke, or OTC-traded derivatives. We also believe costs would generally be lower for larger market participants that

actively transact in derivatives versus smaller market participants.⁵³⁹

Some types of funds use derivatives more extensively. Alternative strategy funds, in particular, have experienced significant growth and have been shown to be heavier users of derivatives. Four managed futures funds in DERA's sample, for example, exhibited aggregate notional exposures ranging from approximately 500% to 950% of net assets, far greater than the exposure limits we are proposing today. Some ETFs (or other funds) expressly use derivatives to obtain a leveraged multiple of two or three times the daily performance (or inverse performance) of an index. Some of these funds had derivatives exposures exceeding 150% of net assets.⁵⁴⁰ A limited number of other types of funds in DERA's sample also had aggregate exposures exceeding 150% of net assets. Funds that today operate with aggregate exposure far in excess of 150% of net assets (or, for certain leveraged ETFs or mutual funds, that seek to maintain a constant level of leveraged investments that require exposure in excess of 150%) could not continue operating as they do today under the proposed rule's 150% exposure limit. Furthermore, we do not expect that funds that use derivatives extensively in order to obtain market exposure generally would be able to satisfy the VaR test included in the risk-based limit.⁵⁴¹ These types of funds thus appear most likely to be affected by the proposed rule.

Some funds within this category of heavier derivatives users might be limited under the proposed rule from achieving high leverage through derivatives, and they might choose to modify their investment activities or portfolio composition in order to comply with the proposed rule. They could do so in three principal ways. First, a fund could react to the proposed rule's conditions (*e.g.*, the restrictions on the amount of aggregate exposure a fund may obtain under the 150% and 300% exposure limits) by reducing its

⁵³⁹ See, *e.g.*, O'Hara, Wang & Zhou, *The Best Execution of Corporate Bonds*, Working Paper (Oct. 26, 2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2680480 (finding that insurance companies trading in corporate bonds receive better execution prices if they are more active in the market, and that trading with a dominant dealer or underwriter worsens those differentials).

⁵⁴⁰ As discussed above, these funds are sometimes referred to as trading tools since they seek to provide a specific level of leveraged exposure to a market index over a fixed period of time.

⁵⁴¹ See *supra* note 314 (explaining that a fund that holds only cash and cash equivalents and derivatives would not be able to satisfy the VaR test).

derivatives use below the relevant limit, or by declining to enter into transactions going forward that would exceed these limits. A fund that is compelled to react to the proposed rule and that does so by reducing its derivatives exposure would experience effects, including transactions costs, similar to those discussed above for a fund that reduces its derivatives exposure voluntarily.

Second, a fund that is limited by the proposed rule from achieving high leverage through derivatives might modify its investment activities by engaging in transactions that might involve leverage but not the issuance of a senior security that would be restricted by section 18 (e.g., a purchased option). Some 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.⁵⁴² A fund may use these types of transactions to help it remain in compliance with the proposed rule, or avoid reliance on the proposed rule altogether. To the extent that a fund pursues leverage other than through a derivative that is subject to the proposed rule, the fund could incur transaction costs to close out positions covered by the proposed rule, and enter into new positions not covered by the proposed rule. These transaction costs are of the same nature as those discussed above for funds that reduce their derivatives exposure in response to the new rule. Further costs for this option are the opposite of the discussion above with respect to shifting from cash-settled to physically-settled instruments: Whereas there, investors could benefit from a more optimally-designed portfolio not subjected to regulatory arbitrage, here, investors may find it detrimental if the transactions entered into by funds to avoid the proposed rule were less efficient, or less calibrated to the fund's disclosed investment approach or risk/reward profile, than would otherwise be the case.

Third, a fund that is limited by the proposed rule from achieving high leverage through derivatives might modify its investment activities and

reduce its use of derivatives by purchasing the securities underlying a derivative instrument (e.g., purchasing the securities underlying an index future, rather than the index future itself). Derivatives can provide a lower-cost method of achieving desired exposures than purchasing the underlying reference asset directly. For example, a fund may use index futures as a cheaper means to gain exposure to certain markets or equitize cash, rather than purchasing the underlying equities included in the index.⁵⁴³ Funds responding to the proposed rule in this manner would incur the incremental costs of trading constituent stocks of the index. As another example, a fund might also gain exposure to (or hedge) credit risk more cheaply through a credit default swap on an individual name or on a CDS index rather than by purchasing or shorting bonds in the cash market.⁵⁴⁴ To the extent that certain funds may be required to reduce their use of derivatives, these funds may experience higher trading costs. The transaction costs for exiting existing derivatives instruments are described in greater detail above. The costs of purchasing the underlying instruments can vary widely based on factors relating to the number and liquidity of the underlying instruments, in addition to the trading costs that various types of funds may incur in order to transact in the underlying instruments.⁵⁴⁵ For example, transaction costs might make it more expensive to replace a total return swap on the S&P 500 by purchasing each of the underlying instruments, or even a sampling thereof, but a total return swap based on a

narrower index might be more readily replaced.⁵⁴⁶

In addition to the direct effects on the fund of transacting in the derivatives rather than in the underlying assets, there are indirect effects. A fund that reduces its use of derivatives or replaces them with underlying assets may affect the fund's liquidity. We recognize that certain derivatives can be more liquid than their underlying reference assets. For example, it is cheaper to trade certain CDS contracts than to trade the underlying bonds.⁵⁴⁷ In addition, some derivatives instruments may continue to trade during a broader stock market halt or during the halt in the trading of a particular security. On the other hand, some derivatives may be less liquid than the underlying assets. For example, OTC swaps are tied to a specific counterparty and may be more customized; an OTC swap therefore may be less liquid than the underlying securities (which may be exchange traded and centrally cleared). Because the staff's data show that most funds in DERA's sample were below the 150% proposed exposure limitation, however, we expect that the proposed rule would not have a material effect on the way in which the majority of funds operate today, including how these funds manage their liquidity. Finally, if a number of funds were to respond to the proposed rule by shifting to purchasing the underlying assets, it is possible that demand for, and thus liquidity of, certain derivatives might be reduced while demand for, and liquidity of, the related underlying assets might be increased.

These three approaches all involve a fund changing its investment strategy in order to comply with the rule and are likely to have similar impacts on capital formation. A fund might seek to reduce its aggregate exposure by replacing a derivative with the underlying security. As a result, the overall demand for the underlying securities may increase and therefore promote capital formation, assuming that those underlying securities would not themselves have been held by the counterparty to the fund's derivative contract to hedge that exposure.⁵⁴⁸ On the other hand, if a

⁵⁴³ See 2010 ABA Derivatives Report, *supra* note 70, at 8 ("[W]hen a fund has a large cash position for a short amount of time, the fund can acquire long futures contracts to retain (or gain) exposure to the relevant equity market. When the futures contracts are liquid (as is typically the case for broad market indices), the fund can eliminate the position quickly and frequently at lower costs than had the fund actually purchased the reference equity securities.") For example, See Biswas, et al., *The Transaction Costs of Trading Corporate Credit*, Working Paper (Mar. 1, 2015) ("Transaction Costs of Trading Corporate Credit"), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2532805 ("For institutional-size trades up to \$500K, bonds are up three times as expensive as the corresponding position using credit default swaps").

⁵⁴⁴ The 2010 ABA Derivatives Report, *supra* note 70, at 8, also observes that "a fund could write a CDS, offering credit protection to its counterparty. In doing so the fund gains the economic equivalent of owning the security on which it wrote the CDS, while avoiding the transaction costs that would have been associated with the purchase of the security."

⁵⁴⁵ See *supra* note 539.

⁵⁴⁶ In many cases, it is possible to obtain a proxy for an index return with only a subsample of the index constituents. While this option reduces the replication transaction cost, it introduces a tracking error and is unlikely to be as cost efficient as transacting in the total return swap. See generally, e.g., Joel M. Dickson et al., *Understanding synthetic ETFs* Vanguard (June 2013), available at https://pressroom.vanguard.com/content/nonindexed/6.14.2013_Understanding_Synthetic ETFs.pdf, at 9.

⁵⁴⁷ See *The Transaction Costs of Trading Corporate Credit*, *supra* note 543.

⁵⁴⁸ For example, a fund that obtains synthetic long exposure to a corporate debt instrument by

⁵⁴² The Investment Company Act also imposes limitations on fund of funds investments. See, e.g., sections 12(d)(1)(A), (B) and (C) of the Investment Company Act. In addition, we understand that funds generally elect federal income tax treatment as a "regulated investment company" under Subchapter M of the Internal Revenue Code and that diversification requirements under Subchapter M may also limit certain fund of funds investments.

fund is unable to use derivatives to mitigate or eliminate certain risks posed by its portfolio securities, a fund may find it less desirable to hold such securities, adversely affecting capital formation by potentially reducing demand for debt and equity securities.⁵⁴⁹ A reduction in the use of derivatives may adversely affect the pricing efficiency of underlying reference securities,⁵⁵⁰ thereby adversely affecting capital formation. In addition, to the extent that a reduction in the use of derivatives adversely affects pricing efficiency or transparency, it may become more difficult for a fund (or its third-party pricing service) and its board of directors to determine fair values where necessary. As we discuss below, however, we believe that the proposed rule would affect only the small percentage of funds that use derivatives to a much greater extent than funds generally, and thus, any such aggregate effects are not likely to be significant.⁵⁵¹

Other funds that use derivatives extensively, including the types of funds discussed above (as those most likely to be impacted by the proposed rule), may be unable to scale down their aggregate exposures or otherwise de-lever their funds in a way that allows the fund to maintain its investment objectives or provide a product that has sufficient investor demand. Such a fund may choose to deregister under the Act and liquidate, and/or the fund's sponsor may choose to offer the fund's strategy as a private fund or (public or private) commodity pool.

For example, a fund that must reduce its aggregate exposure may not be able to offer the returns (and risks) that some investors demand. ETFs (or other funds) that use derivatives to obtain a leveraged multiple of the performance (or inverse performance) of an index and that require exposures in excess of

150% of net assets could not operate in their current form under the proposed rule, and may not have sufficient demand at lower exposure levels. Some of these funds therefore may be liquidated or merged into other funds.

As discussed above, however, alternative strategy funds and certain leveraged ETFs (the types of fund most likely to be particularly affected by the proposed rule) represent a very small percentage of fund assets under management—approximately 3% of all fund assets.⁵⁵² Only a small subset of funds—primarily managed futures funds and leveraged ETFs—would appear to be unable to operate as they do today while complying with the proposed rule's aggregate exposure limits.⁵⁵³ Therefore, we believe that the number of funds that may be unable to scale down their aggregate exposures or otherwise de-lever their funds in a way that allows the funds to maintain their investment objectives or provide a product that has sufficient investor demand—*i.e.*, those that may have to pursue deregistration and liquidation—would be limited in many instances to the small percentage of funds that use derivatives to a much greater extent than funds generally, and would not be significant to the industry as a whole.

In the event that a fund is unable to operate under the proposed rule's aggregate exposure limit, the fund's sponsor and/or investment adviser may choose to: (1) Offer the fund as a private fund or (public or private) commodity pool; (2) liquidate the fund's assets and deregister the fund under the Act; or (3) merge the fund into another fund. We estimate that the average cost associated with such actions would range from \$30,000 to \$150,000, per fund, depending on the particular actions taken by the fund (or its sponsor or investment adviser).⁵⁵⁴ These costs are

the direct costs to the fund. There are also indirect costs associated with a fund's decision to deregister and for the fund's sponsor to offer the fund's strategy as a private fund or public or private commodity pool. To the extent that a fund becomes unavailable to investors, or available only at a higher cost, investors and competition will be adversely affected. For example, non-accredited investors generally would not be able to purchase interests in equivalent unregistered funds. However, accredited investors who prefer unregistered funds, or who are agnostic about the form, could have the same or greater choice of funds, and competition among funds offering similar investment objectives or risk/return profiles as private funds may increase. Similarly, registered funds that choose to operate as public commodity pool investment partnerships, rather than SEC-registered funds, would be accessible to a broad population of investors. In addition, investment advisers, counterparties, and other market participants whose business is concentrated on offering, managing, or servicing these type of funds may similarly be adversely affected.⁵⁵⁵ For example, it could mean substantially lower management fees for advisers whose advisory business primarily involves funds that would be unable to operate under the proposed rule's exposure limits. It also could mean higher management and/or performance fees if the new investment vehicle is a private fund. To the extent that these parties are adversely affected, competition also could be negatively affected. We are unable to quantify these indirect costs because we cannot determine the extent to which adequate substitutes would exist in the market.

The proposed rule's aggregate exposure limits may, in certain situations, constrain a fund's ability to use derivatives as a hedge in connection with its investment strategies. Although the analysis conducted by DERA staff indicates that most funds do not today have aggregate exposure in excess of the proposed rule's 150% and 300% exposure limitations, it is possible that a fund that uses a substantial amount of

writing a credit default swap may decide, instead, to hold the debt instrument directly.

⁵⁴⁹ For example, if a fund can no longer use a credit default swap to help mitigate credit risk, the fund might be less willing to hold a high-yield bond, which may affect the issuance of high-yield bonds.

⁵⁵⁰ For example, option listings may incentivize market analysts to research the underlying securities. Options trading may also facilitate market pricing of the underlying securities. See Arrata William, Alejandro Bernales & Virginie Coudert, *The Effects of Derivatives on Underlying Financial Markets: Equity Options, Commodity Derivatives and Credit Default Swaps*, SUERF 50th Anniversary Volume 445 (2013).

⁵⁵¹ To the extent that aggregate derivatives usage by funds is small compared to the world-wide derivatives market (see *supra* note 518), and to the extent that only some fraction of derivatives usage by funds would potentially be affected, the expected effect on the world-wide derivatives market would be negligible.

⁵⁵² See DERA White Paper, *supra* note 73, Table 1.

⁵⁵³ Based on our staff's review of fund filings with the Commission and Morningstar data, we estimate that there are approximately 60 managed futures funds. Based on information from ETF.com, we estimate that there are 43 2x leveraged ETFs and 36 2x inverse ETFs (79 total), and 36 3x leveraged ETFs and 28 3x inverse ETFs (64 total). We note that some funds that seek to deliver two times the performance of an index may be able to achieve this level of exposure in compliance with the proposed rule's 150% exposure limit by investing in securities included in the benchmark index and obtaining additional exposure through derivatives transactions. Although we understand that most of the funds that seek to achieve performance results, over a specified period of time, that are a multiple of or inverse multiple of the performance of an index or benchmark are ETFs, some mutual funds also pursue these strategies. These mutual funds would be affected to same extent by the proposed rule as leveraged ETFs.

⁵⁵⁴ This estimate is based on staff outreach and experience and includes, for example: Time costs

to consult with appropriate personnel of the investment adviser (*e.g.*, portfolio managers and other senior management) and prepare the necessary documentation (*e.g.*, documents related to fund liquidation, fund formation, fund registration (general counsel and chief compliance officer); time costs to obtain required fund board approvals; internal and external costs related to required shareholder approvals; and external costs for a fund's and/or fund board's outside legal counsel. We note that a fund may incur costs substantially higher or lower than our estimates, based on the size and complexity of the fund.

⁵⁵⁵ See *supra* note 551.

derivatives could be in a position where it could not engage in additional derivatives transactions, including as a portfolio hedge in certain circumstances. A fund that reaches the proposed aggregate exposure limits would not be permitted to enter into additional derivatives transactions unless the fund would be in compliance with the applicable exposure limitation immediately after entering into each transaction. As a consequence, it is possible that a fund may need to limit its derivatives transactions, or close out existing derivatives positions, in order to retain flexibility to enter into risk mitigating derivatives transactions at a later date. Alternatively, a fund may, in certain circumstances, refrain from derivatives transactions that it expects would be risk mitigating, which could potentially have the effect of increasing a fund's risks.

For example, it is possible that a fund that complies with the risk-based portfolio limit's VaR test could be precluded from entering into additional derivatives to protect against a particular risk if the fund had reached the risk-based portfolio limit's 300% limit on aggregate exposure. Such a limitation would appear to apply only if the fund engages in extensive use of derivatives. For example, a bond fund could seek to protect its portfolio against 100% of its interest rate risk and currency risk through derivatives transactions and also seek to hedge a substantial amount of its credit risk while still having room under the 300% limit to seek to hedge other risks such as inflation risk.⁵⁵⁶ We acknowledge that any limitation, such as the 300% exposure limit in the risk-based portfolio limit, may constrain a fund's ability to implement its strategy, and in particular circumstances, may require a fund to take actions other than adding additional derivatives to manage and reduce portfolio risks. In such a circumstance, a fund may experience greater returns, albeit with greater risk, if the fund is unable to enter into additional hedging transactions because it has reached the 300% limit. A fund may decide to maintain the riskier

position, shift away from the underlying assets that it had previously sought to hedge (so as to maintain its previous level of risk), or hedge against the risk using instruments not within the scope of this rule. Because we are unable to reasonably anticipate the ways in which a fund is likely to respond to the 300% limitation, we are unable to quantify the expected impact of the portfolio limitation on a fund's returns.⁵⁵⁷

Proposed rule 18f-4 would also require a fund that engages in financial commitment transactions in reliance on the rule to maintain qualifying coverage assets equal in value to the fund's full obligations under those transactions. The proposed rule generally would take the same approach to financial commitment transactions that we applied in Release 10666, with some modifications discussed above in III.E. The proposed rule's requirements for financial commitment transactions, similar to the approach we applied in Release 10666, would limit the extent to which a fund could engage in financial commitment transactions, in that the fund could not incur obligations under those transactions in excess of the fund's qualifying coverage assets. This would limit a fund's ability to incur obligations under financial commitment transactions to 100% of the fund's net assets, as discussed above in III.E. We believe that the proposed rule is not likely to impose any significant additional limitation on the extent to which a fund can incur obligations under financial commitment transactions (as compared with the current economic baseline) because, as noted above, funds that enter into these transactions today do so in reliance on Release 10666, which generally would limit the fund's obligations under these transactions to the fund's net assets.⁵⁵⁸ This is consistent with DERA staff's analysis, which showed that no fund in the DERA sample had greater than 100% aggregate exposure resulting from financial commitment transactions (the current economic baseline for such transactions).⁵⁵⁹ Accordingly, we believe that the proposed rule's asset segregation requirements for financial commitment transactions would have no measurable effect on efficiency, competition, or capital formation.

We also note that the proposed asset segregation requirements, to the extent that a fund is required to increase its holdings of cash and cash equivalents (for derivatives transactions) or assets convertible to cash or that can generate

cash (for financial commitment transactions), may adversely affect efficiency, competition, and capital formation. For example, holding higher levels of these assets may reduce efficiency by requiring a fund's investment adviser to invest the fund's assets in cash and cash equivalents or assets convertible to cash or that can generate cash to a greater extent than the adviser otherwise would invest the fund's assets, given the fund's investment strategy and investor base. This, in turn, could adversely affect investors by reducing a fund's investment returns, and reduce competition by decreasing a fund's investment opportunities to generate higher returns. In addition, a fund that holds greater amounts of cash and cash equivalents (all other things, such as fund flows, being equal) necessarily holds a smaller amount of securities in its portfolio, which may adversely affect capital formation. As discussed in Section III.C.2 above, however, we understand that cash and cash equivalents are commonly used for posting collateral or margin for derivatives transactions.⁵⁶⁰ Also, given that the margin posted is permitted to be offset against the assets that would be required to be segregated under the proposed rule, the magnitude of funds' shift into cash and cash equivalents under the proposed rule may not be as significant as it would be otherwise, thereby mitigating the negative impact on capital formation that the asset segregation requirements of the proposed rule may cause.

Finally, we note that the size of a fund, or the complex of funds to which a fund belongs, could have certain competitive effects with respect to a fund's compliance with proposed rule 18f-4, including the implementation of its derivatives risk management program, where applicable. For example, if there are economies of scale in creating and administering multiple derivatives risk management programs, a fund that is part of a large fund complex would have a competitive advantage. A fund in a smaller complex, on the other hand, may use a greater portion of its resources to create and administer a derivatives risk management program, which may increase barriers to entry in the fund industry, and lead to an adverse effect on competition. The size of a fund complex also could produce competitive advantages or disadvantages with respect to a fund's use of products developed by third parties to assist a fund in calculating

⁵⁵⁶ For example, the fund could enter into interest rate derivatives with a notional amount of 100% of the fund's net assets in order to seek to hedge interest rate risk; enter into currency derivatives with a notional amount of 100% of the fund's net assets in order to seek to hedge currency risk; and enter into credit derivatives with a notional value that is less than 100% of the fund's net assets to seek to hedge credit risk. The fund in this example would have aggregate exposure of something less than 300% and thus could obtain some additional derivatives exposure—up to the 300% aggregate limit—provided the fund complied with the VaR test under the risk-based portfolio limit and the proposed rule's other conditions.

⁵⁵⁷ See text surrounding *supra* note 534.

⁵⁵⁸ See *supra* note 93 and accompanying text.

⁵⁵⁹ DERA White Paper, *supra* note 73, Table 6.

⁵⁶⁰ See *supra* note 370 and accompanying text.

and monitoring its compliance with the proposed rule's portfolio limitations and asset segregation requirements. For example, a fund in a large complex could receive relatively more favorable pricing for third-party risk management tools, if the fund complex were to purchase discounted bulk services from the tool developer or receive relationship-based pricing discounts. Regardless of the extent to which a third-party provides its product at a discounted rate, the proposed rule may positively impact third-party service providers by increasing sales. We note that the competitive effects discussed above in the context of funds and/or fund families may, instead, apply to a fund's investment adviser. This may occur where the investment adviser (rather than the fund) incurs the costs associated with implementing the proposed rule's requirements, and does not, or is unable to, pass such costs along to the fund (for example, through increases in its advisory fees).

D. Specific Benefits and Quantifiable Costs

We have discussed above a number of general benefits and costs, including effects on efficiency, competition, and capital formation that we believe would generally result from the proposed rule. Taking into account the goals of the proposed rule and the economic baseline, as discussed above, this section explores specific benefits and quantified costs, in the context of each core element of the proposed rule.

We note that the following analyses and estimates are made on a per fund basis, and are not made on a fund complex basis. We have made these estimates on a per fund basis because the DERA sample analysis upon which we rely in our economic analysis was performed at a fund level. In addition, we believe that the extent of derivatives use varies widely between funds. Accordingly, we believe that estimating costs on a per fund basis is likely to provide more meaningful estimates, consistent with the approach taken in the DERA sample. We recognize, however, that many funds are part of a fund complex, and thus may realize economies of scale in complying with the proposed rule.⁵⁶¹ As discussed below, our estimated ranges of per fund costs take this into account. The low end of our range of costs reflects the estimated costs for a fund that is part of a fund complex (which is likely to

experience economies of scale), while the high end of our range of costs reflects the estimated costs likely borne by a stand-alone fund that is not part of a fund complex or that is the only fund in a complex that relies on the rule.

1. Exposure-Based Portfolio Limit

a. Requirements

As discussed above in section III.B.1, the proposed rule would require that a fund that engages in derivatives transactions in reliance on the rule comply with one of two alternative portfolio limitations. The first portfolio limitation—the exposure-based portfolio limit—would place an overall limit on the amount of exposure to underlying reference assets, and potential leverage, that a fund would be able to obtain from derivatives transactions covered by the proposed rule by limiting the fund's exposure under these derivatives transactions and other senior securities transactions to 150% of the fund's net assets.

b. Benefits

The 150% aggregate exposure limit in the exposure-based portfolio limit (as well as the 300% exposure limit in the risk-based portfolio limit discussed below) is designed primarily to impose an overall limit on the amount of exposure to underlying reference assets, and potential leverage, that a fund would be able to obtain through derivatives subject to the rule and other senior securities transactions, while also providing flexibility for a fund to use derivatives for a variety of purposes.⁵⁶² An outer limit on aggregate exposure would prevent funds from obtaining extremely high leverage that we believe may be inconsistent with the Act's stated concern about senior securities that increase unduly the speculative nature of a fund's outstanding securities. The proposed rule, therefore, is expected to benefit investors by providing a clear and workable framework in which funds may continue to use derivatives covered by the proposed rule for a variety of purposes, but subject to a limit on the potential leverage (and leverage-related risks) that could be obtained through these covered instruments. By explicitly limiting a fund's aggregate exposure from derivatives and other senior securities transactions, the proposed rule also may reduce the likelihood of extreme fund losses associated with

leveraged portfolios under stressed market conditions. As a result, the proposed rule may reduce the possibility of a fund needing to liquidate and the associated adverse impacts on market participants and thus may promote market stability.⁵⁶³ As we discussed above, the DERA staff analysis also indicates that most funds and their advisers would be able to continue to operate and to pursue a variety of investment strategies, including alternative strategies (under the 150% exposure limitation).⁵⁶⁴

The proposed rule's definition of exposure for derivatives transactions would require that a fund aggregate the notional amounts of those derivatives (with certain adjustments specified in the proposed rule).⁵⁶⁵ For most types of derivatives, the notional amount can serve as a measure of the fund's investment exposure to the derivative's underlying reference asset or metric. While there are other measures that could be used, the notional amount is a measure that is well-understood and recognized, and readily determinable by funds.⁵⁶⁶ In addition, the notional amount is a measure for determining

⁵⁶³ While we lack empirical evidence that a registered fund's liquidation under stressed market conditions, including the potential forced sale of assets, could have adverse effects on market participants, we believe that the avoidance of potential negative externalities from a fund's liquidation into a stressed market broadly promotes market resiliency and stability.

⁵⁶⁴ See *supra* note 210 and accompanying text.

⁵⁶⁵ The proposed rule includes certain adjustments to the way in which a fund would generally be required to determine the "notional amount" with respect to its derivatives transactions. For any derivatives transaction that provides a return based on the leveraged performance of a reference asset, the notional amount must be multiplied by the leverage factor; for any derivatives transaction for which the reference asset is a managed account or entity formed primarily for the purpose of investing in derivatives transaction, or an index that reflects the performance of such a managed account or entity, the notional amount must be determined by reference to the fund's pro rata share of the notional amounts of the derivatives transactions of such account or entity ("look-through provision"); and for any "complex derivatives transaction," (defined in rule 18f-4(c)(1) and discussed above in section III.B), the notional amount must be an amount equal to the aggregate notional amount of derivatives instruments, excluding other complex derivatives transactions, reasonably estimated to offset substantially all of the market risk of the complex derivatives transaction. See proposed rule 18f-4(c)(7)(iii)(C). The estimated operational costs associated with these aspects of the proposed rule are included in our cost estimates discussed below in section IV.D.1.c.

⁵⁶⁶ See, e.g., Michael Chui, *Derivatives markets, products and participants: an overview* (Bank of International Settlements, IFC Bulletin No. 35 (Feb. 2012), available at <http://www.bis.org/ifc/publ/ifcb35a.pdf> ("Notional amount is the total principal of the underlying security around which the transaction is structured. It is easy to collect and understand.")).

⁵⁶¹ The extent of the economies of scale may depend, in part, on the extent to which multiple funds in the same fund complex use derivatives transactions and financial commitment transactions in similar ways.

⁵⁶² The proposed rule's portfolio limitations, although designed to impose a limit on potential leverage, also could help to address concerns about a fund's ability to meet its obligations, as noted above. See *supra* note 152.

exposure that is adaptable to different types of fund strategies or different uses of derivatives, including types of fund strategies and derivatives that may be developed in the future. Funds, particularly smaller or less sophisticated funds, may benefit from the ease of application of a bright-line, straightforward metric such as this one, as compared to a test that would require consideration of the manner in which a fund uses derivatives in its portfolio (e.g., whether particular derivatives are used for hedging).

c. Quantified Costs

Funds that elect to rely on the rule would incur one-time and ongoing operational costs to establish and implement a 150% exposure-based portfolio limitation.⁵⁶⁷ As discussed above, funds today employ a range of different practices, with varying levels of comprehensiveness, for complying with section 18's prohibitions, Commission positions, and staff guidance. Although the 150% exposure-based portfolio limit would be new for all funds that seek to comply with the proposed rule, we anticipate that the relative costs to a particular fund are likely to vary, depending on the extent to which a fund enters into derivatives transactions, and, for example, the level of sophistication of a fund's current risk management processes surrounding its use of derivatives.

The extent to which a fund currently engages in derivatives transactions may affect the costs the fund would incur. For example, funds that today use derivatives more extensively may already have systems that can be used to determine a fund's exposure or that could more readily be updated to include that functionality. Proposed Form N-PORT would require funds to report the notional amounts of certain derivatives on the form and, if we adopt Form N-PORT, the systems or enhancements put in place by funds in connection with Form N-PORT's reporting requirements may provide an efficient means to calculate notional amounts for proposed rule 18f-4. Conversely, a fund that uses derivatives

only modestly may not have existing systems that can be as readily used to determine a fund's exposure, but a fund that uses derivatives modestly may be able to determine its exposure without the need to establish the kinds of more extensive systems that might be required or desired by funds that use derivatives more extensively.

The types of derivatives a fund uses also may affect the costs the fund would incur. Funds that enter into complex derivatives transactions, as defined in the proposed rule, would be required to determine the notional amounts of those transactions using the alternative approach specified in the proposed rule for complex derivatives transactions. Under this approach, the notional amount of a complex derivatives transaction would be equal to the aggregate notional amount(s) of derivatives 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 into the transaction.⁵⁶⁸ It may require additional resources or analysis to determine a complex derivative's notional amount than, for example, a non-complex derivatives transaction with a stated notional amount that can be used for purposes of the proposed rule's exposure limitations. It may similarly require additional resources or analysis to determine the notional amount of a derivatives transaction for which the reference asset is a managed account or entity formed or operated primarily for the purpose of investing in or trading derivatives transactions, or an index that reflects the performance of such a managed account or entity, because the notional amount of such a derivatives transaction under the proposed rule would be determined by reference to the fund's pro rata share of the notional amounts of the derivatives transactions of such account or entity.⁵⁶⁹ In any case, the costs associated with the exposure-based portfolio limit would directly impact funds (and may indirectly impact fund investors if a fund's adviser incurs costs and passes along its costs to investors through increased fees).

Our staff estimates that the one-time operational costs necessary to establish and implement an exposure-based portfolio limitation would range from \$20,000 to \$150,000⁵⁷⁰ per fund,

depending on the particular facts and circumstances and current derivatives risk management practices of the fund.⁵⁷¹ These estimated costs are attributable to the following activities: (1) Developing and implementing policies and procedures⁵⁷² to comply with the proposed rule's 150% exposure-based portfolio limit; (2) planning, coding, testing, and installing any system modifications relating to the 150% exposure-based portfolio limitation;⁵⁷³ and (3) preparing training materials and administering training sessions for staff in affected areas.

Our staff estimates that a fund that is part of a fund complex will likely benefit from economies of scale and incur costs closer to the low-end of the estimated range of costs, while a standalone fund is more likely to incur costs closer to the higher-end of the

one-time and ongoing systems costs associated with other Commission rulemakings. *See, e.g.*, 2014 Money Market Fund Reform Adopting Release, *supra* note 367, at sections III.A.5 and III.B.8 (estimating the one-time and ongoing operational costs to money market funds and others in the distribution chain to modify systems and implement certain reforms including liquidity fees and gates and/or a floating NAV); Liquidity Release, *supra* note 5, at section IV.C.1 (estimating the one-time and ongoing operational costs to most registered open-end funds to modify systems and implement new proposed rule 22e-4, requiring a liquidity risk management program). Although the substance and content of systems associated with establishing and implementing policies and procedures to comply with proposed rule 18f-4 would be different from the substance and content of systems associated with, for example, implementing the money market fund reforms or a new proposed liquidity risk management program, the costs associated with the core requirements of proposed rule 18f-4, like the 2014 adopted money market fund reforms and the 2015 proposed liquidity risk management program reforms, would entail: Developing and implementing policies and procedures; planning, coding, testing, and installing any relevant system modifications; and preparing training materials and administering training sessions for staff in affected areas.

⁵⁷¹ We estimate that the costs discussed throughout this section would apply equally across affected fund types, including open-end funds, closed-end funds, ETFs, and BDCs.

⁵⁷² Throughout this economic analysis, we include in "developing and implementing policies and procedures" cost estimates (both for initial and ongoing costs) associated with internal and external costs (e.g., compliance consultants, outside legal counsel), as well as staff costs (e.g., legal, compliance, portfolio management, risk management, and other administration personnel).

⁵⁷³ Throughout this economic analysis, these cost estimates assume that affected funds would incur systems costs (i.e., computer-based systems costs) to assist them in complying with the requirements of proposed rule 18f-4. As discussed below, some funds may determine that computer-based systems are not required (e.g., the fund engages only in limited amounts of derivatives transactions for which notional exposures are easily determinable) and choose to implement a less automated system for complying with the proposed rule's requirements. We expect that such a fund would not incur costs related to this particular activity, and more likely, would incur total costs closer to the lower-end of the estimated range of costs.

⁵⁶⁷ As discussed below in section IV.D.4, a fund that seeks to rely on the proposed rule would not be required to have a derivatives risk management program provided the fund limits its aggregate exposure from derivatives transactions to no greater than 50% of the fund's net assets (and does not use complex derivatives transactions). The costs that we estimate here for a fund to comply with the 150% exposure-based portfolio limit would include the costs for a fund to determine and monitor its compliance with the proposed 50% exposure-based test (and complex derivatives transaction limitation) for establishing a derivatives risk management program.

⁵⁶⁸ Proposed rule 18f-4(c)(7)(iii)(C).

⁵⁶⁹ Proposed rule 18f-4(c)(7)(iii)(B).

⁵⁷⁰ These cost estimates, and the other quantified costs discussed below, are based, in part (adjusting such estimates to reflect specific provisions of the proposed rule), on staff experience and outreach, as well as consideration of recent staff estimates of the

estimated range of costs. Our staff also estimates that a standalone fund that is a light or moderate user of derivatives may choose to comply with the proposed rule by implementing a less automated system, and thus be more likely to incur costs closer to the low-end of the estimated range of costs. We anticipate that if there is demand to develop systems and tools related to the exposure-based portfolio limitation, market participants (or other third parties) may develop programs and applications that a fund could purchase at a cost likely less than our estimated cost to develop the programs and applications internally. In addition, the proposed rule may increase the demand for information services relating to derivatives to the extent that funds and advisers use third-party providers of such information services, such as risk management tools (*e.g.*, VaR measures) and pricing data, and thus could potentially affect these third-party providers as well.

Staff also estimates that each fund would incur ongoing costs related to implementing a 150% exposure-based portfolio limitation under proposed rule 18f-4. Staff estimates that such costs would range from 20% to 30% of the one-time costs discussed above.⁵⁷⁴ Thus, staff estimates that a fund would incur ongoing annual costs associated with the 150% exposure-based portfolio limit that would range from \$4,000 to \$45,000.⁵⁷⁵ These costs are attributable to the following activities: (1) Complying with the proposed rule's 150% aggregate exposure limit; (2) systems maintenance; and (3) additional staff training.

In the DERA staff analysis, 68% of all of the sampled funds did not have any exposure to derivatives transactions.⁵⁷⁶ These funds thus do not appear to use derivatives transactions or, if they do

use them, do not appear to do so to a material extent. We therefore estimate that approximately 32% of funds—the percentage of funds that did have derivatives exposure in the DERA sample—are more likely to enter into derivatives transactions and therefore are more likely to incur costs associated with either the exposure-based portfolio limit or the risk-based portfolio limit. Excluding approximately 4% of all funds (corresponding to the percentage of sampled funds that had aggregate exposure of 150% or more of net assets and for which we have estimated costs for the risk-based limit),⁵⁷⁷ we estimate that 28% of funds (3,352 funds⁵⁷⁸) would incur the costs associated with the exposure-based portfolio limit.

As discussed above, we have not aggregated the estimated range of costs across the entire fund industry. We note, however, that the vast majority of funds operate as part of a fund complex, and therefore we expect that many funds would achieve economies of scale in implementing the proposed rule. Accordingly, we believe that the lower-end of the estimated range of costs (\$20,000 in one-time costs; \$4,000 in annual costs) better reflects the total costs likely to be incurred by many funds.

As noted above, based on the DERA sample, 68% of all sampled funds (8,142 funds⁵⁷⁹) do not appear to use derivatives transactions (or if they do, do not appear to use them to a material extent). We do, however, recognize that although we do not estimate costs for these funds to comply with the proposed rule, some of these funds may wish to preserve the flexibility to do so in the future. Accordingly, we estimate that a fund that would otherwise not comply with proposed rule 18f-4 would incur approximately \$10,000 to evaluate

the proposed rule and for the fund's board to consider approving the fund's use of the exemption provided by the rule (and therefore preserve the flexibility to comply in the future).⁵⁸⁰

2. Risk-Based Portfolio Limit

a. Requirements

As discussed above in section III.B.2, the proposed rule would require that a fund that engages in derivatives transactions in reliance on the rule comply with one of two alternative portfolio limitations. The second portfolio limitation is the risk-based portfolio limit, which would focus primarily on a risk assessment of the fund's use of derivatives, and would permit a fund to obtain exposure in excess of that permitted under the first portfolio limitation where the fund's derivatives transactions, in the aggregate, result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives, evaluated using a VaR-based test.

b. Benefits

The principal benefit of the risk-based portfolio limit is that it recognizes that funds may use derivatives to not only seek higher returns through increased investment exposures, but importantly, also as a low-cost and efficient means to reduce and/or mitigate risks associated with the fund's portfolio. Some funds may have or develop investment strategies that include the use of derivatives that, in the aggregate, have relatively high notional amounts, but that are used in a manner that could be expected to reduce the fund's exposure to market risk rather than to increase exposure to market risk through the use of leverage. We expect that investors, and the markets in general, would benefit from an alternative portfolio limitation that focuses primarily on a risk assessment of a fund's use of derivatives, in contrast to the exposure-based portfolio limit, which focuses solely on the level of a fund's exposure. We also expect that funds should benefit from having the flexibility to select a VaR model that best addresses the funds' particular investment strategy and the nature of its portfolio investments, while also specifying certain minimum requirements in the proposed rule.⁵⁸¹

⁵⁷⁴ See *supra* note 570. In estimating the total quantified costs of our proposed rule, we estimate that the portfolio limitation requirements would likely impose initial costs that are proportionately larger than ongoing costs. Accordingly, and based on staff experience and outreach, we estimate that the ongoing costs would range from 20% to 30% of the initial costs.

⁵⁷⁵ This estimate is based on the following calculations: $0.20 \times \$20,000 = \$4,000$; $0.30 \times \$150,000 = \$45,000$.

⁵⁷⁶ DERA White Paper, *supra* note 73, Figure 11.1. As discussed above, we recognize that the DERA staff analysis used a sample of funds and reviewed the funds' then-most recent annual reports. The number of funds that may enter into senior securities transactions may be higher or lower than our estimate. We believe, however, that the results of the DERA staff analysis provide a reasonable basis to estimate the extent to which funds engage in derivatives and other senior securities transactions, and thus provide a reasonable basis to estimate the potential costs of the proposed rule to funds.

⁵⁷⁷ DERA White Paper, *supra* note 73, Figure 9.1.

⁵⁷⁸ This estimate is based on the following calculation: $11,973 \text{ funds} \times 28\% = 3,352 \text{ funds}$. The number of funds is based on the following calculation, as of June 2015: (9,707 open-end funds + 560 closed-end funds + 1,706 ETFs = 11,973). See *supra* note 511 and accompanying text. In estimating the potential costs to funds related to their use of derivatives (both here and throughout this Release), we have estimated the total fund universe excluding money market funds and BDCs because money market funds do not enter into derivatives transactions and because we understand, and the DERA staff analysis shows, that BDCs do not use derivatives to a material extent (no BDC in the DERA staff sample had exposures to derivatives transactions). We have considered, however, the potential costs on these funds to the extent that such funds use financial commitment transactions (see *supra* section IV.D.5), and if a BDC were to engage in derivatives transactions, we expect that the BDC would incur the costs estimated here and throughout this Release for funds that engage in derivatives transactions.

⁵⁷⁹ This estimate is based on the following calculation: $11,973 \text{ funds} \times 68\% = 8,142 \text{ funds}$.

⁵⁸⁰ This estimate is based on staff outreach and experience and includes estimates for time spent by a fund's chief compliance officer, consultation with portfolio managers and other senior management of the fund's adviser, as well as the fund's board of directors.

⁵⁸¹ See *supra* sections III.b.2.a, b.

In addition to the VaR test, the risk-based portfolio limit also includes an outer limit on aggregate exposure. Investors should also benefit from a flexible approach that allows for greater aggregate exposure (as compared with the 150% exposure-based portfolio limitation), and thus may promote the use of derivatives when, in aggregate, the result is an investment portfolio that is subject to less market risk than if the fund did not use such derivatives. Including an outer exposure limit, in addition to the VaR test, should provide benefits similar to those discussed above in section IV.D.1. Those benefits include improved investor protection, increased market stability through explicit limitations on potential leverage, and an exposure calculation that uses notional amounts that are widely available and adaptable to the varied types of derivatives instruments used by funds. We also believe that increasing the aggregate exposure limit from 150% (under the exposure-based portfolio limitation) to 300% of net assets when a fund's use of derivatives, in aggregate, has the effect of reducing the fund's exposure to market risk, should benefit investors by permitting funds to engage in increased use of derivatives to mitigate risks in the fund's portfolio.⁵⁸² Setting the exposure limit at 300% as part of the risk-based portfolio limit would provide a limit for funds that could seek to operate under the risk-based portfolio limit that permits additional capacity for hedging transactions while still setting an overall limit on the amount of leverage that can be obtained through derivatives that are subject to the rule. Moreover, based on the DERA staff analysis, many of the funds with aggregate exposure in excess of 300% of net assets appear to use derivatives primarily to obtain market exposure (rather than to reduce the fund's exposure to market risk).⁵⁸³

c. Quantified Costs

As with the quantified costs we discuss above regarding the exposure-based portfolio limit (section IV.D.1), we expect that funds would incur one-time and ongoing operational costs to establish and implement a risk-based exposure limit, including the VaR test. We expect that a fund that seeks to comply with the 300% aggregate exposure limit would incur the same costs as those that we estimated above in order to establish and implement the

150% exposure-based portfolio limit.⁵⁸⁴ Accordingly, we estimate below the costs we believe a fund would incur to comply with the VaR test. Although the VaR test and outer limit on aggregate exposure would be new for all funds that seek to comply with the proposed rule's risk-based exposure limit, we anticipate that the costs to a particular fund are likely to vary, depending on the extent to which a fund enters into derivatives transactions and the level of sophistication of a fund's existing risk management processes surrounding its use of derivatives. For example, funds that use derivatives extensively may already use a VaR model to evaluate and monitor the risks associated with derivatives transactions. As a result, these funds may incur lower costs as compared with other funds that do not already have sophisticated tools in place to monitor the risks associated with derivatives. In this regard, we note that funds that would seek to comply with the risk-based portfolio limit, rather than the exposure-based portfolio limit, may be more likely to be more extensive users of derivatives because we expect that less extensive derivatives users generally would choose to operate under the exposure-based portfolio limit. These costs would directly impact funds (and may indirectly impact fund investors if a fund's adviser incurs costs and passes along its costs to investors through increased fees).

Our staff estimates that the one-time operational costs necessary to establish and implement a VaR test would range from \$60,000 to \$180,000⁵⁸⁵ per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund. These estimated costs are attributable to the following activities: (1) Developing and implementing policies and procedures to comply with the proposed rule's requirement that the fund's full portfolio VaR is less than the fund's securities VaR; (2) planning, coding, testing, and installing any system modifications relating to the VaR test; and (3) preparing training materials and administering training sessions for staff in affected areas.

Our staff estimates that a fund that is part of a fund complex would likely benefit from economies of scale and incur costs closer to the low-end of the estimated range of costs, while a standalone fund is more likely to incur costs closer to the higher-end of the estimated range of costs. Our staff also

estimates that a standalone fund that is a light or moderate user of derivatives may choose to comply with the proposed rule by implementing a less automated system, and thus be more likely to incur costs closer to the low-end of the estimated range of costs. We anticipate that if there is demand to develop systems and tools related to the risk-based portfolio limitation, market participants (or other third parties) may develop programs and applications that a fund could purchase at a cost likely less than our estimated cost to develop the programs and applications internally.

Staff also estimates that each fund would incur ongoing costs related to implementing a VaR test under proposed rule 18f-4. Staff estimates that such costs would range from 20% to 30% of the one-time costs discussed above.⁵⁸⁶ Thus, staff estimates that a fund would incur ongoing annual costs associated with the VaR test aspect of the risk-based exposure limit that would range from \$12,000 to \$54,000.⁵⁸⁷ These costs are attributable to the following activities, as applicable to each fund: (1) Complying with the VaR test (*i.e.*, that, immediately after entering into any senior securities transaction, the fund's full portfolio VaR is less than the fund's securities VaR); (2) systems maintenance; and (3) additional staff training.

DERA staff analysis shows that approximately 4% of all funds sampled had aggregate exposure of 150% or more of net assets.⁵⁸⁸ We estimate, therefore, that 4% of funds (479 funds⁵⁸⁹) may seek to comply with the risk-based portfolio limit.⁵⁹⁰ As with the other quantified costs we discuss in this Release, we believe that many funds belong to a fund complex and are likely to experience economies of scale. We therefore expect that the lower-end of the estimated range of costs (\$60,000 in one-time costs; \$12,000 in annual costs) better reflects the total costs likely to be incurred by many funds.

⁵⁸⁶ See *supra* notes 570 and 574.

⁵⁸⁷ This estimate is based on the following calculations: $0.20 \times \$60,000 = \$12,000$; $0.30 \times \$180,000 = \$54,000$.

⁵⁸⁸ DERA White Paper, *supra* note 73, Figure 9.1.

⁵⁸⁹ This estimate is based on the following calculation: $11,973 \text{ funds} \times 4\% = 479 \text{ funds}$. See also *supra* note 578.

⁵⁹⁰ We recognize, however, that it is possible that some (or all) of these funds may decide, after evaluating the particularized costs and benefits, to reduce (or even eliminate) their use of such transactions and therefore rely on the 150% exposure-based portfolio limitation, or not rely on proposed rule 18f-4 at all. We discuss these potential effects on efficiency, competition, and capital formation above. See *supra* section IV.C.

⁵⁸² See *supra* note 239 and accompanying text (acknowledging that a hedging transaction may not always result in mitigating risk).

⁵⁸³ See *supra* note 314.

⁵⁸⁴ The only difference would be an increased outer limit of aggregate exposure (from 150% to 300% of the fund's net asset value).

⁵⁸⁵ See *supra* note 570.

3. Asset Segregation

a. Requirements

As discussed above in section III.C, the proposed rule would require a fund that seeks to enter into derivatives transactions to manage the risks associated with its derivatives transactions by maintaining an amount of certain assets, defined in the proposed rule as “qualifying coverage assets,” designed to enable the fund to meet its obligations under such transactions. To satisfy this requirement the fund would be required to maintain qualifying coverage assets to cover the fund’s mark-to-market obligations under a derivatives transaction (the “mark-to-market coverage amount,” as noted above), as well as an additional amount, determined in accordance with policies and procedures approved by the fund’s board, designed to address potential future losses and resulting payment obligations under the derivatives transaction (the “risk-based coverage amount,” as noted above).

b. Benefits

The proposed asset segregation will likely improve a fund’s ability to meet its obligations under its derivatives transactions. The proposed rule’s requirement that the fund maintain qualifying coverage assets with a value equal to the fund’s mark-to-market coverage amount is designed to require the fund to have assets sufficient to meet its obligations under the derivatives transaction, which may include margin or similar payments demanded by the fund’s counterparty as a result of mark-to-market losses, or payments that the fund may make in order to exit the transaction. The proposed rule’s requirement that the fund maintain qualifying coverage assets with a value equal to the fund’s risk-based coverage amount is designed to require the fund to have qualifying coverage assets to cover future losses and any resulting future payment obligations.⁵⁹¹ These aspects of the proposed rule’s asset segregation requirements for derivatives transactions are consistent with suggestions of many commenters on the Concept Release, including a commenter that observed that requiring funds to segregate a mark-to-market amount under the contract as well as an additional amount meant to cover future losses “is more akin to the way portfolio

managers and risk officers assess the portfolio risks created through the use of derivatives.”⁵⁹²

By requiring a fund to determine its risk-based coverage amounts in accordance with board-approved policies and procedures, the proposed rule’s approach to asset segregation is designed to provide a flexible framework that would allow funds to apply the requirements of the proposed rule to particular derivatives transactions used by funds at this time as well as those that may be developed in the future as financial instruments and investment strategies change over time.

In addition, the proposed asset segregation requirements may benefit investors by eliminating the existing practice by some funds (under existing staff guidance) to segregate for certain derivatives transactions (e.g., derivatives that permit physical settlement), the notional amount. As we noted above, the notional amount of a derivatives transaction does not necessarily equal, and often will exceed, the amount of cash or other assets that a fund ultimately would likely be required to pay or deliver under the derivatives transaction. Existing staff guidance contemplates that a fund will segregate assets equal to a derivative’s full notional amount for certain derivatives and the derivative’s daily mark-to-market liability for others. The proposed rule would benefit investors by requiring funds to evaluate their obligations under a derivatives transaction—including by considering future potential payment obligations represented by the derivative’s risk-based coverage amount—rather than segregating assets equal to either a derivative’s notional value or a mark-to-market liability based solely on the type of derivative involved, as under the current approach.

The proposed rule generally would require a fund to segregate cash and cash equivalents as qualifying coverage assets in respect of its coverage obligations for its derivatives transactions. To the extent that a fund currently posts collateral to counterparties for derivatives transactions,⁵⁹³ the fund’s mark-to-market coverage amount would be reduced by the value of the posted assets that represent variation margin, and the fund’s risk-based coverage amount would be reduced by the value of the posted assets that represent initial margin, mitigating the need for the fund

to segregate additional cash and cash equivalents. We believe that cash equivalents are an appropriate component of qualifying coverage assets for derivatives transactions because these securities usually settle within one day⁵⁹⁴ and do not generally fluctuate in value with market conditions.⁵⁹⁵ Therefore, cash and cash equivalents are readily available to support derivatives positions should the need for additional funding arise at short notice, for example due to margin calls, without a fund having to unwind such positions.⁵⁹⁶ The immediacy of funding needs for derivatives transactions may mean that other types of assets commonly used for short-term needs (such as meeting fund redemption requests which can take three days to settle when redeemed through a broker-dealer⁵⁹⁷) would be insufficiently liquid to meet the fund’s obligations under a derivatives contract. Furthermore, we understand that cash and cash equivalents are commonly used for posting collateral or margin for derivatives transactions.⁵⁹⁸

For all of these reasons, we believe that the proposed asset segregation requirements should more effectively result in a fund having sufficient assets to meet its obligations under its derivatives transactions. By requiring the fund to maintain qualifying coverage assets—generally cash equivalents—sufficient to cover the fund’s current mark-to-market obligation and an additional amount designed to address future losses, the proposed rule is designed to reduce the risk that the fund would be required to sell portfolio assets in order to generate assets to satisfy the fund’s derivatives payment obligations, particularly in an environment where those assets may have experienced a temporary decline in value, thereby magnifying the fund’s losses on the forced sale. In addition to the benefit to investors, as discussed above, counterparties to the derivatives transactions may benefit from an

⁵⁹⁴ See, e.g., <http://www.sec.gov/answers/tplus3.htm>.

⁵⁹⁵ This is in contrast to funds’ segregating any liquid asset under existing staff guidance, which may increase the likelihood that a fund’s segregated assets decline in value at the same time the fund experiences losses on the derivatives transaction.

⁵⁹⁶ We recognize that requiring funds generally to maintain cash and cash equivalents may have other associated effects. We discuss these potential effects above in section IV.C.

⁵⁹⁷ Open-end funds that are redeemed through broker-dealers must meet redemption requests within three business days because broker-dealers are subject to rule 15c6-1 under the Securities Exchange Act of 1934. See Liquidity Release, *supra* note 5, at n.21.

⁵⁹⁸ See the discussion of the ISDA margin Survey 2015 in footnote 370.

⁵⁹¹ In addition, the asset segregation requirement in the proposed rule would limit a fund’s derivatives exposure to the extent that the fund limits its derivatives usage in order to comply with the asset segregation requirements. See *supra* note 323 and accompanying text.

⁵⁹² See ICI Concept Release Comment Letter.

⁵⁹³ See, e.g., ISDA Margin Survey 2015, *supra* note 370.

increased expectation of repayment given the higher quality of assets that are set aside for the funds' performance of their contractual obligations. The proposed asset segregation requirements may also provide a number of additional positive effects on efficiency, competition, and capital formation as discussed above in section IV.C.

c. Quantified Costs

As with the quantified costs we discuss above regarding the exposure-based and risk-based portfolio limits (section III.B.1), we expect that funds would incur one-time and ongoing operational costs to establish and implement systems in order to comply with the proposed asset segregation requirements. As discussed above, and pursuant to existing Commission statements and staff guidance, two general practices have developed: the notional amount segregation approach and the mark-to-market segregation approach. Also as discussed above, funds today are determining their current mark-to-market losses, if any, each business day with respect to the derivatives for which they currently segregate assets on a mark-to-market basis, and funds also already calculate their liability under derivatives transactions on a daily basis for various other purposes, including to satisfy variation margin requirements and to determine the fund's NAV. We believe that funds that currently calculate their liability under their derivatives transactions on a daily basis would likely calculate the proposed mark-to-market coverage amount in the same manner, and therefore would not likely incur significant new costs when calculating the fund's mark-to-market coverage amount under the proposed rule.⁵⁹⁹

The risk-based coverage amount would be determined in accordance with policies and procedures approved by the fund's board that are required to take into account certain factors specified in the proposed rule. By requiring funds to establish appropriate policies and procedures, rather than prescribing specific segregation amounts or methodologies, the proposed rule is designed to allow funds to assess and determine risk-based coverage amounts based on their specific derivatives

transactions, investment strategies and associated risks. As a result, we expect that, for funds that are significant users of derivatives, these funds may already use VaR or other risk-management tools to manage associated risks, and may be able to reduce costs by using these tools to calculate the risk-based coverage amount. We therefore anticipate that the relative costs to a particular fund are likely to vary, depending on the extent to which a fund enters into derivatives transactions and the level of sophistication of a fund's risk management processes surrounding its use of derivatives. These costs will directly impact funds (and may indirectly impact fund investors if a fund's adviser incurs costs and passes along its costs to investors through increased fees).

Our staff estimates that the one-time operational costs necessary to establish and implement the proposed asset segregation requirements would range from \$25,000 to \$75,000⁶⁰⁰ per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund. These estimated costs are attributable to the following activities: (1) Developing and implementing policies and procedures to comply with the proposed rule's requirement that, at least once each business day, the fund maintains the required qualifying coverage assets in respect of its derivatives transactions; (2) planning, coding, testing, and installing any system modifications relating to the asset segregation requirements; and (3) preparing training materials and administering training sessions for staff in affected areas.

As we discussed above, a fund that is part of a fund complex would likely benefit from economies of scale and incur costs closer to the low-end of the estimated range of costs, while a standalone fund is more likely to incur costs closer to the higher-end of the estimated range of costs. Our staff also estimates that a standalone fund that is a light or moderate user of derivatives may choose to comply with the proposed rule by implementing a less automated system, and thus be more likely to incur costs closer to the low-end of the estimated range of costs. We anticipate that if there is demand to develop systems and tools related to the asset segregation requirements, market participants (or other third parties) may develop programs and applications that a fund could purchase at a cost likely less than our estimated cost to develop the programs and applications internally.

Staff also estimates that each fund would incur ongoing costs related to implementing the asset segregation requirements under proposed rule 18f-4. Staff estimates that such costs would range from 65% to 75% of the one-time costs discussed above.⁶⁰¹ Thus, staff estimates that a fund would incur ongoing annual costs associated with the asset segregation requirements that would range from \$16,250 to \$56,250.⁶⁰² These costs are attributable to the following activities: (1) At least once each business day, the fund verifies that it maintains the required qualifying coverage assets in respect of its derivatives transactions; (2) systems maintenance; and (3) additional staff training.

As discussed above in section IV.D.1, in the DERA staff analysis, 68% of all of the sampled funds did not have any exposure to derivatives transactions. These funds thus do not appear to use derivatives transactions or, if they do use them, do not appear to do so to a material extent. Staff estimates that the remaining 32% of funds (3,831 funds⁶⁰³) would seek to rely on the proposed rule, and therefore comply with the rule's asset segregation requirements. As with the other quantified costs we discuss in this Release, we believe that many funds belong to a fund complex and are likely to experience economies of scale. We therefore expect that the lower-end of the estimated range of costs (\$25,000 in one-time costs; \$16,250 in annual costs) better reflects the total costs likely to be incurred by many funds.

The proposed asset segregation requirements may also impose indirect costs, such as the potential reduction in fund returns that could result if funds are required to segregate cash and cash equivalents, rather than potentially higher-yielding liquid assets (such as equities, as permitted under existing staff guidance). We are unable to quantify this cost because we do not have sufficient data with respect to the nature and extent to which funds segregate assets under existing staff

⁶⁰¹ In estimating the total quantified costs of our proposed rule, we estimate that the asset segregation requirements (as compared with the portfolio limitation requirements) would likely impose ongoing costs that are proportionately larger than initial costs (e.g., because of the need to determine and identify qualifying coverage assets each business day). Accordingly, and based on staff experience and outreach, we estimate that these ongoing costs would range from 65% to 75% of the initial costs. See *supra* notes 570 and 574.

⁶⁰² This estimate is based on the following calculations: $0.65 \times \$25,000 = \$16,250$; $0.75 \times \$75,000 = \$56,250$.

⁶⁰³ This estimate is based on the following calculation: $11,973 \text{ funds} \times 32\% = 3,831 \text{ funds}$. See *supra* note 578.

⁵⁹⁹ See *supra* section III.C.1.a (noting that funds already calculate their liability under derivatives transactions on a daily basis for other purposes, including to satisfy variation margin requirements, and to determine the fund's NAV). We discuss below in section IV.D.5, the estimated costs for the proposed asset segregation requirements for a fund that enters solely into financial commitment transactions.

⁶⁰⁰ See *supra* note 570.

guidance, or sufficient data to determine the amount of the reduction in return under the proposed rule. However, because the proposed rule would permit a fund to reduce its mark-to-market and risk-based coverage amounts by the value of assets that represent variation margin and initial margin, respectively, such costs are likely mitigated. In this regard we note that this treatment does not only apply to cash and cash equivalents, but extends to any asset considered satisfactory as collateral by a counterparty. Therefore, funds retain the flexibility to optimize their collateral management and post their most cost-efficient collateral, subject to limitations that counterparties or other regulatory requirements may impose on the quality of acceptable collateral.⁶⁰⁴ We also do not know if, or the extent to which, funds might instead shift to investments other than derivatives transactions (or financial commitment transactions) that would not be subject to the proposed rule, including the rule's asset segregation requirements. Finally, we do not know the specific manner in which funds' policies and procedures would provide for the determination of risk-based coverage amounts, and thus do not know the amount funds would segregate under the proposed rule to cover the risk-based coverage amounts. For these reasons, we are unable to quantify the impact of these potential indirect costs.

4. Risk Management Program

a. Requirements

As discussed above in section III.D, a fund that seeks to enter into derivatives transactions and rely on proposed rule 18f-4, except with respect to funds that engage in only a limited amount of derivatives transactions and that do not enter into certain complex derivatives transactions, would be required to establish a formalized derivatives risk management program, including the appointment of a derivatives risk manager.

b. Benefits

The proposed derivatives risk management program is designed to complement the proposed rule's portfolio limitations and asset segregation requirements by requiring

that a fund subject to the requirement assess and manage the particular risks presented by the fund's use of derivatives. The derivatives risk management program would not apply, however, to funds that make only limited use of derivatives and do not use complex derivatives because we expect that the risks and potential impact of these funds' derivatives transactions may not be as significant in comparison to the risks of the funds' overall investment portfolios and may be appropriately addressed by the proposed rule's other requirements, including the requirement to determine risk-based coverage amounts. The proposed rule, therefore, provides a tailored approach that we expect would benefit funds and investors by requiring funds that use derivatives more substantially to establish derivatives risk management programs while allowing certain funds to continue using derivatives (as deemed appropriate by a fund) to help implement the fund's strategy without first having to establish a derivatives risk management program under the proposed rule, provided such use is limited.⁶⁰⁵

The proposed derivatives risk management program requirement aims to promote a minimum baseline in the fund industry with regard to the use of derivatives transactions, and should improve funds' management of the risks related to a fund's use of derivatives as well as the awareness of, and oversight by, the fund's board (through the proposed rule's derivatives risk manager's reporting). In this regard we recognize that the benefits a particular fund and its investors would enjoy and the costs that it would incur in establishing a derivatives risk management program would vary depending on the particular fund's current practices. We believe that the proposed rule's promotion of a standardized level of risk management in the fund industry, however, would promote investor protection by elevating the overall quality of derivatives risk management across the fund industry. Improved quality of risk management related to funds' use of derivatives, may, for example, reduce the possibility of fund losses attributable to leverage and other risks related to the use of derivatives.

Investors should have increased confidence, for example, that a fund that states that it uses derivatives as part of

achieving its investment strategy does so in ways that comply with regulatory requirements, and are consistent with the fund's own stated investment objectives, policies, and risk profile. Monitoring of the risks related to derivatives may also help protect investors from losses stemming from derivatives. To the extent that the derivatives risk management program results in more robust monitoring of the risks related to derivatives (including leverage risks that may magnify losses resulting from negative market movements), the derivatives risk management program may reduce the risk of a fund suffering unexpected losses. This, in turn, may reduce adverse repercussions for other market participants, including fund counterparties, and reduce the risk of potential forced sales which can create or exacerbate stress on other market participants. We also expect that the derivatives risk management program (including its recordkeeping requirements) should also improve the ability of the Commission, through its examination program, to evaluate the risks incurred by funds with respect to their derivatives transactions and how funds manage those risks.

c. Quantified Costs

In addition to the costs discussed above regarding the exposure-based and risk-based portfolio limitations and asset segregation requirements, certain funds would also incur one-time costs to establish and implement a derivatives risk management program in compliance with proposed rule 18f-4, as well as ongoing program-related costs. As discussed above, funds today employ a range of different practices, with varying levels of comprehensiveness and sophistication, for managing the risks associated with their use of derivatives. Certain elements of the derivatives risk management program may entail variability in related compliance costs, depending on a fund's particular circumstances, including the fund's investment strategy, and nature and type of derivatives transactions used by a fund.

As discussed in section II.D, we understand that the advisers to many funds whose investment strategies entail the use of derivatives already assess and manage the risks associated with their derivatives transactions. Funds whose current practices closely align with the proposed derivatives risk management program would incur relatively lower costs to comply with proposed rule 18f-4. Funds whose practices regarding derivatives risk management are less comprehensive or not closely aligned

⁶⁰⁴ For example, as discussed above, ISDA reported in a 2015 survey that cash represented 77% of collateral received for uncleared derivatives transactions (with government securities representing an additional 13% percent), while for cleared OTC transactions with clients, cash represented 59% of initial margin received (with government securities representing an additional 39%) and 100% of variation margin received. See *supra* note 370.

⁶⁰⁵ A fund that limits its derivatives exposure to no greater than 50% of the value of the fund's net assets, and that does not use "complex derivatives transactions," would not be required to adopt and implement a derivatives risk management program. See rule 18f-4(a)(3).

with the risk management requirements in the proposed rule, on the other hand, may incur relatively higher initial compliance costs. The nature and extent of a fund's use of derivatives also may affect the level of costs (and benefits) that the fund would incur. A fund that uses derivatives more extensively may incur relatively greater costs in establishing a risk management program reasonably designed to assess and manage the risk associated with the fund's derivatives, particularly if the fund engages in complex derivatives transactions. A fund that engages in derivatives to a lesser extent, or that uses fewer complex derivatives transactions, may incur lower costs. In any case, the costs associated with a fund's risk management program would directly impact funds (and may indirectly impact fund investors if a fund's adviser incurs costs and passes along its costs to investors through increased fees).

Our staff estimates that the one-time costs necessary to establish and implement a derivatives risk management program would range from \$65,000 to \$500,000⁶⁰⁶ per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund. These estimated costs are attributable to the following activities: (1) Developing policies and procedures relating to each of the required program elements and administration of the program (including the designation of a derivatives risk manager); (2) integrating and implementing the policies and procedures described above; and (3) preparing training materials and administering training sessions for staff in affected areas.

Staff estimates that each fund would incur ongoing program-related costs, as a result of proposed rule 18f-4, that range from 65% to 75% of the one-time costs necessary to establish and implement a derivatives risk management program.⁶⁰⁷ Thus, staff

estimates that a fund would incur ongoing annual costs associated with proposed rule 18f-4 that would range from \$42,250 to \$375,000.⁶⁰⁸ These costs are attributable to the following activities: (1) Assessing, monitoring, and managing the risks associated with the fund's derivatives transactions; (2) reviewing and updating periodically any models (including VaR models), measurement tools, or policies and procedures that are a part of, or used in, the program to evaluate their effectiveness and reflect changes in risks over time; (3) providing written reports to the fund's board, no less frequently than quarterly, describing the adequacy of the fund's program and the effectiveness of its implementation; and (4) additional staff training.

Under the proposed rule, a fund that limits its derivatives exposure to 50% or less of net assets (and does not enter into complex derivatives transactions) would not be required to establish a derivatives risk management program.⁶⁰⁹ In the DERA staff analysis, approximately 10% of all sampled funds had aggregate exposure from derivatives transactions exceeding 50% of net assets.⁶¹⁰ An additional approximately 4% of the funds in DERA's sample had aggregate exposure from derivatives of between 25–50% of net assets.⁶¹¹ In light of this, Commission staff estimates that approximately 14% of funds (1,676

experience and outreach, we estimate that these ongoing costs would range from 65% to 75% of the initial costs. *See supra* note 601.

⁶⁰⁸ This estimate is based on the following calculations: $0.65 \times \$65,000 = \$42,250$; $0.75 \times \$500,000 = \$375,000$.

⁶⁰⁹ A fund would be required to measure its aggregate exposure associated with its derivatives transactions immediately after entering into any senior securities transaction. *See* rule 18f-4(a)(3)(i). Funds that use complex derivatives transactions, as defined in the proposed rule, also would be required to establish risk management programs, even if the funds' derivatives exposure was less than 50% of net assets. The proposed rule's definition of complex derivatives transactions is based on whether the amount payable by either party to a derivatives transaction is dependent on the value of the underlying reference asset at multiple points in time during the term of the transaction, or is a non-linear function of the value of the underlying reference asset, other than due to the optionality arising from a single strike price. *See* rules 18f-4(a)(4)(ii); 18f-4(c)(1).

⁶¹⁰ *See* DERA White Paper, *supra* note 73, Figure 11.1. DERA staff was unable to determine the extent to which funds use derivatives transactions that would be complex derivatives transactions, based on the data available to the staff. The staff is thus unable to estimate the number of funds that would be required to have a risk management program solely as a result of their use of complex derivatives transactions. *See supra* note 609.

⁶¹¹ *See* DERA White Paper, *supra* note 73, Figure 11.1.

funds⁶¹²) would establish a derivatives risk management program. As with the other quantified costs we discuss in this Release, we believe that many funds belong to a fund complex and are likely to experience economies of scale. We therefore expect that the lower-end of the estimated range of costs (\$65,000 in one-time costs; \$42,250 in annual costs) better reflects the total costs likely to be incurred by many funds.

5. Financial Commitment Transactions

a. Requirements

As discussed above in section III.E, the proposed rule would require a fund that enters into financial commitment transactions in reliance on the rule to maintain qualifying coverage assets, identified on the books and records of the fund and determined at least once each business day, with a value equal to the fund's aggregate financial commitment obligations, which generally are the amounts of cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under its financial commitment transactions. The proposed rule would permit a fund to maintain as qualifying assets for a financial commitment transaction assets that 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 such obligation or that have been pledged with respect to the financial commitment obligation and can be expected to satisfy such obligation, determined in accordance with policies and procedures approved by the fund's board of directors.

b. Benefits

By requiring the fund to maintain qualifying coverage assets to cover the fund's full potential obligation under its financial commitment transactions, the proposed rule generally would take the same approach to these transactions that we applied in Release 10666, with some modifications (primarily to the types of segregated assets that would be permitted under the proposed rule). The proposed rule would limit a fund's obligations under financial commitment transactions, in that the fund could not incur obligations under those transactions in excess of the fund's qualifying coverage assets. This would limit a fund's ability to incur obligations under financial commitment transactions to 100% of the fund's net

⁶¹² This estimate is based on the following calculation: $11,973 \text{ funds} \times 14\% = 1,676 \text{ funds}$. *See supra* note 578.

⁶⁰⁶ *See supra* note 570. We note that some funds, and in particular smaller funds for example, may not have appropriate existing personnel capable of fulfilling the responsibilities of the proposed derivatives risk manager, or may choose to hire a new employee to act as the derivatives risk manager rather than assigning that responsibility to a current employee or officer of the fund or the fund's investment adviser who is not a portfolio manager. We would expect that a fund that is required to hire a new derivatives risk manager would likely incur costs on the higher end of our estimated range of costs.

⁶⁰⁷ In estimating the total quantified costs of our proposed rule, we estimate that the derivatives risk management program requirements, similar to the asset segregation requirements, would likely impose ongoing costs that are proportionately larger than initial costs. Accordingly, and based on staff

assets, as discussed above in section III.E. As noted above, funds that enter into financial commitment transactions today in reliance on Release 10666 also do not incur obligations in excess of net assets,⁶¹³ and no fund in the DERA sample had greater than 100% aggregate exposure resulting from financial commitment transactions (the current economic baseline for such transactions).⁶¹⁴ As discussed above in section IV.C, we expect that proposed rule 18f-4 would permit a fund that enters solely into financial commitment transactions to operate much in the same way as it does today.

c. Quantified Costs

We estimate above in section IV.D.3 the potential costs of the asset segregation requirement for funds that enter into derivatives transactions. We estimated that the potential costs would include: (1) Developing and implementing policies and procedures to comply with the proposed rule's requirement that the fund maintains the required qualifying coverage assets, identified on the books and records of the fund and determined at least once each business day; (2) planning, coding, testing, and installing any system modifications relating to the asset segregation requirements; and (3) preparing training materials and administering training sessions for staff in affected areas. A fund that enters solely into financial commitment transactions would similarly have an asset segregation requirement.

Although, as discussed above in section III.E, the amount and nature of "qualifying coverage assets" required differ with regard to derivatives transactions and financial commitment transactions, we believe that the operational costs to implement the asset segregation requirements would be the same. For both derivatives transactions and financial commitment transactions, funds would be required to establish policies and procedures regarding qualifying coverage assets, and in both cases funds would be required to assess their obligations under the transactions. For financial commitment transactions, a fund would be required to maintain assets that 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 its financial commitment obligation or that have been pledged with respect to the financial commitment obligation and can be expected to satisfy such

obligation, determined in accordance with policies and procedures approved by the fund's board of directors. For derivatives transactions, funds would be required to determine, in addition to a mark-to-market coverage amount, the transaction's risk-based coverage amount, which would represent an estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions, determined in accordance with policies and procedures approved by the fund's board. Although the required assessments would differ for derivatives transactions and financial commitment transactions, we expect that there would be no material difference in the activities involved (e.g., developing and implementing policies and procedures, and modifying systems, to comply with the proposed rule's requirement that the fund maintains the required qualifying coverage assets), and thus no material difference in the associated costs.

Accordingly, we estimate that the one-time operational costs necessary to establish and implement the proposed asset segregation requirements would range from \$25,000 to \$75,000 per fund.⁶¹⁵ Staff also estimates that each fund would incur ongoing costs related to implementing the asset segregation requirements under proposed rule 18f-4. Staff estimates that such costs would range from 65% to 75% of the one-time costs discussed above.⁶¹⁶ Thus, staff estimates that a fund would incur ongoing annual costs associated with the asset segregation requirements that would range from \$16,250 to \$56,250.⁶¹⁷ In the DERA staff analysis, approximately 3% of all sampled funds entered into at least some financial commitment transactions, but had no exposure from derivatives transactions.⁶¹⁸ Staff estimates, therefore, that 3% of funds (359 funds⁶¹⁹) would comply with the asset segregation requirements in proposed rule 18f-4 (applicable to financial commitment transactions). The above estimate of affected funds does not include money market funds or BDCs. We understand, however, that both money market funds and BDCs may engage in certain types of financial

commitment transactions.⁶²⁰ Therefore, we estimate that 537 money market funds and 88 BDCs would also comply with the asset segregation requirements in proposed rule 18f-4 (applicable to financial commitment transactions).⁶²¹ As with the other quantified costs we discuss in this Release, we believe that many funds belong to a fund complex and are likely to experience economies of scale. We therefore expect that the lower-end of the estimated range of costs (\$25,000 in one-time costs; \$16,250 in annual costs) better reflects the total costs likely to be incurred by many funds.

6. Amendments to Form N-PORT To Report Risk Metrics by Funds That Are Required To Implement a Derivatives Risk Management Program

a. Requirements

As discussed above in section III.G.2, proposed Form N-PORT would require funds that are required to implement a derivatives risk management program to disclose vega and gamma, risk metrics information that is not currently required by the Commission. As we previously stated, we believe that requiring certain funds to report vega and gamma would assist the Commission in better assessing the risk in a fund's portfolio. In consideration of the burdens of reporting selected risk metrics to the Commission and the benefits of more complete disclosure of a fund's risks, we are proposing to limit the reporting of vega and gamma to only those funds that are required to implement a derivatives risk management program.

The current set of requirements under which registered management investment companies (other than money market funds and SBICs) and ETFs organized as UITs publicly report complete portfolio investment information to the Commission on a quarterly basis, as well as the current practice of some investment companies to voluntarily disclose portfolio investment information, is the baseline from which we will discuss the economic effects of vega and gamma disclosure. The baseline is the same baseline from which we discussed the economic effects of Form N-PORT in the Investment Company Reporting Modernization Release.⁶²²

⁶¹⁵ See *supra* note 600.

⁶¹⁶ See *supra* note 601.

⁶¹⁷ This estimate is based on the following calculations: $0.65 \times \$25,000 = \$16,250$; $0.75 \times \$75,000 = \$56,250$.

⁶¹⁸ We address a fund that invests in both derivatives transactions and financial commitment transactions in section IV.D.3.

⁶¹⁹ This estimate is based on the following calculation: $11,973 \text{ funds} \times 3\% = 359 \text{ funds}$. See *supra* note 578.

⁶²⁰ See *supra* note 578.

⁶²¹ See *supra* note 512 and accompanying text.

⁶²² See Investment Company Reporting Modernization Release, *supra* note 138, at section IV.B.a.

⁶¹³ See *supra* note 93 and accompanying text.

⁶¹⁴ DERA White Paper, *supra* note 73, Table 6.

b. Benefits

The benefits of requiring certain funds to report vega and gamma on Form N-PORT are largely the same benefits as those identified in the Investment Company Reporting Modernization Release.⁶²³ As discussed in that release, the information we would receive on Form N-PORT would facilitate the oversight of funds and would assist the Commission to better effectuate its mission to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation. For example, as we discussed in the Release, risk sensitivity measures improve the ability of Commission staff to efficiently analyze information for funds (such as a fund's exposure to changes in price and volatility) and identify funds with certain risk exposures that appear to be outliers among peer funds. Moreover, the information we would receive on Form N-PORT would improve the Commission's ability to analyze fund industry trends, monitor funds, and, as appropriate, engage in further inquiry or timely outreach in case of a market or other event. In particular, requiring certain funds to report vega and gamma on Form N-PORT could improve the Commission's ability to analyze funds' exposures to volatility and to their exposures to more sizable changes in the value of a derivative's reference security. These measures could be used in considering whether additional guidance or policy measures may be appropriate. The calculation of position-level risk-measures for some derivatives, including derivatives with unique or complicated payoff structures, sometimes requires time-intensive computation methods or additional information that Form N-PORT as proposed, would not require. In addition, the calculation of a second-order derivative, such as gamma, can be more computationally intensive than the calculation of a first-order derivative, such as delta and may require additional modelling. As discussed in section III. G. above, we believe that many of the funds that would be required to implement a derivatives risk management program already calculate risk measures such as gamma and vega as part of their portfolio management programs or have gamma and vega calculated for them by a service provider. Accordingly, we believe that requiring funds to calculate second-order derivatives, such as gamma, and provide risk measures for

derivatives, such as vega, at the position-level, would improve the ability of staff to efficiently identify risk exposures of funds regardless of the types of derivatives.

The benefits of requiring certain funds to report vega and gamma on Form N-PORT would also benefit investors, to the extent that they use the information, to better differentiate investment companies based on their investment strategies. In general, we expect that institutional investors and other market participants would directly use the information from Form N-PORT more so than individual investors. Individual investors, however, could indirectly benefit from the information in Form N-PORT to the extent that third-party information providers and other interested parties are able to report on the information and other entities utilize the information to help investors make more informed investment decisions. An increase in the ability of investors to differentiate investment companies would allow investors to efficiently allocate capital across reporting funds more in line with their risk preferences, increase the competition among funds for investor capital, and could promote capital formation.

c. Costs

As we discussed in the Investment Company Reporting Modernization Release, to the extent that risk metrics are not currently contained in fund accounting or financial reporting systems, funds would bear one-time costs to update systems to adhere to the new filing requirements.⁶²⁴ The one-time costs would depend on the extent to which investment companies currently report the information required to be disclosed. The one-time costs would also depend on whether an investment company would need to implement new systems, such as to calculate and report vega and gamma, and to integrate information maintained in separate internal systems or by third parties to comply with the new requirements. Based on staff outreach to funds, we believe that, at a minimum, funds would incur systems or licensing costs to obtain a software solution or to retain a service provider in order to report data on risk metrics, as risk metrics are not currently required to be reported on fund financial statements. Our experience with and outreach to funds indicates that the types of systems funds use for warehousing and

aggregating data, including data on risk metrics, vary widely.

Similar to our proposal in the Investment Company Modernization Release,⁶²⁵ the proposed amendments to proposed Form N-PORT relating to vega and gamma would increase the amount and availability of public information about certain investment companies' portfolio positions and investment strategy and could potentially 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."⁶²⁶ These practices can reduce the returns of shareholders who invest in actively managed funds.⁶²⁷ These practices can also reduce fund profitability from developing new investment strategies, and therefore negatively affect innovation and impact competition in the fund industry.

As with our proposed liquidity disclosures, we cannot currently predict the extent to which the proposed enhancements to funds' disclosures on Form N-PORT relating to risk metrics would give rise to front-running, predatory trading, and other activities that could be detrimental to a fund and its investors, and thus we are unable to quantify potential costs related to these activities. The costs that relate to the additional risk-sensitivity measures are also intertwined with the overall costs to funds and market participants that could result from the increased disclosure of currently non-public information associated with Form N-PORT in its entirety.⁶²⁸ For example, any analyses of the risk metric-related disclosure proposed to be required could be affected by the enhanced reporting of any other additional information that could more clearly reveal the investment strategy of reporting funds.

The potential costs associated with the increased disclosure of currently non-public information on Form N-PORT are discussed in detail in our recent proposal to modernize investment company reporting,⁶²⁹ as

⁶²⁵ See Investment Company Reporting Modernization Release, *supra* note 138, at section II.A.4; see also Liquidity Release, *supra* note 5.

⁶²⁶ See Investment Company Reporting Modernization Release, *supra* note 138, at n.170 and accompanying and following text.

⁶²⁷ See Russ Wermers, *The Potential Effects of More Frequent Portfolio Disclosure on Mutual Fund Performance*, 7 Investment Company Institute Perspective No. 3 (June 2001), available at <http://www.ici.org/pdf/per07-03.pdf>.

⁶²⁸ See *id.*, at paragraphs accompanying nn.663–673.

⁶²⁹ See *id.*

⁶²³ See Investment Company Reporting Modernization Release, *supra* note 138, at section IV.B.b.

⁶²⁴ See Investment Company Reporting Modernization Release, *supra* note 138, at section IV.B.c.

well as our recent proposal regarding liquidity risk-management programs.⁶³⁰ These proposals also discuss the ways in which we have endeavored to mitigate these costs, including by proposing to maintain the status quo for the frequency and timing of disclosure of publicly available portfolio information.⁶³¹ While proposed Form N-PORT would be required to be filed monthly, it would be required to be disclosed quarterly and would not be made public until 60 days after the close of the period at issue. Because funds are currently required to disclose their portfolio investments quarterly (and this disclosure is made public with a 60-day lag), we believe that maintaining the status quo with regard to the frequency and the time lag of publicly available portfolio reporting would permit the Commission (as well as the fund industry generally) to assess the impact of the Form N-PORT filing requirements on the mix of information available to the public, and the extent to which these changes might affect the potential for predatory trading, before determining whether more frequent or more timely public disclosure would be beneficial to investors in funds.⁶³²

d. Quantified Costs

As further discussed below⁶³³ and in our Investment Company Modernization Release,⁶³⁴ we estimate that funds would incur certain annual costs associated with preparing, reviewing, and filing reports on Form N-PORT. The proposed amendments to proposed Form N-PORT would require funds that are required to implement a derivatives risk management program to report on Form N-PORT the vega and gamma for certain investments.⁶³⁵ We estimate that 1,676 funds⁶³⁶ would be required to file, on a monthly basis, additional information on Form N-PORT as a

result of the proposed amendments.⁶³⁷ Assuming that 35% of funds (587 funds) would choose to license a software solution to file reports on Form N-PORT in house,⁶³⁸ we estimate an upper bound on the initial annual costs to file the additional information associated with the proposed amendments for funds choosing this option of \$3,352 per fund⁶³⁹ with annual ongoing costs of \$2,991 per fund.⁶⁴⁰ We further assume that 65% of funds (1,089 funds) would choose to retain a third-party service provider to provide data aggregation and validation services as part of the preparation and filing of reports on Form N-PORT,⁶⁴¹ and we estimate an upper bound on the initial costs to file the additional information associated with the proposed amendments for funds choosing this option of \$2,319 per fund⁶⁴² with annual ongoing costs of \$1,517 per fund.⁶⁴³

7. Amendments to Form N-CEN To Report Reliance on Proposed Rule 18f-4

a. Requirements

As discussed above in section III.G.3, our amendments to proposed Form N-CEN would require funds to identify the portfolio limitation(s) on which a fund relied during the reporting period. As we stated above, this information would allow the Commission and others to monitor reliance on the exemptions under proposed rule 18f-4.

The current set of requirements—management companies must file reports on Form N-SAR semi-annually⁶⁴⁴—is the baseline from which we discuss the economic effects of Form N-CEN. The parties that could be affected by the rescission of Form N-SAR and the introduction of Form N-

CEN include funds that currently file reports on Form N-SAR and funds that would file reports on Form N-CEN; the Commission; and, other current and future users of fund census information including investors, third-party information providers, and other interested potential users. The baseline is the same baseline from which we discussed the economic effects of Form N-CEN in the Investment Company Reporting Modernization Release.⁶⁴⁵

b. Benefits

The benefits of requiring funds to report reliance on certain exemptive rules, including proposed rule 18f-4, on Form N-CEN are largely the same benefits as those identified in the Investment Company Reporting Modernization Release.⁶⁴⁶ As we discussed in that release, proposed Form N-CEN would improve the quality and utility of the information reported to the Commission and allow Commission staff to better understand industry trends, inform policy, and assist with the Commission's examination program. Similarly, identifying the portfolio limitation(s) on which a fund relied during the reporting period would identify for the staff funds that rely on proposed rule 18f-4. As discussed in our recent proposal to modernize Investment Company reporting, the information we would receive on Form N-CEN would facilitate the oversight of funds and would assist the Commission to better effectuate its mission to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.⁶⁴⁷

c. Costs

As we discussed above, to the extent that reliance on certain exemptive rules is not currently contained in fund accounting or financial reporting systems, funds would bear one-time costs to update systems to adhere to the new filing requirements.⁶⁴⁸ The one-time costs would depend on the extent to which funds currently report the information required to be disclosed. The one-time costs would also depend on whether a fund would need to implement new systems in order to integrate information maintained in

⁶³⁰ See Liquidity Release, *supra* note 5.

⁶³¹ See *id.*, at section II.A.4 and paragraph accompanying n. 670.

⁶³² See *id.*

⁶³³ See *infra* section V.

⁶³⁴ See Investment Company Reporting Modernization Release, *supra* note 138, at nn.658–662 accompanying text.

⁶³⁵ While we do not have a specific estimate of the number of funds that calculate gamma and vega, based on our discussions with members of the industry and due to the nature of those funds' investment strategies, we expect that many of those funds currently calculate vega and gamma for its investment programs or have vega and gamma calculated for them by a service provider. However, we realize that it is possible that some funds may not calculate vega and gamma and our cost estimates reflect those costs as well.

⁶³⁶ Commission staff estimates, therefore, that approximately 14% of funds (1,676 funds) would be required to establish a derivatives risk management program. See *supra* note 612 and accompanying text.

⁶³⁷ There were 8,734 open-end funds (excluding money market funds, and including ETFs) as of the end of 2014. See Investment Company Institute, 2015 Investment Company Fact Book (2015), available at https://www.ici.org/pdf/2015_factbook.pdf, at 177, 184.

⁶³⁸ This assumption tracks the assumption made in the Investment Company Reporting Modernization Release that 35% of funds would choose to license a software solution to file reports on Form N-PORT. See Investment Company Reporting Modernization Release, *supra* note 138, at nn.658–659 and accompanying text.

⁶³⁹ See *infra* note 797 and accompanying text.

⁶⁴⁰ See *infra* note 797.

⁶⁴¹ This assumption tracks the assumptions made in the Investment Company Reporting Modernization Release that 65% of funds would choose to retain a third-party service provider to provide data aggregation and validation services as part of the preparation and filing of reports on Form N-PORT. See Investment Company Reporting Modernization Release, *supra* note 138, at nn.660–661 and accompanying text.

⁶⁴² See *infra* note 803 and accompanying text.

⁶⁴³ See *infra* note 804 and accompanying text.

⁶⁴⁴ See rule 30b1-1.

⁶⁴⁵ See Investment Company Reporting Modernization Release, *supra* note 138, at section IV.E.a.

⁶⁴⁶ See Investment Company Reporting Modernization Release, *supra* note 138, at section IV.E.b.

⁶⁴⁷ See *id.*

⁶⁴⁸ See Investment Company Reporting Modernization Release, *supra* note 138, at section IV.B.c.

separate internal systems with the new requirements.

d. Quantified Costs

As further discussed below⁶⁴⁹ and in our Investment Company Modernization Release,⁶⁵⁰ we estimate that funds would incur certain annual costs associated with preparing, reviewing, and filing reports on Form N-CEN. The proposed amendments to proposed Form N-CEN would require funds to identify the portfolio limitation(s) on which they relied during the reporting period.

In the Investment Company Modernization Reporting Release, the staff estimated that the Commission would receive an average of 3,146 reports per year, based on the number of existing Form N-SAR filers, including 2,419 funds.⁶⁵¹ We further estimated that management investment companies would require 33.35 annual burden hours in the first year⁶⁵² and 13.35 annual burden hours in each subsequent year for preparing and filing reports on proposed Form N-CEN. We estimated that all Form N-CEN filers would have an aggregate annual expense of \$12,395,064 for reports on Form N-CEN.⁶⁵³

As part of this burden, funds would be required to identify if they relied upon ten different rules under the Act.⁶⁵⁴ While the costs associated with collecting and documenting the requirements under proposed rule 18f-4 are discussed above,⁶⁵⁵ we believe that there are additional costs relating to identifying the portfolio limitation(s) on which a fund relied on proposed Form

N-CEN. We therefore estimate that 2,419 funds would incur an average annual hour burden of .25 hours for the first year to compile (including review of the information), tag, and electronically file the additional information in light of the proposed amendments, and an average annual hour burden of approximately .1 hours for each subsequent year's filing. We further estimate an upper bound on the initial costs to funds of \$80 per fund⁶⁵⁶ with annual ongoing costs of \$32 per fund.⁶⁵⁷ We do not anticipate any change to the total external annual costs of \$1,748,637.⁶⁵⁸

E. Reasonable Alternatives

In formulating our proposal, we have considered various alternatives to the individual elements of proposed rule 18f-4. Those alternatives are outlined above in the sections discussing the proposed rule elements, and we have requested comment on these alternatives.⁶⁵⁹ The following discussion addresses significant alternatives to proposed rule 18f-4, which involve broader issues than the more granular alternatives to the individual rule elements discussed above in section III of this Release. First, we discuss an alternative approach focused on asset segregation. This approach would allow funds to establish their own minimum asset segregation requirements for derivatives transactions while taking into account a variety of risk measures, but would not include additional limitations designed to impose a limit on leverage. Second, we discuss an approach that would require a fund engaging in derivatives transactions to segregate liquid assets equal in value to the full amount of the potential obligations under the derivatives transactions. This approach would, in effect, apply the approach in Release 10666 to all types of derivatives. Third, we discuss the European Union provisions relating to UCITS funds and alternative investment funds ("AIFs")⁶⁶⁰ as an alternative approach to our proposed rule. Fourth, we discuss whether it would be a reasonable alternative to rely on enhancing derivatives-related disclosure. In addition to these discussions regarding alternatives to proposed rule 18f-4, we also discuss below certain alternatives

to our proposed amendments to Proposed Form N-PORT.

1. Mark-to-Market Plus "Cushion Amount" Alternative

In the Concept Release we discussed an alternative approach to funds' current asset segregation approaches—generally, notional amount and mark-to-market segregation as discussed above—that was originally proposed in the 2010 ABA Derivatives Report. This alternative approach would allow individual funds to establish their own asset segregation standards for derivatives transactions but would not impose any additional requirements or overall limits on a fund's use of derivatives. Under this alternative, a fund would be required to adopt policies and procedures that would include, among other things, minimum asset segregation requirements for each type of derivatives instrument, taking into account relevant factors such as the type of derivative, the specific transaction, and the nature of the assets segregated ("Risk Adjusted Segregation Amounts"). In developing these standards, fund investment advisers might take into account a variety of risk measures, including VaR and other quantitative measures of portfolio risk, and would not be limited to the notional amount or mark-to-market standards.⁶⁶¹ This alternative is similar in some ways to the proposed rule's asset coverage requirements for derivatives transactions, as discussed in section IV.D.3. The proposed rule differs from this alternative in that it imposes requirements in addition to those related to asset coverage, including overall notional amount limits and the requirement for certain funds to have derivatives risk management programs.

Certain commenters on the Concept Release suggested that segregation of a fund's daily mark-to-market liability alone may not be effective in at least some cases, and suggested that we impose asset segregation requirements under which a fund would include in its segregated account for a derivative an amount designed to address future losses (a "cushion amount") in addition to the daily mark-to-market liability for the derivative.⁶⁶² Some commenters specifically supported the 2010 ABA Derivatives Report alternative that used

⁶⁶¹ The 2010 ABA Derivatives Report recommended that these minimum Risk Adjusted Segregated Amounts be reflected in policies and procedures that would be subject to approval by the fund's board of directors and disclosed (including the principles underlying the Risk Adjusted Segregated Amounts for different types of derivatives) in the fund's SAI.

⁶⁶² See, e.g., SIFMA Concept Release Comment Letter; ICI Concept Release Comment Letter.

⁶⁴⁹ See *infra* section V.B.6.

⁶⁵⁰ See Investment Company Reporting Modernization Release, *supra* note 138, at nn.658–662 accompanying text.

⁶⁵¹ This estimate is based on 2,419 management companies and 727 UITs filing reports on Form N-SAR as of Dec. 31, 2014. UITs would not be required to complete Item 31 of proposed Form N-CEN. See General Instruction A of proposed Form N-CEN.

⁶⁵² This estimate is based on the following calculation: 13.35 hours for filings + 20 additional hours for the first filing = 33.35 hours.

⁶⁵³ This estimate is based on annual ongoing burden hour estimate of 32,294 burden hours for management companies (2,419 management companies × 13.35 hours per filing) plus 6,623 burden hours for UITs (727 UITs × 9.11 burden hours per filing), for a total estimate of 38,917 burden ongoing hours. This was then multiplied by a blended hourly wage of \$318.50 per hour, \$303 per hour for Senior Programmers and \$334 per hour for compliance attorneys, as we believe these employees would commonly be responsible for completing reports on proposed Form N-CEN (\$318.50 × 38,917 = \$12,395,064.50). See Investment Company Reporting Modernization Release, *supra* note 138, at n.723 and accompanying text.

⁶⁵⁴ See Item 31 of Proposed Form N-CEN.

⁶⁵⁵ See *supra* Sections IV.D.1. and IV.D.2.

⁶⁵⁶ See *infra* note 815.

⁶⁵⁷ See *infra* note 816.

⁶⁵⁸ See *infra* note 821.

⁶⁵⁹ See *supra* sections III.B–III.F.

⁶⁶⁰ AIFs are alternative investment funds that are marketed to professional investors in the European Union.

Risk Adjusted Segregated Amounts and many commenters generally supported using a “principles-based approach” to asset segregation⁶⁶³ that would permit funds to adopt policies and procedures that would include minimum asset segregation requirements for each type of derivatives instrument, taking into account relevant factors.⁶⁶⁴ Some commenters expressed the view that the optimal amount of cover for many derivatives may be somewhere in between the full notional and mark-to-market amounts and that the amount should be expected to cover the potential loss to the fund.⁶⁶⁵ One of these commenters recommended that fund boards should be responsible for designing asset segregation policies with the objective of maintaining segregated assets sufficient to meet obligations arising from the fund’s derivatives under “extreme but plausible market conditions.”⁶⁶⁶ Another commenter argued that the cushion amount generally should be equal to the initial margin that funds will generally be required to post for derivatives following the implementation of margin requirements under the Dodd-Frank Act or, in the alternative, a cushion amount determined by funds based on a portfolio-wide analysis of their derivatives transactions.⁶⁶⁷ This

commenter suggested that initial margin represents an amount designed to protect against potential future losses, and where regulators or clearinghouses have determined the amount of initial margin that must be posted, they have already made determinations about the level of risk represented by an instrument.⁶⁶⁸

As discussed above in section IV.D.3, the rule we are proposing today would require a fund that enters into derivatives transactions and financial commitment transactions in reliance on the proposed rule to maintain an appropriate amount of qualifying coverage assets. For derivatives transactions, a fund would be required to maintain qualifying coverage assets with a value equal to at least the sum of the fund’s aggregate mark-to-market coverage amounts and risk-based coverage amounts.⁶⁶⁹ For financial commitment transactions, a fund would be required to maintain qualifying coverage assets with a value equal to at least the fund’s aggregate financial commitment obligations.⁶⁷⁰

The proposed rule’s asset segregation requirement would in many ways be consistent with the approaches recommended by the 2010 ABA Derivatives Report and by commenters in that it would require funds to maintain amounts intended to cover the fund’s current mark-to-market amount to cover the amount that would be payable by the fund if the fund were to exit the derivatives transaction at such time, plus an additional amount that represents a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions.

However, the proposed rule would differ significantly from the approach recommended in the 2010 ABA Derivatives Report and by some commenters in that the proposed rule would impose portfolio limitations, as discussed in section III.B.1.c, designed to impose a limit on the amount of leverage a fund may obtain through derivatives and other senior securities transactions. The 2010 ABA Derivatives Report alternative, in contrast, focused on asset segregation without any other limitation on a fund’s use of senior securities transactions. The proposed

rule’s inclusion of both portfolio limitations and asset coverage requirements would be consistent with the recommendation of one commenter, which supported a principles-based approach to asset segregation but also recognized that we might “wish to consider adopting an overall leverage limit that funds would be required to comply with, notwithstanding that they have segregated liquid assets to back their obligations.”⁶⁷¹

The 2010 ABA Derivatives Report also recommended an asset segregation approach that would give discretion to boards to determine the segregation amount for each instrument and thus the amount of derivatives exposures that the fund could obtain. The proposed asset coverage requirements, by contrast, would be based in part on procedures approved by the fund’s board, but would also impose specific requirements on the fund’s asset coverage practices, including by generally requiring the fund to segregate short-term, highly liquid assets.

As noted in section III.A, we believe that the proposed rule’s approach for derivatives transactions—providing separate portfolio limitations and asset segregation requirements—would be more effective than an approach focusing on asset segregation alone, particularly when it is coupled with a risk management program for funds that engage in more than a limited amount of derivatives transactions or that use certain complex derivatives transactions, as we are proposing today. Moreover, the approach recommended in the 2010 ABA Derivatives Report and similar suggestions by some commenters would provide discretion to funds to determine their derivatives-related requirements, and as a result, the extent of their use of senior securities transactions. We believe that this alternative approach under the 2010 ABA Derivatives Report, without more, may not result in a meaningful limitation on funds’ use of derivatives, and thus would not address the undue speculation concern expressed in section 1(b)(7) or the asset sufficiency concern expressed in section 1(b)(8), as discussed above in section II. We believe that relying solely on the discretion of funds and their boards of directors for limitations on the use of derivatives would not be a sufficient basis for an exemption from section 18, which imposes a limit on the extent to which funds may issue senior securities.

⁶⁶³ See, e.g., BlackRock Concept Release Comment Letter; Invesco Concept Release Comment Letter; Loomis Concept Release Comment Letter; ICI Concept Release Comment Letter; IDC Concept Release Comment Letter; ABA Concept Release Comment Letter; Comment Letter of Stradley Ronon Stevens & Young LLP (Nov. 7, 2011) (File No. S7-33-11), available at <http://www.sec.gov/comments/s7-33-11/s73311-27.pdf>; MFDF Concept Release Comment Letter; T. Rowe Concept Release Comment Letter; Vanguard Concept Release Comment Letter; AlphaSimplex Concept Release Comment Letter; Oppenheimer Concept Release Comment Letter; Rafferty Concept Release Comment Letter.

⁶⁶⁴ See, e.g., ABA Concept Release Comment Letter; IDC Concept Release Comment Letter; BlackRock Concept Release Comment Letter; Invesco Concept Release Comment Letter; ICI Concept Release Comment Letter; MFDF Concept Release Comment Letter; AlphaSimplex Concept Release Comment Letter; Loomis Concept Release Comment Letter; T. Rowe Price Concept Release Comment Letter; Comment Letter of Security Investors, LLC (Nov. 7, 2011) (File No. S7-33-11), available at <http://www.sec.gov/comments/s7-33-11/s73311-36.pdf>.

⁶⁶⁵ See, e.g., ICI Concept Release Comment Letter; Invesco Concept Release Comment Letter.

⁶⁶⁶ ICI Concept Release Comment Letter (noting that “*extreme but plausible market conditions*” is a statutory standard used by swap execution facilities and derivatives clearing organizations to determine the minimum amount of financial resources such entities must have to ensure, with a reasonably high degree of certainty, that they will be able to satisfy their obligations. See, e.g., section 5b(c)(2) of the Commodity Exchange Act, as amended by section 725(c) of the Dodd-Frank Act.).

⁶⁶⁷ See SIFMA Concept Release Comment Letter. See section III.C. for a discussion of why we are not

proposing to use initial margin to determine asset segregation amounts.

⁶⁶⁸ See SIFMA Concept Release Comment Letter.

⁶⁶⁹ Proposed rule 18f-4(a)(2). See also proposed rule 18f-4(c)(6) (definition of mark-to-market coverage amount) and 18f-4(c)(9) (definition of risk-based coverage amount).

⁶⁷⁰ Proposed rule 18f-4(b). See also proposed rule 18f-4(c)(5) (definition of financial commitment obligation).

⁶⁷¹ See Vanguard Concept Release Comment Letter, at n.18.

2. Applying Notional Amount Segregation to All Senior Securities Transactions

Another alternative approach we considered was to apply the approach in Release 10666 to all types of derivatives, thereby requiring that a fund engaging in any derivatives transaction segregate liquid assets of the types we specified in Release 10666 equal in value to the full amount of the conditional and unconditional obligations incurred by the fund (also referred to as notional amount segregation).⁶⁷²

Although the approach in Release 10666 appears to have addressed the concerns reflected in sections 1(b)(7) and 1(b)(8) for the trading practices described in that release, applying it to derivatives by requiring funds to segregate the types of liquid assets we described in Release 10666 equal in value to the full notional amount of each derivative may require funds to hold more liquid assets than may be necessary to address the purposes and concerns underlying section 18, as discussed above in section III.A. Furthermore, as discussed above in section III.B.1.c., given the contingent nature of funds' derivatives obligations and the various ways in which funds use derivatives—both for investment purposes to increase returns but also to mitigate risks—we believe it is appropriate to provide funds some additional flexibility to use derivatives, subject to the limitations set forth in the proposed rule.

3. UCITS Alternative

In developing proposed rule 18f–4, we considered the current guidelines that apply to UCITS funds. As discussed below, while our proposed rule is similar in some respects to the guidelines that cover UCITS funds, our proposed rule also differs in other respects. We also considered the current guidelines that apply to AIFs. We discuss further below how our proposed rule generally differs from the guidelines that govern AIFs.

The Committee of European Securities Regulators (“CESR”) (which, as of January 1, 2011, became the European Securities and Markets Authority, or “ESMA”), conducted an extensive review and consultation concerning exposure measures for derivatives used by UCITS funds. CESR's Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (“Global Exposure

Guidelines”) ⁶⁷³ were issued in 2010, and addressed the implementation of the European Commission's 2009 revised UCITS Directive (“2009 Directive”).⁶⁷⁴ Under the 2009 Directive, UCITS funds are permitted to engage in any type of derivatives investments subject to compliance with one of two permissible, alternative methods to limit their exposure to derivatives: (1) The “commitment” approach and (2) the VaR approach.⁶⁷⁵

Under the commitment approach, a UCITS fund's net exposures from derivatives may not exceed 100% of the fund's net asset value.⁶⁷⁶ CESR's Global Exposure Guidelines extensively address the calculation of derivatives exposure and specify a method for calculating derivatives exposure that generally uses the market value of the equivalent position in the underlying asset.⁶⁷⁷ CESR's Global Exposure Guidelines also incorporate a schedule of derivative investments and their

⁶⁷³ See CESR Global Guidelines, *supra* note 162. In order for CESR's Global Exposure Guidelines to be binding and operational in a particular EU Member State, the Member State must adopt them. To date, it appears that a few EU Member States, e.g., Ireland and Luxembourg, have adopted them. The majority of UCITS funds, however, are domiciled in either Ireland or Luxembourg.

⁶⁷⁴ See Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations, and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) (“Directive 2009/65/EC”), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:302:0032:0096:en:PDF>.

⁶⁷⁵ See CESR Global Guidelines, *supra* note 162. The CESR's Global Exposure Guidelines note that the “use of a commitment approach or VaR approach or any other methodology to calculate global exposure does not exempt UCITS from the requirement to establish appropriate internal risk management measures and limits.” *Id.*, at 5. In addition, with respect to the selection of the methodology used to measure global exposure, CESR's Global Exposure Guidelines note that the “commitment approach should not be applied to UCITS using, to a large extent and in a systematic way, financial derivative instruments as part of complex investment strategies.” *Id.*, at 6.

⁶⁷⁶ Directive 2009/65/EC, *supra* note 674 at Article 51(3) at 62 (“The exposure is calculated taking into account the current value of the underlying assets, the counterparty risk, future market movements and the time available to liquidate the positions”). See also CESR Global Guidelines, *supra* note 162 (“The commitment conversion methodology for standard derivatives is always the market value of the equivalent position in the underlying asset. This may be replaced by the notional value or the price of the futures contract where this is more conservative. For non-standard derivatives, where it is not possible to convert the derivative into the market value or notional value of the equivalent underlying asset, an alternative approach may be used provided that the total amount of the derivatives represent a negligible portion of the UCITS portfolio.”).

⁶⁷⁷ The market value of the underlying reference asset may be “replaced by the notional value or the price of the futures contract where this is more conservative.” See CESR Global Guidelines, *supra* note 162, at 7.

corresponding conversion methods to be used in calculating global exposure.⁶⁷⁸ The applicable conversion method for UCITS funds depends on the particular derivative.⁶⁷⁹ We believe that the calculation of derivatives exposure under CESR's Global Exposure Guidelines is generally similar to the method of calculating notional amounts, which under our proposed rule would be included in a fund's calculation of its exposure. Instead of specifying in the rule the precise method of determining notional amounts for every particular type of derivative transaction, we have proposed a definition of notional amount that we believe can be more readily adapted both to current and new types of derivatives transactions.

Although the CESR commitment approach is similar with respect to our proposed method of calculating derivatives exposure, the commitment approach differs from our proposed exposure-based alternative in several ways. First, the commitment approach permits exposures of up to only 100% of the fund's net assets rather than our proposed rule's exposure-based portfolio limit of 150%. Second, the commitment approach permits UCITS funds to reduce their calculated derivatives exposure for certain netting and hedging transactions. With respect to netting, CESR's Global Exposure Guidelines allow netting of derivatives transactions regardless of the derivatives' due dates, provided that the trades are “concluded with the sole aim of eliminating the risks linked to the positions.”⁶⁸⁰ In addition, UCITS funds are permitted to reduce their exposures for hedging arrangements—these are described in CESR's Global Exposure Guidelines as transactions that do not necessarily refer to the same underlying asset but are entered into for the “sole

⁶⁷⁸ See *id.*, at 7–12.

⁶⁷⁹ *Id.*, at 8. For example, for bond futures, the applicable conversion method is the number of contracts multiplied by the notional contract size multiplied by the market price of the cheapest-to-deliver reference bond. For plain vanilla fixed/floating interest rate and inflation swaps, the applicable conversion method is the market value of the underlier (though the notional value of the fixed leg may also be applied). *Id.* For foreign exchange forwards, the prescribed conversion method is the notional value of the currency leg(s). *Id.*, at 9. With respect to non-standard derivatives, where it is not possible to convert the derivative into the market value or notional value of the equivalent underlying asset, CESR's Global Exposure Guidelines note that “an alternative approach may be used provided that the total amount of the derivatives represent a negligible portion of the UCITS portfolio.” *Id.*, at 7.

⁶⁸⁰ See CESR Global Guidelines, *supra* note 162, at 13.

⁶⁷² See *supra* note 54 and accompanying text.

aim of offsetting risks" linked to other positions.⁶⁸¹

As discussed above in section III.B, given the flexibility provided by our proposed 150% exposure limit (and the requirements provided under our proposed risk-based portfolio limit discussed above), the proposed rule does not permit a fund to reduce its exposure for purposes of the rule's portfolio limitations for particular types of hedging, risk-mitigating or offsetting transactions. For all of the reasons discussed in that section, we believe that it would be more appropriate, in lieu of a reduction for hedging on a transaction-by-transaction basis, to provide funds with the flexibility to enter into derivatives transactions for a variety of purposes, including those that are partially or primarily for hedging, through a 150% exposure limitation.

Similar to our proposed rule, the UCITS guidelines also provide an alternative risk-based approach. This alternate method for UCITS compliance is the VaR (or other advanced risk measurement) approach, designed to measure potential losses due to market risk rather than measure leverage exposures.⁶⁸² When following the VaR approach to calculate global exposure, a UCITS fund may use either an absolute VaR approach or a relative VaR approach.⁶⁸³ The absolute VaR approach limits the maximum VaR that a UCITS fund can have relative to its net assets, and as a general matter, the absolute VaR is limited to 20 percent of the UCITS fund's net assets.⁶⁸⁴ Under the relative VaR approach, the VaR of the portfolio cannot be greater than

twice the VaR of an unleveraged reference portfolio.⁶⁸⁵

While our proposed rule also uses a VaR ratio comparison as a risk measurement method to limit the use of derivatives, we have determined not to propose the use of an absolute VaR method that would limit the fund's VaR amount to a specified percentage of net assets, or a relative VaR that would measure a fund's VaR as compared to a reference benchmark. As discussed above in the section III.B.2.b, our concern with respect to an absolute VaR method is that the calculation of VaR on a historical basis is highly dependent on the historical trading conditions during the measurement period and can change dramatically both from year to year and from periods of benign trading conditions to periods of stressed market conditions. As discussed above in section III.B.1.c, we believe that our exposure-based portfolio limit of 150% and our risk-based portfolio limit of 300% are appropriately designed to impose a limit on the amount of leverage a fund may obtain through certain derivatives and other senior securities transactions while also providing flexibility for funds to use derivatives transactions for a variety of purposes. However, a limitation based on an absolute VaR method could potentially allow a fund to obtain very substantial amounts of leveraged exposures that the fund could then be required to unwind during stressed market conditions, which could adversely affect the fund and its investors. In addition, our staff has noted that some UCITS funds relying on the absolute VaR method disclose gross notional amounts for their portfolios that are substantially in excess of our proposed portfolio limitations that we believe are appropriate for funds subject to section 18 of the Act as discussed above in section III.B.1.c.

The relative VaR method for UCITS funds, under which a fund would compare its total portfolio VaR to an unleveraged reference portfolio or benchmark, allows a UCITS fund to use derivatives in its portfolio so long as the VaR of the UCITS fund is not greater than two times the VaR of the reference portfolio or benchmark. As discussed above in section III.B.2.a, we have not proposed this particular approach for several reasons, including concerns regarding difficulties in determining whether a reference index or benchmark

is itself leveraged. Our staff has also noted that a number of UCITS funds do not use the relative VaR method and many alternative funds use a benchmark that is a money market rate (such as LIBOR), oftentimes because an analogous investment benchmark is not available for the fund strategy, which suggests that a VaR comparison to a benchmark would not provide a suitable method for many fund strategies.⁶⁸⁶

In addition to the two alternative exposure limitations, CESR's Global Exposure Guidelines also subject UCITS funds to "cover rules" for investments in financial derivatives.⁶⁸⁷ Under these cover rules, a UCITS fund should, at any given time, be capable of meeting all its payment and delivery obligations incurred by transactions involving financial derivative investments, and should monitor to make sure that financial derivatives transactions are adequately covered.⁶⁸⁸ More specifically, in the case of a derivative that provides, automatically or at the counterparty's choice, for physical delivery of the underlying financial instrument, a UCITS fund: (1) Should hold the underlying financial instrument in its portfolio as cover, or, (2) if the UCITS fund deems the underlying financial instrument to be sufficiently liquid, it may hold as coverage other assets (including cash) as cover on the condition that these assets (after applying appropriate haircuts), held in sufficient quantities, may be used at any time to acquire the underlying financial instrument that is to be delivered.⁶⁸⁹ In the case of a derivative that provides, automatically or at the UCITS fund's choice, for cash settlement, the UCITS fund should hold enough liquid assets after appropriate haircuts to allow the UCITS fund to make the contractually required payments.⁶⁹⁰ Similar to the UCITS cover rules, the asset segregation requirements of our proposed rule are also designed to assure that a fund has sufficient assets to pay its derivatives related

⁶⁸¹ See CESR Global Guidelines, *supra* note 162, at 18. The UCITS requirements also permit the fund to reduce its exposures if the derivative directly swaps the performance of financial assets held by the fund for other reference assets or the derivative, in combination with cash held by the fund, represents the equivalent of a cash investment in the reference asset.

⁶⁸² *Id.*, at 22 ("More particularly, the VaR approach measures the maximum potential loss at a given confidence level (probability) over a specific time period under normal market conditions.").

⁶⁸³ *Id.*, at 23. A global exposure calculation using the VaR approach should consider all the positions in the UCITS' portfolio. *Id.*, at 22. The VaR approach measures the probability of risk of loss rather than the amount of leverage in portfolio and the VaR calculation is required to have a "one-tailed confidence interval of 99%," a holding period of one month (20 business days), an observation period of risk factors of at least one year (unless a shorter observation period is justified by a significant increase in price volatility), at least quarterly updates, and at least daily calculation. *Id.* at 26. UCITS employing the VaR approach are required to conduct a "rigorous, comprehensive and risk-adequate stress testing program." *Id.*, at 30–34.

⁶⁸⁴ *Id.*, at 25–26.

⁶⁸⁶ See *supra* notes 268–270 and accompanying text.

⁶⁸⁷ CESR Global Guidelines, *supra* note 162, at 40.

⁶⁸⁸ *Id.*

⁶⁸⁹ *Id.*

⁶⁹⁰ *Id.* On April 14, 2011, ESMA published a final report on the guidelines on risk measurement and the calculation of the global exposure for certain types of structured UCITS funds. See *Guidelines to Competent Authorities and UCITS Management Companies on Risk Measurement and the Calculation of Global Exposure for Certain Types of Structured UCITS*, Final Report Ref.: ESMA/2011/112 (Apr. 14, 2011), available at <http://www.esma.europa.eu/popup2.php?id=7542> (these guidelines, which will need to be adopted and implemented by Member States, propose for certain types of structured UCITS, an optional regime for the calculation of the global exposure).

⁶⁸⁵ CESR's Global Exposure Guidelines note that the relative VaR approach does not directly measure leverage of the UCITS' strategies but instead allows the UCITS to double the risk of loss under a given VaR model as compared to a reference benchmark. *Id.*, at 24.

obligations. However, our proposed asset segregation requirements differ from the UCITS requirements for the reasons discussed above in section III.C.

ESMA has also more recently adopted guidelines to assess the leverage used by AIFs marketed to professional investors in the European Union.⁶⁹¹ These guidelines supplement a directive proposed by the European Commission, the Alternative Investment Fund Managers Directive (“AIFMD”), which had the objective to create a comprehensive and effective regulatory and supervisory framework for AIF managers at the European level.⁶⁹² AIFMD defines leverage as “any method by which the [AIF manager] increases the exposure of an AIF it manages whether through borrowing of cash or securities, or leverage embedded in derivative positions or by any other means.”⁶⁹³ For each AIF that it manages, the AIF manager is required to establish a maximum level of leverage which it may employ on behalf of the AIF and to report the AIF’s leverage to investors and supervisory authorities.⁶⁹⁴ Unlike the UCITS regime, AIFMD does not restrict the amount of leverage that may be used by an AIF; instead it requires managers to set their own limitation for each AIF. The requirements in AIFMD thus serve primarily to provide a consistent method of measuring and reporting of the amount of leverage used by AIFs.

AIF managers are required to calculate leverage used by AIFs both under a gross method and a commitment method. As described by ESMA, “[t]he gross method gives the overall exposure of the AIF whereas the commitment method gives insight in the hedging and netting techniques used by the manager.”⁶⁹⁵ The measurement of exposure relating to derivatives and

borrowings in our proposed rule generally is similar to AIFMD requirements with respect to the measurement of the gross exposure relating to derivatives and borrowings.⁶⁹⁶ The commitment method under AIFMD, however, allows an AIF also to report its exposure after reduction for netting and hedging arrangements. The determination of whether a set of transactions are eligible for netting or hedging treatment would be made by the AIF manager subject to general principles focusing on whether the transactions result in an “unquestionable reduction of the general market risk” or alternatively whether the transactions are part of an arbitrage strategy that is seeking to generate a return based on the relative performance of two correlated assets.⁶⁹⁷

For reasons discussed above, we have decided not to propose a rule that would allow fund managers to set their own exposure limitation for each fund. In addition, as discussed above, we believe it would be difficult to develop standards for determining circumstances under which transactions are offsetting other transactions, and thus we have chosen not to incorporate a hedging reduction into the proposed exposure limitations. Accordingly, and as discussed above in section III.B.1.c, we believe that a test that focuses on the notional amounts of funds’ derivatives transactions, coupled with an appropriate exposure limit, will better accommodate the broad diversity of registered funds and the ways in which they use derivatives. We also believe that, to the extent fund managers may wish to include more specific risk metrics with respect to their funds, they may do so by including such metrics within the proposed derivatives risk management program.

4. Disclosure Alternative and Considerations

We considered whether enhancements to funds’ disclosure obligations with respect to a fund’s use of derivatives would be a reasonable alternative to the proposed rule.⁶⁹⁸ We received a range of comments on the Concept Release regarding the efficacy of disclosure. Some commenters that recommended disclosure enhancements also suggested approaches that went beyond enhanced disclosure,⁶⁹⁹ and at least one commenter specifically argued that disclosure alone was not sufficient.⁷⁰⁰ For example, this commenter noted that the financial crisis of 2007–2008 demonstrated that disclosure alone is not adequate because markets may do a poor job of regulating the use of leverage by financial institutions, thus allowing leverage to increase until there are catastrophic failures.⁷⁰¹ On the other hand, some commenters specifically argued that in at least certain circumstances the use of derivatives by a fund should be addressed solely through disclosure. For example, one commenter suggested that disclosure requirements would be suitable for transactions that possess only economic leverage, which the commenter argued would implicate the risks and volatility of a fund similar to that of other types of non-derivative investments.⁷⁰² Another commenter argued that leveraged funds, particularly leveraged exchange-traded funds, present fewer concerns than do other funds that use derivatives due in part to their robust level of disclosure, and should not have any additional derivatives limitations imposed on them.⁷⁰³

Although disclosure is an important mechanism through which funds inform existing and prospective shareholders of the fund’s use of derivatives, we do not believe that an approach that focuses on

⁶⁹¹ See Commission Delegated Regulation (EU) No 231/2013 of Dec. 19, 2012 supplementing Directive 2011/61/EU of the European Parliament and of the Council with regard to exemptions, general operating conditions, depositaries, leverage, transparency and supervision (“Commission Delegated Regulation No. 231/2013”), available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R0231> (providing for the calculation of leverage for alternative investment funds).

⁶⁹² Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010 (“Directive 2011/61/EU”), available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0061&from=EN>.

⁶⁹³ See Directive 2011/61/EU, *supra* note 692, at Article 4(1)(v).

⁶⁹⁴ See *id.*, at Articles 15(4) and 7(3)(a).

⁶⁹⁵ See Commission Delegated Regulation No. 231/2013, *supra* note 691, at preamble paragraph (12).

⁶⁹⁶ The AIFMD requirements do allow for a reduction to account for cash equivalents held by the fund while requiring leverage from reinvestment of collateral held by the fund to be added to the leverage calculation.

⁶⁹⁷ For example, the AIF directive notes that a “portfolio management practice which aims to keep the alpha of a basket of shares (comprising a limited number of shares) by combining the investment in that basket of shares with a beta-adjusted short position on a future on a stock market index should not be considered as complying with the hedging criteria. Such a strategy does not aim to offset the significant risks linked to the investment in that basket of shares but to offset the beta (market risk) of that investment and keep the alpha. The alpha component of the basket of shares may dominate over the beta component and as such lead to losses at the level of the AIF. For that reason, it should not be considered as a hedging arrangement.” See Commission Delegated Regulation No. 231/2013, *supra* note 691, at preamble paragraph (23).

⁶⁹⁸ See, e.g., Security Investors Comment Letter (arguing that significant changes to the current regulatory scheme are not warranted, but that the existing regulatory scheme could be improved upon the clarification of existing guidance, including greater disclosure about funds’ investments in derivatives); Ropes and Gray Comment Letter (suggesting that absent any indication that funds are not making adequate disclosure with respect to derivatives, or that fund boards are not fulfilling their oversight responsibilities, there is no compelling reason for the Commission to impose new restrictions on the use of derivatives).

⁶⁹⁹ See, e.g., ABA Concept Release Comment Letter; ICI Concept Release Comment Letter.

⁷⁰⁰ See, e.g., Keen Concept Release Comment Letter.

⁷⁰¹ See Keen Concept Release Comment Letter.

⁷⁰² See ABA Concept Release Comment Letter. See also T. Rowe Price Concept Release Comment Letter; ICI Concept Release Comment Letter.

⁷⁰³ See Rafferty Concept Release Comment Letter.

disclosure would address the purposes and concerns underlying section 18 of the Act as effectively as the approach we are proposing today, particularly given that section 18 itself imposes a specific limitation on the amount of senior securities that may be issued by a fund regardless of the risk associated with the particular senior securities. In this regard we note that investment company abuse of leverage was a primary concern that led to enactment of the Investment Company Act.⁷⁰⁴ In the Investment Company Act's preamble, Congress cited excessive leverage as a major abuse that it meant to correct, declaring in section 1(b)(7) of the Act that the public interest and the interest of investors are adversely affected "when investment companies by excessive borrowing and the issuance of excess amounts of senior securities increase unduly the speculative character of their junior securities."⁷⁰⁵ The proposed rule is designed to impose a limit on the amount of leverage a fund may obtain through derivatives and financial commitment transactions, whereas requiring enhancement to derivatives disclosure, absent additional requirements to limit leverage or potential leverage, would not appear to provide any limit on the amount of leverage a fund may obtain, and thus would not provide any regulatory distinction between funds regulated by the Act and private funds not regulated by the Act in respect of their respective ability to obtain leverage through derivatives. An approach focused on enhanced disclosure requirements thus does not appear to provide a sufficient basis for an exemption from the requirements of section 18 of the Act.

We do, however, believe that disclosure is an important aspect of the existing regulatory framework and that effective derivatives-related disclosure would complement the limitations on derivatives use in the proposed rule. Indeed, in May 2015, we proposed enhanced reporting and disclosure requirements for investment companies that include new reporting requirements for derivatives transactions, including,

for most funds, more detailed reporting of the terms and conditions of each derivatives contract in a fund's portfolio on a monthly basis in a structured format.⁷⁰⁶ The proposal also would require reporting of the fund's monthly net realized gain (or loss) and net change in unrealized appreciation (or depreciation) attributable to derivatives.⁷⁰⁷

As discussed in the Investment Company Reporting Modernization Release, these proposed requirements would, among other things, help the Commission and investors better understand the exposures that the derivatives create or hedge, which can be important to understanding a fund's investment strategy, use of leverage, and potential for risk of loss.⁷⁰⁸ Such information would allow the Commission to better assess industry trends regarding the use of derivatives, which the Commission could use to better carry out its regulatory functions, such as the formulation of policy and guidance, the review of registration statements, and the examination of funds.⁷⁰⁹ The Investment Company Reporting Modernization Release also included amendments to Regulation S-X that would require similar enhanced derivatives disclosures in fund financial statements, which would increase transparency of a fund's use of derivatives and comparability among funds to help investors better assess funds' use of derivatives and make more informed investment decisions.⁷¹⁰

Amendments to Proposed Form N-PORT

The Commission is also proposing to require additional position level risk-sensitivity measures on Form N-PORT, vega and gamma, for funds that are required to implement a derivatives risk management program by proposed rule

18f-4(a)(3). These measures would improve the ability of Commission staff to efficiently understand and approximate the risk exposures of reporting funds.

A reasonable alternative is to require portfolio- and position-level risk-sensitivity measures in addition to vega and gamma that would provide Commission staff a more precise approximation of the risk exposures of reporting funds. For example, Form N-PORT could require the risk-sensitivity measures theta and rho at the position-level; and at the portfolio level measures that describe the sensitivity of a reporting fund to a 50 or 100 basis point change in interest rates and credit spreads or a measure of convexity. These measures could improve the ability of Commission staff to monitor the fund industry in connection with other risks and more sizable changes in prices and rates. While potentially valuable, requiring these additional measures could increase the burden on funds, and the additional precision might not significantly improve the ability of Commission staff to monitor the fund industry in most market environments. Another reasonable alternative is to not require any additional risk-sensitivity measures. Although the burden to investment companies to provide the information would be less if fewer or no risk-sensitivity measures were required by the Commission, we believe that the benefits from requiring the measures, including the ability to efficiently identify and size specific investment risks, justify the costs to investment companies to provide the measures.

Our proposal would require only those funds that are required to implement a derivatives risk management program to report vega and gamma on proposed Form N-PORT. As an alternative, we could require funds with lower exposures than those funds would be required to implement a derivatives risk management program to also report vega and gamma. Alternatively, we could redefine the basis for funds to implement a derivatives risk management program and therefore require a different set of funds to report the additional risk-sensitivity measures. However, as we discussed above, we believe that the current requirements will capture most of the funds that use derivatives as a significant factor of their returns, while not imposing burdens on funds that do not generally rely on derivatives as an

⁷⁰⁴ In 1939, the Commission Released an exhaustive study of the investment company industry that laid the foundation for the Investment Company Act. SEC, Investment Trusts and Investment Companies, H.R. Doc. No. 707, 75th Cong., 3d Sess. pt. 1 (1939); SEC, Investment Trusts and Investment Companies, H.R. Doc. No. 70, 76th Cong., 1st Sess. pt. 2 (1939); SEC, Investment Trusts and Investment Companies, H.R. Doc. No. 279 Cong., 1st Sess. pt. 3 (1939). For a discussion of leveraged capital structures of investment companies, see Investment Trust Study pt.3, Ch. V, "Problems in Connection with Capital Structure," 1563-1940.

⁷⁰⁵ Section 1(b)(7) of the Investment Company Act.

⁷⁰⁶ Such information would be reported on proposed Form N-PORT. See Proposed Form N-PORT, Item C.11.; Investment Company Reporting Modernization Release, *supra* note 138. Our staff also has previously addressed funds' disclosure with respect to their use of derivatives in 2010 and 2013. See Letter from Barry D. Miller, Associate Director, Division of Investment Management, U.S. Securities and Exchange Commission, to Karrie McMillan, General Counsel, Investment Company Institute (July 30, 2010); SEC, Disclosure and Compliance Matters for Investment Company Registrants That Invest in Commodity Interests, IM Guidance Update (Aug. 2013) (No. 2013-05), available at <https://www.sec.gov/divisions/investment/guidance/im-guidance-2013-05.pdf>.

⁷⁰⁷ Proposed Form N-PORT Item B.5.

⁷⁰⁸ See Investment Company Reporting Modernization Release, *supra* note 138, at Part II.A.2.d. and Part II.A.2.g.iv.

⁷⁰⁹ See Investment Company Reporting Modernization Release, *supra* note 138, at Part II.A.

⁷¹⁰ See Investment Company Reporting Modernization Release, *supra* note 138, at Part II.C.

important part of their investment strategies.⁷¹¹

F. Request for Comment

The Commission requests comment on all aspects of this initial economic analysis, including whether the analysis has: (1) Identified all benefits and costs, including all effects on efficiency, competition, and capital formation; (2) given due consideration to each benefit and cost, including each effect on efficiency, competition, and capital formation; and (3) identified and considered reasonable alternatives to the proposed new rule and rule amendments. We request and encourage any interested person to submit comments regarding the proposed rule, our analysis of the potential effects of the proposed rule and proposed amendments, and other matters that may have an effect on the proposed rule. We request that commenters identify sources of data and information as well as provide data and information to assist us in analyzing the economic consequences of the proposed rule and proposed amendments. We also are interested in comments on the qualitative benefits and costs we have identified and any benefits and costs we may have overlooked.

In addition to our general request for comment on the economic analysis associated with the proposed rule and proposed amendments, we request specific comment on certain aspects of the proposal:

- What factors, taking into account a fund's particular risks and circumstances, would cause particular variance in funds' compliance costs related to the proposed rule?
- We request comment on our estimates of the one-time and ongoing costs associated with proposed rule 18f-4, including the exposure-based and risk-based portfolio limits, asset segregation requirement, and risk management program requirement. Do commenters agree with our cost estimates? If not, how should our estimates be revised, and what changes, if any, should be made to the assumptions forming the basis for our estimates? Are there any significant costs that have not been identified within our estimates that warrant consideration? To what degree would economies of scale affect compliance costs for funds?
- We request comment on our estimate of the number of funds that would seek to comply with the exposure-based and risk-based portfolio limits, asset segregation requirements,

and the derivatives risk management program requirement. Do commenters agree that a fund that belongs to a fund complex is likely to achieve economies of scale that make it more likely that a fund will incur costs closer to the low-end of the range of estimated costs?

- Do commenters agree with our belief that the benefits and costs associated with the asset segregation requirement for a fund that invests solely in financial commitment transactions would be the same as those we estimate for the asset segregation requirements that would apply to a fund that also enters into derivatives transactions? Why or why not?

- To what extent do commenters anticipate that proposed rule 18f-4 could lead funds to modify their investment strategies or decrease their use of derivatives?

- To what extent do funds' current practices regarding derivatives risk management, if applicable, currently align with the proposed derivatives risk management program, and what operational and other costs would funds incur in modifying their current practices to comply with the proposed requirements?

V. Paperwork Reduction Act

A. Introduction

Proposed rule 18f-4 contains several "collections of information" within the meaning of the Paperwork Reduction Act of 1995 ("PRA").⁷¹² The proposed amendments to proposed Form N-PORT and Form N-CEN would impact the collections of information burdens associated with that proposed form described in the Investment Company Reporting Modernization Release.⁷¹³ In the Investment Company Reporting Modernization Release, we submitted new collections of information for proposed Form N-PORT and Form N-CEN.⁷¹⁴ The title for these new collections of information is "Form N-PORT under the Investment Company Act, Monthly Portfolio Investments Report" and "Form N-CEN Under the Investment Company Act, Annual Report for Registered Investment Companies." We are submitting new collections of information for proposed new rule 18f-4 under the Investment Company Act of 1940. The titles for this new collection of information would be: "Rule 18f-4 under the Investment Company Act of 1940, Use of Derivatives by Registered Investment

Companies and Business Development Companies."

The Commission is submitting these collections of information to the OMB for review in accordance with 44 U.S.C. 3507(d) and 5 CFR 1320.11. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number.

The Commission is proposing new rule 18f-4 and is proposing to amend proposed Form N-PORT and Form N-CEN. The proposed rule and amendments are designed to address the investor protection purposes and concerns underlying section 18 of the Act and to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives transactions in light of the dramatic growth in the volume and complexity of the derivatives markets over the past two decades and the increased use of derivatives by certain funds. We discuss below the collection of information burdens associated with these reforms.⁷¹⁵

B. Proposed Rule 18f-4

Proposed rule 18f-4 would require a fund that relies on the rule in order to enter into derivatives transactions to: (1) Comply with one of two alternative portfolio limitations designed to impose a limit on the amount of leverage the fund may obtain through derivatives transactions and other senior securities transactions; (2) manage the risks associated with its derivatives transactions by maintaining an amount of certain assets, defined in the rule as "qualifying coverage assets," designed to enable the fund to meet its obligations under its derivatives transactions; and (3) depending on the extent of its derivatives usage, establish a derivatives risk management program. A fund that relies on the proposed rule in order to enter into financial commitment transactions would be required to maintain qualifying coverage assets equal in value to the fund's full obligations under those transactions. As discussed in greater detail below, a number of the proposed requirements are collections of information under the PRA. The respondents to proposed rule 18f-4 would be certain registered open-end and closed-end management investment companies and BDCs. Compliance with proposed rule 18f-4 would be mandatory for all funds that seek to

⁷¹² 44 U.S.C. 3501 through 3521.

⁷¹³ See Investment Company Reporting Modernization Release, *supra* note 138, at section V.

⁷¹⁴ See *id.*

⁷¹⁵ We discuss below these collection of information burdens on each fund, but note that certain of the estimated costs may be incurred instead, at least in part, by other third parties, including a fund's investment adviser.

⁷¹¹ See *supra* section III.G.2.

engage in derivatives transactions and financial commitment transactions in reliance on the rule, which would otherwise be subject to the restrictions of section 18. No information would be submitted directly to the Commission under proposed rule 18f-4. To the extent that records required to be created and maintained by funds under the rule are provided to Commission staff in connection with examinations or investigations, such information would be kept confidential subject to the provisions of applicable law. We believe that our collection of information cost estimates below are an upper bound because, as discussed in section IV, many funds are part of a fund complex and will likely benefit from economies of scale.

1. Portfolio Limitations for Derivatives Transactions

Proposed rule 18f-4 would require a fund that engages in derivatives transactions in reliance on the rule to comply with one of two alternative portfolio limitations.⁷¹⁶ Under the exposure-based portfolio limit, a fund generally would be required to determine that, immediately after entering into any senior securities transaction, its aggregate exposure does not exceed 150% of the value of the fund's net assets.⁷¹⁷ Under the risk-based portfolio limit, a fund generally would be required to determine that, immediately after entering into any senior securities transaction, (1) the fund's full portfolio VaR does not exceed its securities VaR and (2) the fund's aggregate exposure does not exceed 300% of the value of the fund's net assets.⁷¹⁸ In addition, a fund that engages in derivatives transactions in reliance on the proposed rule would not be required to have a derivatives risk management program if the fund complies with a portfolio limitation under which, immediately after entering into any derivatives transaction, the fund's aggregate exposure does not exceed 50% of the value of the fund's net assets and the fund does not use complex derivatives transactions.⁷¹⁹

As discussed above in section IV.D.1 and IV.D.2, in the DERA staff analysis, 68% of all of the sampled funds did not have any exposure to derivatives transactions, and these funds thus do not appear to use derivatives transactions or, if they do use them, do not appear to do so to a material

extent.⁷²⁰ Staff thus estimates that the remaining 32% of funds (3,831 funds⁷²¹) will seek to rely on this part of proposed rule 18f-4, and therefore comply with the portfolio limitation requirements. These funds would be subject to the collections of information described below with respect to their applicable portfolio limitations.

Initial Determination of Portfolio Limitations

The proposed rule would require a fund's board of directors, including a majority of the directors who are not interested persons of the fund, to approve (a) the fund's determination to comply with either the exposure-based portfolio limit or the risk-based portfolio limit under the proposed rule, and (b) if applicable, the fund's determination to limit its aggregate exposure under derivatives transactions to not more than 50% of its NAV and not to use complex derivatives transactions.⁷²² We estimate a one-time burden of 3 hours per fund associated with a board's review and approval of a fund's portfolio limitation or, amortized over a three-year period, a burden of approximately 1 hour annually per fund. We therefore estimate that the total hourly burden for the initial reviews and approvals of funds' portfolio limitations would be 11,493 hours.⁷²³ We estimate that each fund would incur a time cost of approximately \$5,121 to obtain this initial approval, for a total initial time cost for all funds of approximately \$19,618,551.⁷²⁴ In addition to the

⁷²⁰ None of the BDCs in the DERA sample had exposure to derivatives transactions.

⁷²¹ This estimate is based on the following calculation: $11,973 \text{ funds} \times 32\% = 3,831 \text{ funds}$. See *supra* note 578.

⁷²² Proposed rule 18f-4(a)(5)(i). The cost burdens associated with a fund board's approvals include costs incurred to prepare materials for the board's determinations, as well as the board's review and approval of determinations required by the proposed rule. See *infra* note 724.

⁷²³ This estimate is based on the following calculation: $3 \text{ hours} \times 3,831 \text{ funds} = 11,493 \text{ hours}$.

⁷²⁴ This estimate is based on the following calculations: $0.6 \text{ hours} \times \$301 \text{ (hourly rate for a senior portfolio manager)} = \181 ; $0.6 \text{ hours} \times \$455.5 \text{ (blended hourly rate for assistant general counsel)} = \273 ; $1.0 \text{ hours} \times \$4,400 \text{ (hourly rate for a board of 8 directors)} = \$4,400$; $0.8 \text{ hours (for a fund attorney's time to prepare materials for the board's determinations)} \times \$334 \text{ (hourly rate for a compliance attorney)} = \267 . $\$181 + \$273 + \$4,400 + \$267 = \$5,121$; $\$5,121 \times 3,831 \text{ funds} = \$19,618,551$. The hourly wages used are from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified to account for an 1800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits, and overhead. The staff previously estimated in 2009 that the average cost of board of director time was \$4,000 per hour for the board as a whole, based on information received from funds

internal costs described above, we also estimate that each fund would incur a one-time average external cost of \$800 associated with a fund board consulting its outside legal counsel with regard to the required board approvals.⁷²⁵

Recordkeeping

The proposed rule would require a fund to maintain a record of each determination made by the fund's board that the fund will comply with one of the portfolio limitations under the proposed rule, which would include the fund's initial determination as well as a record of any determination made by the fund's board to change the portfolio limitation.⁷²⁶ We estimate a one-time burden of 0.6 hours per fund associated with maintaining a record of a board's initial determination of the fund's portfolio limit or, amortized over a three-year period, a burden of about 0.2 hours annually per fund. We therefore estimate that the total burden for maintaining a record of a board's initial determination of the fund's portfolio limit would be 2,299 hours.⁷²⁷ We also estimate that each fund would incur a time cost of approximately \$38 to meet this requirement, for a total initial time cost of approximately \$164,733.⁷²⁸

In addition, a fund that relies on the proposed rule also would be subject to an ongoing requirement to maintain a written record demonstrating that immediately after the fund entered into any senior securities transaction, the fund complied with its applicable portfolio limit, with such record reflecting the fund's aggregate exposure, the value of its net assets and, if applicable, the fund's full portfolio VaR and its securities VaR.⁷²⁹ We estimate that each fund would incur an average burden of 50 hours to retain these

and their counsel. Adjusting for inflation, the staff estimates that the current average cost of board of director time is approximately \$4,400.

⁷²⁵ This estimate is based on the following calculation: $2 \text{ hours} \times \$400 \text{ (hourly rate for outside legal services)} = \800 .

⁷²⁶ Proposed rule 18f-4(a)(6)(i). The fund would be required to maintain this record for a period of not less than five years (the first two years in an easily accessible place) following each determination.

⁷²⁷ This estimate is based on the following calculation: $0.6 \text{ hours} \times 3,831 \text{ funds} = 2,299 \text{ hours}$.

⁷²⁸ This estimate is based on the following calculation: $0.3 \text{ hours} \times \$57 \text{ (hourly rate for a general clerk)} = \17 ; $0.3 \text{ hours} \times \$87 \text{ (hourly rate for a senior computer operator)} = \26 . $\$17 + \$26 = \$43$; $\$43 \times 3,831 \text{ funds} = \$164,733$.

⁷²⁹ Proposed rule 18f-4(a)(6)(iv). The fund would be required to maintain this record for a period of not less than five years (the first two years in an easily accessible place) following each senior securities transaction. This written record requirement would also apply to a fund's monitoring of the 50% portfolio limit for purposes of the derivatives risk management program requirement (discussed below).

⁷¹⁶ Proposed rule 18f-4(a)(1).

⁷¹⁷ Proposed rule 18f-4(a)(1)(i).

⁷¹⁸ Proposed rule 18f-4(a)(1)(ii).

⁷¹⁹ Proposed rule 18f-4(a)(1).

records.⁷³⁰ We therefore estimate that the total annual burden for maintaining these records would be 191,550 hours.⁷³¹ We also estimate that each fund would incur an annual time cost of approximately \$3,600, and a total annual time cost for all funds of approximately \$13,791,600.⁷³² We estimate that there are no external costs associated with this collection of information.⁷³³

Accordingly, we estimate that, for recordkeeping associated with a fund's portfolio limitations, including maintenance of a record of a board's initial determination of the fund's portfolio limit and maintenance of written records demonstrating the fund's ongoing compliance with applicable portfolio limits, the time burden per fund would be 50.6 hours and the time cost per fund would be \$3,638.⁷³⁴ We therefore estimate that the total burden for maintaining such records would be 193,849 hours, at an aggregate time cost of \$13,937,178.⁷³⁵

Estimated Total Burden

Amortized over a three-year time period, the hour burdens and time costs for collections of information associated with portfolio limitations under proposed rule 18f-4, including the

burdens associated with (a) board review and approval of funds' initial portfolio limitations, (b) maintenance of records of initial board determinations of funds' portfolio limits, and (c) maintenance of written records demonstrating funds' compliance with applicable portfolio limits, are estimated to result in an aggregate average annual hour burden of 196,147 hours and aggregate time cost of \$20,386,028.⁷³⁶ In addition to the internal costs described above, we also estimate that each fund would incur a one-time average external cost of \$800.

2. Asset Segregation: Derivatives Transactions

Proposed rule 18f-4 would require a fund that enters into derivatives transactions⁷³⁷ in reliance on the rule to manage the risks associated with its derivatives transactions by maintaining an amount of specified assets (defined in the proposed rule as "qualifying coverage assets") designed to enable the fund to meet its obligations arising from such transactions.⁷³⁸ A fund would be required to identify on the books and records of the fund, at least once each business day, qualifying coverage assets with a value equal to at least the fund's aggregate "mark-to-market coverage amounts" and "risk-based coverage amounts."⁷³⁹ The mark-to-market coverage amount would mean the amount that would be payable by the fund, for each derivatives transaction, if the fund were to exit the derivatives transaction at the time of determination.⁷⁴⁰ The risk-based coverage amount would mean the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions, determined in accordance with board-approved policies and procedures.⁷⁴¹ A fund would be permitted to adjust these

coverage amounts, at its discretion, if the fund has entered into certain netting agreements, or the fund has posted variation margin (for the mark-to-market coverage amount) or initial margin (for the risk-based coverage amount), or collateral for such amounts payable by the fund.⁷⁴² A fund would be required to have policies and procedures approved by its board of directors (and maintained by the fund in an easily accessible place⁷⁴³) that are reasonably designed to provide for the fund's maintenance of qualifying coverage assets.⁷⁴⁴

As discussed above in section IV.D.3, DERA staff analysis shows that 68% of all sampled funds do not appear to use derivatives transactions (or if they do, do not appear to use them to a material extent). Staff estimates that the remaining 32% of funds (3,831 funds) and no BDCs will seek to rely on this aspect of proposed rule 18f-4, and therefore comply with the asset segregation requirements. These funds would be subject to the collections of information described below with respect to asset segregation requirements.

Identification of Qualifying Coverage Assets

The qualifying coverage assets requirement would subject funds to a collection of information insofar as they are required to make a daily identification on a fund's books and records of its maintenance of qualifying coverage assets, including determinations of the mark-to-market and risk-based coverage amounts. Although we expect that these activities would generally be automated and/or routine, our estimates below include estimates for anticipated time costs by a fund's staff to make manual adjustments to these determinations (e.g., to reflect netting agreements, or account for assets posted as initial or variation margin or collateral). The cost estimates below also reflect the fact that, with regard to the mark-to-market coverage amount, we believe that funds already calculate their liability under derivatives transactions on a daily basis for various other purposes, including to satisfy variation margin requirements and to determine the fund's NAV. Funds also calculate their liability under derivatives transactions on a periodic

⁷³⁰ We assume for purposes of this estimate that funds would implement automated processes for creating a written record of their compliance with the applicable portfolio limit immediately after entering into any senior securities transaction, and that a fund would enter into at least one derivatives transaction or other senior securities transaction per trading day. Based on 250 trading days per year, and assuming 0.1 hours per trading day spent by a general clerk and 0.1 hours per trading day spent by a senior computer operator, we estimate the annual time cost to be $(0.1 \times 250) = 25$ hours per year per fund for each general clerk and senior computer operator.

⁷³¹ This estimate is based on the following calculations: $50 \text{ hours} \times 3,831 \text{ funds} = 191,550 \text{ hours}$.

⁷³² This estimate is based on the following calculation: $25 \text{ hours} \times \$57 \text{ (hourly rate for a general clerk)} = \$1,425$; $25 \text{ hours} \times \$87 \text{ (hourly rate for a senior computer operator)} = \$2,175$. $\$1,425 + \$2,175 = \$3,600$; $\$3,600 \times 3,831 \text{ funds} = \$13,791,600$.

⁷³³ Except as provided for above, we have estimated (both for purposes of the economic analysis and the PRA) the cost burdens associated with the proposed rule using a fund's internal resources, rather than third party solutions which may develop in the future. See, e.g., *supra* text in paragraph following note 573.

⁷³⁴ This estimate is based on the following calculations: $0.6 \text{ hours (maintenance of a record of board's initial determination of fund's portfolio limit)} + 50 \text{ hours (maintenance of written records demonstrating fund's compliance with applicable portfolio limits)} = 50.6 \text{ hours}$; $\$38 \text{ (maintenance of a record of a board's initial determination of a fund's portfolio limit)} + \$3,600 \text{ (maintenance of written records demonstrating fund's compliance with applicable portfolio limits)} = \$3,638$.

⁷³⁵ This estimate is based on the following calculations: $50.6 \text{ hours} \times 3,831 \text{ funds} = 193,849 \text{ hours}$; $\$3,638 \times 3,831 \text{ funds} = \$13,937,178$.

⁷³⁶ These estimates are based on the following calculations: $(11,493 \text{ hours (year 1)} + 2,299 \text{ hours (year 1)} + (3 \times 191,550 \text{ hours (years 1, 2 and 3)}) \div 3 = 196,147 \text{ hours}$; $(\$19,618,551 \text{ (year 1)} + (\$164,733 \text{ (year 1)} + (3 \times \$13,791,600)) \div 3 = \$20,386,028$.

⁷³⁷ We include in this analysis a fund that enters into derivatives transactions, as well as financial commitment transactions and other senior securities. We discuss estimated PRA costs for a fund that enters solely into financial commitment transactions below.

⁷³⁸ Proposed rule 18f-4(a)(2), (c)(6), (c)(8), (c)(9).

⁷³⁹ Proposed rule 18f-4(a)(2). Qualifying coverage assets for derivatives transactions would generally mean cash and cash equivalents. The exceptions to the requirement to maintain cash and cash equivalents are for derivatives transactions under which a fund may satisfy its obligation by delivering a particular asset, in which case that particular asset would be a qualifying coverage asset. See proposed rule 18f-4(c)(6).

⁷⁴⁰ Proposed rule 18f-4(c)(6).

⁷⁴¹ Proposed rule 18f-4(c)(9).

⁷⁴² Proposed rules 18f-4(c)(6)(i), (ii); 18f-4(c)(9)(i), (ii).

⁷⁴³ A fund must maintain a written copy of the fund's policies and procedures, approved by the fund's board, in effect, or at any time within the past five years were in effect, in an easily accessible place. Proposed rule 18f-4(a)(6)(ii).

⁷⁴⁴ Proposed rule 18f-4(a)(5)(ii).

basis in order to provide financial statements to investors. We generally expect that funds would be able to use these calculations to determine their mark-to-market coverage amounts.

We do not expect that this aspect of the proposed rule will impose any initial, one-time “collection of information” burdens on funds. We do estimate, however, that each fund would incur an average annual burden of 110 hours associated with the identification of qualifying coverage assets. We therefore estimate that the total annual burden for the identification of qualifying coverage assets would be 421,410 hours.⁷⁴⁵ We also estimate that each fund would incur an annual time cost of approximately \$11,530 to identify qualifying coverage assets, for a total annual time cost for all funds of approximately \$44,171,430.⁷⁴⁶ We estimate that there are no external costs associated with this collection of information.⁷⁴⁷

Board-Approved Policies & Procedures

Proposed rule 18f–4 would require funds to have written policies and procedures reasonably designed to provide for the fund’s maintenance of qualifying coverage assets. For purposes of this PRA analysis, we estimate that a fund would incur a one-time average burden of 15 hours associated with documenting its policies and procedures. The proposed rule would also require that the fund’s board approve such policies and procedures and we estimate a one-time burden of 1 hour per fund associated with fund boards’ review and approval of its policies and procedures. Amortized over a three-year period, this would be an annual burden per fund of approximately 5.3 hours. We estimate that the total one-time burden for the initial documentation, and board approval of, written policies and procedures to provide for a fund’s maintenance of qualifying coverage assets would be 61,296 hours.⁷⁴⁸ We also estimate that each fund would incur a time cost of approximately \$6,291, and a total initial time cost for all funds of approximately

\$38,593,494.⁷⁴⁹ We estimate that there are no ongoing annual costs associated with this collection of information. In addition to the internal costs described above, we also estimate that each fund would incur a one-time average external cost of \$800 associated with a fund board consulting its outside legal counsel with regard to the required board approvals.⁷⁵⁰

Recordkeeping

The proposed rule would require a fund to maintain a written copy of the policies and procedures approved by the fund’s board of directors that are in effect, or at any time within the past five years were in effect, in an easily accessible place. We estimate a one-time burden (and no ongoing annual burden) of 1 hour per fund associated with maintaining a written copy of the fund’s board-approved policies and procedures or, amortized over a three-year period, a burden of approximately 0.3 hours annually per fund. We therefore estimate that the total one-time burden for maintaining this record would be 3,831 hours.⁷⁵¹ We also estimate that each fund would incur a time cost of approximately \$57, and a total initial time cost for all funds of approximately \$218,367.⁷⁵² We estimate that there are no external costs associated with this collection of information.

In addition, a fund that relies on the proposed rule also would be subject to an ongoing requirement to maintain a written record reflecting the mark-to-market coverage amount and risk-based coverage amount for each derivatives transaction entered into by the fund and identifying the associated qualifying coverage assets, as determined by the fund at least once each business day, for a period of not less than five years (the first two years in an easily accessible place).⁷⁵³ We estimate that each fund would incur an average annual burden of 50 hours to retain these records.⁷⁵⁴

⁷⁴⁹ This estimate is based on the following calculations: 7.5 hours × \$301 (hourly rate for a senior portfolio manager) = \$2,258; 7.5 hours × \$455.5 (blended hourly rate for assistant general counsel (\$426) and chief compliance officer (\$485)) = \$3,416; 1 hour × \$4,400 (hourly rate for a board of 8 directors) = \$4,400. \$2,258 + \$3,416 + \$4,400 = \$10,074; \$10,074 × 3,831 funds = \$38,593,494.

⁷⁵⁰ This estimate is based on the following calculation: 2 hours × \$400 (hourly rate for outside legal services) = \$800.

⁷⁵¹ This estimate is based on the following calculation: 1 hour × 3,831 funds = 3,831 hours.

⁷⁵² This estimate is based on the following calculation: 1 hour × \$57 (hourly rate for a general clerk) = \$57. \$57 × 3,831 funds = \$218,367.

⁷⁵³ Proposed rule 18f–4(a)(6)(v).

⁷⁵⁴ We assume for purposes of this estimate that funds would implement automated processes for creating a written record of their compliance with the qualifying coverage asset requirements and that

We therefore estimate that the total annual burden for maintaining these records would be 191,550 hours.⁷⁵⁵ We also estimate that each fund would incur an annual time cost of approximately \$3,600, and a total annual time cost for all funds of approximately \$13,791,600.⁷⁵⁶ We estimate that there are no external costs associated with this collection of information.

Estimated Total Burden

Amortized over a three-year time period, the hour burdens and time costs for collections of information associated with the asset segregation requirement for derivatives transactions under proposed rule 18f–4, including the burdens associated with (a) identifying qualifying coverage assets; (b) documenting board-approved policies and procedures; and (c) maintaining required records, are estimated to result in an aggregate average annual hour burden of 634,669 hours and aggregate time costs of \$70,900,317.⁷⁵⁷ In addition to the internal costs described above, we also estimate that each fund would incur a one-time average external cost of \$800.

3. Asset Segregation: Financial Commitment Transactions

Proposed rule 18f–4 would require a fund that enters into financial commitment transactions in reliance on the rule to similarly maintain qualifying coverage assets designed to enable the fund to meet its obligations arising from such transactions. A fund would be required to identify on the books and records of the fund, at least once each business day, qualifying coverage assets with a value equal to at least the fund’s aggregate financial commitment obligations.⁷⁵⁸ Financial commitment

a fund would enter into at least one derivatives transaction per trading day. Based on 250 trading days per year, and assuming 0.1 hours per trading day spent by a general clerk and 0.1 hours per trading day spent by a senior computer operator, we estimate the annual time cost to be $(0.1 \times 250) = 25$ hours per year per fund for each general clerk and senior computer operator.

⁷⁵⁵ This estimate is based on the following calculations: 50 hours × 3,831 funds = 191,550 hours.

⁷⁵⁶ This estimate is based on the following calculation: 25 hours × \$57 (hourly rate for a general clerk) = \$1,425; 25 hours × \$87 (hourly rate for a senior computer operator) = \$2,175. \$1,425 + \$2,175 = \$3,600; \$3,600 × 3,831 funds = \$13,791,600.

⁷⁵⁷ These estimates are based on the following calculations: $((3 \times 421,410 \text{ hours}) (\text{years 1, 2 and 3}) + 61,296 (\text{year 1}) + 3,831 (\text{year 1}) + (3 \times 191,550 \text{ hours}) (\text{years 1, 2 and 3})) + 3 = 634,669 \text{ hours}$; $((3 \times \$44,171,430) + (\$38,593,494 (\text{year 1})) + (\$218,367 (\text{year 1})) + (3 \times \$13,791,600) (\text{years 1, 2, and 3})) + 3 = \$70,900,317$.

⁷⁵⁸ Proposed rule 18f–4(b)(1).

⁷⁴⁵ This estimate is based on the following calculation: 110 hours × 3,831 funds = 421,410 hours.

⁷⁴⁶ This estimate is based on the following calculations: 100 hours × \$87 (hourly rate for a senior computer operator) = \$8,700; 10 hours × \$283 (hourly rate for compliance manager) = \$2,830. \$8,700 + \$2,830 = \$11,530; \$11,530 × 3,831 funds = \$44,171,430.

⁷⁴⁷ See *supra* note 733.

⁷⁴⁸ This estimate is based on the following calculation: 16 hours × 3,831 funds = 61,296 hours.

obligations would mean the amount of cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under a financial commitment transaction (as defined in the proposed rule).⁷⁵⁹ A fund that enters solely into financial commitment transactions would, as described above for a fund that enters into derivatives transactions, be required to have policies and procedures approved by its board of directors (and maintained by the fund in an easily accessible place) that are reasonably designed to provide for the fund's maintenance of qualifying coverage assets.⁷⁶⁰

As discussed above in section IV.D.5, DERA staff analysis shows that approximately 3% of all sampled funds enter into at least some financial commitment transactions, but do not use derivatives transactions. Staff estimates, therefore, that 3% of funds (359 funds) would comply with the asset segregation requirements in proposed rule 18f-4 applicable to financial commitment transactions and would not also be complying with the asset segregation and other requirements applicable to derivatives transactions. In addition, staff estimates that 537 money market funds and 88 BDCs may engage in certain types of financial commitment transactions. In sum, staff estimates that 984 funds would comply with the asset segregation requirements applicable to financial commitment transactions and incur the same costs we estimate above (with regard to funds that engage in derivatives transactions). These funds would be subject to the collections of information described below.

Identification of Qualifying Coverage Assets

Similar to the requirement applicable to a fund that enters into derivatives transactions (discussed above), a fund that enters solely into financial commitment transactions would, under the proposed rule, incur operational costs to establish and implement systems in order to comply with the proposed asset segregation requirements, including the proposed requirement that a fund maintain qualifying coverage assets, identified on the books and records of the fund, at least once each business day. We believe that the activities related to these requirements are largely the same,

whether applicable to a fund that enters into derivatives transactions, or financial commitment transactions. Accordingly, we estimate the same costs to a fund that enters solely into financial commitment transactions as the asset segregation costs we estimate above for funds that enter into derivatives transactions.

We estimate that each fund would incur an average annual burden of 110 hours (and no initial one-time burdens) associated with the identification of qualifying coverage assets. We therefore estimate that the total annual burden for the identification of qualifying coverage assets would be 108,240 hours.⁷⁶¹ We also estimate that each fund would incur an ongoing annual time cost of approximately \$11,530 to identify qualifying coverage assets, for a total ongoing annual time cost for all funds of approximately \$11,345,520.⁷⁶² We estimate that there are no external costs associated with this collection of information.

Board-Approved Policies & Procedures

A fund that enters solely into financial commitment transactions, like a fund that enters into derivatives transactions, would be required under the proposed rule to have board-approved policies and procedures regarding the maintenance of qualifying coverage assets. Accordingly, we estimate that a fund would incur a one-time average burden of 15 hours associated with documenting its policies and procedures. The proposed rule would also require that the fund's board approve such policies and procedures and we estimate a one-time burden of 1 hour per fund associated with fund boards' review and approval of its policies and procedures. Amortized over a three-year period, this would be an annual burden per fund of approximately 5.3 hours. We estimate that the total one-time burden for the initial documentation, and board approval of, written policies and procedures to provide for a fund's maintenance of qualifying coverage assets would be 15,744 hours.⁷⁶³ We also estimate that each fund would incur a time cost of approximately \$6,291, and a total initial time cost for all funds of approximately

\$9,912,816.⁷⁶⁴ We estimate that there are no annual time costs associated with this collection of information. In addition to the internal costs described above, we also estimate that each fund would incur a one-time average external cost of \$800 associated with a fund board consulting its outside legal counsel with regard to the required board approvals.⁷⁶⁵

Recordkeeping

A fund that enters solely into financial commitment transactions would also be required under the proposed rule to retain a written copy of the fund's board-approved policies and procedures regarding the maintenance of qualifying coverage assets. This requirement also applies to funds that enter into derivatives transactions. Accordingly, as discussed above for the recordkeeping burdens associated with asset segregation for derivatives transactions, we estimate a one-time burden (and no annual burden) of 1 hour per fund associated with maintaining a written copy of the fund's board-approved policies and procedures or, amortized over a three-year period, a burden of approximately 0.3 hours annually per fund. We therefore estimate that the total one-time burden for maintaining this record would be 984 hours.⁷⁶⁶ We also estimate that each fund would incur a time cost of approximately \$57, and a total initial time cost for all funds of approximately \$56,088.⁷⁶⁷ We estimate that there are no external costs associated with this collection of information.

In addition, a fund that relies on the proposed rule also would be subject to an ongoing requirement to maintain a written record reflecting the amount of each financial commitment obligation associated with each financial commitment transaction entered into by the fund and identifying the associated qualifying coverage assets, as determined by the fund at least once each business day, for a period of not less than five years (the first two years in an easily accessible place).⁷⁶⁸ We

⁷⁶⁴ This estimate is based on the following calculations: 7.5 hours × \$301 (hourly rate for a senior portfolio manager) = \$2,258; 7.5 hours × \$455.5 (blended hourly rate for assistant general counsel (\$426) and chief compliance officer (\$485)) = \$3,416; 1 hour × \$4,400 (hourly rate for a board of 8 directors) = \$4,400. \$2,258 + \$3,416 + \$4,400 = \$10,074; \$10,074 × 984 funds = \$9,912,816.

⁷⁶⁵ This estimate is based on the following calculation: 2 hours × \$400 (hourly rate for outside legal services) = \$800.

⁷⁶⁶ This estimate is based on the following calculation: 1 hour × 984 funds = 984 hours.

⁷⁶⁷ This estimate is based on the following calculation: 1 hour × \$57 (hourly rate for a general clerk) = \$57. \$57 × 984 funds = \$56,088.

⁷⁶⁸ Proposed rule 18f-4(b)(3)(ii).

⁷⁵⁹ Proposed rule 18f-4(c)(5) (noting, that where the fund is conditionally or unconditionally obligated to deliver a particular asset, the financial commitment obligation shall be the value of the asset, determined at least once each business day).

⁷⁶⁰ Proposed rule 18f-4(b)(2)(3).

⁷⁶¹ This estimate is based on the following calculation: 110 hours × 984 funds = 108,240 hours.

⁷⁶² This estimate is based on the following calculations: 100 hours × \$87 (hourly rate for a senior computer operator) = \$8,700; 10 hours × \$283 (hourly rate for compliance manager) = \$2,830. \$8,700 + \$2,830 = \$11,530; \$11,530 × 984 funds = \$11,345,520.

⁷⁶³ This estimate is based on the following calculation: 16 hours × 984 funds = 15,744 hours.

estimate that each fund would incur an average annual burden of 50 hours to retain these records.⁷⁶⁹ We therefore estimate that the total annual hour burden for maintaining these records would be 49,200 hours.⁷⁷⁰ We also estimate that each fund would incur an annual time cost of approximately \$3,600, and a total annual time cost for all funds of approximately \$3,542,400.⁷⁷¹ We estimate that there are no external costs associated with this collection of information.

Estimated Total Burden

Amortized over a three-year time period, the hour burdens and time costs for collections of information associated with the asset segregation requirement for financial commitment transactions under proposed rule 18f-4, including the burdens associated with (a) identifying qualifying coverage assets; (b) documenting board-approved policies and procedures; and (c) maintaining required records, are estimated to result in an aggregate average annual hour burden of 163,016 hours and aggregate time costs of \$18,210,888.⁷⁷² In addition to the internal costs described above, we also estimate that each fund would incur a one-time average external cost of \$800.

4. Derivatives Risk Management Program

Proposed rule 18f-4 would require that a fund that engages in more than a limited amount of derivatives transactions, or that uses complex derivatives transactions (as defined in the proposed rule), to adopt and implement a derivatives risk management program.⁷⁷³ This risk

management program would require a fund to adopt and implement policies and procedures reasonably designed to assess and manage the risks of the fund's derivatives transactions, reasonably segregate the functions associated with the program from the portfolio management function of the fund, and periodically review and update the program at least annually.⁷⁷⁴ The proposed rule would also require a fund to designate a derivatives risk manager responsible for administering the program and require that the risk manager, no less frequently than quarterly, prepare a written report that describes the adequacy and effectiveness of the fund's risk management program.⁷⁷⁵ A fund's board of directors must also (1) approve the fund's derivatives risk management program, including any material changes to the program; (2) approve the fund's designation of the fund's derivatives risk manager (who cannot be a portfolio manager of the fund); and (3) review, no less frequently than quarterly, the written report prepared by the fund's derivatives risk manager that describes the adequacy and effectiveness of the fund's risk management program.⁷⁷⁶ Finally, proposed rule 18f-4 would impose certain recordkeeping requirements related to the derivatives risk management program (as described below).

As discussed above in section IV.D.4, DERA staff analysis shows that approximately 10% of all sampled funds had aggregate exposure from derivatives transactions high enough (*i.e.*, aggregate exposure of 50% of net assets or greater) to require that they establish a derivatives risk management program under the proposed rule. The DERA staff analysis also shows an additional approximately 4% of funds had aggregate exposure of between 25–50% of net assets. Commission staff estimates, therefore, that approximately 14% of funds (1,676 funds⁷⁷⁷) and no BDCs would be required to establish a derivatives risk management program. These funds would be subject to the collections of information described

below with respect to the derivatives risk management program provision.

Establishing a Derivatives Risk Management Program

As discussed above in section IV.D.4, we estimated that each fund would incur one-time costs to establish and implement a derivatives risk management program in compliance with proposed rule 18f-4, as well as ongoing program-related costs. For purposes of the PRA analysis, we estimate that each fund would incur an average initial burden of 30 hours associated with establishing a derivatives risk management program, including (1) adopting and implementing (including documenting) policies and procedures reasonably designed to assess and manage the risks of the fund's derivatives transactions and designating a derivatives risk manager (24 hours); and (2) obtaining initial board approval of the derivatives risk management program and the designation of the fund's derivatives risk manager (6 hours). Amortized over a three-year period, this would be an annual burden per fund of 10 hours. Accordingly, we estimate that the total average annual initial burden for establishing a derivatives risk management program would be 50,280 hours.⁷⁷⁸ We also estimate that each fund would incur an initial time cost of \$27,346 in relation to this hour burden, for a total initial time cost for all funds of approximately \$45,831,896.⁷⁷⁹ In addition to the internal costs described above, we also estimate that each fund would incur a one-time average external cost of \$1,600 associated with a fund board consulting its outside legal counsel with regard to the required board approval.⁷⁸⁰

In addition to the initial burden, we estimate that each fund would incur an average annual burden of 38 hours associated with its derivatives risk management program, including that: (1) The fund review and update its risk management program at least annually (8 hours); (2) the derivatives risk

⁷⁶⁹ We assume for purposes of this estimate that funds would implement automated processes for creating a written record of their compliance with the qualifying coverage asset requirements and that a fund would enter into at least one financial commitment transaction per trading day. Based on 250 trading days per year, and assuming 0.1 hours per trading day spent by a general clerk and 0.1 hours per trading day spent by a senior computer operator, we estimate the annual time cost to be $(0.1 \times 250) = 25$ hours per year per fund for each general clerk and senior computer operator.

⁷⁷⁰ This estimate is based on the following calculations: $50 \text{ hours} \times 984 \text{ funds} = 49,200 \text{ hours}$.

⁷⁷¹ This estimate is based on the following calculation: $25 \text{ hours} \times \$57 \text{ (hourly rate for a general clerk)} = \$1,425$; $25 \text{ hours} \times \$87 \text{ (hourly rate for a senior computer operator)} = \$2,175$. $\$1,425 + \$2,175 = \$3,600$; $\$3,600 \times 984 \text{ funds} = \$3,542,400$.

⁷⁷² These estimates are based on the following calculations: $((3 \times 108,240 \text{ hours}) \text{ (years 1, 2 and 3)} + 15,744 \text{ (year 1)} + 984 \text{ (year 1)} + (3 \times 49,200) \text{ (years 1, 2 and 3)}) \div 3 = 163,016 \text{ hours}$; $((3 \times \$11,345,520) \text{ (years 1, 2 and 3)} + (\$9,912,816 \text{ (year 1)}) + (\$56,088 \text{ (year 1)}) + (3 \times \$3,542,400) \text{ (years 1, 2 and 3)}) \div 3 = \$18,210,888$.

⁷⁷³ A derivatives risk management program would not be required if the fund complies with a portfolio limitation under which, immediately after entering

into any derivatives transaction, the fund's aggregate exposure associated with the fund's derivatives transactions does not exceed 50% of the value of the fund's net assets, and the fund does not use "complex derivatives" (as defined in proposed rule 18f-4(c)(1)).

⁷⁷⁴ See proposed rule 18f-4(a)(3)(i)(A) through (D).

⁷⁷⁵ See proposed rule 18f-4(a)(3)(ii)(B) and (C).

⁷⁷⁶ Proposed rule 18f-4(a)(3)(ii).

⁷⁷⁷ This estimate is based on the following calculation: $11,973 \text{ funds} \times 14\% = 1,676 \text{ funds}$. See *supra* note 578.

⁷⁷⁸ This estimate is based on the following calculation: $30 \text{ hours} \times 1,676 \text{ funds} = 50,280 \text{ hours}$.

⁷⁷⁹ This estimate is based on the following calculations: $12 \text{ hours} \times \$301 \text{ (hourly rate for a senior portfolio manager)} = \$3,612$; $12 \text{ hours} \times \$455.5 \text{ (blended hourly rate for assistant general counsel (\$426) and chief compliance officer (\$485))} = \$5,466$; $4 \text{ hours} \times \$4,400 \text{ (hourly rate for a board of 8 directors)} = \$17,600$; $2 \text{ hours (for a fund attorney's time to prepare materials for the board's determinations)} \times \$334 \text{ (hourly rate for a compliance attorney)} = \668 . $\$3,612 + \$5,466 + \$17,600 + \$668 = \$27,346$; $\$27,346 \times 1,676 \text{ funds} = \$45,831,896$.

⁷⁸⁰ This estimate is based on the following calculation: $4 \text{ hours} \times \$400 \text{ (hourly rate for outside legal services)} = \$1,600$.

manager prepare, on a quarterly basis, a written report that describes the adequacy and effectiveness of the fund's risk management program (24 hours⁷⁸¹); and (3) the fund's board review, on a quarterly basis, the written report prepared by the fund's derivatives risk manager that describes the adequacy and effectiveness of the fund's risk management program, and approve any material changes to the derivatives risk management program (6 hours). Accordingly, we estimate that the total average annual burden for establishing a derivatives risk management program would be 63,688 hours.⁷⁸² We also estimate that each fund would incur an annual time cost of \$41,066, for a total annual time cost for all funds of approximately \$68,826,616.⁷⁸³ In addition to the internal costs described above, we also estimate that each fund would incur average annual external costs of \$3,200 associated with a fund board's consulting its outside legal counsel with regard to quarterly reviews of the reports prepared by the fund's derivatives risk manager.⁷⁸⁴

Recordkeeping

Proposed rule 18f-4 would require a fund that adopts and implements a derivatives risk management program to maintain: (1) A written copy of the policies and procedures adopted by the fund (as required in proposed rule 18f-4(a)(3)) that are in effect, or any time within the past five years were in effect, in an easily accessible place; (2) copies of any materials provided to the board of directors in connection with its approval of the derivatives risk management program, including any material changes to the program, and any written reports provided to the board relating to the derivatives risk management program, for at least five

years after the end of the fiscal year in which the documents were provided (the first two years in an easily accessible place); and (3) records documenting the periodic reviews and updates required under proposed rule 18f-4(a)(3)(i)(D), for a period of not less than five years (the first two years in an easily accessible place) following each review or update.

We estimate that each fund would incur an annual average burden of 4 hours to retain these records.⁷⁸⁵ We therefore estimate that the total annual burden for maintaining these records would be 6,704 hours.⁷⁸⁶ We also estimate that each fund would incur an annual time cost of approximately \$288, and a total annual time cost for all funds of approximately \$482,688 with respect to this hourly burden.⁷⁸⁷ We estimate that there are no external costs associated with this collection of information.

Estimated Total Burden

Amortized over a three-year time period, the hour burdens and time costs for collections of information associated with the derivatives risk management program under proposed rule 18f-4, including the burdens associated with (a) establishing a derivatives risk management program; and (b) maintaining required records, are estimated to result in an aggregate average annual hour burden of 65,923 hours and aggregate time costs of \$61,644,397.⁷⁸⁸ In addition to the internal costs described above, we also estimate that each fund would incur a one-time average external cost of \$1,600 and average annual external costs of \$3,200.

Estimated Total Burden for Rule 18f-4

Amortized over a three-year time period, the hour burdens and time costs for collections of information associated with proposed rule 18f-4, including the burdens associated with (a) portfolio limitations for derivatives transactions; (b) asset segregation for derivatives transactions; (c) asset segregation for financial commitment transactions; and

(d) derivatives risk management program, are estimated to result in an aggregate average annual hour burden of 1,059,755 hours and aggregate time costs of \$171,141,630.⁷⁸⁹ In addition to the internal costs described above, we also estimate that each fund would incur an aggregate average one-time external cost of \$4,000 and aggregate average annual external costs of \$3,200.⁷⁹⁰

5. Amendments to Form N-PORT

On May 20, 2015, the Commission proposed Form N-PORT, which would require funds to report information within thirty days after the end of each month about their monthly portfolio holdings to the Commission in a structured data format. Preparing a report on Form N-PORT is mandatory and a collection of information under the PRA, and the information required by Form N-PORT would be data-tagged in XML format. Responses to the reporting requirements would be kept confidential for reports filed with respect to the first two months of each quarter; the third month of the quarter would not be kept confidential, but made public sixty days after the quarter end.

Prior Burden Estimate for Proposed Form N-PORT

In the Investment Company Reporting Modernization Release, we estimated that, for the 35% of funds that would file reports on proposed Form N-PORT in house, the per fund aggregate average annual hour burden was estimated to be 178 hours per fund, and the average cost to license a third-party software solution would be \$4,805 per fund per year.⁷⁹¹ For the remaining 65% of funds that would retain the services of a third party to prepare and file reports on proposed Form N-PORT on the fund's behalf, we estimated the aggregate average annual hour burden to be 125 hours per fund, and each fund would

⁷⁸¹ The estimate is based on the following calculation: 4 quarterly reports × 6 hours to prepare each written report = 24 hours.

⁷⁸² This estimate is based on the following calculation: 38 hours × 1,676 funds = 63,688 hours.

⁷⁸³ This estimate is based on the following calculations: Reviewing/updating the risk management program (8 hours): 4 hours × \$301 (hourly rate for a senior portfolio manager) = \$1,204; 4 hours × \$455.5 (blended hourly rate for assistant general counsel (\$426) and chief compliance officer (\$485)) = \$1,822; Preparing quarterly reports by the derivatives risk manager (6 hours × 4 reports = 24 hours): 24 hours × \$485 (hourly rate for chief compliance officer functioning as proposed derivatives risk manager) = \$11,640; Reviewing quarterly reports by the fund's board (1.5 hours × 4 reports = 6 hours): 6 hours × \$4,400 (hourly rate for a board of 8 directors) = \$26,400. \$1,204 + \$1,822 + \$11,640 + \$26,400 = \$41,066; \$41,066 × 1,676 funds = \$68,826,616.

⁷⁸⁴ This estimate is based on the following calculation: 8 hours (2 hours × 4 quarterly reviews) × \$400 (hourly rate for outside legal services) = \$3,200.

⁷⁸⁵ We estimate 2 hours spent by a general clerk and 2 hours spent by a senior computer operator.

⁷⁸⁶ This estimate is based on the following calculation: 4 hours × 1,676 funds = 6,704 hours.

⁷⁸⁷ This estimate is based on the following calculation: 2 hours × \$57 (hourly rate for a general clerk) = \$114; 2 hours × \$87 (hourly rate for a senior computer operator) = \$174. \$114 + \$174 = \$288; \$288 × 1,676 funds = \$482,688.

⁷⁸⁸ These estimates are based on the following calculations: (50,280 hours (year 1) + (2 × 63,688 hours) (years 2 and 3) + (3 × 6,704 hours) (years 1, 2 and 3)) ÷ 3 = 65,923 hours; (\$45,831,896 (year 1) + (2 × \$68,826,616) (years 2 and 3) + (3 × \$482,688) (years 1, 2 and 3)) ÷ 3 = \$61,644,397.

⁷⁸⁹ These estimates are based on the following calculations: (196,147 hours: portfolio limitations + 634,669 hours: asset segregation (derivatives) + 163,016 hours: asset segregation (financial commitment transactions) + 65,923 hours (risk management program)) = 1,059,755 hours; (\$20,386,028: portfolio limitations + \$70,900,317: asset segregation (derivatives) + \$18,210,888: asset segregation (financial commitment transactions) + \$61,644,397 (risk management program)) = \$171,141,630.

⁷⁹⁰ These estimates are based on the following calculations: One-time costs: (\$800: portfolio limitations + \$800: asset segregation (derivatives) + \$800: asset segregation (financial commitment transactions) + \$1,600 (risk management program)) = \$4,000; Annual costs: (\$3,200: risk management program).

⁷⁹¹ See Investment Company Reporting Modernization Release, *supra* note 138, at nn.736–741, 749 and accompanying text.

pay an average fee of \$11,440 per fund per year for the services of third-party service provider. In sum, we estimated that filing reports on proposed Form N-PORT would impose an average total annual hour burden of 1,537,572 hours on applicable funds, and all applicable funds would incur on average, in the aggregate, external annual costs of \$97,674,221.⁷⁹²

Recordkeeping and Reporting

We are proposing amendments to Form N-PORT that would require each fund that is required to implement a derivatives risk management program as required by proposed rule 18f-4(a)(3) to report for options and warrants, including options on a derivative, such as swaps.⁷⁹³ We believe that the enhanced reporting proposed in these amendments would help our staff better monitor price and volatility trends, as well as various funds' risk profiles.

Estimated Total Burden

We estimate that 14% of funds (1,676 funds)⁷⁹⁴ would be required to file, on a monthly basis, additional information on Form N-PORT as a result of the proposed amendments. We estimate that each fund that files reports on Form N-PORT in house (35%, or 587 funds) would require an average of approximately 2 burden hours to compile (including review of the information), tag, and electronically file the additional information in light of the proposed amendments for the first monthly filing and an average of approximately 1 burden hour for each subsequent monthly filing. Therefore, we estimate the per fund average annual hour burden associated with the incremental changes to Form N-PORT as a result of the proposed amendments for these funds would be an additional 13 hours for the first year⁷⁹⁵ and an additional 12 hours for each subsequent year.⁷⁹⁶ We further estimate an upper bound on the initial annual costs to funds choosing this option of \$3,352 per fund⁷⁹⁷ with annual ongoing costs of

\$2,991 per fund.⁷⁹⁸ Amortized over three years, the average annual hour burden would be an additional 12 hours per fund⁷⁹⁹ and the aggregate average annual cost would be an additional \$3,111 per fund.⁸⁰⁰

We estimate that 65% of funds (1,075 funds) would retain the services of a third party to provide data aggregation, validation and/or filing services as part of the preparation and filing of reports on proposed Form N-PORT on the fund's behalf. For these funds, we estimate that each fund would require an average of approximately 3 hours to compile and review the information with the service provider prior to electronically filing the monthly report for the first time and an average of .5 burden hours for each subsequent monthly filing. Therefore, we estimate the per fund average annual hour burden associated with the incremental changes to proposed Form N-PORT as a result of the proposed amendments for these funds would be an additional 8.5 hours for the first year⁸⁰¹ and an additional 6 hours for each subsequent year.⁸⁰² We further estimate an upper bound on the initial costs to funds choosing this option of \$2,319 per fund⁸⁰³ with annual ongoing costs of

hours \times \$312/hour for a senior database administrator) + (2 hours \times \$266/hour for a financial reporting manager) + (2 hours \times \$198/hour for a senior accountant) + (2 hours \times \$157/hour for an intermediate accountant) + (2 hours \times \$301/hour for a senior portfolio manager) + (1.5 hours \times \$283/hour for a compliance manager)). See Investment Company Reporting Modernization Release, *supra* note 138, at n.658 and accompanying text.

⁷⁹⁸ This estimate is based upon the following calculations: \$2,991 in internal costs = (2.14 hours \times \$266/hour for a financial reporting manager) + (2.14 hours \times \$198/hour for a senior accountant) + (2.14 hours \times \$157/hour for an intermediate accountant) + (2.14 hours \times \$301/hour for a senior portfolio manager) + (1.71 hours \times \$283/hour for a compliance manager) + (1.71 hours \times \$312/hour for a senior database administrator)). See Investment Company Reporting Modernization Release, *supra* note 138, at n. 659 and accompanying text.

⁷⁹⁹ The estimate is based on the following calculation: (13 + (12 \times 2)) \div 3 = 12.33.

⁸⁰⁰ The estimate is based on the following calculation: (\$3,352 + (\$2,991 \times 2)) \div 3 = \$3,111.

⁸⁰¹ The estimate is based on the following calculation: (1 filing \times 3 hours) + (11 filings \times 0.5 hour) = 8.5 burden hours in the first year.

⁸⁰² This estimate is based on the following calculation: 12 filings \times 0.5 hour = 6 burden hours in each subsequent year.

⁸⁰³ This estimate is based upon the following calculations: \$2,319 in internal costs = (1.5 hours \times \$303/hour for a senior programmer) + (2.5 hours \times \$312/hour for a senior database administrator) + (.9 hours \times \$266/hour for a financial reporting manager) + (.9 hours \times \$198/hour for a senior accountant) + (.9 hours \times \$157/hour for an intermediate accountant) + (.9 hours \times \$301/hour for a senior portfolio manager) + (.9 hours \times \$283/hour for a compliance manager)). See Investment Company Reporting Modernization Release, *supra* note 138, at n.660 and accompanying text.

\$1,517 per fund.⁸⁰⁴ Amortized over three years, the aggregate average annual hour burden would be an additional 7 hours per fund,⁸⁰⁵ with average annual ongoing costs of \$1,784 per fund.⁸⁰⁶

In sum, we estimate that the proposed amendments to Form N-PORT would impose an average total annual hour burden of an additional 14,667 hours on applicable funds,⁸⁰⁷ and an average additional total cost of \$3,768,933 on applicable funds.⁸⁰⁸ We do not anticipate any change to the total external annual costs of \$97,674,221.⁸⁰⁹

6. Amendments to Form N-CEN

On May 20, 2015, we proposed to amend rule 30a-1 to require all funds to file reports with certain census-type information on proposed Form N-CEN with the Commission on an annual basis. Proposed Form N-CEN would be a collection of information under the PRA, and is designed to facilitate the Commission's oversight of funds and its ability to monitor trends and risks. The collection of information under Form N-CEN would be mandatory for all funds, and responses would not be kept confidential.

Prior Burden Estimate for Proposed Form N-CEN

In the Investment Company Reporting Modernization Release, the staff estimated that the Commission would receive an average of 3,146 reports per year, based on the number of existing Form N-SAR filers, including responses from 2,419 management companies.⁸¹⁰ We estimated that management investment companies would require 33.35 annual burden hours in the first

⁸⁰⁴ This estimate is based upon the following calculations: \$1,517 in internal costs = (1 hours \times \$266/hour for a financial reporting manager) + (1 hours \times \$198/hour for a senior accountant) + (1 hours \times \$157/hour for an intermediate accountant) + (1 hours \times \$301/hour for a senior portfolio manager) + (1 hours \times \$283/hour for a compliance manager) + (1 hours \times \$312/hour for a senior database administrator)). See Investment Company Reporting Modernization Release, at n. 661 and accompanying text.

⁸⁰⁵ The estimate is based on the following calculation: (8.5 + (6 \times 2)) \div 3 = 6.83.

⁸⁰⁶ The estimate is based on the following calculation: (\$2,319 + (\$1,517 \times 2)) \div 3 = \$1,784.

⁸⁰⁷ The estimate is based on the following calculation: (587 funds \times 12 hours) + (1,089 funds \times 7 hours) = 14,667 hours.

⁸⁰⁸ The estimate is based on the following calculation: (587 funds \times \$3,111) + (1,089 funds \times \$1,784) = \$3,768,933.

⁸⁰⁹ See Investment Company Reporting Modernization Release, *supra* note 138, at n.751 and accompanying text.

⁸¹⁰ This estimate is based on 2,419 management companies and 727 UITs filing reports on Form N-SAR as of Dec. 31, 2014. UITs would not be required to complete Item 31 of proposed Form N-CEN. See General Instruction A of proposed Form N-CEN.

⁷⁹² See *id.*, at nn.748 and 751 and accompanying text.

⁷⁹³ See Item C.11.c.viii of proposed Form N-PORT.

⁷⁹⁴ Commission staff estimates, therefore, that approximately 14% of funds (1,676 funds) would be required to establish a derivatives risk management program. See *supra* note 612 and accompanying text.

⁷⁹⁵ The estimate is based on the following calculation: (1 filing \times 2 hours) + (11 filings \times 1 hour) = 13 burden hours in the first year.

⁷⁹⁶ This estimate is based on the following calculation: (12 filings \times 1 hour) = 12 burden hours in each subsequent year.

⁷⁹⁷ This estimate is based upon the following calculations: \$3,352 in internal costs = (\$3,196 = 1 hour \times \$303/hour for a senior programmer) + (2.5

year⁸¹¹ and 13.35 annual burden hours in each subsequent year for preparing and filing reports on proposed Form N-CEN. We further estimated that all Form N-CEN filers would have an aggregate annual paperwork related expenses of \$12,395,064 for reports on Form N-CEN.⁸¹² We also estimated that all applicable funds would incur, in the aggregate, external annual costs of \$1,748,637, which would include the costs of registering and maintaining LEIs for funds.

Recordkeeping and Reporting

We are proposing amendments to Form N-CEN to identify whether the fund relied upon proposed rule 18f-4. Specifically, the proposed amendments to Form N-CEN would require a fund to identify the portfolio limitation(s) on which the fund relied during the reporting period.

Estimated Total Burden

As discussed above, as part of the Investment Company Modernization Release proposal, funds would be required to identify if they relied upon ten different rules under the Act during the reporting period.⁸¹³ In addition to the paperwork costs associated with collecting and documenting the requirements under proposed rule 18f-4,⁸¹⁴ we believe that there are additional paperwork cost relating to identifying the portfolio limitation(s) on which a fund relied on proposed Form N-CEN. We therefore estimate that 2,419 funds would incur an average annual hour burden of .25 hours for the first year to compile (including review of the information), tag, and electronically file the additional information in light of the proposed amendments, and an average annual hour burden of approximately .1 hours for each subsequent year's filing. We further estimate an upper bound on the initial costs to funds choosing this

option of \$80 per fund⁸¹⁵ with annual ongoing costs of \$32 per fund.⁸¹⁶ Amortized over three years, the aggregate average annual hour burden would be an additional .15 hours per fund,⁸¹⁷ with average annual ongoing costs of \$48 per fund.⁸¹⁸

In sum, we estimate that the proposed amendments to Form N-CEN would impose an average total annual hour burden of an additional 363 hours on applicable funds,⁸¹⁹ and an average additional total cost of \$115,616 on applicable funds.⁸²⁰ We do not anticipate any change to the total external annual costs of \$1,748,637.⁸²¹

C. Request for Comments

We request comment on whether our estimates for burden hours and any external costs as described above are reasonable. Pursuant to 44 U.S.C. 3506(c)(2)(B), the Commission solicits comments in order to: (1) Evaluate whether the proposed collections of information are necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (2) evaluate the accuracy of the Commission's estimate of the burden of the proposed collections of information; (3) determine whether there are ways to enhance the quality, utility, and clarity of the information to be collected; and

⁸¹⁵ This estimate is based on multiplying .25 hours by a blended hourly wage of \$318.50 per hour, \$303 per hour for Senior Programmers and \$334 per hour for compliance attorneys, as we believe these employees would commonly be responsible for completing reports on proposed Form N-CEN ($\$318.50 \times .25 = \80). See Investment Company Reporting Modernization Release, *supra* note 138, at n.723 and accompanying text.

⁸¹⁶ This estimate is based on multiplying .1 hours by a blended hourly wage of \$318.50 per hour, \$303 per hour for Senior Programmers and \$334 per hour for compliance attorneys, as we believe these employees would commonly be responsible for completing reports on proposed Form N-CEN ($\$318.50 \times .1 = \32). See Investment Company Reporting Modernization Release, *supra* note 138, at n.723 and accompanying text.

⁸¹⁷ The estimate is based on the following calculation: $(.25 + (.1 \times 2)) \div 3 = .15$ hours.

⁸¹⁸ The estimate is based on the following calculation: $(\$80 + (\$32 \times 2)) \div 3 = \$48$.

⁸¹⁹ The estimate is based on the following calculation: $(2,419 \text{ funds} \times .15 \text{ hours}) = 363 \text{ hours}$.

⁸²⁰ This estimate is based on annual ongoing burden estimate of 363 burden hours for management companies (2,419 management companies \times .15 hours per filing). This was then multiplied by a blended hourly wage of \$318.50 per hour, \$303 per hour for Senior Programmers and \$334 per hour for compliance attorneys, as we believe these employees would commonly be responsible for completing reports on proposed Form N-CEN ($\$318.50 \times 363 = \$115,616$). See Investment Company Reporting Modernization Release, *supra* note 138, at n.723 and accompanying text.

⁸²¹ See Investment Company Reporting Modernization Release, *supra* note 138, at n.769 and accompanying text.

(4) determine whether there are ways to minimize the burden of the collections of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology.

The agency has submitted the proposed collection of information to OMB for approval. Persons wishing to submit comments on the collection of information requirements of the proposed amendments should direct them to the Office of Management and Budget, Attention Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Washington, DC 20503, and should send a copy to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090, with reference to File No. S7-24-15. OMB is required to make a decision concerning the collections of information between 30 and 60 days after publication of this Release; therefore, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days after publication of this Release. Requests for materials submitted to OMB by the Commission with regard to these collections of information should be in writing, refer to File No. S7-24-15, and be submitted to the Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE., Washington, DC 20549-2736.

VI. Initial Regulatory Flexibility Act Analysis

This Initial Regulatory Flexibility Analysis has been prepared in accordance with section 3 of the Regulatory Flexibility Act ("RFA").⁸²² It relates to proposed rule 18f-4 and proposed amendments to Form N-PORT and Form N-CEN.

A. Reasons for and Objectives of the Proposed Actions

The use of derivatives by funds implicates certain requirements under the Investment Company Act, including section 18 of that Act.⁸²³ In particular, section 18 limits a fund's ability to obtain leverage or incur obligations to persons other than the fund's common shareholders through the issuance of senior securities, as defined in that section.⁸²⁴ As discussed above, funds and their counsel, in light of the guidance we provided in Release 10666 and provided by our staff, have applied the segregated account approach to, or otherwise sought to cover, many types

⁸²² 5 U.S.C. 603.

⁸²³ See *supra* section I.

⁸²⁴ See *supra* section I.

⁸¹¹ This estimate is based on the following calculation: 13.35 hours for filings + 20 additional hours for the first filing = 33.35 hours.

⁸¹² This estimate is based on annual ongoing burden hour estimate of 32,294 burden hours for management companies (2,419 management companies \times 13.35 hours per filing) plus 6,623 burden hours for UITs (727 UITs \times 9.11 burden hours per filing), for a total estimate of 38,917 burden ongoing hours. This was then multiplied by a blended hourly wage of \$318.50 per hour, \$303 per hour for Senior Programmers and \$334 per hour for compliance attorneys, as we believe these employees would commonly be responsible for completing reports on proposed Form N-CEN ($\$318.50 \times 38,917 = \$12,395,064.50$). See Investment Company Reporting Modernization Release, *supra* note 138, at n.723 and accompanying text.

⁸¹³ See *supra* section IV.D.7.d; see also Item 31 of Proposed Form N-CEN.

⁸¹⁴ See *supra* section V.B.1.

of transactions other than those specifically addressed in Release 10666, including various derivatives and other transactions that implicate section 18.⁸²⁵ We have determined to propose a new approach to funds' use of derivatives in order to address the investor protection purposes and concerns underlying section 18 of the Act and to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives transactions in light of the dramatic growth in the volume and complexity of the derivatives markets over the past two decades and the increased use of derivatives by certain funds.

The Commission is proposing a new exemptive rule and amendments to Form N-PORT and Form N-CEN that are designed to provide an updated and more comprehensive approach to the regulation of funds' use of derivatives, as well as certain other transactions that implicate section 18 of the Act, and to more effectively address the purposes and concerns underlying section 18.⁸²⁶ Specifically, proposed rule 18f-4 is designed both to impose a limit on the leverage a fund relying on the rule may obtain through derivatives transactions and financial commitment transactions, and to require the fund to have qualifying coverage assets to meet its obligations under those transactions, in order to address the undue speculation concern expressed in section 1(b)(7) and the asset sufficiency concern expressed in section 1(b)(8).⁸²⁷ In addition, the derivatives risk management program requirement is designed to complement the proposed rule's portfolio limitations and asset segregation requirements by requiring funds subject to the requirement to adopt and implement a derivatives risk management program that addresses the program elements specified in the rule, including the assessment and management of the risks associated with the fund's derivatives transactions.⁸²⁸ The program would be administered by a derivatives risk manager designated by the fund and approved by the fund's board of directors.⁸²⁹ The amendments to Form N-PORT require the reporting of certain risk metrics (vega and gamma) but only by those funds that engage in more than a limited amount of derivatives transactions, by virtue of meeting the threshold requiring them to implement a derivatives risk management program as required by proposed rule 18f-4(a)(3).

Last, the amendments to Form N-CEN would require a fund to identify the portfolio limitation(s) on which the fund relied during the reporting period.

B. Legal Basis

The Commission is proposing new rule 18f-4 under the authority set forth in sections 6(c), 12(a), 31(a), and 38(a) of the Investment Company Act of 1940 [15 U.S.C. 80a-6(c), 80a-12(a), 80a-31(a), and 80a-38(a)]. The Commission is proposing amendments to proposed Form N-PORT and Form N-CEN under the authority set forth in sections 8, 30, and 38 of the Investment Company Act of 1940 [15 U.S.C. 80a-8, 80a-30, 80a-38].

C. Small Entities Subject to Proposed Rule 18f-4 and Amendments to Form N-PORT and Form N-CEN

An investment company is a small entity if, together with other investment companies in the same group of related investment companies, it has net assets of \$50 million or less as of the end of its most recent fiscal year.⁸³⁰ Commission staff estimates that, as of June 2015, approximately 110 open and closed-end funds are small entities. We discuss below the percentage of small funds that the staff estimates may seek to rely on the proposed rule, and the percentage of small funds that may be required to comply with the various aspects of the proposed rule.

D. Projected Reporting, Recordkeeping, and Other Compliance Requirements

1. Portfolio Limitations for Derivatives Transactions

Proposed rule 18f-4 would require a fund that engages in derivatives transactions in reliance on the rule, including any small entities that rely on the rule, to comply with one of two alternative portfolio limitations.⁸³¹ A fund that relies on the exposure-based portfolio limit would be required to operate so that its aggregate exposure under senior securities transactions, measured immediately after entering into any such transaction, does not exceed 150% of the fund's net assets.⁸³² Under the risk-based portfolio limit, a fund generally would be required to demonstrate, using a VaR calculation, that its derivatives transactions, in the aggregate, result in an investment portfolio that is subject to less market risk than if the fund did not use such derivatives.⁸³³ A fund that elects the

risk-based portfolio limitation under the proposed rule would be permitted to obtain exposure under its derivatives transactions and other senior securities of up to 300% of the fund's net assets.⁸³⁴

The proposed rule would require that for a fund relying on the rule, a fund's board of directors, including a majority of the directors who are not interested persons of the fund, approve which of the two alternative portfolio limitations will apply to the fund.⁸³⁵ In addition, the proposed rule would require a fund to maintain a record of each determination made by the fund's board that the fund will comply with one of the portfolio limitations under the proposed rule, which would include the fund's initial determination as well as a record of any determination made by the fund's board to change the portfolio limitation.⁸³⁶ The fund also would be required to maintain a written record demonstrating that immediately after the fund entered into any senior securities transaction, the fund complied with the portfolio limitation applicable to the fund immediately after entering into the senior securities transaction, reflecting the fund's aggregate exposure, the value of the fund's net assets and, if applicable, the fund's full portfolio VaR and its securities VaR.⁸³⁷

As discussed above in section IV, our staff estimates that the one-time operational costs necessary to establish and implement an exposure-based portfolio limitation would range from \$20,000 to \$150,000 per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund.⁸³⁸ Staff also estimates that each fund would incur ongoing costs related to implementing a 150% exposure-based portfolio limitation under proposed rule 18f-4. Staff estimates that such costs would range from 20% to 30% of the one-time costs discussed above. Thus, staff estimates that a fund would incur ongoing annual costs associated with the 150% exposure-based portfolio limit that would range from \$4,000 to \$45,000.

⁸³⁴ Proposed rule 18f-4(a)(1)(ii).

⁸³⁵ Proposed rule 18f-4(a)(5)(i).

⁸³⁶ See proposed rule 18f-4(a)(6)(i). The fund would be required to maintain this record for a period of not less than five years (the first two years in an easily accessible place) following each determination.

⁸³⁷ See proposed rule 18f-4(a)(6)(iv). The fund would be required to maintain this record for a period of not less than five years (the first two years in an easily accessible place) following each senior securities transaction entered into by the fund.

⁸³⁸ See section IV.

⁸²⁵ See *supra* section II.B.3.

⁸²⁶ See *supra* section III.A.

⁸²⁷ See *supra* section III.A.

⁸²⁸ See *supra* section III.A.

⁸²⁹ See *supra* section III.A.

⁸³⁰ See rule 0-10(a) under the Investment Company Act.

⁸³¹ Proposed rule 18f-4(a)(1).

⁸³² Proposed rule 18f-4(a)(1)(i).

⁸³³ Proposed rule 18f-4(a)(1)(ii).

As discussed above in section IV.D.1, in the DERA staff analysis, 68% of all of the sampled funds did not have any exposure to derivatives transactions. These funds thus do not appear to use derivatives transactions or, if they do use them, do not appear to do so to a material extent. We estimate that approximately 32% of funds—the percentage of funds that did have derivatives exposure in the DERA sample—are more likely to enter into derivatives transactions and therefore are more likely to incur costs associated with either the exposure-based portfolio limit or the risk-based portfolio limit. Excluding approximately 4% of all funds (corresponding to the percentage of sampled funds that had aggregate exposure of 150% or more of net assets and for which we have estimated costs for the risk-based limit), we estimate that 28% of funds would incur the costs associated with the exposure-based portfolio limit. Staff also estimates that 28% of small funds (approximately 31 small funds) enter into at least some derivatives transactions, and would therefore incur the costs associated with the exposure-based portfolio limit.

As with the costs discussed above regarding the exposure-based portfolio limit, we expect that funds would incur one-time and ongoing operational costs to establish and implement a risk-based exposure limit, including the VaR test. We expect that a fund that seeks to comply with the 300% aggregate exposure limit would incur the same costs as those that we estimated above in order to establish and implement the 150% exposure-based portfolio limit. Accordingly, we estimate below the costs we believe a fund would incur to comply with the VaR test. Our staff estimates that the one-time operational costs necessary to establish and implement a VaR test would range from \$60,000 to \$180,000 per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund. Staff also estimates that each fund would incur ongoing costs related to implementing a VaR test under proposed rule 18f-4. Staff estimates that such costs would range from 20% to 30% of the one-time costs discussed above. Thus, staff estimates that a fund would incur ongoing annual costs associated with the VaR test aspect of the risk-based exposure limit that would range from \$12,000 to \$54,000. DERA staff estimates that approximately 4% of all funds sampled had aggregate exposure of 150% (or greater) of net assets. We estimate therefore, that 4% of funds would rely on the proposed rule,

and comply with the risk-based portfolio limit. Staff also estimates that 4% of small funds (approximately 4 small funds) would rely on the proposed rule, and comply with the risk-based portfolio limit.

2. Asset Segregation

Under proposed rule 18f-4, a fund, including a fund that is a small entity, that enters into derivatives transactions in reliance on the rule would be required to manage the risks associated with its derivatives transactions by maintaining an amount of qualifying coverage assets designed to enable the fund to meet its obligations arising from such transactions.⁸³⁹ A fund's board, including a majority of the fund's independent directors, would be required to approve the fund's policies and procedures reasonably designed to provide for the fund's maintenance of qualifying coverage assets.⁸⁴⁰ A fund that would be required to maintain an amount of qualifying coverage assets under the proposed rule also would be subject to certain recordkeeping requirements. The proposed rule would require that qualifying coverage assets for derivatives transactions be identified on the books and records of the fund at least once each business day.⁸⁴¹ In addition, the fund would be required to maintain a written copy of the policies and procedures approved by the board regarding the fund's maintenance of qualifying coverage assets, as required under the proposed rule.⁸⁴²

Our staff estimates that the one-time operational costs necessary to establish and implement the proposed asset segregation requirements would range from \$25,000 to \$75,000 per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the funds comprising the fund. Staff also estimates that each fund would incur ongoing costs related to implementing the asset segregation requirements under proposed rule 18f-4. Staff estimates that such costs would range from 65% to 75% of the one-time costs discussed above. Thus, staff estimates that a fund would incur ongoing annual costs associated with the asset segregation requirements that would range from \$16,250 to \$56,250. As discussed above in section IV.D.1, in the DERA staff analysis, 68% of all of the sampled funds did not have any exposure to derivatives transactions. These funds

thus do not appear to use derivatives transactions or, if they do use them, do not appear to do so to a material extent. Staff estimates that the remaining 32% of funds will seek to rely on the proposed rule 18f-4, as noted above, and therefore comply with the asset segregation requirements. Staff also estimates that 32% of small funds (approximately 35 small funds) will seek to rely on proposed rule 18f-4, and therefore comply with the asset segregation requirements.

3. Derivatives Risk Management Program

We are proposing measures under rule 18f-4 that will help enhance derivatives risk management by requiring that any fund, including a small entity, that engages in more than a limited amount of derivatives transactions pursuant to the proposed rule, or that uses complex derivatives transactions, adopt and implement a derivatives risk management program.⁸⁴³ This risk management program would require a fund have policies and procedures reasonably designed to assess and manage the risks of the fund's derivatives transactions.⁸⁴⁴ The program is designed to be tailored by each fund and its adviser to the particular types of derivatives used by the fund and the manner in which those derivatives relate to the fund's investment portfolio and strategy. Funds that make only limited use of derivatives would not be subject to the proposed condition requiring the adoption of a formalized derivatives risk management program. A fund that makes only limited use of derivatives, however, would need to monitor its investments in derivatives to confirm that its aggregate exposure to derivatives transactions is not more than 50% of its NAV and that it does not use complex derivatives.

Under the proposed rule, a fund's board of directors (including a majority of the directors who are not interested persons of the fund) must approve the fund's derivatives risk management program, including any material changes to the program, if applicable.⁸⁴⁵ A fund that has a risk management program would be required to designate a person as a derivatives risk manager responsible for administering the program and such derivatives risk manager would be required to provide a written report to the fund's board of directors, no less frequently than quarterly, that reviews the adequacy and

⁸³⁹ See proposed rule 18f-4(a)(2).

⁸⁴⁰ See proposed rule 18f-4(a)(5)(ii).

⁸⁴¹ See proposed rules 18f-4(a)(2) and 18f-4(a)(6)(v).

⁸⁴² See proposed rule 18f-4(a)(6)(iii).

⁸⁴³ See proposed rule 18f-4(a)(3).

⁸⁴⁴ See proposed rule 18f-4(a)(3).

⁸⁴⁵ See proposed rule 18f-4(a)(3)(ii)(A).

effectiveness of its implementation.⁸⁴⁶ We note that some funds, and in particular smaller funds for example, may not have appropriate existing personnel capable of fulfilling the responsibilities of the proposed derivatives risk manager, or may choose to hire a derivatives risk manager rather than assigning that responsibility to a current employee or officer of the fund or the fund's investment adviser who is not a portfolio manager. We would expect that a fund that is required to hire a new derivatives risk manager would likely incur costs on the higher end of our estimated range of costs provided below.

A fund that is required to have a derivatives risk management program under the proposed rule would be required to maintain a written copy of the fund's risk management program and any associated policies and procedures that are in effect, or at any time within the past five years, were in effect in an easily accessible place.⁸⁴⁷ In addition, a fund would be required to maintain copies of any materials provided to the board of directors in connection with its approval of the derivatives risk management program, including any material changes to the program, and any written reports provided to the board of directors relating to the program.⁸⁴⁸

As discussed in the Economic Analysis section, our staff estimates that the one-time costs necessary to establish and implement a derivatives risk management program would range from \$65,000 to \$500,000 per fund, depending on the particular facts and circumstances and current derivatives risk management practices of the fund. Staff estimates that each fund would incur ongoing program-related costs, as a result of proposed rule 18f-4, that range from 65% to 75% of the one-time costs necessary to establish and implement a derivatives risk management program. Thus, staff estimates that a fund would incur ongoing annual costs associated with proposed rule 18f-4 that would range from \$42,250 to \$375,000. Under the proposed rule, a fund that has no greater than 50% aggregate exposure associated with its derivatives transactions would not be required to establish a derivatives risk management program. DERA staff analysis shows that approximately 10%

of all sampled funds had aggregate exposure from derivatives transactions high enough (*i.e.*, aggregate exposure of 50% of net assets or greater) to require that they establish a derivatives risk management program under the proposed rule. The DERA staff analysis also shows that approximately 4% of additional funds had aggregate exposure of between 25 and 50% of net assets. In light of this, Commission staff estimates that approximately 14% of funds would establish a derivatives risk management program. Staff also estimates that approximately 14% of small funds (approximately 15 small funds) would establish a derivatives risk management program.

4. Financial Commitment Transactions

Under our proposed rule, a fund may also enter into financial commitment transactions, notwithstanding the requirements of section 18(a)(1), section 18(f)(1) and section 61 of the Investment Company Act provided that the fund maintains qualifying coverage assets, identified on the books and records of the fund and determined at least once each business day, with a value equal to at least the fund's aggregate financial commitment obligations.⁸⁴⁹ In addition, the fund's board of directors (including a majority of the directors who are not interested persons of the fund) would be required to approve policies and procedures reasonably designed to provide for the fund's maintenance of qualifying coverage assets.⁸⁵⁰ The fund would also be required to maintain a written copy of the policies and procedures approved by the board of directors that are in effect, or at any time within the past five years were in effect, in an easily accessible place.⁸⁵¹ In addition, the fund would be required to maintain a written record reflecting the amount of each financial commitment obligation associated with each financial commitment transaction entered into by the fund and identifying the qualifying coverage assets maintained by the fund with respect to each financial commitment obligation, as determined by the fund at least once each business day, for a period of not less than five years (the first two years in an easily accessible place).⁸⁵²

Our staff estimates that the one-time operational costs necessary to establish and implement the proposed asset segregation requirements would range from \$25,000 to \$75,000 per fund. Staff

also estimates that each fund would incur ongoing costs related to implementing the asset segregation requirements under proposed rule 18f-4. Staff estimates that such costs would range from 65% to 75% of the one-time costs discussed above. Thus, staff estimates that a fund would incur ongoing annual costs associated with the asset segregation requirements that would range from \$16,250 to \$56,250. DERA staff analysis shows that approximately 3% of all sampled funds enter into at least some financial commitment transactions, but do not use derivatives transactions (or other senior securities transactions). Staff estimates, therefore, that 3% of funds would comply with the asset segregation requirements in proposed rule 18f-4 applicable to financial commitment transactions.⁸⁵³ Staff also estimates that 3% of small funds (approximately 3 small funds) would comply with the asset segregation requirements in proposed rule 18f-4 applicable to financial commitment transactions.

5. Amendments to Proposed Form N-PORT

We are proposing amendments to proposed Form N-PORT to require the reporting of certain risk metrics (vega and gamma) but only by those funds that engage in more than a limited amount of derivatives transactions, by virtue of meeting the threshold requiring them to implement a derivatives risk management program as required by proposed rule 18f-4(a)(3).⁸⁵⁴ As discussed above, we propose to limit the reporting of vega and gamma because: (1) We understand that there are added burdens to reporting risk-metrics and we are therefore proposing to limit the reporting of these risk metrics to only those funds who are engaged in more than a limited amount of derivatives transactions or that use certain complex derivatives transactions, as opposed to funds that engage in a more limited use of derivatives; and (2) we believe many of the funds that would be required to

⁸⁵³ The estimate of affected funds does not include money market funds or BDCs. We understand, however, that both money market funds and BDCs may engage in certain types of financial commitment transactions. We estimate that 537 money market funds and 88 BDCs would also comply with the asset segregation requirements in proposed rule 18f-4 (applicable to financial commitment transactions). Based on information in filings submitted to the Commission, we believe that there are no money market funds that are small entities. The Commission staff further estimates that, as of June 2015, approximately 29 BDCs are small entities.

⁸⁵⁴ See *supra* section III.G. See also proposed rule 18f-4(a)(3).

⁸⁴⁶ See proposed rule 18f-4(a)(3)(ii)(B) and (C).

⁸⁴⁷ See proposed rule 18f-4(a)(6)(iii)(A).

⁸⁴⁸ See proposed rule 18f-4(a)(6)(iii)(B). The fund would be required to maintain this record for a period of not less than five years after the end of the fiscal year in which the documents were provided (the first two years in an easily accessible place).

⁸⁴⁹ Proposed rule 18f-4(b)(1). See also proposed rule 18f-4(c)(5) (definition of financial commitment obligation).

⁸⁵⁰ Proposed rule 18f-4(b)(2).

⁸⁵¹ Proposed rule 18f-4(b)(3)(i).

⁸⁵² Proposed rule 18f-4(b)(3)(ii).

implement a derivatives risk management program and that invest in derivatives as part of their investment strategy currently calculate risk metrics for their own internal risk management programs, albeit, for internal reporting purposes.⁸⁵⁵ We anticipate that the enhanced reporting proposed in these amendments would help our staff better monitor price and volatility trends and various funds' risk profiles. Risk metrics data reported on Form N-PORT that is made publicly available also would inform investors and assist users in assessing funds' relative price and volatility risks and the overall price and volatility risks of the fund industry—particularly for those funds that use investments in derivatives as an important part of their trading strategy.

All funds that would be required to implement a derivatives risk management program as required by proposed rule 18f-4(a)(3) would be subject to the proposed amendments to Form N-PORT, including funds that are small entities. For smaller funds and fund groups⁸⁵⁶ we proposed an extra 12 months (or 30 months after the effective date) to comply with the proposed Form N-PORT reporting requirements. We estimate that 10% of small funds (approximately 11 small funds) would be required to comply with the proposed amendments to Form N-PORT.

We estimate that 1,676 funds would be required to file, on a monthly basis, additional information on Form N-PORT as a result of the proposed amendments.⁸⁵⁷ Assuming that 35% of funds (587 funds) would choose to license a software solution to file reports on Form N-PORT in house, we estimate an upper bound on the initial annual costs to file the additional information associated with the proposed amendments for funds choosing this option of \$3,352 per fund with annual ongoing costs of \$2,991 per fund.⁸⁵⁸ We

further assume that 65% of funds (1,089 funds) would choose to retain a third-party service provider to provide data aggregation and validation services as part of the preparation and filing of reports on Form N-PORT, and we estimate an upper bound on the initial costs to file the additional information associated with the proposed amendments for funds choosing this option of \$2,319 per fund with annual ongoing costs of \$1,517 per fund.⁸⁵⁹ As noted above, we estimate that 10% of small funds (approximately 11 small funds) would be required to comply with the proposed amendments to Form N-PORT. Staff estimates that 35% of small funds (approximately 4 small funds) would choose to license a software solution to file reports on Form N-PORT in house, and 65% of small funds (approximately 7 small funds) would choose to retain a third-party service provider.

6. Amendments to Form N-CEN

We are proposing amendments to Form N-CEN to require a fund to identify whether the fund relied upon proposed rule 18f-4. Specifically, the proposed amendments to Form N-CEN would require a fund to identify the portfolio limitation(s) under which the fund relied during the reporting period. As we discussed above, while the costs associated with collecting and documenting the requirements under proposed rule 18f-4 are discussed above,⁸⁶⁰ we believe that there are additional costs relating to identifying the portfolio limitation(s) on which a fund relied on proposed Form N-CEN.

We estimate that 2,419 funds would incur initial costs of \$80 per fund,⁸⁶¹ with annual ongoing costs of \$32 per fund,⁸⁶² to compile (including review of the information), tag, and electronically file the additional information in light of the proposed amendments. We do not anticipate any change to the total external annual costs of \$1,748,637.⁸⁶³

As noted above, we estimate that approximately 110 open and closed-end funds are small entities that would be required to identify the portfolio limitation(s) on which they relied on reports on Form N-CEN during the reporting period.⁸⁶⁴

E. Duplicative, Overlapping, or Conflicting Federal Rules

Commission staff has not identified any federal rules that duplicate, overlap, or conflict with proposed rule 18f-4 or the proposed amendments to Form N-PORT and Form N-CEN.

F. Significant Alternatives

The RFA directs the Commission to consider significant alternatives that would accomplish our stated objectives, while minimizing any significant economic impact on small entities. We considered the following alternatives for small entities in relation to our proposal: (1) Exempting funds that are small entities from proposed rule 18f-4, or any part thereof, and/or establishing different requirements under proposed rule 18f-4 to account for resources available to small entities; (2) exempting funds that are small entities from the proposed amendments to Form N-PORT, or establishing different disclosure and reporting requirements, or different reporting frequency, to account for resources available to small entities; (3) the clarification, consolidation, or simplification of compliance requirements under proposed rule 18f-4 for small entities; and (4) the use of performance rather than design standards.

1. Proposed Rule 18f-4

We do not believe that exempting any subset of funds, including funds that are small entities, from the provisions in proposed rule 18f-4 would permit us to achieve our stated objectives. We also do not believe that it would be desirable to establish different requirements applicable to funds of different sizes under proposed rule 18f-4 to account for resources available to small entities⁸⁶⁵ or to use performance standards rather than design standards for small entities where applicable. We note, however, that proposed rule 18f-4 is an exemptive rule, which would require funds to comply with new requirements only if they wish to enter into derivatives transactions and financial commitment transactions. Therefore, if a small entity does not invest in derivatives or financial commitment transactions as part of its investment strategy, then the small entity would not be required to comply with the provisions of proposed rule 18f-4. In the DERA staff analysis, 68%

⁸⁵⁵ Part C of proposed Form N-PORT would require a fund and its consolidated subsidiaries to disclose its schedule of investments and certain information about the fund's portfolio of investments. We propose to add Item C.11.c.viii to Part C of proposed Form N-PORT that would require funds that are required to implement a risk management program under proposed rule 18f-4(a)(3) provide the gamma and vega for options and warrants, including options on a derivative, such as swaptions. See Item C.11.c.viii of proposed Form N-PORT.

⁸⁵⁶ For purposes of the extended compliance date only, we proposed that funds that together with other investment companies in the same "group of related investment companies" have net assets of less than \$1 billion as of the end of the most recent fiscal year be subject to an extra 12 months to comply with proposed Form N-PORT.

⁸⁵⁷ See *supra* note 794.

⁸⁵⁸ See *supra* notes 797 and 798, and accompanying text.

⁸⁵⁹ See *supra* notes 803 and 804, and accompanying text.

⁸⁶⁰ See *supra* sections IV.D.1. and IV.D.2.

⁸⁶¹ See *supra* note 815.

⁸⁶² See *supra* note 816.

⁸⁶³ See *supra* note 821.

⁸⁶⁴ See *supra* section VI.C.

⁸⁶⁵ We believe, however, that the Commission has accounted for the resources available to small entities by providing some flexibility in the proposed requirement that each fund that is required to adopt and implement a program must *reasonably* segregate the functions associated with the portfolio management of the fund.

of all funds sampled did not have any exposure to derivatives transactions, which would indicate that many funds, including many small funds, will be unaffected by the proposed rule. However, for small funds that would be affected by our proposed rule, providing an exemption or consolidating or simplifying the proposed rule for small entities could subject investors of small funds that invest in derivatives to a higher degree of risk than investors to large funds that would be required to comply with the proposed elements of the rule.

The undue speculation concern expressed in section 1(b)(7) of the Act and the asset sufficiency concern reflected in section 1(b)(8) of the Act that the proposed rule is designed to address applies to both small as well as large funds. As discussed throughout this Release, we believe that the proposed rule would result in multiple investor protection benefits, and these benefits should apply to investors in smaller funds as well as investors in larger funds. We therefore do not believe it would be appropriate to exempt funds that are small entities from the portfolio limitation provisions or the asset segregation provisions of proposed rule 18f-4 or establish different requirements applicable to funds of different sizes under these provisions to account for resources available to small entities. Further, we believe that all of the proposed elements of rule 18f-4 should work together to produce the anticipated investor protection benefits, and therefore do not believe it is appropriate to except or modify the requirements for smaller funds because we believe this would limit the benefits to investors in such funds.

We also do not believe it would be appropriate to exempt funds that are small entities from the derivatives risk management requirements of proposed rule 18f-4 or establish different requirements applicable to funds of different sizes. We believe that all of the proposed program elements would be necessary for a fund to effectively assess and manage its derivatives risk, and we anticipate that all of the proposed program elements would work together to produce the anticipated investor protection benefits. We do note that the costs associated with proposed rule 18f-4 would vary depending on the fund's particular circumstances, and thus the proposed rule could result in different burdens on funds' resources. In particular, we expect that a fund that pursues an investment strategy that involves greater derivatives risk may have greater costs associated with its

derivatives risk management program. However, we believe that it is appropriate to correlate the costs associated with the proposed rule with the level of derivatives risk facing a fund, and not necessarily with the fund's size. Thus, to the extent a fund that is a small entity faces relatively little derivatives risk, it would incur relatively low costs to comply with proposed rule 18f-4. And, to the extent that a fund that is a small entity that engages in a limited amount of derivatives transactions pursuant to the proposed rule, and does not use complex derivatives transactions, such small entity would not be required to adopt and implement a derivatives risk management program.

2. Form N-PORT and Form N-CEN

Similarly, we do not believe that the interests of investors would be served by exempting funds that are small entities from the proposed disclosure and reporting requirements, or subjecting these funds to different disclosure and reporting requirements than larger funds. We believe that all fund investors, including investors in funds that are small entities, would benefit from disclosure and reporting requirements that would permit them to make investment choices that better match their risk tolerances. We also believe that all fund investors would benefit from enhanced Commission monitoring and oversight of the fund industry, which we anticipate would result from the proposed disclosure and reporting requirements.

G. General Request for Comment

The Commission requests comments regarding this analysis. We request comment on the number of small entities that would be subject to our proposal and whether our proposal would have any effects that have not been discussed. We request that commenters describe the nature of any effects on small entities subject to our proposal and provide empirical data to support the nature and extent of such effects. We also request comment on the estimated compliance burdens of our proposal and how they would affect small entities.

VII. Consideration of Impact on the Economy

For purposes of the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"), the Commission must advise OMB whether a proposed regulation constitutes a "major" rule. Under SBREFA, a rule is considered "major" where, if adopted, it results in or is likely to result in:

- An annual effect on the economy of \$100 million or more;
- A major increase in costs or prices for consumers or individual industries;

or

- Significant adverse effects on competition, investment, or innovation.

We request comment on whether our proposal would be a "major rule" for purposes of SBREFA. We solicit comment and empirical data on:

- The potential effect on the U.S. economy on an annual basis;
- Any potential increase in costs or prices for consumers or individual industries; and
- Any potential effect on competition, investment, or innovation.

Commenters are requested to provide empirical data and other factual support for their views to the extent possible.

VII. Statutory Authority

The Commission is proposing new rule 18f-4 under the authority set forth in sections 6(c), 12(a), 31(a), and 38(a) of the Investment Company Act of 1940 [15 U.S.C. 80a-6(c), 80a-31(a), 80a-12(a), and 80a-38(a)]. The Commission is proposing amendments to proposed Form N-PORT and Form N-CEN under the authority set forth in sections 8, 30, and 38 of the Investment Company Act of 1940 [15 U.S.C. 80a-8, 80a-30, 80a-38].

Text of Rules and Forms

List of Subjects in 17 CFR Parts 270 and 274

Investment companies, Reporting and recordkeeping requirements, Securities.

For the reasons set out in the preamble, title 17, chapter II of the Code of Federal Regulations is proposed to be amended as follows:

PART 270—RULES AND REGULATIONS, INVESTMENT COMPANY ACT OF 1940

- 1. The authority citation for part 270 continues to read, in part, as follows:

Authority: 15 U.S.C. 80a-1 *et seq.*, 80a-34(d), 80a-37, 80a-39, and Pub. L. 111-203, sec. 939A, 124 Stat. 1376 (2010), unless otherwise noted.

* * * * *

- 2. Section § 270.18f-4 is added to read as follows:

§ 270.18f-4 Exemption from the requirements of section 18 and section 61 for certain senior securities transactions.

(a) A registered open-end or closed-end company or business development company (each, including any separate series thereof, a "fund") may enter into derivatives transactions, notwithstanding the requirements of

section 18(a)(1) (15 U.S.C. 80a–18(a)(1)), section 18(c) (15 U.S.C. 80a–18(c)), section 18(f)(1) (15 U.S.C. 80a–18(f)(1)) and section 61 (15 U.S.C. 80a–61) of the Investment Company Act; provided that:

(1) The fund complies with one of the following portfolio limitations such that, immediately after entering into any senior securities transaction:

(i) The aggregate exposure of the fund does not exceed 150% of the value of the fund's net assets; or

(ii) The fund's full portfolio VaR is less than the fund's securities VaR and the aggregate exposure of the fund does not exceed 300% of the value of the fund's net assets.

(2) The fund manages the risks associated with its derivatives transactions by maintaining qualifying coverage assets, identified on the books and records of the fund as specified in paragraph (a)(6)(v) of this section and determined at least once each business day, with a value equal to at least the sum of the fund's aggregate mark-to-market coverage amounts and risk-based coverage amounts.

(3) Except as provided in paragraph (a)(4) of this section, the fund adopts and implements a written derivatives risk management program ("program") that is reasonably designed to assess and manage the risks associated with the fund's derivatives transactions.

(i) *Required program elements.* Each fund required to adopt and implement a program must adopt and implement written policies and procedures reasonably designed to:

(A) Assess the risks associated with the fund's derivatives transactions, including an evaluation of potential leverage, market, counterparty, liquidity, and operational risks, as applicable, and any other risks considered relevant;

(B) Manage the risks associated with the fund's derivatives transactions (including the risks identified in paragraph (a)(3)(i)(A) of this section, as applicable), including by:

(1) Monitoring whether the fund's use of derivatives transactions is consistent with any investment guidelines established by the fund or the fund's investment adviser, the relevant portfolio limitation applicable to the fund under this section, and relevant disclosure to investors; and

(2) Informing persons responsible for portfolio management of the fund or the fund's board of directors, as appropriate, regarding material risks arising from the fund's derivatives transactions;

(C) Reasonably segregate the functions associated with the program from the portfolio management of the fund; and

(D) Periodically review and update the program at least annually, including any models (including 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.

(ii) *Board approval and oversight of the program.* (A) The fund shall obtain initial approval of the program, as well as any material change to the program, from the fund's board of directors, including a majority of directors who are not interested persons of the fund;

(B) The fund's board of directors, including a majority of directors who are not interested persons of the fund, shall review, no less frequently than quarterly, a written report prepared by the person designated under paragraph (a)(3)(i)(C) of this section that describes the adequacy of the fund's program and the effectiveness of its implementation; and

(C) The fund shall designate an employee or officer of the fund or the fund's investment adviser (who may not be a portfolio manager of the fund) responsible for administering the policies and procedures incorporating the elements of paragraphs (a)(3)(i)(A) through (D) of this section, whose designation must be approved by the fund's board of directors, including a majority of the directors who are not interested persons of the fund.

(4) A derivatives risk management program shall not be required if the fund complies, and monitors its compliance, with a portfolio limitation under which:

(i) Immediately after entering into any derivatives transaction the aggregate exposure associated with the fund's derivatives transactions does not exceed 50% of the value of the fund's net assets; and

(ii) The fund does not enter into complex derivatives transactions.

(5) The fund's board of directors (including a majority of the directors who are not interested persons of the fund) has:

(i) Approved the particular portfolio limitation under which the fund will operate pursuant to paragraph (a)(1) of this section and, if applicable, paragraph (a)(4) of this section;

(ii) Approved policies and procedures reasonably designed to provide for the fund's maintenance of qualifying coverage assets, as required under paragraph (a)(2) of this section; and

(iii) If the fund is required to adopt and implement a derivatives risk management program, taken the actions

specified in paragraph (a)(3)(ii) of this section.

(6) The fund maintains:

(i) A written record of each determination made by the fund's board of directors under paragraph (a)(5)(i) of this section with respect to the portfolio limitation applicable to the fund for a period of not less than five years (the first two years in an easily accessible place) following each determination;

(ii) A written copy of the policies and procedures approved by the board of directors under paragraph (a)(5)(ii) of this section that are in effect, or at any time within the past five years were in effect, in an easily accessible place; and

(iii) If the fund is required to adopt and implement a derivatives risk management program:

(A) A written copy of the policies and procedures adopted by the fund under paragraph (a)(3) of this section that are in effect, or at any time within the past five years were in effect, in an easily accessible place;

(B) Copies of any materials provided to the board of directors in connection with its approval of the derivatives risk management program, including any material changes to the program, and any written reports provided to the board of directors relating to the program, for at least five years after the end of the fiscal year in which the documents were provided, the first two years in an easily accessible place; and

(C) Records documenting the periodic reviews and updates conducted in accordance with paragraph (a)(3)(i)(D) of this section (including any updates to any VaR calculation models used by the fund and the basis for any material changes thereto), for a period of not less than five years (the first two years in an easily accessible place) following each review or update.

(iv) A written record demonstrating that immediately after the fund entered into any senior securities transaction, the fund complied with the portfolio limitation applicable to the fund immediately after entering into the senior securities transaction, reflecting the fund's aggregate exposure, the value of the fund's net assets and, if applicable, the fund's full portfolio VaR and its securities VaR, for a period of not less than five years (the first two years in an easily accessible place) following each senior securities transaction entered into by the fund.

(v) A written record reflecting the mark-to-market coverage amount and the risk-based coverage amount for each derivatives transaction entered into by the fund and identifying the qualifying coverage assets maintained by the fund with respect to the fund's aggregate

mark-to-market and risk-based coverage amounts, as determined by the fund at least once each business day, for a period of not less than five years (the first two years in an easily accessible place).

(b) A fund may enter into financial commitment transactions, notwithstanding the requirements of section 18(a)(1) (15 U.S.C. 80a–18(a)(1)), section 18(c) (15 U.S.C. 80a–18(c)), section 18(f)(1) (15 U.S.C. 80a–18(f)(1)) and section 61 (15 U.S.C. 80a–61) of the Investment Company Act; provided that:

(1) The fund maintains qualifying coverage assets, identified on the books and records of the fund as specified in paragraph (b)(3)(ii) of this section and determined at least once each business day, with a value equal to at least the fund's aggregate financial commitment obligations.

(2) The fund's board of directors (including a majority of the directors who are not interested persons of the fund) has approved policies and procedures reasonably designed to provide for the fund's maintenance of qualifying coverage assets, as required under paragraph (b)(1) of this section.

(3) The fund maintains:

(i) A written copy of the policies and procedures approved by the board of directors under paragraph (b)(2) of this section that are in effect, or at any time within the past five years were in effect, in an easily accessible place; and

(ii) A written record reflecting the amount of each financial commitment obligation associated with each financial commitment transaction entered into by the fund and identifying the qualifying coverage assets maintained by the fund with respect to each financial commitment obligation, as determined by the fund at least once each business day, for a period of not less than five years (the first two years in an easily accessible place).

(c) *Definitions.* (1) *Complex derivatives transaction* means 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.

(2) *Derivatives transaction* means any swap, security-based swap, futures contract, forward contract, option, any combination of the foregoing, or any similar instrument ("derivatives instrument") under which the fund is or

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.

(3) *Exposure* means the sum of the following amounts, determined immediately after the fund enters into any senior securities transaction:

(i) The aggregate notional amounts of the fund's derivatives transactions, provided that a fund may net any directly offsetting derivatives transactions that are the same type of instrument and have the same underlying reference asset, maturity and other material terms;

(ii) The aggregate financial commitment obligations of the fund; and

(iii) The aggregate indebtedness (and with respect to any closed-end fund or business development company, involuntary liquidation preference) with respect to any senior securities transaction entered into by the fund pursuant to section 18 (15 U.S.C. 80a–18) or 61 (15 U.S.C. 80a–61) of the Investment Company Act without regard to the exemption provided by this section.

(4) *Financial commitment transaction* means 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).

(5) *Financial commitment obligation* means the amount of cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under a financial commitment transaction. Where the fund is conditionally or unconditionally obligated to deliver a particular asset, the financial commitment obligation shall be the value of the asset, determined at least once each business day.

(6) *Mark-to-market coverage amount* means, for each derivatives transaction, at any time of determination under this section, the amount that would be payable by the fund if the fund were to exit the derivatives transaction at such time; provided that:

(i) If the fund has entered into a netting agreement that allows the fund to net its payment obligations with respect to multiple derivatives transactions, the mark-to-market

coverage amount for those derivatives transactions may be calculated as the net amount that would be payable by the fund, if any, with respect to all derivatives transactions covered by the netting agreement; and

(ii) The fund's mark-to-market coverage amount for a derivatives transaction may be reduced by the value of assets that represent variation margin or collateral for the amounts payable referred to in paragraph (c)(6) of this section with respect to the derivatives transaction.

(7) *Notional amount* means, with respect to any derivatives transaction:

(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; and

(iii) Notwithstanding paragraphs (c)(7)(i) and (ii) of this section:

(A) For any derivatives transaction that provides a return based on the leveraged performance of a reference asset, the notional amount shall be multiplied by the leverage factor;

(B) For any derivatives transaction for which the reference asset is a managed account or entity formed or operated primarily for the purpose of investing in or trading derivatives transactions, or an index that reflects the performance of such a managed account or entity, the notional amount shall be determined by reference to the fund's pro rata share of the notional amounts of the derivatives transactions of such account or entity; and

(C) For any complex derivatives transaction, the notional amount shall be an amount equal to the aggregate notional amount of derivatives instruments, excluding other complex derivatives transactions, reasonably estimated to offset substantially all of the market risk of the complex derivatives transaction.

(8) *Qualifying coverage assets* means assets of the fund described in paragraphs (c)(8)(i) through (iii) of this section, provided that the total amount of a fund's qualifying coverage assets shall not exceed the fund's net assets, and that assets of the fund maintained as qualifying coverage assets shall not be used to cover both a derivatives transaction and a financial commitment transaction:

(i) Cash and cash equivalents;

(ii) With respect to any derivatives transaction or financial commitment transaction under which the fund may satisfy its obligations under the

transaction by delivering a particular asset, that particular asset; and

(iii) With respect to any financial commitment obligation, assets that 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 such obligation or that have been pledged with respect to the financial commitment obligation and can be expected to satisfy such obligation, determined in accordance with policies and procedures approved by the fund's board of directors as provided in paragraph (b)(2) of this section.

(9) *Risk-based coverage amount* means, for each derivatives transaction, an amount, in addition to the derivative transaction's mark-to-market coverage amount, that represents, at any time of determination under this section, a reasonable estimate of the potential amount payable by the fund if the fund were to exit the derivatives transaction under stressed conditions, determined in accordance with policies and procedures (which must take into account, as relevant, the structure, terms and characteristics of the derivatives transaction and the underlying reference asset) approved by the fund's board of directors as provided in paragraph (a)(5) of this section; provided that:

(i) The risk-based coverage amount may be determined on a net basis for derivatives transactions that are covered by a netting agreement that allows the fund to net its payment obligations with respect to multiple derivatives transactions, in accordance with the terms of the netting agreement; and

(ii) The fund's risk-based coverage amount for a derivatives transaction may be reduced by the value of assets that represent initial margin or collateral for the potential amounts payable referred to in paragraph (c)(9) of this section with respect to the derivatives transaction.

(10) *Senior securities transaction* means any derivatives transaction, financial commitment transaction, or any transaction involving a senior security entered into by the fund pursuant to section 18 (15 U.S.C. 80a–18) or 61 (15 U.S.C. 80a–61) of the Act without regard to the exemption provided by this section.

(11) *Value-at-risk* or *VaR* means 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 interval, provided that:

(i) For purposes of the portfolio limitation described in (a)(1)(ii) of this section:

(A) A fund's "*securities VaR*" means the VaR of the fund's portfolio of securities and other investments, but excluding any derivatives transactions;

(B) A fund's "*full portfolio VaR*" means the VaR of the fund's entire portfolio, including securities, other investments and derivatives transactions; and

(C) A fund must apply its VaR model consistently when calculating the fund's securities VaR and the fund's full portfolio VaR.

(ii) Any VaR model used by a fund for purposes of determining the fund's securities VaR and full portfolio VaR must:

(A) Take into account and incorporate all significant, identifiable market risk factors associated with a fund's investments, including, as applicable:

(1) Equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk;

(2) Material risks arising from the nonlinear price characteristics of a fund's investments, including options and positions with embedded optionality; and

(3) The sensitivity of the market value of the fund's investments to changes in volatility;

(B) Use a 99% confidence level and a time horizon of not less than 10 and not more than 20 trading days; and

(C) If using historical simulation, include at least three years of historical market data.

PART 274—FORMS PRESCRIBED UNDER THE INVESTMENT COMPANY ACT OF 1940

■ 3. The authority citation for part 274 continues to read, in part, as follows:

Authority: 15 U.S.C. 77f, 77g, 77h, 77j, 77s, 78c(b), 78l, 78m, 78n, 78o(d), 80a–8, 80a–24, 80a–26, 80a–29, and Pub. L. 111–203, sec. 939A, 124 Stat. 1376 (2010), unless otherwise noted.

* * * * *

■ 4. Further amend Form N–CEN (referenced in 274.101) as proposed at 80 FR 33699, June 12, 2015, and further amended at 80 FR 62387, October 15, 2015, by, in Part C, adding paragraphs k and l to Item 31 to read as follows:

§ 274.101 Form N–CEN, annual report of registered investment companies.

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Part C. Additional Questions for Management Investment Companies

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Item 31. * * *

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k. Rule 18f–4(a)(1)(i) (17 CFR 270.18f–4(a)(1)(i)): _____

l. Rule 18f–4(a)(1)(ii) (17 CFR 270.18f–4(a)(1)(ii)): _____

* * * * *

■ 5. Amend Form N–PORT (referenced in 274.150), as proposed at 80 FR 33712, June 12, 2015, and further amended at 80 FR 62387, October 15, 2015, by:

■ a. In Part C, revising Item C. 11.c.viii; and

■ b. In Part C, adding Item C.11.c.ix.

The revision and addition read as follows:

§ 274.150 Form N–PORT, Monthly portfolio holdings report.

* * * * *

Part C: Schedule of Portfolio Investments

* * * * *

Item C.11. * * *

c. * * *

viii. For funds that are required to implement a risk management program under rule 18f–4(a)(3) under the Investment Company Act, provide:

1. Gamma.

2. Vega.

* * * * *

ix. Unrealized appreciation or depreciation.

* * * * *

By the Commission.

Dated: December 11, 2015.

Brent J. Fields,
Secretary.

[FR Doc. 2015–31704 Filed 12–24–15; 8:45 am]

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