Analysis of the SEC’s Final Rulemaking to Regulate the Use of Derivatives and Other Transactions by Registered Investment Companies and BDCs

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The U.S. Securities and Exchange Commission on October 28, 2020 approved by a 3-2 vote a new rule and rule and form amendments related to the use of derivatives and certain other transactions by registered investment companies (i.e., open-end funds other than money market funds; closed-end funds; and exchange-traded funds) and business development companies (BDCs) (collectively, funds).¹

These regulatory actions include: (1) new Rule 18f-4 under the Investment Company Act of 1940 (the Final Rule); (2) a related rule amendment under the 1940 Act pertaining to leveraged/inverse exchange-traded funds (ETFs); (3) related fund reporting rule and form and registration statement form amendments; and (4) a conforming amendment to Rule 22e-4 under the 1940 Act (collectively, the Final Rulemaking).

The Final Rulemaking represents the most significant change to the way the Commission regulates funds’ use of derivatives and other transactions and the obligations of fund boards with respect to such transactions since the Commission’s foundational Release 10666 was published in 1979.² The Final Rulemaking was proposed in November 2019³ and was a re-proposal of a 2015 Commission rulemaking effort.⁴ The 2015 proposed rulemaking

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¹ Use of Derivatives by Registered Investment Companies and Business Development Companies (Adopting Release), SEC Rel. No. IC-34078. A copy of the Commission’s press release including a “fact sheet” is available on the Commission’s website.


³ Use of Derivatives by Registered Investment Companies and Business Development Companies; Required Due Diligence by Broker-Dealers and Registered Investment Advisers Regarding Retail Customers’ Transactions in Certain Leveraged/Inverse Investment Vehicles (Proposing Release and 2019 Proposal), 85 Fed. Reg. 4446 (Jan. 24, 2020). The 2019 Proposal, which is also referred to herein as the Proposed Rule, was approved for publication by the Commission on November 25, 2019 and subsequently published in the Federal Register on January 24, 2020.

⁴ For further information regarding the 2015 proposed rulemaking, which is referred to herein as the 2015 Proposed Rule, please refer to Dechert OnPoint, SEC Proposes Significant New Restrictions on the Use of Derivatives and Other Transactions by Registered Funds and BDCs. For further information regarding the industry response to the 2015 proposed rulemaking, please refer to Industry Response to SEC Derivatives and Senior Securities Rule Proposal, The Investment Lawyer, Vol. 23, No. 6 (June 2016).
was the first significant Commission or staff action relating to funds’ use of derivatives and certain other transactions that create leverage since the Commission’s issuance of a Concept Release in 2011.5

The Final Rulemaking includes a number of significant changes from the 2019 Proposal. The Adopting Release highlights that many of the changes from the 2019 Proposal were made in response to industry comments, and that certain changes take into account in particular commenters’ experiences in managing funds’ derivatives risk through the period of market volatility following the 2020 outbreak of the COVID-19 coronavirus across the world.

In light of the Final Rule, and consistent with the approach identified under the Proposed Rule, the Commission is rescinding Release 10666 and the related “asset segregation” requirements articulated in that release, after an 18-month transition period to allow funds to prepare to come into compliance with the Final Rulemaking following its effective date, which will be 60 days after its publication in the Federal Register. The Commission staff also will withdraw related no-action letters and other guidance or portions thereof to the extent moot, superseded or otherwise inconsistent with the Final Rule. As a result, any fund will need to comply with the conditions set forth in the Final Rule in order to engage in the applicable transactions.

**Background**

**1940 Act Restrictions on Senior Securities and Current Commission and Staff Guidance**

The 1940 Act restricts the ability of funds to issue senior securities. A “senior security,” as defined under Section 18(g) of the 1940 Act, includes “any bond, debenture, note, or similar obligation or instrument constituting a security and evidencing indebtedness, and any stock of a class having priority over any other class as to distribution of assets or payment of dividends.” Sections 18(f)(1) and 18(a)(1)-(2) of the 1940 Act restrict the ability of open-end funds and closed-end funds, respectively, to issue such securities.6 With certain exceptions, BDCs are subject to the limitations of Section 18(a) to the same extent as closed-end funds.7

The 1940 Act’s restrictions on senior securities included in Section 18 stem from Congressional concerns at the time of its adoption about the risk to junior security holders resulting from: (1) “excessive” borrowing by funds and funds

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5 Use of Derivatives by Investment Companies under the Investment Company Act of 1940, SEC Rel. No. IC-29776 (Aug. 31, 2011) (Concept Release). The Concept Release addressed compliance issues arising under numerous other aspects of the 1940 Act with respect to derivatives. Notably, the Final Rule addresses only compliance with Section 18 of the 1940 Act, and does not address other issues that arise under the 1940 Act with respect to the use of derivatives, such as the appropriate treatment of derivatives under the provisions of the 1940 Act governing issuer diversification, industry concentration and investments in securities-related issuers.

6 Section 18(f)(1) prohibits an open-end fund from issuing or selling any senior security; however, the fund may borrow from a bank provided that immediately after any such borrowing there is asset coverage of at least 300% for all of the fund’s borrowings. Section 18(a)(1) prohibits a closed-end fund from issuing or selling any senior security that “represents an indebtedness” unless the fund has at least 300% asset coverage for all borrowings, and Section 18(a)(2) prevents a closed-end fund from issuing a senior security that is a class of stock unless the fund has at least 200% asset coverage for such stock.

7 See Section 61(a). In contrast to closed-end funds, the asset coverage requirements applicable to senior securities issued by BDCs are 200% (or 150% in certain circumstances) rather than 300%, regardless of whether the senior security is represented by indebtedness or preferred stock.
issuing “excessive amounts of senior securities” (the “undue speculation concern”); and (2) funds operating “without adequate assets or reserves” (the “asset sufficiency concern”), among other concerns.8

The Commission and its staff historically have taken positions that investments in many different types of derivatives (as well as other transactions) that represent a “contractual obligation to pay in the future for consideration presently received,” whether for speculative purposes or for leveraging, fall within the “functional meaning” of the term “evidence of indebtedness” for purposes of Section 18, and therefore potentially are senior securities.9

In Release 10666, the Commission took the position that a fund could engage in certain trading practices that may involve the issuance of senior securities, if the fund maintains a segregated account of liquid assets to “cover” the transaction. Since then, the staff of the Commission’s Division of Investment Management has provided guidance through no-action relief that allowed funds to cover derivatives transactions in a variety of ways, including through the use of offsetting transactions. Various industry practices based on Release 10666 and the Commission staff guidance have developed further over time.10

**Commission Views on Current Practices**

The Adopting Release states that the Commission continues to view trading practices that impose a contractual obligation on a fund to pay or deliver assets in the future to a counterparty as falling within the functional meaning of the term “evidence of indebtedness,” and therefore the Commission views these transactions as involving “the issuance of a senior security for purposes of section 18.”

In the Adopting Release, the Commission highlights that funds have developed practices for covering derivatives transactions that are based “at least in part” on staff guidance and no-action letters. The Adopting Release discusses how funds’ asset segregation practices vary depending upon the type of derivatives transaction. Moreover, the Adopting Release notes that fund practices also vary with respect to the types of assets set aside for coverage. The Adopting Release expresses the Commission’s view that the practices regarding derivatives currently used by funds do not address the undue speculation and asset sufficiency concerns underlying Section 18, and “may involve risks that can result in significant losses to a fund.”

In light of these concerns, the Adopting Release states that the Final Rule is intended to: provide an “updated, comprehensive approach to the regulation of funds’ use of derivatives”; limit the risks posed by funds’ derivatives use by creating a board oversight and compliance framework; and establish an outside limit on fund leverage risk.

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8 See Provisions Of The Proposed Bill Related To Capital Structure (Sections 18, 19(B), And 21(C)), Introduced by L.M.C Smith, Associate Counsel, Investment Trust Study, Securities and Exchange Commission, Hearings on S.3580 Before a Subcommittee of the Senate Committee on Banking and Currency, 76th Congress, 3rd session (1940); Release 10666 at n. 8. See also Sections 1(b)(3), (7) and (8) of the 1940 Act.

9 See, e.g., Release 10666 at text accompanying n.14 (regarding reverse repurchase agreements, firm commitment agreements, and standby commitment agreements); see also Dreyfus Strategic Investing and Dreyfus Strategic Income, SEC No-Action Letter (June 22, 1987) (Dreyfus) (regarding short selling, futures, certain types of options, forward currency contracts).

10 See, e.g., Dreyfus (permitting the use of offsetting positions); Merrill Lynch Asset Management, L.P., SEC No-Action Letter (July 2, 1996) (Merrill Lynch) (permitting the use of “any asset, including equity securities and non-investment grade debt ... so long as the asset is liquid and marked to market daily” when covering derivatives transactions).
Introduction to the Framework under the Final Rulemaking

Derivatives Transactions

The Final Rule provides that, if a fund satisfies the conditions described below, the fund may enter into derivatives transactions (defined below), notwithstanding the requirements of Sections 18(a)(1), 18(c), 18(f)(1) and 61 of the 1940 Act. Derivatives transactions entered into in compliance with the Final Rule will not be considered for purposes of computing asset coverage, as defined in Section 18(h) of the 1940 Act.

A fund transacting in derivatives must comply with the following requirements, unless the fund is a limited derivatives user (as discussed below):

- **Derivatives Risk Management Program.** The fund must adopt and implement a written derivatives risk management program (Program), which includes policies and procedures that are reasonably designed to manage the fund’s derivatives risks and to reasonably segregate the functions associated with the Program from the portfolio management of the fund. The Program must include specific elements, which are described below.

- **Board Oversight and Reporting.** The fund’s board, including a majority of directors/trustees who are not interested persons of the fund, must approve the designation of a “derivatives risk manager,” which is discussed below. The derivatives risk manager must provide a written report to the board on or before implementation of the Program, and at least annually thereafter, regarding certain matters relating to the Program. The derivatives risk manager also will need to provide to the board regular written reports, at a frequency determined by the board, regarding the derivatives risk manager’s analysis of “exceedances” of “risk guidelines,” as well as the results of certain stress testing and backtesting required under the Program.

- **Limit on Fund Leverage Risk.** The fund must comply with an outer limit on fund leverage risk based on value-at-risk (VaR). Under this requirement, the fund must comply with a “relative VaR test” unless the fund’s derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for this purpose, taking into account the fund’s investments, investment objectives, and strategy. A fund that does not apply the relative VaR test must comply with an “absolute VaR test.” Under the relative VaR test, the fund’s VaR may not exceed 200% of the VaR of a designated reference portfolio (250%, for certain closed-end funds). Under the absolute VaR test, a fund’s VaR may not exceed 20% of the value of the fund’s net assets (25% for certain closed-end funds). The fund will need to determine its compliance with the applicable VaR test at least once each business day; additional requirements will be triggered if the fund determines that it is not in compliance with the applicable VaR test.

Alternatively, a fund that enters into derivatives transactions is not required to adopt a Program or comply with the board oversight and reporting requirements or the limit on fund leverage risk, if the fund: (1) adopts and implements policies and procedures reasonably designed to manage the fund’s derivatives risks; and (2) limits its derivatives exposure to 10% of its net assets. For purposes of the 10% limit, derivatives exposure excludes certain currency and interest rate derivatives used for specified hedging purposes. Additional requirements will be triggered if a fund determines that it is not in compliance with the 10% limit. This aspect of the Final Rule is referred to as the “limited derivatives user exception.”
Reverse Repurchase Agreements, Similar Financing Transactions and Unfunded Commitments

The Final Rule provides that a fund may enter into reverse repurchase agreements and similar financing transactions notwithstanding the requirements of Sections 18(a), 18(c) and 18(f)(1) of the 1940 Act, subject to certain requirements. To enter into reverse repurchase agreements and similar financing transactions, the fund must: (1) (a) comply with the asset coverage requirements under Section 18; and (b) combine the aggregate amount of indebtedness associated with such transactions with the aggregate amount of any other senior securities representing indebtedness when calculating the asset coverage ratio; or (2) treat all such agreements and transactions as derivatives transactions for all purposes under the Final Rule.

The Final Rule provides that a fund may enter into unfunded commitment agreements notwithstanding the requirements of Sections 18(a), 18(c), 18(f)(1) and 61 of the 1940 Act, subject to certain requirements. To enter into an unfunded commitment agreement, the fund must reasonably believe, at the time it enters into such agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to all of its unfunded commitment agreements as they come due.

Leveraged/Inverse Funds

A leveraged/inverse fund (as defined below) generally is subject to all of the provisions of the Final Rule, including the relative VaR test. However, the Final Rule includes an exception from the limit on fund leverage risk for leveraged/inverse funds that were in operation as of October 28, 2020 and seek an investment result above 200% of the return (or inverse of the return) of an underlying index, provided such a fund satisfies certain additional conditions.

Other Requirements

The Commission adopted amendments that would permit leveraged/inverse funds to operate as ETFs pursuant to Rule 6c-11 under the 1940 Act. The Commission also is rescinding the exemptive orders previously issued to sponsors of leveraged/inverse ETFs upon which those funds currently rely. In addition, the Commission adopted conforming amendments to Rule 22e-4 under the 1940 Act as part of the Final Rulemaking.

The Commission also adopted related recordkeeping requirements and amendments to Form N-PORT, Form N-LIQUID (which will be re-titled as Form N-RN), and Form N-CEN, as well as certain related reporting requirements under the 1940 Act, “to enhance the Commission’s ability to oversee funds’ use of and compliance with the proposed rules effectively, and for the Commission and the public to have greater insight into the impact that funds’ use of derivatives would have on their portfolios.”

Repeal of Existing Commission Guidance

As noted above, the Commission is rescinding Release 10666, and the Commission’s staff will withdraw certain related no-action letters and guidance in conjunction with the adoption of the Final Rule.

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The key components of the Final Rulemaking are discussed in further detail below. As appropriate, the text of each of the following sections sets forth a description of the Final Rulemaking, and Dechert's analysis of and observations regarding the Commission’s guidance provided in the Adopting Release are set forth in bullet points following the description of the Final Rulemaking.
Scope of the Final Rule

Funds Subject to the Final Rule

The Final Rule applies to registered open-end and closed-end investment companies and BDCs, including any separate series thereof, but does not apply to any registered open-end investment company that is regulated as a money market fund under Rule 2a-7 under the 1940 Act (with a limited exception for certain when-issued, forward-settling and non-standard settlement cycle securities transactions, discussed below). In addition, unit investment trusts (UITs) are not permitted to rely on the Final Rule.

Fund Transactions Subject to the Final Rule

The Final Rule defines as a "derivatives transaction":

1. 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, whether as margin or settlement payment or otherwise;

2. Any short sale borrowing; and

3. Any reverse repurchase agreement or similar financing transactions (each as defined below), if a fund relies on Rule 18f-4(d)(1)(ii) and therefore is required to treat its reverse repurchase agreements and similar financing transactions as derivatives transactions (as discussed below).

Separately, the Final Rule provides that a fund or a money market fund may invest in a security on a when-issued or forward-settling basis, or with a non-standard settlement cycle, and the transaction will be deemed not to involve a senior security, provided that: (i) the fund intends to physically settle the transaction; and (ii) the transaction will settle within 35 days of its trade date.

- The treatment of such when-issued, forward-settling and non-standard settlement cycle securities transactions represents a significant deviation from the 2019 Proposed Rule, which might not have permitted certain money market funds to continue investing in these products.

- The Adopting Release notes that this provision will allow money market funds to continue to be able to invest in when-issued Treasury securities "notwithstanding that these investments trade on a forward basis involving a temporary delay between the transaction’s trade date and settlement date."

11 Rule 18f-4(a), definition of “Fund.”
12 Rule 18f-4(a), definition of “Derivatives transaction.”
13 Rule 18f-4(f).
Derivatives Risk Management Program

The Final Rule requires that a fund (other than a limited derivatives user) that enters into derivatives transactions adopt and implement a written Program, which must include policies and procedures that are reasonably designed to manage the fund’s derivatives risks and to reasonably segregate the functions associated with the Program from the portfolio management of the fund.14

- The Program requirement was adopted largely as it was proposed. A chart is included in Appendix A, which compares the required Program elements and related board oversight and reporting requirements with corresponding requirements under: (1) the 2015 Proposed Rule; (2) the 2019 Proposed Rule; and (3) the liquidity risk management program required by Rule 22e-4 under the 1940 Act. That chart shows many commonalities among the sets of requirements, as well as certain differences.

- The Final Rule does not require a fund’s board to approve its Program, representing a departure from the liquidity risk management program framework under Rule 22e-4. The Adopting Release highlights that the board instead “will engage with the [Program] through its appointment of the derivatives risk manager, who is responsible for administering the [Program] and reporting to the board on the [Program’s] implementation and effectiveness.”

- The Adopting Release notes that the Program requirement institutes a standardized risk management framework for funds that engage in more than a limited amount of derivatives transactions, while allowing principles-based tailoring to the fund’s particular risks. The Adopting Release further states that the Program requirement is “drawn from existing fund best practices” and that the Commission believes “it will enhance practices for funds that have not already implemented a derivatives risk management program, while building off practices of funds that already have one in place.”

- The Adopting Release states that a fund’s Program “should take into account the way the fund uses derivatives, whether to increase investment exposures in ways that increase portfolio risks or, conversely, to reduce portfolio risks or facilitate efficient portfolio management.” Accordingly, the Program requirement is designed to result in a Program with elements that are tailored to the particular types of derivatives that the fund uses and their related risks, as well as how those derivatives impact the fund’s investment portfolio and strategy.

Program Administration – The Derivatives Risk Manager

Eligibility to Serve as a Derivatives Risk Manager and Reliance on Assistance

The Final Rule requires that the fund’s derivatives risk manager be an officer or officers of the fund’s investment adviser and must be responsible for administering the fund’s Program and related policies and procedures. The Final Rule provides that the derivatives risk manager may not be the fund’s portfolio manager, if a single officer serves in that position, and that the derivatives risk manager may not have a majority composed of portfolio managers, if multiple officers serve as derivatives risk manager.15

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14 Rule 18f-4(c)(1).

15 Rule 18f-4(a), definition of “Derivatives risk manager.”
The person(s) serving in the role of the derivatives risk manager must have sufficient authority within the investment adviser and be able to carry out their responsibilities under the Final Rule. Accordingly, the Adopting Release states that the Commission believes that an officer of the fund’s investment adviser “would be more likely to have the requisite level of seniority to be effective than a non-officer employee or third-party service provider.”

The Adopting Release states that the Commission recognizes that investment advisers “may have personnel who, although not designated as ‘officers’ in accordance with the adviser’s corporate bylaws, have a comparable degree of seniority and authority within the organization” and that, if such person(s) “otherwise met the qualifications for being a derivatives risk manager … such a person(s) could be treated as an officer, for purposes of the [Final Rule], and serve as a fund’s derivatives risk manager if approved by the fund’s board.”

The Adopting Release notes further that the Commission recognizes that “employees of the adviser may have relevant derivatives risk management experience that would be helpful to the derivatives risk manager in administering the [Program]” and, while non-officer “employees may not serve as the derivatives risk manager, they may provide support to the person(s) serving in the role” and also “may carry out derivatives risk management activities.”

The Final Rule does not permit a fund’s investment adviser to serve as the derivatives risk manager, a departure from the liquidity risk management program administrator requirements under Rule 22d-4 (but consistent with the Proposed Rule). The Adopting Release notes that the Commission continues to believe that “requiring the derivatives risk manager to be one or more natural persons, specifically approved by the board, will promote independence and objectivity in this role” and the derivatives risk manager’s accountability to the board.16

The Final Rule does not require that the derivatives risk manager be responsible for carrying out all activities associated with the fund’s Program. The Adopting Release states that the Commission does “not anticipate that the person necessarily would carry out all such activities.” Rather, the derivatives risk manager “could seek inputs that could help inform risk management from third parties that are separate from the adviser, such as third-party service providers, and may reasonably rely on such inputs” and the derivatives risk manager “may benefit from the expertise and assistance of third-party service providers even though the service provider (or its employees) may not itself serve as the fund’s derivatives risk manager.”

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16 In response to concerns that, if an individual were to serve in the role, he or she could face personal liability for his or her administration of the Program, the Adopting Release notes that the Final Rule “does not change the standards that apply in determining whether a person is liable for aiding or abetting or causing a violation of the federal securities laws,” and that the Commission recognizes that “risk management necessarily involves judgment” and loss suffered by a fund “does not, itself, mean that a fund’s derivatives risk manager acted inappropriately.”
Required Experience for a Derivatives Risk Manager

The Final Rule requires a derivatives risk manager to have “relevant experience regarding the management of derivatives risk.”  

- The Adopting Release states that requiring a fund’s derivatives risk manager to have relevant experience regarding the management of derivatives risk reflects the “potential complex and unique risks that derivatives can pose to funds and promote[s] the selection of a derivatives risk manager who is well-positioned to manage these risks.” The Adopting Release notes that “rather than the rule taking a more prescriptive approach in identifying a specific amount or type of experience that the derivatives risk manager must have,” requiring the derivatives risk manager to have “relevant experience” should “provide flexibility such that the person(s) serving in this role may have experience that is relevant in light of the derivatives risks unique to the fund.” To that end, the Adopting Release notes that the Commission does not believe it is practical to detail in the rule “the specific experience a derivatives risk manager should hold.” Instead, the Commission recognizes that “different funds may appropriately seek out different types of derivatives risk experience from their respective derivatives risk managers, depending on the funds’ particular circumstances.”

Reasonable Segregation of Program Administration from Portfolio Management

As noted above, the Final Rule requires that the policies and procedures included in the Program be “reasonably designed” to “reasonably segregate” the Program’s functions from a fund’s portfolio management function. As also noted above, the Final Rule limits the ability for portfolio managers to serve as a derivatives risk manager.

- The Adopting Release notes that “[s]eparation of the derivatives risk management function and the portfolio management function creates important checks and balances,” and this requirement is designed to “enhance the independence of the derivatives risk manager and other risk management personnel” by promoting “objective and independent identification, assessment, and management of the risks associated with derivatives use.”

- According to the Adopting Release, incentives of a fund’s portfolio management personnel may not always be consistent with the restrictions a Program would impose due to the fact that portfolio managers’ compensation may be based, in part, on returns of the fund. Accordingly, the Adopting Release states that separating these functions “should help mitigate the possibility that these competing incentives diminish the [Program’s] effectiveness.”

- The Adopting Release provides that a variety of methods (including independent reporting chains, oversight arrangements, or separate monitoring systems and personnel) may be used to establish separation of functions.

- Notably, the Adopting Release states that “the reasonable segregation requirement is not meant to indicate that the derivatives risk manager and portfolio management must be subject to a communications ‘firewall.’” Rather, the Adopting Release states that the Commission recognizes “the important perspective and insight regarding the fund’s use of derivatives that the portfolio manager can provide and generally understand[s]”

17 Rule 18f-4(a), definition of “Derivatives risk manager.”

18 Rule 18f-4(c)(1).
that the fund’s derivatives risk manager would work with the fund’s portfolio management in implementing the [Program] requirement.”

- The Adopting Release notes that, while the Commission understands that smaller funds may have more limited employee resources, which may make it more difficult to segregate the portfolio management and derivatives risk management functions, the Commission continues to believe that “segregation of these functions is important and funds may need to hire additional personnel.”

**Program Administration in the Context of Sub-Advised Funds**

- In response to comments on the Proposed Rule, the Commission provided clarification about the administration of a fund’s Program for sub-advised funds, and the Adopting Release states that the Final Rule “provides flexibility for funds to involve sub-advisers in derivatives risk management.” Specifically, the Adopting Release notes that officers of both the fund’s primary adviser and sub-adviser(s) are permitted to be members of the “group of individuals” that could serve as a fund’s derivatives risk manager, and for a fund in which a sub-adviser manages the entirety of the fund’s portfolio (as opposed to a portion, or “sleeve,” of the fund’s assets), the officer(s) of a sub-adviser alone also could serve as a fund’s derivatives risk manager, if approved by the fund’s board.

- In addition, under the Final Rule and subject to appropriate oversight, a fund’s derivatives risk manager may delegate to a sub-adviser “specific derivatives risk management activities that are not specifically assigned to the derivatives risk manager in the [Final Rule],” and may “reasonably rely on information provided by sub-advisers in fulfilling his or her responsibilities.” The Adopting Release highlights, however, that the fund “retains ultimate responsibility” for compliance with the Final Rule, and the derivatives risk manager remains responsible for the reporting obligations to the board, as well as for the administration of the Program.19

- Importantly, the Adopting Release states that delegation to a sub-adviser of certain portfolio-level elements of the Program (e.g., stress testing) would not be consistent with a fund’s obligations under the Final Rule, though sub-advisers may be appropriately positioned to assist the derivatives risk manager by providing certain information at a more granular level.20

**Program Elements**

A fund’s Program is required to include the following elements: (1) risk identification and assessment; (2) risk guidelines; (3) stress testing; (4) backtesting; (5) internal reporting and escalation; and (6) periodic review of the Program.21 Each required Program element is discussed below.

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19 Accordingly, the Adopting Release notes that where risk management activities are delegated to a sub-adviser, the fund’s policies and procedures generally should address the oversight of any delegated activities, including the scope of and conditions on activities delegated to a sub-adviser(s) and oversight of the sub-adviser(s), and that the same considerations would apply with respect to any sub-delegates.

20 The Adopting Release notes that examples of these areas include risk identification, risk assessment, and monitoring the fund’s risk guidelines established under the Program.

21 Rule 18f-4(c).
Risk Identification and Assessment

This element requires that the Program provide for the identification and assessment of the fund’s derivatives risks, taking into account the fund’s derivatives transactions and other investments.22

- The Adopting Release states that the Commission continues to believe that “an appropriate assessment of derivatives risks generally involves assessing how a fund’s derivatives may interact with the fund’s other investments or whether the fund’s derivatives have the effect of helping the fund manage risks.” Such a holistic assessment better positions a fund to implement a Program that does not over- or understate the fund’s derivatives risks.

In addition to “any other risks” that a fund’s derivatives risk manager deems material, the Final Rule requires that the fund’s exposure to the following derivatives risks – which the Commission believes are “common to most derivatives transactions” – be specifically identified and managed:

1. **Leverage risk**: generally refers to the risk that derivatives transactions can magnify a fund’s gains and losses;

2. **Market risk**: generally refers to risk from potential adverse market movements in relation to a fund’s derivatives positions, or the risk that markets could experience a change in volatility that adversely impacts fund returns and a fund’s obligations and exposures;

3. **Counterparty risk**: generally refers to the risk that a 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 concentrated exposure to such a counterparty;

4. **Liquidity risk**: generally refers to risk involving the liquidity demands that derivatives can create to make payments of margin, collateral, or settlement payments to counterparties;23

5. **Operational risk**: generally refers to risk related to potential operational issues (including documentation issues, settlement issues, systems failures, inadequate controls, and human error); and

6. **Legal risk**: generally refers to insufficient documentation, insufficient capacity or authority of the counterparty, or legality or enforceability of a contract, which the Adopting Release generally identifies as applicable to OTC derivatives.

The Adopting Release highlights that the Final Rule “does not limit a fund’s identification and assessment of derivatives risks to only those specified in the [Final Rule].” Rather, the Adopting Release states that “[s]ome derivatives transactions could pose certain idiosyncratic risks,” and “[t]o the extent the derivatives risk manager considers any such idiosyncratic risk to be material, that risk would be a ‘derivatives risk’ for purposes of the [Final Rule].”

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22 Rule 18f-4(c)(1)(i).

23 Notably, the Adopting Release’s discussion of liquidity risk does not refer to the liquidity status of the derivatives transaction as a fund investment.
Risk Guidelines

This element requires that the Program provide for the establishment, maintenance and enforcement of investment, risk management, or related guidelines that provide for quantitative or otherwise measurable criteria, metrics or thresholds of the fund’s derivatives risks (Guidelines). The Guidelines must specify levels of the given criterion, metric or threshold that a fund does not normally expect to exceed, as well as the measures to be taken if the levels are exceeded.24

- The Adopting Release states that the Commission believes that the Guidelines are a “key component” of a fund’s derivatives risk management, and are designed to address the derivatives risks that a fund must monitor routinely as part of its Program, and to help the fund identify when it should respond to changes in those risks.

- The Adopting Release observes that the Final Rule does not set forth specific limits for the Guidelines, but instead requires a fund to adopt Guidelines that provide for quantitative thresholds tailored to the fund. The Adopting Release states that, while the Commission recognizes that “some risks may not be readily quantifiable or measurable,” one appropriate way to manage such risks is through other practices, such as review and approval procedures for derivatives contracts. The Adopting Release explains that: the Guidelines are “designed to complement, and not duplicate, the stress testing and other aspects of the fund’s [Program]”; and “quantitative thresholds should be those the fund determines to be appropriate and that are most pertinent to its investment portfolio, and that the fund reasonably determines are consistent with its risk disclosure.” Establishing discrete metrics to monitor a fund’s derivatives risks, therefore, will require a fund’s derivatives risk manager to regularly measure changes in risks, and is designed to lead to the taking of timelier steps to manage these risks.

- The Adopting Release states that funds may use a “variety of approaches” in developing Guidelines, and notes that the Guidelines requirement “draws on the risk identification element of the [Program] and the scope and objectives of the fund’s use of derivatives.” The Adopting Release explains that, in developing the Guidelines (and determining whether to change the Guidelines), “a fund generally should consider how to implement them in view of its investment portfolio and the fund’s disclosure to investors,” and “could consider establishing corresponding investment size controls or lists of approved transactions across the fund.” The Adopting Release further notes that a fund “could also consider establishing an approved list of specific derivatives 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,” and could consider subjecting to additional scrutiny new instruments (or instruments newly used by the fund). The Adopting Release suggests implementing “appropriate monitoring mechanisms,” including quantitative metrics.

- The Adopting Release states that the requirement to identify a fund’s response to exceeding the Guidelines “should provide the fund’s derivatives risk manager with a clear basis from which to determine whether to involve other persons, such as the fund’s portfolio management or board of directors, in addressing derivatives risks appropriately” as required under the internal reporting and escalation element of the Program.

24 Rule 18f-4(c)(1)(ii).
As discussed below, the Final Rule requires the derivatives risk manager to report to the fund’s board the derivatives risk manager’s analysis of any exceedances of Guidelines.

**Stress Testing**

This element requires the Program to provide for stress testing of the fund’s portfolio. The fund’s stress tests must evaluate potential losses to the fund’s portfolio in response to extreme but plausible market changes, as well as changes in market risk factors that would have a significant adverse effect on the fund’s portfolio, taking into account correlations of market risk factors and resulting payments to derivatives counterparties.25

- Although the Final Rule requires that stress tests take into account correlations of market risk factors and resulting payments to counterparties, it does not specify which market risk factors must be considered. The Adopting Release notes that, while the Proposing Release provided six examples of market risk factors commonly considered for this purpose (i.e., liquidity, volatility, yield curve shifts, sector movements or changes in the underlying instrument’s price), other examples could include interest rates, credit spreads, volatility, and foreign exchange rates. The Commission stated, however, that “specific factors to consider in a particular stress test may vary from fund to fund and will require judgment by fund risk professionals in designing stress tests.” The Adopting Release states that the Commission believes the Final Rule’s “principles-based approach to stress testing allows funds to tailor their simulations to a fund’s particular relevant risk factors” and that the stress testing requirements are designed to produce valuable results by focusing testing “on extreme events that may provide actionable information to inform a fund’s derivatives risk management.”

- The Adopting Release highlights that the Commission believes that stress testing is an “important tool to evaluate different drivers of derivatives risks” and, as discussed in more detail under “Limit on Fund Leverage Risk” below, “will serve as an important complement to the VaR-based limit on fund leverage risk, as well as any VaR testing under the fund’s risk guidelines.”

- The Final Rule permits a fund to determine the frequency with which stress tests are conducted, provided that the fund must conduct stress testing at least weekly. In determining testing frequency, a fund must take into account the fund’s strategy and investments, as well as current market conditions. The Adopting Release notes, for example, that “a fund whose strategy involves a high portfolio turnover might determine to conduct stress testing more frequently than a fund with a more static portfolio,” and that a fund “might conduct more-frequent stress tests in response to increases in market stress.” The Adopting Release also notes that the “minimum weekly stress testing frequency balances the attendant costs of establishing a stress testing program with the benefits of frequent testing,” and that funds may “conduct more-detailed scenario analyses on a less-frequent basis.”

- As discussed below, the Final Rule requires the derivatives risk manager to report to the fund’s board the derivatives risk manager’s analysis of the results of the stress testing.

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25 Rule 18f-4(c)(1)(iii).
Backtesting

This element requires the Program to provide for the backtesting of the results of the VaR calculation model used by the fund in connection with the applicable VaR test. The backtesting obligation requires a fund to compare its actual gain or loss for each business day with the VaR the fund had calculated for that day, and identify as an exception any instance in which the fund experienced a loss exceeding the corresponding VaR calculation’s estimated loss. However, in a modification from the Proposed Rule, the Final Rule permits a fund to perform this analysis on a basis no less frequent than weekly instead of on a daily basis, comparing the fund’s daily gain and loss to the estimated VaR for each business day in the backtesting period.26

- The Adopting Release states that the backtesting requirement will allow a fund to monitor the effectiveness of its VaR model and “will assist a fund in confirming the appropriateness of its model and related assumptions and help identify when a fund should consider model adjustments.” Although a fund may consider additional factors (e.g., market trends, additional risk factors, formal reviews by a model risk governance committee, approval by a risk forum) when adjusting its VaR model, the Adopting Release notes that “if 10 or more exceptions are generated in a year from backtesting that is conducted using a 99% confidence level and over a one-day time horizon, and assuming 250 trading days in a year, it is statistically likely that such exceptions are a result of a VaR model that is not accurately estimating VaR.”

- The Adopting Release states that the Commission agrees “that daily backtesting may not be necessary for funds to gather the information needed in order for a fund to readily and efficiently adjust or calibrate its VaR calculation model.” However, the Adopting Release continues, “requiring funds to conduct backtesting on a weekly, rather than a daily, basis (taking into account the fund’s gain and loss on each business day that occurred during the weekly backtesting period) … will ensure that funds collect backtesting data for each business day, while also providing funds with the added flexibility of only running the test weekly.”

- The Adopting Release notes that costs of weekly backtesting likely will be marginally higher than the costs of less-frequent backtesting, but that additional costs due to the required frequency will be limited because a fund still must calculate its portfolio VaR each business day to satisfy the limit on fund leverage risk. The Adopting Release expresses the Commission’s belief that “the limited additional costs for weekly backtesting relative to monthly testing are justified by the benefits of providing more-recent information regarding the effectiveness of a fund’s VaR model.”

- As discussed below, the Final Rule requires the derivatives risk manager to report to the fund’s board the derivatives risk manager’s analysis of the backtesting results.

Internal Reporting and Escalation

This element requires a fund’s Program to identify the circumstances under which for the fund’s portfolio management will be informed regarding the operation of the Program, including Guidelines exceedances and the results of the fund’s stress testing. Further, this element requires a derivatives risk manager to inform in a timely manner the fund’s portfolio management team, and also directly inform the fund’s board of directors as appropriate,

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26 Rule 18f-4(c)(1)(iv).
of material risks arising from the fund’s derivatives transactions, including risks identified by the fund’s exceedance of a criterion, metric or threshold provided for in the fund’s Guidelines or by required stress testing.\textsuperscript{27}

- The Adopting Release indicates that the requirement for reporting to portfolio management recognizes that portfolio managers generally will be responsible for transactions that could mitigate or address derivatives risks as they arise, and is designed to inform portfolio managers’ execution of the fund’s strategy.

- The Adopting Release also states that the board reporting requirement is designed to foster dialogue and provide the board with key information to facilitate board oversight. The Adopting Release notes that “funds today often have a dialogue between risk professionals and fund boards,” and that the Commission continues to believe that these lines of communication are a key part of derivatives risk management. Accordingly, while the Final Rule requires a derivatives risk manager to inform portfolio managers in a timely manner of material risks arising from the fund’s derivatives transactions, it does not require the derivatives risk manager automatically to escalate these risks to the fund’s board. Rather, the Adopting Release states that the Commission believes that a “fund’s derivatives risk manager is best positioned” to make a determination regarding the appropriateness of board escalation, and, therefore, the Final Rule grants the derivatives risk manager discretion to inform the board of material risks “as appropriate.”

- The Adopting Release highlights the Commission’s belief that internal reporting and escalation should be “principles-based” and that “funds should have flexibility when implementing this [Program] requirement” in light of funds’ differing strategies and the “variety of ways” the Commission anticipates that funds will manage their derivatives risks.

- The Adopting Release states that the Commission believes that the escalation requirements should be “tailored based on the fund’s size, sophistication, and needs,” and that these would be appropriate factors for the derivatives risk manager to consider in establishing the fund’s escalation requirements. Further, the Adopting Release emphasizes that the Final Rule “does not limit a board’s ability to engage with the derivatives risk manager on the circumstances under which risks will be communicated to the board,” and that “engagement may help a derivatives risk manager develop an understanding of risks that the board would find most salient, or important to raise outside of a regularly scheduled board meeting.”

**Periodic Review of the Program**

This element requires a fund’s derivatives risk manager to review the Program at least annually to evaluate the Program’s effectiveness and to reflect changes in the fund’s derivatives risks over time. The review applies to the overall Program and also must include a review of the fund’s VaR calculation model, including any backtesting required under the Program, as well as any designated reference portfolio to evaluate whether it remains appropriate.\textsuperscript{28}

- The Adopting Release reflects the Commission’s belief that requiring an annual review of the Program is appropriate because derivatives and fund leverage risks, as well as the means by which funds evaluate such risks, can change and that such an annual review would ensure a “recurring dialogue” between a fund’s derivatives risk manager and its board regarding the implementation of the Program and its

\textsuperscript{27} Rule 18f-4(c)(1)(v).

\textsuperscript{28} Rule 18f-4(c)(1)(vi).
effectiveness. The Adopting Release states that, while the annual review requirement “mirrors the minimum period in which the fund’s derivatives risk manager would be required to provide a written report on the effectiveness of the [Program] to the board,” a fund’s derivatives risk manager could determine that “more frequent reviews are appropriate based on the fund’s particular derivatives risks, the fund’s policies and procedures implementing the [Program], market conditions, or other facts and circumstances.”

- The Adopting Release states that the Commission continues to believe that periodic review of a fund’s Program and VaR calculation model is necessary to determine whether the fund is appropriately addressing its derivatives risks, and that a fund’s derivatives risk manager, as a result of the review, could determine whether the fund should update its Program, its VaR calculation model, or any designated reference portfolio.

- The Adopting Release states that the Final Rule “does not prescribe review procedures or incorporate specific developments that a derivatives risk manager must consider as part of its review.” Instead, “a derivatives risk manager generally should implement periodic review procedures for evaluating regulatory, market-wide, and fund-specific developments” that would affect a fund’s Program so that the fund is well positioned to evaluate the Program’s effectiveness.

**Board Oversight, Approval of the Derivatives Risk Manager and Reporting**

**Board Oversight Role with Respect to Compliance with the Final Rule**

The Adopting Release states that the board approval and reporting requirements are “designed to further facilitate the board’s oversight of the fund’s derivatives risk management program.” In addition, in response to industry comments, the Adopting Release states that the Commission believes “the role of the board under the [Final Rule] is one of general oversight, and [the Commission expects] that directors will exercise their reasonable business judgment in overseeing the fund’s Program on behalf of the fund’s investors.”

The Adopting Release also states that the Commission believes that the board should: (1) “understand the program and the derivatives risks it is designed to manage as well as participate in determining who should administer the program”; (2) “ask questions and seek relevant information regarding the adequacy of the program and the effectiveness of its implementation”; and (3) view oversight as “an iterative process.” According to the Commission, the board’s oversight role should involve “inquiry into material risks arising from the fund’s derivatives transactions and follow up regarding the steps the fund has taken to address such risks, including as those risks that may change over time.”

In discussing the required derivatives risk manager reporting to the board, the Adopting Release states that the Commission agrees that “the board’s role is distinct from that of the derivatives risk manager and is not one that requires the board to be involved in the day-to-day management of the fund” or to have day-to-day responsibility for the fund’s derivatives risk management. However, this portion of the Adopting Release also reiterates that the Commission envisions that a fund’s board will have active and regular engagement with the derivatives risk manager as part of its oversight role and states that the board’s oversight should not be “a passive activity,” and that directors should “understand the [Program] and the derivatives risks it is designed to manage.” The Adopting Release also notes the importance of a board’s receipt of “sufficient information on a regular basis to remain abreast of the specific derivatives risks that the fund faces.”
The Adopting Release also highlights that the fund’s board will be responsible for overseeing a fund’s compliance with the Final Rule more generally. The Adopting Release states that the requirements of Rule 38a-1 under the 1940 Act regarding board approval of fund policies and procedures reasonably designed to prevent violation of the federal securities laws by the fund and its service providers “would encompass [a board’s responsibilities for overseeing] a fund’s compliance obligations” with respect to the Final Rule.

**Board Approval of the Derivatives Risk Manager**

The Final Rule requires a fund’s board of directors, including a majority of the directors who are not interested persons of the fund, to approve the designation of the derivatives risk manager.29

- The Adopting Release states that the Commission believes that the board approval requirement “is important to establish the foundation for an effective relationship and line of communication between a fund’s board and its derivatives risk manager.” The Adopting Release also suggests that this requirement will promote the board, in its oversight role, remaining engaged with the Program.

- The Commission also addressed the role a fund’s investment adviser may play in the process for designating a derivatives risk manager. The Adopting Release states that the Final Rule “does not preclude the adviser from participating in the selection process,” and that a fund’s investment adviser “could, for example, nominate potential candidates, review resumes, conduct initial interviews, and articulate the adviser’s view of the candidate.”

- In a departure from the Proposed Rule, the Final Rule does not include the specific requirement that the fund’s board “take[e] into account the derivatives risk manager’s relevant experience regarding the management of derivatives risk” in approving the designation of the derivatives risk manager. However, the Adopting Release explains that “as the definition of ‘derivatives risk manager’ requires the person fulfilling the role to have relevant experience regarding the management of derivatives risk,” a fund board’s “consideration of a candidate to serve as a derivatives risk manager necessarily would take into account the candidate’s experience,” and accordingly, a specific requirement in the Final Rule to that effect is unnecessary.

**Board Reporting**

**Derivatives Risk Manager’s Board Reporting on Program Implementation and Effectiveness**

On or before implementation of the Program, and at least annually thereafter, the derivatives risk manager must provide to the board a written report providing a representation that the fund’s Program is reasonably designed to manage the fund’s derivatives risks and to incorporate the required elements of the Program. The representation may be based on the derivatives risk manager’s reasonable belief after due inquiry. The written report must include the basis for the representation, as well as information that may be reasonably necessary to evaluate the adequacy of the fund’s Program and the effectiveness of its implementation. The written report also must include the derivatives risk manager’s basis for the approval of any designated reference portfolio used under the relative VaR test or any change in the designated reference portfolio during the period covered by the report, or, if applicable, an explanation of the basis for the derivatives risk manager’s determination that a designated reference portfolio would not provide

29 Rule 18f-4(c)(3)(i).
an appropriate reference portfolio for purposes of the relative VaR test such that the fund relied on the absolute VaR test instead.30

- The Adopting Release states that requiring the derivatives risk manager to include a representation regarding the Program, as well as the derivatives risk manager’s basis for such representation in the Program implementation and effectiveness report, reflects the Commission’s belief that “the derivatives risk manager, rather than the board, is best positioned to make the determinations underlying the affirmative representations,” and will “reinforce that the fund and its adviser are responsible for derivatives risk management while the board’s responsibility is to oversee this activity.”

- The Adopting Release states that a derivatives risk manager could form its required reasonable belief “based on an assessment of the program and taking into account input from fund personnel, including the fund’s portfolio management, or data that third parties provide.”

- Further, the Adopting Release specifies that the requirement that such reports include information reasonably necessary to evaluate the adequacy and effectiveness of a fund’s Program “is designed to facilitate the board’s oversight role, including its role under Rule 38a-1,” and that it “does not imply any obligation for a board to make any particular findings.”

- The Commission noted in the Adopting Release that the requirement for the report to include the basis for any change in the designated reference portfolio – as opposed to “the basis for the selection” of a reference index as provided under the Proposed Rule – is a “clarifying” change. This information is required to be reported because the derivatives risk manager’s approval of such a change “can affect the amount of leverage risk a fund may obtain under the final rule.”

**Derivatives Risk Manager’s Regular Board Reporting**

The derivatives risk manager must provide to the board, at a frequency determined by the board, a written report regarding the derivatives risk manager’s analysis of exceedances of the fund’s Guidelines, as well as the derivatives risk manager’s analysis of the results of the fund’s stress tests and backtesting. Each such report must include such information as may be reasonably necessary for the board to evaluate the fund’s response to exceedances and the results of stress testing.31

- In a departure from the Proposed Rule, the Final Rule does not require that the board must receive a report regarding “any” exceedances of the fund’s Guidelines. The Commission noted in the Adopting Release that this change is intended to clarify that a fund’s derivatives risk manager does not need to provide a report on every exceedance of a fund’s Guidelines. The Adopting Release states that the relevant board reports instead “must include an analysis of exceedances that occurred during the period covered by the report, as well as stress testing and backtesting conducted during the period.” The Adopting Release notes that the analysis will provide context. The Commission considers receiving this context to be more useful to a board than receiving a simple list of exceedances and backtesting and stress testing results. The Adopting Release states that the report including this analysis could be presented in summary form, and that it is not

30 Rule 18f-4(c)(3)(ii).
31 Rule 18f-4(c)(3)(iii).
necessary to present a detailed listing of each Guidelines exceedance and/or each stress testing or backtesting exception.

- The Adopting Release states that the Commission understands that “many fund advisers today provide regular reports to fund boards, often in connection with quarterly board meetings, regarding a fund’s use of derivatives and their effects on a fund’s portfolio, among other information.” Accordingly, the Adopting Release states that the Final Rule’s requirement for reporting on a fund’s response to exceedances and results of stress testing and backtesting “is designed to provide the board with timely information to facilitate its oversight of the fund and the operation of the program.”

- Further, the Adopting Release highlights the importance of permitting boards to determine for themselves the frequency of such reporting, and states that the Commission believes that “[t]his flexibility will permit boards to tailor their oversight to funds’ particular facts and circumstances.”

**Limit on Fund Leverage Risk**

A fund that enters into derivatives transactions is required to comply with a VaR-based outer limit on fund leverage risk, unless that fund is a limited derivatives user (as discussed below).32

The requirements under this condition are largely similar to those under the Proposed Rule, with certain significant differences. Many of the changes from the Proposed Rule reflect the Commission’s responses to industry comments on technical aspects of the Proposed Rule, discussed below. Certain of these changes result in the requirements being similar to, or the same as, the corresponding VaR-based requirements for UCITS funds. A chart comparing the corresponding requirements under the limit on fund leverage risk in each of the Proposed Rule and Final Rule and the corresponding requirements for UCITS is included in Appendix B. A comparison of the key requirements under the limit on fund leverage risk in each of the Proposed Rule and Final Rule and the portfolio limitations that would have applied under the 2015 Proposal is included in Appendix C.

**Reasons for the Use of VaR as the Outer Limit on Fund Leverage Risk**

- The Adopting Release states that the Commission believes “that the risk-based approach in the final rule, which relies on VaR, stress testing, and overall risk management, effectively will address concerns about fund leverage risk underlying section 18, while also allowing funds to continue to use derivatives for a variety of purposes.”

- The Adopting Release states that “a VaR test, and especially one that compares a fund’s VaR to an unleveraged reference portfolio that reflects the markets or asset classes in which the fund invests, can be used to analyze whether a fund is using derivatives transactions to leverage the fund’s portfolio, magnifying its potential for losses and significant payment obligations of fund assets to derivatives counterparties.” The Adopting Release further states that VaR tests can serve as a tool to “analyze whether a fund is using derivatives with effects other than leveraging the fund’s portfolio that may be less likely to raise the concerns underlying section 18.” In addition, the Adopting Release observes that VaR “enables risk to be measured in a reasonably comparable and consistent manner across diverse types of investments that may be included

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32  Rule 18f-4(c)(2).
in a fund’s portfolio,” and that VaR is a broadly-used industry metric that provides an "overall indication of market risk, including the market risk associated with a fund’s derivatives transactions."

- The Adopting Release states that the Commission recognizes that “VaR is not itself a leverage measure,” and that factors other than derivatives and leverage can cause a fund’s VaR to diverge from the VaR of its designated reference portfolio. The Adopting Release also acknowledges that VaR tests do not provide an estimate of a portfolio’s maximum loss amount outside of the specified confidence level (tail risk).\(^{33}\) However, the Adopting Release indicates that the Commission does not intend the VaR limits to be “a stand-alone risk management tool,” but rather that the VaR limits are a part of a fund’s derivatives risk management Program to be used in conjunction with the Guidelines and stress testing which will address risks that VaR does not capture.\(^{34}\) In particular, stress testing will involve evaluation of tail risk.

- The Adopting Release acknowledges that “idiosyncratic circumstances” may result in the VaR tests potentially under- or overstating a fund’s leverage risk. The Adopting Release states that a fund “that believes an alternative means of estimating and limiting its leverage risk would be more effective in accomplishing the Commission’s stated goals ... including addressing the concerns underlying section 18” could seek approval from the Commission to use such a different limit through the exemptive application process.

**Definition of VaR, Calculation Model, and Parameters for VaR and Scaling**

“Value-at-risk” or "VaR" is defined to mean an estimate of potential losses on an instrument or portfolio, expressed as a percentage of the value of the portfolio’s assets (or net assets when computing a fund’s VaR), over a set time horizon and at a specified confidence level. Any VaR model used must:

1. 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;

2. Use a 99% confidence level and a time horizon of 20 trading days; and

3. Be based on at least three years of historical market data.\(^{35}\)

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33 In this regard, VaR does not estimate the extent of the loss in the 1% of the time outside of the required 99% confidence level. The Adopting Release provides an example for clarity. If a fund’s VaR calculated at a 99% confidence level was $100, this means the fund’s VaR model estimates that, 99% of the time, the fund would not be expected to lose more than $100. VaR does not estimate how much the fund would be expected to lose in that other 1% of the time.

34 The Adopting Release states that, under the Program requirement, a fund “will [also] have to consider other risks that VaR does not capture (such as counterparty risk and liquidity risk) as part of its derivatives risk management program.” The Adopting Release further notes that the Commission believes “that the final rule’s derivatives risk management program provides an effective complement to the VaR tests.”

35 Rule 18f-4(a), definition of “Value-at-risk or VaR.”
Based on the definitional requirements for VaR, there would be a 1% probability that the value of the fund would decrease by its calculated VaR amount or more during a 20-day period.

- The Adopting Release, consistent with the Proposing Release, notes that VaR calculation models often fall within one of three modeling methods (i.e., historical simulation, Monte Carlo simulation or parametric models) and that a particular model may be more or less suitable, depending on a fund’s strategy, investments and other factors. The Adopting Release states that the Commission believes that the derivatives risk manager should choose the appropriate VaR model for the fund's portfolio.

- In response to industry comments, the Adopting Release states that the Commission agrees that “performing VaR calculations to determine a 99% confidence level VaR by rescaling a calculation initially performed at a 95% confidence level” is appropriate. The Adopting Release also reiterates a statement in the Proposing Release that the Commission agrees that the use of a time-scaling technique pursuant to which a fund could scale a one-day VaR calculation to a 20-day calculation is appropriate. The Adopting Release acknowledges that these techniques “may be beneficial in that [they] would allow a fund’s VaR calculation to take into account additional observations” and still comply with the 99% confidence level and 20 trading day parameters.

- The Adopting Release notes that the use of a relatively high 99% confidence level and longer 20 trading day time horizon requirement means that “the VaR model is designed to measure, and seek to limit the severity of, those less-frequent but larger losses.”

- Although all VaR calculations must comply with the specified model requirements, consistent with the Proposed Rule, the Final Rule does not require a fund to apply the same VaR model in the same way when calculating the VaR of its portfolio and the VaR of its designated reference portfolio.

**VaR Calculations for Funds of Funds and Funds with Controlled Foreign Corporations**

- The Adopting Release states that the Commission agrees with industry comments regarding the treatment of a fund that invests in other registered investment companies (fund of funds). The Adopting Release states that a fund of funds would not be required to look through to an underlying registered investment company’s or BDC’s use of derivatives transactions for purposes of determining the acquiring fund’s derivatives exposure (discussed in more detail under “Limited Derivatives User Exception” below). An acquiring fund that does not itself use derivatives transactions will not be required to comply with Rule 18f-4. An acquiring fund that is subject to the limit on fund leverage risk as a result of its direct derivatives transactions could use the historic returns of the underlying funds (along with VaR information about the acquiring fund’s other investments) when determining the acquiring fund’s VaR. The Adopting Release does not address the treatment of underlying funds that are not registered investment companies or BDCs.

- A fund’s investments in derivatives transactions through controlled foreign corporations will be treated as direct investments of the fund for purposes of Section 18 and Rule 18f-4.

**Use of Relative vs. Absolute VaR Test**

To comply with the limit on fund leverage risk, a fund generally must comply with the relative VaR test. However, a fund is not required to comply with the relative VaR test if the derivatives risk manager “reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR
test, taking into account the fund’s investments, investment objectives, and strategy.” Such a fund must instead comply with the absolute VaR test.36

- The Adopting Release states that the Commission adopted the relative VaR test as the default test based on a belief that “it resembles the way that section 18 limits a fund’s leverage risk” in that Section 18 “limits the extent to which a fund can potentially increase its market exposure through leveraging by issuing senior securities, but it does not directly limit a fund’s level of risk or volatility.” To this point, the Adopting Release notes that both Section 18 and the relative VaR test limit “a fund’s potential leverage on a relative rather than an absolute basis.”

- The Adopting Release states that the reasonable determination that the derivatives risk manager must make in order for a fund not to use the relative VaR test “is designed to make clear that this provision involves a derivatives risk manager’s determination after reasonable inquiry and analysis regarding the feasibility of applying a relative VaR test to a fund and the appropriate reference portfolio for that purpose.” (emphasis added.) The Commission believes this standard “provides greater clarity” than the standard under the Proposed Rule.

**Designated Reference Portfolio – Designated Index or Securities Portfolio**

The “designated reference portfolio” for purposes of the relative VaR test must be a “designated index” or the fund’s “securities portfolio.”

The term “designated index” means an unleveraged index that:

1. Is approved by the derivatives risk manager for purposes of the relative VaR test and that reflects the markets or asset classes in which the fund invests; and

2. Is not administered by an organization that is an affiliated person of the fund, its investment adviser or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used.

A blended index may be a designated index, provided that none of the indexes that compose the blended index may be administered by an organization that is an affiliated person of the fund, its investment adviser or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used. The investment adviser may create the blended index so long as the components of the blended index meet the requirements.

Notwithstanding the provisions under the definition of designated index requiring administration of an index by a non-affiliate, if the fund’s investment objective is to track the performance (including a leverage multiple or inverse multiple) of an unleveraged index, the fund must use that index as its designated reference portfolio.37

- In response to industry comments, the Adopting Release provides guidance that whether an index is “leveraged” depends “on the economic characteristics of the index’s constituents, and not just on whether some or all of the constituents are leveraged.” The Adopting Release also notes that an index including

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36 Rule 18f-4(c)(2)(i).
37 Rule 18f-4(a), definition of “Designated reference portfolio.”
derivatives generally would be leveraged if the derivatives “multiply the returns of the index or index constituents.”

- This requirement – that a fund with an investment objective to track the performance (or leverage multiple or inverse multiple) of an index use that index as its designated reference portfolio – is a departure from the Proposed Rule. As a result of this requirement, only an actively managed fund has the flexibility to select between a third-party index or the fund’s own securities portfolio, or could instead comply with the absolute VaR test in appropriate circumstances.

- In a departure from the Proposed Rule, the designated index will not be required to be disclosed in a fund’s annual report. In a related change, the Final Rule does not require that the index be an “appropriate broad-based securities market index” or an “additional index,” as defined in the instructions to Item 27 in Form N-1A. 38 A fund still will be required to disclose its designated index or state that the fund’s designated reference portfolio is its securities portfolio on Form N-PORT, as applicable, which will be made publicly available for the third month of each quarter.

The term “securities portfolio” means the fund’s portfolio of securities and other investments, excluding any derivatives transactions, that is approved by the derivatives risk manager for purposes of the relative VaR test, provided that the fund’s securities portfolio reflects the markets or asset classes in which the fund invests (i.e., the markets or asset classes in which the fund invests directly through securities and other investments and indirectly through derivatives transactions).39

- The relative VaR test under the Proposed Rule would not have permitted an actively managed fund to use its securities portfolio as a point of reference for this VaR test. This alternative approach was adopted in response to industry comments that identified issues with the approach included in the Proposed Rule.

- The Adopting Release highlights that whether a fund’s “securities portfolio [excluding any derivatives transactions] would provide an appropriate reference portfolio would depend on the facts and circumstances.” The requirement that the securities portfolio or designated index (as applicable) reflect the markets or asset classes in which the fund invests is designed “to provide an appropriate baseline for the relative VaR test.” The Commission stated that “[a]bsent this requirement, a fund could, for example, invest in a small number of highly-volatile securities that are not representative of the fund’s overall investments for the purpose of obtaining a higher amount of leverage risk.” In addition, “a fund obtaining some of its investment exposure through derivatives transactions may find that [its] securities portfolio does not reflect the overall markets or assets in which the fund invests both directly and indirectly through derivatives transactions.”

- While the definitions of the terms “designated index” and “securities portfolio” do not reference a fund’s “investments, investment objectives, and strategy,” the derivatives risk manager is required to take these factors into account in considering whether a designated index or a securities portfolio would be appropriate.

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38 The Adopting Release states that the Commission made “this change in light of the fact that the final rule will not require a fund to disclose its designated index in the annual report, together with a presentation of the fund’s performance relative to the designated index.”

39 Rule 18f-4(a), definition of “Securities portfolio.”
Relative and Absolute VaR Test Thresholds

Under the relative VaR test, the VaR of a fund’s portfolio cannot exceed 200% of the VaR of the designated reference portfolio. In the case of a closed-end fund that has issued to investors and has then-outstanding shares of a senior security that is stock (i.e., preferred stock), this limit is 250%.40

- Under the proposed relative VaR test, the threshold was 150%. The Adopting Release states that the Commission considered that using the 200% threshold may provide compliance and operational efficiencies for advisers to U.S. funds using derivatives transactions that also advise UCITS funds, which are subject to a corresponding 200% relative VaR test. The Adopting Release notes that such efficiencies would facilitate the offering of similar fund strategies in the United States and Europe, which may "benefit investors by facilitating investor choice and reducing costs (to the extent these efficiencies result in cost savings that are passed on to investors)."

- The Adopting Release states that the Commission "expect[s] that many funds will use derivatives transactions in such a manner that their fund’s VaR generally is not at or approaching this limit," and that a fund’s Program "could incorporate internal VaR thresholds lower" than 200%.

- The proposed relative VaR test would not have taken into account the structural leverage that a closed-end fund can obtain through the issuance of preferred stock in accordance with the 1940 Act, which potentially could cause such a fund to exceed the proposed relative VaR test before the fund entered into any derivatives transactions. Accordingly, the Proposed Rule would have applied the same threshold to all funds complying with the relative VaR test. Allowing a higher 250% threshold for these funds “is designed to reflect [closed-end funds’] ability to use equity-based leverage.” However, if a closed-end fund does not obtain equity-based structural leverage, the fund would be subject to the 200% threshold.

- The Adopting Release states that BDCs with equity-based structural leverage also can rely on the higher 250% threshold. The Adopting Release notes that the Commission considered applying a different relative VaR test for BDCs, which have greater flexibility to issue senior securities under the 1940 Act than closed-end funds. However, the Adopting Release notes that allowing BDCs to further leverage their portfolios compared to other closed-end funds “would not appear to further the capital formation benefits that underlie BDCs’ ability to obtain additional leverage” under the 1940 Act. Also, based on a review of financial statements of sample BDCs conducted by the Commission staff, the Commission believes that “most BDCs either would not use derivatives or would rely on the exception for limited derivatives users.”

Under the absolute VaR test, the VaR of a fund’s portfolio cannot exceed 20% of the value of the fund’s net assets. In the case of a closed-end fund that has issued to investors and has then-outstanding shares of a senior security that is stock, this limit is 25%.41

- Under the proposed absolute VaR test, the threshold was 15%. The Adopting Release states that, in deciding to increase the absolute VaR threshold to 20%, the Commission considered several comments, including one commenter who “analyzed the VaR of the S&P 500 as the risk-based reference point for setting the absolute VaR limit and highlighted that the S&P 500 itself would breach a 15% absolute VaR limit

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40 Id., definition of “Relative VaR test.”

41 Id., definition of “Absolute VaR test.”
for specific periods of time.” The Commission also acknowledged other commenters who noted that raising the absolute VaR limit to 20% would be consistent with the corresponding test under the UCITS framework.

- Similar to the proposed relative VaR test, the proposed absolute VaR test would not have taken into account the equity-based structural leverage that a closed-end fund can obtain through the issuance of preferred stock.

**Daily Testing for Compliance with the Applicable VaR Test; Reporting and Remediation of VaR Breaches**

A fund is required to determine its compliance with the applicable VaR test at least once each business day. If the fund determines that it is not in compliance, the fund “must come back into compliance promptly after such determination, in a manner that is in the best interests of the fund and its shareholders.”

If a fund does not come back into compliance with the applicable VaR test within five business days, the derivatives risk manager must:

1. Provide a written report to the fund’s board and explain how and by when (i.e., number of business days) the derivatives risk manager reasonably expects that the fund will come back into compliance;

2. Analyze the circumstances that caused the fund to be out of compliance for more than five business days and update any Program elements as appropriate to address those circumstances; and

3. Provide a written report to the fund’s board within 30 calendar days of the exceedance, explaining how the fund came back into compliance and the results of the analysis and updates required above.

If the fund remains out of compliance with the applicable VaR test at the time of the second report, the report must update the initial report, and the derivatives risk manager must update the board of directors as to the fund’s progress in coming back into compliance, at regularly scheduled intervals at a frequency determined by the board. The Adopting Release states that, in this case, the second report must explain how, and by when, the derivatives risk manager “reasonably expects the fund will come back into compliance.”

In addition, as discussed in more detail below, if a fund has not come into compliance within five business days, the fund must file a report with the Commission on Form N-RN within one business day after the fifth business day. Such a fund also must file another report on Form N-RN within one business day after coming back in compliance with its VaR test.

- The Adopting Release states that these remediation requirements reflect the Commission’s view that it would be inappropriate for a fund to purposefully exceed the applicable VaR-based limit, while still allowing funds to take reasonable steps to come back into compliance. Thus, the requirements balance investor protection concerns relating to leverage with the potential harm to a fund and its shareholders if the fund were required to take remediating steps more quickly.

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42 Rule 18f-4(c)(2)(ii).

43 Rule 18f-4(c)(2)(iii).

44 Rule 18f-4(c)(7); Form N-RN.
• Under the Proposed Rule, reporting and remediation requirements would have applied if a fund was out of compliance for three business days, rather than five business days as under the Final Rule. The Adopting Release states that the Commission appreciates “that investigating a VaR breach and taking steps to remediate it may take more time than reducing a fund’s outstanding bank borrowings, which was the basis for the three-day period at proposal.”

• The Proposed Rule would have required that a fund that was out of compliance with its VaR test come back into compliance promptly, and within no more than three business days. The Final Rule eliminates the three business day requirement and replaces it with a requirement that a fund come back into compliance promptly in a manner that is in the best interests of the fund and its shareholders. The Adopting Release acknowledges that this period may exceed the five business day period that triggers other obligations to take remediating steps. The Adopting Release states that this requirement under the Final Rule will avoid requiring a fund to engage in deeply discounted transactions (fire sales) and otherwise avoidable incurrence of trading losses “while coming back into compliance in a deliberate manner that is in the best interest of the fund and its shareholders.” In addition, the Adopting Release states that “[a] fund engaging in ‘fire sales’ to avoid filing a report on Form N-RN would violate the final rule.”

• The Adopting Release states that the initial board reporting requirement is “designed to facilitate the fund coming back into compliance promptly by requiring the derivative risk manager to develop a specific remediation course of action and to facilitate the board’s oversight.” The Adopting Release states that the required second board report must be made within 30 calendar days because the Commission anticipates “that funds generally would have mitigated VaR breaches by that time and would be in a position to report to the board regarding the progress.” These two requirements – the second board report in the event the fund has not come back into compliance by the 30th calendar day, and the additional ongoing board update – are designed “to facilitate appropriate board oversight and incentivize compliance” with the VaR limits.

• Under the Proposed Rule, a fund that was not in compliance with its VaR test for three business days would have been subject to a restriction on entering into new derivatives transactions. Under the proposed restriction, a fund would have been prohibited from entering into new derivatives transactions (other than derivatives transactions that, individually or in the aggregate, were designed to reduce the fund’s VaR) until the fund was back in compliance with the applicable VaR test for three consecutive business days (in addition to being required to provide reports to the fund’s board). In explaining the departure from the proposed derivatives entry restriction, the Adopting Release acknowledges industry comments, stating that the Commission believes the remediation provisions adopted in the Final Rule “will present a strong incentive for funds to come back into compliance without the need ... to limit a fund’s investment activities in ways that could be detrimental to shareholders.”

• The Adopting Release notes that if a fund were repeatedly out of compliance for more than five business days, the Commission “would expect the fund and its board of directors to reconsider whether the fund’s derivatives risk management program is appropriately designed and operating efficiently.”

• The Adopting Release states that the Form N-RN reporting requirements allow the Commission to monitor the length of time a fund is out of compliance, and also that the Commission expects such monitoring “would include staff outreach to a fund concerning its remediation plans where the fund has remained out of compliance for a longer period of time.”
Limited Derivatives User Exception

Conditions for Reliance on the Exception

Under the limited derivatives user exception, a fund is not required to adopt a Program, comply with the limit on fund leverage risk, or comply with the board oversight and reporting provisions under the Final Rule, if:

1. The fund adopts and implements written policies and procedures reasonably designed to manage the fund’s derivatives risk; and

2. The fund’s derivatives exposure does not exceed 10% of the fund’s net assets.45

The measure of derivatives exposure for this purpose excludes currency or interest rate derivatives that hedge currency or interest rate risks associated with one or more specific equity or fixed-income investments held by the fund (which must be foreign currency-denominated in the case of currency derivatives), or the fund’s borrowings. Such derivatives must be entered into and maintained by the fund for hedging purposes. In addition, the notional amounts of such derivatives may not exceed the value of the hedged investments (or the par value thereof (in the case of fixed-income investments) or the principal amount (in the case of borrowing)) by more than 10%.46

“Derivatives exposure” for this purpose means the sum of (1) the gross notional amounts of the fund’s derivatives transactions (as defined in the Final Rule) and (2) in the case of short sale borrowings, the value of the assets sold short. If a fund’s derivatives transactions include reverse repurchase agreements or similar financing transactions, the fund’s derivatives exposure also includes, for each transaction, the proceeds received but not yet repaid or returned (or for which the associated liability has not been extinguished) in connection with the transaction. The Final Rule also provides that, in determining derivatives exposure, a fund may: convert the notional amount of interest rate derivatives to 10-year bond equivalents and delta adjust47 the notional amounts of options contracts; and exclude any closed-out positions, if those positions were closed out with the same counterparty and result in no credit or market exposure to the fund.48

A chart comparing the corresponding requirements under the limited derivatives user exception in each of the 2015 and 2019 Proposed Rules and the Final Rule is included in Appendix C.

Conditions Relating to Derivatives Exposure Levels

- The Adopting Release explains that the Commission does not view the 10% threshold as a “negligible amount” of derivatives, but rather that the threshold is designed to provide “an objective standard to identify funds that use derivatives in a limited manner.” However, the Adopting Release also explains that the 10% threshold is not designed to serve as a risk measure itself.

45 Rule 18f-4(c)(4).
46 Rule 18f-4(c)(4)(i).
47 The Adopting Release provides that,”[d]elta 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. A fund would delta adjust an option by multiplying the option’s unadjusted notional amount by the option’s delta.”
48 Rule 18f-4(a), definition of “Derivatives exposure.”
The Adopting Release notes that including the use of the word “gross” in the definition of the term “derivatives exposure” is designed to make clear that this measure includes the sum of the absolute values of the notional amounts of the derivatives transactions, without netting long and short positions.

The Adopting Release notes that the specified adjustments to interest rate derivatives and options are consistent with the reporting requirements of Form PF and Form ADV.

Adding an exclusion for certain interest rate and currency hedging positions is an important departure from the Proposed Rule, which would have included two mutually exclusive bases for the exception: compliance with a 10% exposure limit; or limiting derivatives use solely to currency hedging transactions. The Adopting Release notes that the Commission believes that the excluded interest rate and currency hedging transactions are appropriate for limited derivatives users because “they will predictably and mechanically provide the anticipated hedging exposure without giving rise to basis risks or other potentially complex risks ....”

The Adopting Release notes that the limited offsetting of closed out positions does not extend to positions across counterparties or other offsetting positions, and the limited exclusion of certain interest rate and currency hedging positions similarly does not extend to other hedging transactions, because such additional categories of transactions could involve a scale of positions and derivatives risks that the Commission believes should be managed as part of a fund’s Program.

The Commission provides significantly more certainty by including a provision allowing the notional value of interest rate and currency hedging positions to exceed by up to 10% (a) the value, (b) par value, or (c) principal of the instrument or borrowings being hedged, rather than the standard included in the Proposed Rule, which provided that such hedging derivatives notional amount could not exceed the value of a hedged investment by more than a “negligible amount.” The Adopting Release explains that the Commission modified this aspect of the proposal in response to comments in order to provide greater clarity and facilitate compliance, and that a 10% threshold, rather than a smaller value, would avoid funds potentially being required to frequently trade for the purpose of resizing their hedges in response to small changes in the value of the hedged investments.

**Condition for Policies and Procedures Reasonably Designed to Manage Derivatives Risk**

The Adopting Release explains that the policies and procedures requirement “recognizes that even a limited use of derivatives can present risks that a fund should manage,” and highlights that certain derivatives risks could apply even where a derivatives transaction does not create leverage risk (e.g., counterparty risk, the need to meet margin calls, and risks posed by derivatives with non-linear or path-dependent returns such as options).

The Adopting Release states that these policies and procedures “should be tailored to the extent and nature of the fund’s derivatives use,” noting that a fund using more complex derivatives, or with derivatives exposure approaching 10%, should have more extensive policies and procedures than a fund using derivatives only occasionally and for a limited purposes such as cash equitization.

To this point, the Adopting Release highlights that the Final Rule does not set a minimum frequency of testing for continued compliance with the exception. However, given the timeframes discussed below for required responses to exceedances of the 10% limit, testing may need to be conducted regularly.
Exceedances of the 10% Limit

If a fund’s derivatives exposure exceeds 10% of its net assets (as calculated in accordance with the limited derivatives user exception) and if the fund is not in compliance with the requirement within five business days, the fund’s investment adviser must provide a written report to the fund’s board of directors informing the board whether the investment adviser intends either:

1. To reduce the fund’s derivatives exposure to less than 10% of the fund’s net assets promptly, but within no more than 30 calendar days of the exceedance, in a manner that is in the best interests of the fund and its shareholders; or

2. That the fund establish a Program, comply with the limit on fund leverage risk, and comply with the board oversight and reporting requirements under the Final Rule, as soon as reasonably practicable.49

In both cases, the fund’s next Form N-PORT filing must specify the number of business days, in excess of five business days, that the fund’s derivatives exposure exceeded 10% of its net assets.

- The Adopting Release states that the two permitted remediation approaches under the Final Rule “are designed to balance providing a clear framework for addressing exceedances that persist beyond five business days with investor protection concerns related to fund leverage risk and potential harm to a fund if it were required to sell assets or exit positions quickly to remain a limited derivatives user.”

- The Adopting Release also states that “if a fund were to exceed the 10% threshold repeatedly, and particularly if those exceedances occurred over a long period of time and did not occur in connection with extreme market events that may cause rapid and significant changes in a fund’s net asset value, the fund would not appear to be using derivatives in a limited manner.” This statement suggests that, for a fund relying on the limited derivatives user exception that repeatedly exceeds the 10% threshold under normal market conditions, establishing a Program and coming into compliance with the other conditions of the Final Rule may be the only appropriate steps to take.

- The Adopting Release also states that, in order for a fund’s compliance policies and procedures under Rule 38a-1 to be reasonably designed to achieve compliance with the Final Rule, they should be “designed to prevent repeated exceedances” and “to address the fund’s compliance with the 10% threshold and support the fund’s reliance” on the limited derivatives user exception.

- The Adopting Release notes that the Commission believes that the appropriate standard for purposes of the second remediation approach is to require a fund to come into compliance with the other requirements under the Final Rule as soon as reasonably practicable, rather than providing a specific time requirement for such a transition in the Final Rule. The Adopting Release also acknowledges that a fund’s ability to comply quickly will vary based on a wide variety of factors.

49 Rule 18f-4(c)(4)(ii).
Reverse Repurchase Agreements and Similar Financing Transactions

Rule 18f-4 permits a fund to enter into reverse repurchase agreements or similar financing transactions notwithstanding the requirements of Section 18(c) and Section 18(f), if the fund:

1. Complies with the asset coverage requirements under Section 18 and combines the aggregate amount of indebtedness associated with all such reverse repurchase agreements and similar financing transactions with the aggregate amount of any other senior securities representing indebtedness (e.g., bank borrowings, other borrowings permitted under the 1940 Act that constitute senior securities) when calculating the asset coverage ratio,50 or

2. Treats all of its reverse repurchase agreements or similar financing transactions as derivatives transactions for all purposes under Rule 18f-4.51

A fund relying on Rule 18f-4 to enter into reverse repurchase agreements or similar financing transactions must maintain a written record documenting which approach the fund is using, for a period of not less than five years (the first two years in an easily accessible place) following the determination.52

Alternative Approaches to Compliance for Reverse Repurchase Agreements and Similar Financing Transactions

- The first approach allows reverse repurchase agreements and similar financial transactions not to be counted as derivatives transactions for purposes of the limited derivatives user exception. The Adopting Release states that these agreements and transactions “achieve effectively identical results to a bank borrowing or other borrowing,” and that the Commission therefore believes “it is appropriate to allow funds to engage in these transactions to the same degree as borrowings under the [1940 Act], and to treat them equally.” Notably, a fund electing to use this approach does not need to include such agreements and transactions in calculating the fund’s derivatives exposure for purposes of the limited derivatives user exception. However, a fund that is subject to VaR testing because of its investments in derivatives transactions does need to include VaR relating to its investment of the proceeds of its reverse repurchase agreements and similar financing transactions for the purposes of such testing, because the VaR tests take into account all of the fund’s investments.

- Allowing the second, alternative approach is an important departure from the Proposed Rule, which would have required all such transactions to be included with any other senior securities representing indebtedness in a fund’s asset coverage calculations (i.e., the first approach). The Adopting Release states that this change to the framework as proposed was “designed to provide a fund flexibility to choose the approach that is best suited to its investment strategy or operational needs, while still addressing section 18’s asset sufficiency and leverage concerns.” The Adopting Release states that a fund using these transactions and agreements “to borrow beyond what the [1940 Act] allows under section 18” raises the same concerns underlying the Program requirement and other conditions applicable to funds that enter into derivatives transactions under Rule 18f-4 (e.g., leverage risks and asset sufficiency). Accordingly, the

50  Rule 18f-4(d)(1)(i).
51  Rule 18f-4(d)(1)(ii).
52  Rule 18f-4(d)(2).
Adopting Release states that the Commission believes that the Final Rule “should address the concerns raised by fund use of reverse repurchase agreements in a consistent manner as those posed by derivatives transactions under the rule when a fund engages in those transactions beyond the [1940 Act’s] asset coverage requirements for borrowings.”

- The text of the Final Rule and the Adopting Release indicate that the election to rely on one or the other alternative approach will apply to all of a fund’s reverse repurchase agreements and similar financing transactions at any given time. The Adopting Release acknowledges that a fund may “switch between the two options multiple times throughout one year” – for example, where circumstances change or a fund re-evaluates how best to treat such agreements and transactions – and that such action would be memorialized under the recordkeeping requirement relating to this choice. However, the Adopting Release also notes that frequent switches may indicate that “the fund has not effectively evaluated the appropriate approach” or may be engaging in “gaming,” and may raise evasion concerns.

- The Adopting Release notes that the Final Rule does not provide relief from Section 61 for BDCs engaging in the relevant transactions, and states that the Commission does not believe that BDCs engage in such agreements and transactions “to such an extent that they would seek or require the additional flexibility to treat these transactions as derivatives transactions ....”

**Definitions; Investment of Securities Lending Collateral**

- Rule 18f-4 does not define the terms “reverse repurchase agreement” and “similar financing transactions.”
  - The Adopting Release highlights that a reverse repurchase agreement is a transaction by which a fund (a) transfers a security to another party in return for cash or other assets in an amount equal to a percentage of the value of the security sold, and (b) then repurchases the transferred security from the other party, at a later agreed-upon date, by paying an amount equal to the proceeds of the initial sale transaction plus interest. The Adopting Release notes that reverse repurchase agreements are used by funds as a means to obtain financing, and are economically equivalent to a secured borrowing.
  - The Adopting Release notes that an example of a similar financing transaction would be a fund’s purchase of a security on margin. In addition, a tender option bond (TOB) financing transaction (as opposed to purchasing an “inverse floater” issued by a TOB) is economically similar to a reverse repurchase agreement and, therefore, is a “similar financing transaction” (without distinguishing whether the TOB financing is “recourse” or “non-recourse”).

- The Adopting Release reiterates Commission guidance provided in the Proposing Release that a fund’s obligation to return securities lending collateral is not treated as a similar financing transaction for purposes of Rule 18f-4, so long as the fund: (1) does not sell or otherwise use non-cash collateral received for loaned securities to leverage the fund’s portfolio; and (2) invests cash collateral solely in cash or cash equivalents. For this purpose, the Adopting Release highlights previous Commission statements that: (1) defined the term “cash equivalents” by reference to the current U.S. generally accepted accounting principles definition; (2) highlighted that this definition includes as cash equivalents “short-term, highly liquid investments that are 53 The Proposing Release noted that “securities lending arrangements are structurally similar to reverse repurchase agreements in that, in both cases, a fund transfers a portfolio security to a counterparty in exchange for cash (or other assets).”
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”; and (3) provided that “items commonly considered to be cash equivalents include certain Treasury bills, agency securities, bank deposits, commercial paper, and shares of money market funds.”

- Notably, in response to industry comments, the Commission declined to expand the types of assets in which funds can invest securities lending proceeds beyond cash and cash equivalents, noting that other types of investments “may result in leveraging of the fund’s portfolio,” and would result in the securities lending activity being a similar financing transaction under Rule 18f-4.

### Unfunded Commitment Agreements

Because the Commission believes that unfunded commitment agreements generally do not have a leveraging effect on a fund’s portfolio or involve the other risks associated with derivatives transactions (as well as for other reasons), unfunded commitment agreements are not considered to be derivatives transactions under the Final Rule. Unfunded commitment agreements also are not treated in the same manner as reverse repurchase agreements under the Final Rule.

An “unfunded commitment agreement” is a contract that is not a derivatives transaction, under which a fund commits (conditionally or unconditionally) to make a loan to a company or to invest equity in a company in the future, including by making a capital commitment to a private fund that can be drawn at the discretion of the fund’s general partner.

Under the Final Rule, a fund is permitted to enter into an unfunded commitment agreement, notwithstanding the requirements of Sections 18(a), 18(c), 18(f)(1) and 61 of the 1940 Act, if the fund reasonably believes, at the time it enters into such an agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to all of its unfunded commitment agreements, in each case as it comes due.

In forming a reasonable belief, the Final Rule requires that a fund must:

1. Take into account the fund’s reasonable expectations with respect to other obligations (including with respect to senior securities or redemptions);
2. Not take into account cash that may become available from the sale or disposition of any investment at a price that deviates significantly from the market value of those investments; and
3. Not take into account cash that may become available from issuing additional equity.

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54 See Financial Account Standards Board, Accounting Standards Codification 210-10-20. The GAAP definition of cash equivalents also includes the following explanatory text: “Generally, only investments with original maturities of three months or less qualify under that definition. Original maturity means original maturity to the entity holding the investment. For example, both a three-month U.S. Treasury bill and a three-year U.S. Treasury note purchased three months from maturity qualify as cash equivalents. However, a Treasury note purchased three years ago does not become a cash equivalent when its remaining maturity is three months. Examples of items commonly considered to be cash equivalents are Treasury bills, commercial paper, money market funds, and federal funds sold (for an entity with banking operations).”

55 Rule 18f-4(a), definition of “Unfunded commitment agreement.”
The Final Rule also requires that a fund entering into unfunded commitment agreements under the Final Rule must document the basis for its reasonable belief regarding the sufficiency of its cash and cash equivalents, and maintain a record of this documentation for a period of not less than five years (the first two years in an easily accessible place) following the date that the fund entered into the agreement.56

- The Adopting Release states that the Commission believes that unfunded commitment agreements “can raise the asset sufficiency concerns” underlying the 1940 Act in certain circumstances. In addition, the Adopting Release states that a fund must consider “its unique facts and circumstances in forming its reasonable belief.”

- While the Final Rule precludes a fund that is making an asset sufficiency determination from taking into account cash that may become available from issuing additional equity (as proposed), the Adopting Release states that a fund is not precluded from considering the potential issuance of debt to support a reasonable belief, and notes the Commission’s understanding that funds often satisfy their obligations under such agreements through borrowings.

- In addition, the Adopting Release states that a fund may consider its strategy, the liquidity of its portfolio assets, its borrowing capacity under existing committed lines of credit, and the contractual provisions of its unfunded commitment agreements. In addition, a fund with existing unfunded loan commitments may evaluate the likelihood that borrowers would have to satisfy contractual milestones as a condition to the obligation to fund a loan, informed by the fund’s experience with comparable obligations.

**Leveraged/Inverse Funds**

Consistent with the recently adopted provisions of Rule 6c-11, the Final Rule defines a “leveraged/inverse fund” to mean “a fund that seeks, directly or indirectly, to provide investment returns that correspond to the performance of a market index by a specified multiple (‘leverage multiple’), or to provide investment returns that have an inverse relationship to the performance of a market index (‘inverse multiple’), over a predetermined period of time.”

Leveraged/inverse funds generally are subject to full compliance with Rule 18f-4.

- The Adopting Release indicates that certain deviations that cause a leveraged/inverse fund, in following its strategy, to exceed the relative VaR test (i.e., 200% threshold) by a de minimis amount under certain circumstances (e.g., financing costs, valuation differences) from time to time, do not alone constitute an exceedance of the relative VaR test and give rise to remediation or reporting requirements under the Final Rule. However, such de minimis deviations may not be driven by an increase in such fund’s leveraged/inverse market exposure.

- Additionally, the Adopting Release explains that the Commission anticipates leveraged/inverse funds that seek to provide inverse performance, for purposes of the VaR test, will calculate the VaR of the index on the index’s inverse performance.

The Final Rule further provides that a currently existing fund that meets the definition of a leveraged/inverse fund and that cannot comply with the limit on fund leverage risk is not required to comply with the limit on fund leverage risk, if:

56 Rule 18f-4(e)(1).
1. As of October 28, 2020, the fund: was in operation; had outstanding shares issued in one or more public offerings to investors; and disclosed in its prospectus a leverage multiple (or inverse multiple) in excess of 200% of the performance (or the inverse of the performance) of the underlying index;

2. The fund does not change the underlying market index or increase the level of leveraged or inverse market exposure the fund seeks to provide, directly or indirectly; and

3. The fund discloses in its prospectus that it is not subject to the limit on fund leverage risk.

In the Adopting Release, the Commission stated that the Final Rule seeks to preserve investor choice and allow leveraged/inverse funds to continue to operate, under the Final Rule.

- While the Final Rule also does not explicitly prohibit leveraged/inverse funds from seeking or obtaining investment results in excess of 300% of the return (or inverse of the return) of the underlying index as proposed, the Adopting Release suggests that a prohibition is unnecessary as no such funds currently exist, nor would they be formed in light of the Final Rule.57

- While the Final Rule permits over-200% leveraged-inverse funds to continue, subject to the above constraints, the Commission cautioned that such funds still present (in its view) Section 18 concerns and are part of a forthcoming staff review of complex financial products (discussed below).

Proposed Sales Practices Rules Not Adopted

The Proposed Rule would have subjected broker-dealers and investment advisers to proposed sales practices rules. However, the Final Rulemaking did not include these proposed rules.

- The Adopting Release notes that the “Commission received significant comment” on such proposed requirements, including (among others) that the sales practices rules: restricted investor choice; offered few additional protections for investors; placed restrictions on intermediaries, instead of the funds themselves; created operational burdens and potential legal liability for intermediaries; and applied to leveraged/inverse funds and listed commodity pools using leveraged/inverse strategies, but not all leveraged/inverse products. The Adopting Release also notes that certain leveraged/inverse funds can comply with the relative VaR test.

- In explaining the Commission’s decision not to adopt the sales practices rules as part of the Final Rulemaking, the Adopting Release recognizes that Regulation Best Interest applies to a broker-dealer’s recommendation with respect to leveraged/inverse investment vehicles, and that investment advisers have fiduciary obligations with respect to their investment advice in connection with leveraged/inverse investment vehicles.

- In addition, the Adopting Release emphasizes that these regimes address only certain of the investor protection concerns expressed in the Proposing Release, and offers analysis as to how the Commission views Regulation Best Interest and the adviser’s standard of conduct operating with respect to certain leveraged/inverse funds. For example, while the Adopting Release acknowledges that there are information

57 According to the Adopting Release, the “Commission’s exemptive orders for leveraged/inverse ETFs contemplate those funds seeking investment results corresponding to a multiple of the return (or inverse of the return) of an underlying index that does not exceed 300%, and thus no funds with an over-300% leverage multiple or inverse multiple currently exist.”
requirements in both regimes, the Commission suggested that “absent an identified, short-term, ... specific trading objective,” these products might not be in the best interest of a retail investor.

**Staff Review of Complex Financial Products and their Regulatory Requirements; Joint Statement on Same**

The Adopting Release also explains that the Commission has directed its staff to “review the effectiveness of the existing regulatory requirements in protecting investors – particularly those with self-directed accounts – who invest in leveraged/inverse funds and other complex investment products,” and to make recommendations to the Commission for action with respect to these products. The Adopting Release states that the Commission staff will consider: requirements related to these products that would promote a retail investor’s understanding of the products; further obligations for broker-dealers and investment advisers related to the products; point-of-sale disclosure; and policies and procedures tailored to the risks of the products. The Adopting Release also notes that the staff review will consider leveraged/inverse funds, including the over-200% leveraged/inverse funds, alongside other complex financial products, and aim to address “holistically” the Commission’s investor protection concerns.

To this point, a joint statement by Chairman Clayton and several Division Directors released on the date of the Final Rulemaking highlights certain potential issues posed by complex financial products and retail investors, as well as investor protection concerns in an increasingly accessible and volatile marketplace. The joint statement also highlights that the Commission staff will review the effectiveness of the existing regulatory requirements in protecting investors (including those with self-directed accounts) who invest in leveraged/inverse products and other complex products, and requests public comment on the issues raised in the joint statement.

**Amendments to Rule 6c-11 for Leveraged/Inverse ETFs**

In September of 2019, the Commission adopted Rule 6c-11 under the 1940 Act, which permits ETFs that satisfy certain conditions to operate without first obtaining an individual exemptive order from the Commission. As originally adopted, Rule 6c-11 excluded leveraged/inverse ETFs from the scope of ETFs that may rely on the rule.

The Final Rulemaking amends Rule 6c-11 to: (1) remove the provision excluding leveraged/inverse ETFs from its scope; (2) allow an ETF that seeks “directly or indirectly, to provide investment returns that correspond to the performance of a market index by a specified multiple, or to provide investment returns that have an inverse relationship to the performance of a market index, over a predetermined period of time” (i.e., a ETF that is a

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58 Joint Statement Regarding Complex Financial Products and Retail Investors, Commission Chairman Jay Clayton; Dalia Blass, Director, Division of Investment Management; William Hinman, Director, Division of Corporation Finance; Brett Redfearn, Director, Division of Trading and Markets, SEC Public Statement (Oct. 28, 2020).

59 For a detailed discussion of Rule 6c-11, please refer to Dechert OnPoint, SEC Adopts Final ETF Rule and Issues Related Exchange Act Relief.

60 Rule 6c-11(c)(4) provides that “the exchange-traded fund may not seek, directly or indirectly, to provide investment returns that correspond to the performance of a market index by a specified multiple, or to provide investment returns that have an inverse relationship to the performance of a market index, over a predetermined period of time.”

In the adopting release for Rule 6c-11, the Commission explained that leveraged/inverse ETFs “serve markedly different investment purposes than other ETFs,” and raise issues under Section 18 that the Commission had been evaluating as part of its “broader consideration of derivatives use by registered funds and [BDCs].” Exchange-Traded Funds, SEC Rel. No. IC-33646 (Sept. 25, 2019).
“leveled/inverse fund” as defined under Rule 18f-4) to rely on Rule 6c-11; and (3) require such a leveraged/inverse ETF to comply with all applicable conditions in Rule 18f-4.

Because leveraged/inverse ETFs will be eligible to rely on Rule 6c-11, the Commission also is rescinding the exemptive orders previously issued to the sponsors of leveraged/inverse ETFs, effective on the compliance date for the Final Rulemaking (18 months following the effective date, as discussed below). Accordingly, such ETFs will need to comply with Rule 6c-11 rather than their exemptive orders as of the compliance date. The Adopting Release states that the Commission believes that amending Rule 6c-11 and rescinding these exemptive orders will help promote a more level playing field and greater competition.

The Adopting Release acknowledges a comment suggesting that prior to amending Rule 6c-11 to permit leveraged/inverse ETFs to rely on the rule, the Commission should implement a system for the categorization and identification of exchange-traded products (ETPs). The Adopting Release notes that the Commission declined to implement an ETP naming system at this time, but that the Commission encourages “ETP market participants to continue engaging with their investors, with each other, and with the Commission on these issues.”

Recordkeeping Provisions

The Final Rule includes certain recordkeeping requirements designed to provide the Commission staff and a fund’s compliance personnel the ability to evaluate the fund’s compliance with the Final Rule’s requirements.

For a fund subject to the Program requirement, the Final Rule requires the fund to maintain a written record of its policies and procedures that are designed to manage the fund’s derivatives risks. In addition, the Final Rule requires a fund to maintain: a written record of the results of any stress testing of its portfolio; a written record of the results of any VaR backtesting that it conducts; written records documenting any internal reporting or escalation of material risks under the Program; and written records documenting any periodic reviews of the Program.

For a fund subject to the Program requirement, the Final Rule also requires the fund to maintain a written record of: copies of any materials provided to the fund’s board of directors in connection with approving the designation of the derivatives risk manager; any written reports provided to the board of directors relating to the Program; and any written reports provided to the board that the Final Rule requires regarding the fund’s non-compliance with the applicable VaR test.

For a fund required to comply with the VaR-based limit on fund leverage risk, the fund will need to maintain written records documenting: the fund’s determination of: the VaR of its portfolio; the VaR of the fund’s designated reference portfolio, as applicable; the fund’s VaR ratio, as applicable; and any updates to any VaR calculation models used by the fund, as well as the basis for any material changes made to those models.

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61 The Adopting Release states that the Commission believes that the 18-month period will provide sufficient time for existing leveraged/inverse ETFs to prepare to comply with Rule 6c-11 rather than their exemptive orders.


63 Rule 18f-4(c)(6)(i)(B).

64 Rule 18f-4(c)(6)(i)(C).
A fund that is a limited derivatives user is required to maintain a written record of: its policies and procedures that are reasonably designed to manage its derivatives risk; and any written reports provided to the board regarding the fund’s exceeding the exception’s 10% derivatives exposure limit.65

As the Final Rule permits a fund that enters into reverse repurchase agreements or similar financing transactions to either comply with the asset coverage requirements under Section 18 of the 1940 Act or to treat such reverse repurchase agreements or other similar financing transactions as derivatives transactions for all purposes under the Final Rule, the fund must maintain a written record documenting whether the fund is treating these transactions under (1) an asset coverage requirements approach or (2) a derivatives transactions treatment approach.66 A fund is required to maintain such a record with respect to each determination to change its approach.

A fund that enters into unfunded commitment agreements must maintain a record documenting the basis for the fund’s belief regarding the sufficiency of its cash and cash equivalents to meet its obligations with respect to its unfunded commitment agreements.67 Funds are required to make such a record each time they enter into such an agreement.

Consistent with the period provided in Rule 38a-1(d) and Rule 22e-4 under the 1940 Act, a fund must retain a copy of its written policies and procedures under the rules that are currently in effect, or were in effect at any time within the past five years, in an easily accessible place.68 A fund also will need to maintain all other records and materials that the Final Rule requires the fund to keep for at least five years (the first two years in an easily accessible place).69

- The Commission noted in the Adopting Release that the recordkeeping requirements of the Final Rule “will increase the effectiveness of the Commission’s oversight of the fund industry, which will, in turn, benefit investors.” The Commission also expressed its belief that such requirements “will generally not impose a large additional burden on funds,” as most funds typically would maintain such records voluntarily in connection with the funds’ Program administration and compliance with relevant requirements of the Final Rule.

Amendments to Fund Reporting Requirements

In connection with adopting the Final Rule, the Commission adopted amendments to Form N-PORT, Form N-LIQUID (re-titled as Form N-RN) and Form N-CEN that are “designed to enhance the Commission’s ability to oversee funds’ use of and compliance with the new rule effectively, and to provide the Commission and the public additional information regarding funds’ use of derivatives.” The new reporting requirements are intended to allow the Commission to identify and monitor industry trends, as well as risks associated with funds’ investments in derivatives. Commenters generally supported the proposals regarding reporting to the Commission, but not all those related to reporting to the public.

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65 Rule 18f-4(c)(6)(i)(D).
66 Rule 18f-4(d)(2).
67 Rule 18f-4(e)(2).
68 Rule 18f-4(c)(6)(ii)(A).
69 Rule 18f-4(c)(6)(ii)(B); Rule 18f-4(d)(2); and Rule 18f-4(e)(2).
**Amendments to Form N-PORT**

**Derivatives Exposure**

If a fund relies on the limited derivatives user exception, amended Form N-PORT requires the fund to report: the fund’s aggregate derivatives exposure; the fund’s exposure from currency derivatives that hedge currency risks; the fund’s exposure from interest rate derivatives that hedge interest rate risk; and the number of business days, if any, in excess of the five-business-day period that the fund remained above the 10% threshold for the exception during the reporting period.70

- The amendments to Form N-PORT depart from the proposed amendments included in the 2019 Proposal in several ways. Most notably, the Proposed Rule would have required any fund relying on Rule 18f-4 to report its derivatives exposure on Form N-PORT. However, under the Final Rulemaking, only a fund that relies on the limited derivatives user exception is required to report its aggregate derivatives exposure and other exposure metrics.

- These reporting requirements are designed to assist the Commission with monitoring compliance with the limited derivatives user exception.

**VaR Information**

If a fund is subject to the limit on fund leverage risk, amended Form N-PORT requires the fund to report: the fund’s median daily VaR during the period; the name of and index identifier for the fund’s designated index or a statement that the fund’s designated reference portfolio is the fund’s securities portfolio (for a fund subject to the relative VaR test only); the fund’s median VaR ratio during the reporting period, as a percentage of the VaR of the fund’s designated reference portfolio (for a fund subject to the relative VaR test only); and number of exceptions identified as a result of the fund’s backtesting of its VaR calculation model during the reporting period.71

- Amended Form N-PORT does not include the proposed requirement that a fund report its highest daily VaR (and, if using the relative VaR test, highest daily VaR ratio) and these measures’ corresponding dates. The Adopting Release notes that the Commission determined that median VaR data more effectively portrays a fund’s use of derivatives than the highest VaR figures, considering that the latter might reflect VaR on a single day that could have been an outlier.

**Public Availability and Other Matters**

Much of the information reported on N-PORT for the third month of a fund’s fiscal quarter is made publicly available on the 60th day after the end of the fund’s quarter. However, amended Form N-PORT provides that the following information will not be made publicly available: derivatives exposure for limited derivatives users; median daily VaR; median VaR ratio; and VaR backtesting results.72

- Notably, the final amendments to Form N-PORT depart from those proposed by removing the requirement that the number of a fund’s backtesting exceptions be made publicly available. The Adopting Release states

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70 Item B.9 of Form N-PORT.
71 Item B.10 of Form N-PORT.
72 General Instruction F to Form N-PORT.
that the Commission opted to remove this requirement in light of numerous comments expressing concern that, if such information was made publicly available, investors could misunderstand or ascribe inappropriate significance to the number of backtesting exceptions, especially considering that the Commission expected that all funds would experience a certain number of backtesting exceptions each year.

- BDCs are not required to file Form N-PORT and therefore are not subject to these reporting requirements.

**Amendments to Form N-LIQUID (Form N-RN)**

The Final Rulemaking re-titles Form N-LIQUID as Form N-RN. As amended, Form N-RN includes new reporting events for funds that are subject to the limit on fund leverage risk.

A fund that is subject to the relative or absolute VaR test that determines that it is not in compliance with the applicable test and has not come back into compliance within five business days after such determination must report: the dates on which the VaR of the fund’s portfolio exceeded the VaR test; the VaR of the fund’s portfolio on the dates each exceedance occurred; the VaR of the fund’s designated reference portfolio on the dates each exceedance occurred (for a fund subject to the relative VaR test only); the name of and index identifier for the fund’s designated index or a statement that the fund’s designated reference portfolio is the fund’s securities portfolio (for a fund subject to the relative VaR test only); and the value of the fund’s net assets on the dates each exceedance occurred (for a fund subject to the absolute VaR test only).  

A fund must file an additional report on Form N-RN when it is back in compliance with the applicable VaR test that reports: the dates on which the VaR of the fund’s portfolio exceeded the applicable VaR test; and the current VaR of the fund’s portfolio.

A fund must report on Form N-RN within one business day following the fifth business day after the fund has determined that its portfolio VaR exceeds its VaR test and again one business day following the date that the fund is back in compliance with its VaR test.

Reports on Form N-RN will be non-public.

- The Final Rulemaking includes a related amendment to Rule 30b1-10 under the 1940 Act and makes related changes to the instructions to Form N-RN to reflect a requirement that all funds subject to the limit on fund leverage risk (including registered closed-end funds and BDCs) must file current reports regarding VaR test breaches under the circumstances that Form N-RN specifies.

**Amendments to Form N-CEN**

The Final Rulemaking adds reporting items to Form N-CEN that require a fund to identify whether the fund: relied on Rule 18f-4; was excepted from the Program and limit on fund leverage risk requirements; is a leveraged/inverse fund that was excepted from the limit on fund leverage risk; entered into any reverse repurchase agreements or similar

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73 Part E and Part F of Form N-RN.
74 Part G of Form N-RN.
75 General Instruction A.(2) to Form N-RN.
76 General Instruction A.(1) to Form N-RN.
financing transactions under (1) an asset coverage requirements approach or (2) a derivatives transactions treatment approach; entered into any unfunded commitment agreements under Rule 18f-4; and invested in a security on a when-issued or forward-settling basis, or with a non-standard settlement cycle. All such information will be made publicly available, as was proposed.  

- BDCs are not required to file Form N-CEN and therefore are not subject to these reporting requirements.

### Conforming Amendments to Rule 22e-4 and Forms

The Final Rulemaking amends Rule 22e-4 and a related reporting requirement on Form N-PORT to remove references to assets “segregated to cover” certain derivatives transactions. The Adopting Release explains that such references are no longer relevant, as they refer to assets segregated in accordance with Release 10666 and related staff guidance, which are being rescinded and withdrawn in connection with the Final Rule.

The Final Rulemaking amends Form N-PORT’s general instructions to make clear that the term “derivatives transactions” has the same meaning as in Rule 18f-4, solely with respect to N-PORT items that relate specifically to the Final Rule.

Under the Final Rule, a fund’s derivatives transactions and unfunded commitments entered into under Rule 18f-4 are not considered for purposes of computing Section 18 asset coverage. Accordingly, the Final Rulemaking amends Form N-2 to conform Form N-2’s senior securities table to the provisions of the Final Rule that provide that a fund’s derivatives transactions and unfunded commitment agreements entered into in reliance on the Final Rule will not be included for purposes of computing asset coverage under Section 18(h).

### Transition Periods and Compliance Dates

To give funds sufficient time to comply with the provisions of the Final Rulemaking, the Final Rulemaking provides an 18-month transition period following its effective date, which will be 60 days after its publication in the Federal Register. According to the Adopting Release, the Commission increased the transition period from one year to 18 months in response to comments that a one-year transition period would not provide sufficient time to implement a Program and the limit on fund leverage risk, and to designate a qualified derivatives risk manager.

As noted above, in connection with the adoption of the Final Rule, the Commission will rescind Release 10666, and the Commission staff will withdraw all no-action letters and other staff guidance (or portions thereof) addressing derivatives transactions and other transactions covered by the Final Rule that the Division of Investment Management has determined will be moot, superseded or otherwise inconsistent with the Final Rule. To provide time for funds to prepare to transition their current approaches and come into compliance with the Final Rulemaking, the Commission and the Commission staff, respectively, will delay the rescission of Release 10666 and relevant no-action letters and other guidance for 18 months after the publication of the Final Rulemaking in the Federal Register.

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77 Item C.7 of Form N-CEN. This item of Form N-CEN requires a fund to indicate by “checking a box” whether it has relied on certain 1940 Act rules during a reporting period.

78 General Instruction D to Form N-CEN.

79 General Instruction E to Form N-PORT.
However, the Adopting Release states that any fund may elect to rely on the Final Rule following its effective date, which will be 60 days after its publication in the Federal Register, and prior to the date Release 10666 is rescinded and the related guidance is withdrawn. However, if a fund elects to do so, it may not rely on Release 10666, the related staff no-action letters, or other staff guidance to comply with Section 18 with respect to its use of derivatives and the other transactions that the Final Rule addresses. In addition, if that fund experiences an event reportable on Form N-RN, “the fund must file with the Commission a report on Form N-RN within the period and according to the instructions specified in that form.” Until such time as the Commission completes the process of updating the current Form N-LIQUID (including retitling the form as Form N-RN), such a fund may do so in a report on Form N-LIQUID filed on EDGAR; such a fund also must comply with the amendments to Form N-PORT and Form N-CEN, as applicable.80

80 The Adopting Release notes, however, that the Commission “appreciate[s] that funds will not be able to comply with these new reporting requirements until Commission staff completes the process of updating these amended forms for filing on EDGAR.” Accordingly, until the Commission finishes updating Form N-PORT and Form N-CEN, a fund may elect to rely on the Final Rule prior to the compliance date without also complying with these reporting requirements. The Adopting Release states that the Commission staff will issue a notice to the public when the updated forms are available for filing on EDGAR.
## Appendix A – Comparison to Rule 22e-4

<table>
<thead>
<tr>
<th>Derivatives Risk Management Program and Elements</th>
<th>Liquidity Risk Management Program and Elements</th>
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<tbody>
<tr>
<td><strong>Program</strong></td>
<td><strong>Program</strong></td>
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<tr>
<td>Rule 18f-4(c)(1) – Adopt and implement a written Program with policies and procedures reasonably designed to manage the fund’s derivatives risks and to reasonably segregate the functions associated with the Program from portfolio management; must include required elements</td>
<td>2019 Rule 18f-4(c)(1) – Adopt and implement a written Program with policies and procedures reasonably designed to manage the fund’s derivatives risks and to reasonably segregate the functions associated with the Program from portfolio management; must include required elements</td>
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<td>(Adopted as proposed in 2019 Proposal)</td>
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<tr>
<td><strong>Assessment of Risk</strong></td>
<td><strong>Assessment of Risk</strong></td>
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<td>(Adopted as proposed in 2019 Proposal)</td>
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<tr>
<td>Risk Guidelines / Management</td>
<td>Derivatives Risk Management Program and Elements</td>
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<tr>
<td>Rule 18f-4(c)(1)(ii) – Establish, maintain and enforce investment, risk management, or related guidelines providing for specified levels of criteria, metrics or thresholds of derivatives risks, and measures to be taken if the levels are exceeded</td>
<td>2019 Rule 18f-4(c)(1)(ii) – Establish, maintain and enforce investment, risk management, or related guidelines providing for specified levels of criteria, metrics or thresholds of derivatives risks, and measures to be taken if the levels are exceeded</td>
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<td>(Adopted as proposed in 2019 Proposal)</td>
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<tr>
<td>Rule 18f-4(c)(1)(iii) – Stress testing (at least weekly) to evaluate potential losses to the fund’s portfolio</td>
<td>2019 Rule 18f-4(c)(1)(iii) – Stress testing (at least weekly) to evaluate potential losses to the fund’s portfolio</td>
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<td>(Adopted as proposed in 2019 Proposal)</td>
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Stress Testing
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<td></td>
<td>2020 Final Rule</td>
<td>2016 Final Rule</td>
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<tr>
<td>Backtesting</td>
<td>Rule 18f-4(c)(1)(iv) – Backtesting (at least weekly) of the results of the VaR calculation model used by the fund</td>
<td>No corresponding requirement – Concept appears not to be applicable to the program elements</td>
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<td></td>
<td>(Adopted as proposed in 2019 Proposal except with at least weekly, not daily, backtesting)</td>
<td>(Adopted as proposed in 2019 Proposal)</td>
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<td></td>
<td>2019 Rule 18f-4(c)(1)(iv) – Daily backtesting of the results of the VaR calculation model used by the fund</td>
<td>No corresponding requirement – Concept is not applicable to the portfolio limit</td>
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<td>Reporting and Escalation</td>
<td>Rule 18f-4(c)(1)(v)(A) – Internal reporting to portfolio management regarding operation of Program upon circumstances specified under the Program (e.g., exceedances of Guidelines and results of stress tests)</td>
<td>2019 Rule 18f-4(c)(1)(v)(A) – Internal reporting to portfolio management regarding operation of Program upon circumstances specified under the Program (e.g., exceedances of Guidelines and results of stress tests)</td>
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<td>Rule 18f-4(c)(1)(v)(B) – Derivatives risk manager informing portfolio management in a timely manner and directly informing the board, as appropriate, of material risks arising from the fund’s derivatives transactions</td>
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<td>(Adopted as proposed in 2019 Proposal)</td>
<td>2015 Rule 18f-4(a)(3)(i)(B)(2) – Program must provide for informing portfolio management or the board, as appropriate, regarding material risks arising from the fund’s derivatives transactions</td>
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<td>2019 Rule 18f-4(c)(1)(v)(A) – Program must provide for informing portfolio management or the board, as appropriate, regarding material risks arising from the fund’s derivatives transactions</td>
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<td>Rule 22e-4(b)(1)(iii)(A)(3) – A relevant fund’s policies and procedures for responding to a shortfall below HLIM must require that program administrator report to the board on shortfalls within specified periods</td>
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<td>Rule 22e-4(b)(1)(iv) – If a fund holds more than 15% of its net assets in illiquid investments that are assets, the program administrator must report such occurrence to the board within 1 business day with a plan to address and, if still above 15% after 30 days, the board must assess whether the plan continues to be in the fund’s best interests</td>
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<tr>
<td>Periodic Review of Program</td>
<td>Derivatives Risk Management Program and Elements</td>
<td>Liquidity Risk Management Program and Elements</td>
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<td><strong>2015 Proposal</strong></td>
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<td>Rule 18f-4(c)(1)(vi) –</td>
<td>Derivatives risk manager periodic (at least</td>
<td>Fund must periodically review (at least annually) “liquidity risk,” including consideration of specified factors</td>
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<td>review of the Program</td>
<td>time. Must include a review of VaR calculation</td>
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<td>to evaluate its</td>
<td>model and any designated reference portfolio</td>
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<td>effectiveness and reflect</td>
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<td>changes in risk over time.</td>
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<td>Rule 18f-4(c)(1)(vi) –</td>
<td>Derivatives risk manager periodic (at least</td>
<td>Relevant fund must, no less frequently than annually, review the HLIM</td>
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<td>Derivatives risk manager</td>
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<td>model and any designated reference index to</td>
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<td>remains appropriate</td>
<td>evaluate whether it remains appropriate</td>
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<td>2019 Proposal)</td>
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<td>their effectiveness and reflect changes in</td>
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<td>risks over time</td>
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</table>

**Derivatives Risk Manager**

- Rule 18f-4(a) (definitions) – Officer or officers of the fund’s investment adviser; not a portfolio manager or, if multiple officers are derivatives risk manager, may not have a majority composed of portfolio managers; must have relevant experience regarding management of derivatives risk

- Rule 18f-4(a) (definitions) – Responsible for administering the Program and related policies and procedures

(Adopted as proposed in 2019 Proposal)

**Liquidity Program Administrator**

- Rule 22e-4(b)(1)(i) – The fund’s investment adviser, officer, or officers (which may not be solely portfolio managers of the fund) responsible for administering the program and its policies and procedures

- Rule 22e-4(b)(1)(iii)(A)(2) – Relevant fund must, no less frequently than annually, review the HLIM

See also discussion of Rule 22e-4(b)(2)(iii) under “Board Reporting on Program” below
<table>
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<tr>
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<th>Derivatives Risk Management Program and Elements</th>
<th>Liquidity Risk Management Program and Elements</th>
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<tr>
<td>Approval of Manager / Administrator</td>
<td>Rule 18f-4(c)(3)(i) – Designation approved by the board, including a majority of independent board members</td>
<td>2019 Rule 18f-4(c)(5)(i) – Designation approved by the board, including a majority of independent board members, taking into account experience</td>
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<td>No explicit requirement for board approval of Program</td>
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<td>Requirements of Rule 38a-1 encompass board obligations to oversee Program</td>
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<td>Board Reporting on Program</td>
<td>Derivatives Risk Management Program and Elements</td>
<td>Liquidity Risk Management Program and Elements</td>
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<td>2020 Final Rule</td>
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<td>Rule 18f-4(c)(3)(ii)</td>
<td>Derivatives risk manager reporting to the board on Program implementation and effectiveness in a written report on or before implementation and at least annually thereafter; report must include representation as to the Program’s reasonable design to manage the fund’s derivatives risks and basis for such representation. The report must also include the basis for the derivatives risk manager’s approval of any designated reference portfolio or any change in designated reference portfolio, or the basis for any determination that a designated reference portfolio would not provide an appropriate reference portfolio. (Adopted as proposed in 2019 Proposal with clarifications to terminology and to specifically address changes to designated reference portfolio)</td>
<td>Derivatives risk manager reporting to the board on Program implementation and effectiveness in a written report on or before implementation and at least annually thereafter; report must include representation as to the Program’s reasonable design to manage the fund’s derivatives risks and basis for such representation and for selection of designated reference index (or lack thereof).</td>
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<tr>
<td>Rule 18f-4(c)(5)(ii)</td>
<td>2019 Rule 18f-4(c)(5)(ii) – Derivatives risk manager reporting to the board on Program implementation and effectiveness in a written report on or before implementation and at least annually thereafter; report must include representation as to the Program’s reasonable design to manage the fund’s derivatives risks and basis for such representation and for selection of designated reference index (or lack thereof).</td>
<td>The board shall review on at least a quarterly basis a written report prepared by the derivatives risk manager regarding the adequacy of Program and effectiveness of implementation.</td>
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<td>Rule 18f-4(a)(3)(ii)(B)</td>
<td>2015 Rule 18f-4(a)(3)(ii)(B) – The board shall review on at least a quarterly basis a written report prepared by the derivatives risk manager regarding the adequacy of Program and effectiveness of implementation.</td>
<td>Rule 22e-4(b)(2)(iii) – The board, including a majority of independent directors, must review, no less frequently than annually, a written report prepared by the program administrator that addresses the operation of the program and assesses its adequacy and effectiveness of implementation, including, if applicable, the operation of the HLIM, and any material changes to the program.</td>
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<td>Regular Board Reporting</td>
<td>Derivatives Risk Management Program and Elements</td>
<td>Liquidity Risk Management Program and Elements</td>
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<td><strong>Rule 18f-4(c)(3)(iii)</strong> – Derivatives risk manager providing to board, at frequency determined by board, a written report regarding analysis of exceedances of guidelines, results of stress testing and results of backtesting, including information reasonably necessary to evaluate fund’s response to guideline exceedances and stress testing results**</td>
<td><strong>2019 Rule 18f-4(c)(5)(iii)</strong> – Derivatives risk manager providing to board, at frequency determined by board, a written report regarding analysis of exceedances of guidelines, results of stress testing and results of backtesting, including information reasonably necessary to evaluate fund’s response to guideline exceedances and stress testing results</td>
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*(Adopted as proposed in 2019 Proposal, except removing requirement to report “any” Guidelines exceedances)*
Appendix B – Comparison to VaR-Based Limits for UCITS

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<td>Rule 18f-4(c)(2)(i) – A fund must comply with the relative VaR test unless the derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, taking into account the fund’s investments, investment objectives, and strategy. A fund that does not apply the relative VaR test must comply with the absolute VaR test</td>
<td>2019 Rule 18f-4(c)(2)(i) – A fund must comply with the relative VaR test or, if the derivatives risk manager is unable to identify a designated reference index that is appropriate for the fund taking into account the fund’s investments, investment objectives, and strategy, the absolute VaR test</td>
<td>Section 1, Definition and scope of Global Exposure – A UCITS must calculate its global exposure on at least a daily basis and comply with global exposure limits. UCITS may calculate global exposure by using the commitment approach, the value at risk approach or other advanced risk measurement methodologies as may be appropriate</td>
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<td>Rule 18f-4(c)(2)(ii) – The fund must determine its compliance with the applicable VaR test at least once each business day</td>
<td>2019 Rule 18f-4(c)(2)(ii) – The fund must determine its compliance with the applicable VaR test at least once each business day</td>
<td>Section 3.1 General Principles and general requirement – A global exposure calculation using the VaR approach should consider all the positions of the portfolio</td>
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(Adopted as proposed in 2019 Proposal except with respect to the use of designated reference portfolio, rather than only using a designated reference index, and the standard for the derivatives risk manager’s determination)
### VaR Definition

**Rule 18f-4(a) (definitions)** – VaR means an estimate of potential losses on an instrument or portfolio, expressed as a percentage of the value of the portfolio’s assets (or net assets when computing a fund’s VaR), over a specified time horizon and at a given confidence level.

*(Adopted as proposed in 2019 Proposal, but distinguishes between portfolio assets and fund net assets)*

#### VaR Calculation Model and Parameters

- **Rule 18f-4(a) (definitions)** – Any VaR model used by a fund for purposes of determining the fund’s compliance with the applicable VaR test must:
  1. take into account and incorporate all significant, identifiable market risk factors associated with a fund’s investments, including, as applicable: (A) equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk; (B) material risks arising from the nonlinear price characteristics of a fund’s investments, including options and positions with embedded optionality; and (C) the sensitivity of the market value of the fund’s investments to changes in volatility;
  2. use a 99% confidence level and a time horizon of 20 trading days; and
  3. be based on at least three years of historical market data.

*(Model parameters were adopted as proposed in 2019 Proposal)*

#### 2019 Proposal

- **Rule 18f-4(a) (definitions)** – Any VaR model used by a fund for purposes of determining the fund’s compliance with the applicable VaR test must:
  1. take into account and incorporate all significant, identifiable market risk factors associated with a fund’s investments, including, as applicable: (A) equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk; (B) material risks arising from the nonlinear price characteristics of a fund’s investments, including options and positions with embedded optionality; and (C) the sensitivity of the market value of the fund’s investments to changes in volatility;
  2. use a 99% confidence level and a time horizon of 20 trading days; and
  3. be based on at least three years of historical market data.

*(Model parameters were adopted as proposed in 2019 Proposal)*

#### 2020 Final Rule

- **Rule 18f-4(a) (definitions)** – VaR means an estimate of the potential losses on an instrument or portfolio, expressed as a percentage of the value of the portfolio’s assets, over a specified time horizon and at a given confidence level.

#### CESR’s (now ESMA) Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (Guidelines)

- **Section 3.1, explanatory text, paragraph 38** – The VaR approach is a measure of the maximum potential loss at a given confidence level (probability) over a specific time period under normal market conditions due to market risk rather than leverage.

#### 2019 Rule 18f-4(a) (definitions)

- Any VaR model used by a fund for purposes of determining the fund’s compliance with the applicable VaR test must:
  1. take into account and incorporate all significant, identifiable market risk factors associated with a fund’s investments, including, as applicable: (A) equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk; (B) material risks arising from the nonlinear price characteristics of a fund’s investments, including options and positions with embedded optionality; and (C) the sensitivity of the market value of the fund’s investments to changes in volatility;
  2. use a 99% confidence level and a time horizon of 20 trading days; and
  3. be based on at least three years of historical market data.

The default calculation parameters for UCITS were largely the same as those stated in the Proposed Rule with a longer required number of years of historical market data.

### VaR Calculation Model and Parameters

- **Section 3.6.1 VaR approach** – Quantitative requirements, Calculation Standards, paragraphs 2-4 – The calculation of the absolute and relative VaR should be carried out in accordance with the following parameters:
  1. one-tailed confidence interval of 99%;
  2. holding period equivalent to 1 month (20 business days);
  3. effective observation period (history) of risk factors of at least 1 year (250 business days) unless a shorter observation period is justified by a significant increase in price volatility (for instance extreme market conditions);
  4. quarterly data set updates, or more frequent when market prices are subject to material changes; and
  5. at least daily calculation

A confidence interval and/or a holding period differing from the default calculation in (a) and (b) may be used by the UCITS provided the confidence interval is not below 95% and the holding period does not exceed 1 month (20 days).
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<td></td>
<td>The default calculation parameters for UCITS are largely the same as those stated in the Final Rule with a longer required number of years of historical market data</td>
<td>The Proposing Release recognized that certain funds prefer to calculate their VaR for a one-day holding period, and therefore suggested that funds may convert their one-day VaR to the equivalent VaR for a 20-day holding period for purposes of the VaR test, if appropriate</td>
<td>For UCITS referring to an absolute VaR approach, the use of other calculation parameters goes together with a rescaling of the 20% limit to the particular holding period and/or confidence interval. The rescaling can only be done under the assumption of a normal distribution with an identical and independent distribution of the risk factor returns by referring to the quantiles of the normal distribution and the square root of time rule</td>
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<td>The Adopting Release states that “rescaling” a VaR calculation initially performed at a 95% confidence level to 99% is appropriate and reaffirms that a fund may convert a one-day VaR to the equivalent VaR for a 20-day holding period for purposes of the VaR test, if appropriate</td>
<td>Unlike under the UCITS approach, the Proposed Rule provided no flexibility to reduce the confidence level, change the time horizon or use less than the specified number of years of historical market data</td>
<td>The Guidelines’ explanatory text states that UCITS may deviate from the default VaR calculation standards (i.e., confidence interval of 99% and holding period of 1 month (20 days)). The text notes, as an example, that a UCITS could use a confidence interval of 95% and a holding period of 5 days in which case the 20% maximum VaR limit should be scaled down to 7%</td>
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<td>Unlike under the UCITS approach, the Final Rule provides no flexibility to reduce the confidence level, change the time horizon or use less than the specified number of years of historical market data</td>
<td>In addition, the Proposed Rule did not provide flexibility to scale the maximum absolute VaR test level of 15% based on different confidence level and holding period factors</td>
<td>With regard to the relative VaR approach, the Guidelines’ explanatory text states that the relative nature of the measure means that no adjustment (i.e., rescaling) is necessary to the VaR limit of 200% in instances where the UCITS deviates from the default VaR calculation standards</td>
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**Section 3.6.3 Completeness and accuracy of the risk assessment** – The choice of the appropriate model remains the responsibility of the UCITS. When selecting the VaR model, the UCITS should ensure that the model is appropriate with regard to the investment strategy being pursued and the types and complexity of the financial instruments used. The VaR model should provide for completeness and it should assess the risks with a high level of accuracy. In particular:

- All the positions of the UCITS portfolio should be included in the VaR calculation
- The model should adequately capture all the material market risks associated with portfolio
<table>
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<tr>
<th>VaR Calculation Model and Parameters (continued)</th>
<th>2020 Final Rule</th>
<th>2019 Proposal</th>
<th>CESR’s (now ESMA) Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (Guidelines)</th>
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<td>positions and, in particular, the specific risks associated with financial derivative instruments. For that purpose, all the risk factors which have more than a negligible influence on the fluctuation of the portfolio’s value should be covered by the VaR model</td>
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<td>• The quantitative models used within the VaR framework (pricing tools, estimation of volatilities and correlations, etc) should provide for a high level of accuracy</td>
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<td>• All data used within the VaR framework should provide for consistency, timeliness and reliability</td>
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<tr>
<td>Rule 18f-4(a) (definitions) – A designated reference portfolio is a designated index or the fund’s securities portfolio. Notwithstanding paragraph (2) of the definition of designated index, if the fund’s investment objective is to track the performance (including a leverage multiple or inverse multiple) of an unleveraged index, the fund must use that index as its designated reference portfolio</td>
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<td><strong>(New from the 2019 Proposal)</strong></td>
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<tr>
<td>Rule 18f-4(a) (definitions) – A designated index is an unleveraged index that:</td>
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<td>(1) is approved by the derivatives risk manager for purposes of the relative VaR test and that reflects the markets or asset classes in which the fund invests; and</td>
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<td>(2) is not administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used.</td>
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<td>In the case of a blended index, none of the indexes that compose the blended index may be administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used.</td>
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<td>(Adopted as proposed in 2019 Proposal except the designated reference index is approved, not</td>
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| 2019 Rule 18f-4(a) (definitions) – A designated reference index is an unleveraged index that: |
| (1) is selected by the derivatives risk manager and that reflects the markets or asset classes in which the fund invests; |
| (2) is not administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used; and |
| (3) is an “appropriate broad-based securities market index” or an “additional index,” as defined in the instruction to Item 27 in Form N-1A. |
| In the case of a blended index, none of the indexes that compose the blended index may be administered by an organization that is an affiliated person of the fund, its investment adviser, or principal underwriter, or created at the request of the fund or its investment adviser, unless the index is widely recognized and used. |

<p>| Section 3.3 Relative VaR approach, paragraph 2 – The reference portfolio and the related processes should comply with the following criteria: |
| (1) The reference portfolio should be unleveraged and should, in particular, not contain any financial derivative instruments or embedded derivatives, except that: |
| (i) a UCITS engaging in a long/short strategy may select a reference portfolio which uses financial derivative instruments to gain the short exposure |
| (ii) a UCITS which intends to have a currency hedged portfolio may select a currency hedged index as a reference portfolio |
| (2) The risk profile of the reference portfolio should be consistent with the investment objectives, policies and limits of the UCITS’ portfolio |
| (3) If the risk/return profile of a UCITS changes frequently or if the definition of a reference portfolio is not possible, then the relative VaR method should not be used |
| (4) The process relating to the determination and the ongoing maintenance of the reference portfolio should be integrated in the risk management process and be supported by adequate procedures. Guidelines governing the composition of the reference portfolio should be developed. In addition, the actual composition of the reference portfolio and any changes should be clearly documented |</p>
<table>
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<tr>
<th>Designated Reference Portfolio (continued)</th>
<th>2020 Final Rule</th>
<th>2019 Proposal</th>
<th>CESR’s (now ESMA) Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (Guidelines)</th>
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<td>selected, by the derivatives risk manager and does not refer to Form N-1A)</td>
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<td><strong>Rule 18f-4(a) (definitions)</strong> – A securities portfolio means the fund’s portfolio of securities and other investments, excluding any derivatives transactions, that is approved by the derivatives risk manager for purposes of the relative VaR test, provided that the fund’s securities portfolio reflects the markets or asset classes in which the fund invests (i.e., the markets or asset classes in which the fund invests directly through securities and other investments and indirectly through derivatives transactions)</td>
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<td>(New from the 2019 Proposal)</td>
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<tr>
<td>Relative and Absolute VaR Test Thresholds</td>
<td>2020 Final Rule</td>
<td>2019 Proposal</td>
<td>CESR’s (now ESMA) Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (Guidelines)</td>
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<td>Rule 18f-4(a) (definitions) – The relative VaR test means (1) the VaR of the fund’s portfolio does not exceed 200% of the VaR of the designated reference portfolio or (2) in the case of a closed-end company that has issued to investors and has then outstanding shares of a class of senior security that is a stock, that the VaR of the fund’s portfolio does not exceed 250% of the VaR of the designated reference portfolio.</td>
<td>2019 Rule 18f-4(a) (definitions) – The relative VaR test means the VaR of the fund’s portfolio does not exceed 150% of the VaR of the designated reference index.</td>
<td>Section 3.3 Relative VaR approach, paragraph 1 – The VaR of the UCITS portfolio must not be greater than 200% of the VaR of the reference portfolio.</td>
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<td>Rule 18f-4(a) (definitions) – The absolute VaR test means (1) the VaR of the fund’s portfolio does not exceed 20% of the value of the fund’s net assets or (2) in the case of a closed-end company that has issued to investors and has then outstanding shares of a class of senior security that is a stock, that the VaR of the fund’s portfolio does not exceed 25% of the value of the fund’s net assets.</td>
<td>2019 Rule 18f-4(a) (definitions) – The absolute VaR test means the VaR of the fund’s portfolio does not exceed 15% of the value of the fund’s net assets.</td>
<td>Section 3.6.1 VaR approach – Quantitative requirements, Calculation Standards, paragraph 1 – The absolute VaR of a UCITS cannot be greater than 20% of its net asset value.</td>
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<td>(Adopted as proposed in 2019 Proposal, but increased % limits and added higher % limits for certain closed-end funds)</td>
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<td>Section 3.1 General Principles and general requirement – A UCITS should always set the maximum VaR limit according to its defined risk profile.</td>
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<td>Reporting and Remediation of VaR Breaches</td>
<td>2020 Final Rule</td>
<td>2019 Proposal</td>
<td>CESR’s (now ESMA) Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (Guidelines)</td>
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<td><strong>Rule 18f-4(c)(2)(ii) and (iii)</strong> – If a fund determines that it is not in compliance with its VaR test, it must return to compliance promptly, in a manner that is in the best interests of the fund and its shareholders. If after the five business days the fund remains non-compliant, certain requirements regarding board reporting (triggered on fifth and 30th business days), Program analysis and updates would apply</td>
<td><strong>2019 Rule 18f-4(c)(2)(ii) and (iii)</strong> – If a fund determines that it is not in compliance with its VaR test, it must return to compliance within three business days. If after the three business days the fund remains non-compliant, the requirements regarding board reporting, Program analysis and updates and restrictions on certain new derivatives transactions would apply</td>
<td>(Adopted as proposed in 2019 Proposal, but removes requirement to return to compliance within three business days; extends non-compliance threshold to five days; and removes restrictions on certain new derivatives transactions after breach)</td>
<td>See discussion of overshooting under Back Testing below</td>
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<td>Rule 18f-4(c)(1)(iv) – The Program must provide for the backtesting to be conducted no less frequently than weekly, of the results of the VaR calculation model used by the fund in connection with the applicable VaR test by comparing the fund’s actual gain or loss that occurred on each business day during the backtesting period for that day with the corresponding VaR calculation for that day, estimated over a one-day time horizon, and identifying as an exception any instance in which the fund experiences a loss exceeding the corresponding VaR calculation’s estimated loss.</td>
<td>2019 Rule 18f-4(c)(1)(iv) – The Program must provide for the backtesting of the results of the VaR calculation model used by the fund in connection with the applicable VaR test by, each business day, comparing the fund’s actual gain or loss for that day with the corresponding VaR calculation for that day, estimated over a one-day time horizon, and identifying as an exception any instance in which the fund experiences a loss exceeding the corresponding VaR calculation’s estimated loss.</td>
<td>Section 3.6.4 Back Testing, paragraphs 1-6 – A UCITS should monitor the accuracy and performance of its VaR model (i.e., prediction capacity of risk estimates), by conducting a back testing program. The back testing program should provide for each business day a comparison of the one-day value-at-risk measure generated by the UCITS model for the UCITS’ end-of-day positions to the one-day change of the UCITS’ portfolio value by the end of the subsequent business day.</td>
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<td>(Adopted as proposed in 2019 Proposal except with at least weekly, not daily, backtesting)</td>
<td>The Proposing Release noted that, based on the required 99% confidence level and one-day time horizon, a fund would be expected to have approximately 2.5 backtesting exceptions per year. The Proposing Release noted that, if a fund were “consistently to experience backtesting exceptions more (or less) frequently, [it] could suggest that the fund’s VaR model may not be effectively taking into account and incorporating all significant, identifiable market risk factors associated with a fund’s investments.” The Proposing Release also stated that “if 10 or more exceptions are generated in a year from backtesting that is conducted using a 99% confidence level and over a one-day time horizon, and assuming 250 trading days in a year, it is statistically likely that such exceptions are a result of a VaR model that is not accurately estimating VaR.”</td>
<td>The UCITS should carry out the back testing program at least on a monthly basis, subject to always performing retroactively the comparison for each business day.</td>
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<td>Rule 18f-4(c)(1)(v) – The derivatives risk manager must provide regular reports on the results of the backtesting to the fund’s board</td>
<td>2019 Rule 18f-4(c)(1)(v) – The derivatives risk manager must provide regular reports on the results of the backtesting to the fund’s board.</td>
<td>The UCITS should determine and monitor the “overshootings” on the basis of this back testing program. An overshooting is a one-day change in the portfolio’s value that exceeds the related one-day value-at-risk measure calculated by the model. If the back testing results reveal a percentage of overshootings that appears to be too high, the UCITS should review the VaR model and make appropriate adjustments.</td>
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<td>(Adopted as proposed in 2019 Proposal)</td>
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<td>The UCITS senior management should be informed at least on a quarterly basis (and where applicable the UCITS competent authority should be informed on a semi-annual basis), if the number of overshootings for each UCITS for the most recent 250 business days exceeds 4 in the case of a 99% confidence interval. This information should contain an analysis and explanation of the sources of ‘overshootings’ and a statement of what measures if any were taken to improve the accuracy of the model. The competent authority may take measures and apply stricter criteria to the use of VaR if the ‘overshootings’ exceed an unacceptable number.</td>
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<td>Rule 18f-4(c)(1)(iii) – The Program must provide for stress testing of the fund’s portfolio to evaluate potential losses to the fund’s portfolio in response to extreme but plausible market changes or changes in market risk factors that would have a significant adverse effect on the fund’s portfolio, taking into account correlations of market risk factors and resulting payments to derivatives counterparties. A fund may determine the frequency with which stress tests are conducted, taking into account the fund’s strategy and investments and current market conditions, provided that the fund must conduct stress testing at least weekly.&lt;br&gt;(Adopted as proposed in 2019 Proposal)</td>
<td>2019 Rule 18f-4(c)(1)(iii) – The Program must provide for stress testing of the fund’s portfolio to evaluate potential losses to the fund’s portfolio in response to extreme but plausible market changes or changes in market risk factors that would have a significant adverse effect on the fund’s portfolio, taking into account correlations of market risk factors and resulting payments to derivatives counterparties. A fund may determine the frequency with which stress tests are conducted, taking into account the fund’s strategy and investments and current market conditions, provided that the fund must conduct stress testing at least weekly</td>
<td>Section 3.6.5 – Stress Testing – General Provisions – Each UCITS using the VaR approach should conduct a rigorous, comprehensive and risk-adequate stress testing program. The stress testing program should be designed to measure any potential major depreciation of the UCITS value as a result of unexpected changes in the relevant market parameters and correlation factors. Conversely, where appropriate, it should also measure changes in the relevant market parameters and correlation factors, which could result in major depreciation of the UCITS value. The stress tests should be adequately integrated into the UCITS risk management process and the results should be considered when making investment decisions for the UCITS</td>
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<td>Section 3.6.5 – Stress Testing – Quantitative Requirements – The stress tests should cover all risks which affect the value or the fluctuations in value of the UCITS to any significant degree. In particular, those risks which are not fully captured by the VaR model used, should be taken into account. The stress tests should be appropriate for analyzing potential situations in which the use of significant leverage would expose the UCITS to significant downside risk and could potentially lead to the default of the UCITS (i.e., NAV &lt;0). The stress tests should focus on those risks which, though not significant in normal circumstances, are likely to be significant in stress situations</td>
<td>Section 3.6.5 – Stress Testing – Qualitative Requirements – Stress tests should be carried out on a regular basis, at least once a month, and whenever a change in the value or the composition of a UCITS or a change in market conditions makes it likely that the test results will differ significantly</td>
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<tr>
<td>Rule 18f-4(c)(1)(vi)</td>
<td>The derivatives risk manager must review the Program at least annually to evaluate the Program’s effectiveness and to reflect changes in risk over time. The periodic review must include a review of the VaR calculation model used by the fund (including the required backtesting) and any designated reference portfolio to evaluate whether it remains appropriate. (Adopted as proposed in 2019 Proposal except with respect to the use of designated reference portfolio, not designated reference index)</td>
<td>2019 Rule 18f-4(c)(1)(vi) – The derivatives risk manager must review the Program at least annually to evaluate the Program’s effectiveness and to reflect changes in risk over time. The periodic review must include a review of the VaR calculation model used by the fund (including the required backtesting) and any designated reference index to evaluate whether it remains appropriate.</td>
<td>Section 3.7 – VaR Approach: Qualitative requirements – The risk management function should be responsible for, among other things, sourcing, testing, maintaining and using the VaR model, supervising the determination of the reference portfolio, adopting the model to the UCITS’ portfolio, performing continuous validation of the model, monitoring and controlling VaR limits, and producing on a regular basis reports for senior management. Following initial development, and after any significant change to the model, the model should undergo a validation by a party independent of the building process for ensuring that the model is conceptually sound and captures adequately all material risks. The risk management function should perform ongoing validation of the VaR model including back testing as noted above.</td>
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### Exceptions

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<tr>
<td>Rule 18f-4(c)(4)(i)</td>
<td>A fund is not required to adopt a Program, comply with the limit on fund leverage risk or comply with the board oversight and reporting requirements if:</td>
<td>2019 Rule 18f-4(c)(3) – A fund is not required to adopt a Program or comply with the limit on fund leverage risk if:</td>
<td>Section 2 Calculation of Global Exposure using the Commitment Approach – There is no limited derivatives user exception for UCITS. UCITS may, instead of complying with the above VaR-based test, calculate its global exposure by using the “commitment approach.” Under the commitment approach, a UCITS’ derivatives notional amounts (taking into account netting and hedging) may not exceed 100% of the UCITS’ net asset value. If a UCITS chooses to use the commitment approach then it is limited to a leverage limit of 100% (UCITS may only generate leverage through financial derivative instruments and cannot borrow to create a leveraged investment)</td>
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<td>(1) the fund adopts and implements written policies and procedures reasonably designed to manage the fund’s derivatives risks; and (Adopted as proposed in 2019 Proposal)</td>
<td>(1) the fund adopts and implements written policies and procedures reasonably designed to manage the fund’s derivatives risk; and</td>
<td>Section 1 Definition and scope of Global Exposure, paragraph 4 – A UCITS must use an advanced risk measurement methodology (supported by a stress testing program) such as the VaR approach to calculate global exposure where:</td>
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<td>(2) the fund’s derivatives exposure does not exceed 10% of net assets, excluding, for this purpose, currency or interest rate derivatives that hedge currency or interest rate risks associated with specific equity or fixed income investments held (which must be foreign-currency-denominated in the case of currency derivatives), or the fund’s borrowings, provided that the currency or interest rate derivatives are entered into and maintained by the fund for hedging purposes and that the notional amounts of such derivatives do not exceed the value of the hedged investments (or the par value thereof, in the case of fixed income investments, or the principal amount, in the case of borrowing) by more than 10% (Exclusions are new from the 2019 Proposal)</td>
<td>(2) (i) the fund’s derivatives exposure does not exceed 10% of the fund’s net assets or (ii) the fund limits its use of derivatives transactions to currency derivatives that hedge the currency risks associated with specific foreign-currency-denominated equity or fixed-income investments held by the fund, provided that the currency derivatives are entered into and maintained by the fund for hedging purposes and that the notional amounts of such derivatives do not exceed the value of the hedged instruments denominated in the foreign currency (or the par value thereof, in the case of fixed-income investments) by more than a negligible amount</td>
<td>(1) it engages in complex investment strategies which represent more than a negligible part of the UCITS’ investment policy;</td>
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<td>Rule 18f-4(c)(4)(ii) – If a fund’s derivatives exposure exceeds 10% of its net assets, and the fund is not in compliance within 5 business days, the fund’s investment adviser must provide a written report to the board informing</td>
<td>2019 Rule 18f-4(a) – Derivatives exposure means: the sum of the notional amounts of the fund’s derivatives instruments and, in the case of short sale borrowings, the value of the asset sold short. In determining derivatives exposure a fund may convert the notional amount of interest rate derivatives to 10-year bond equivalents and delta adjust the notional amounts of options contracts</td>
<td>(2) it has more than a negligible exposure to exotic derivatives; or</td>
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ESMA’s explanatory text states that with respect to the selection of the methodology used to measure global exposure, it expects 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. As a general rule, ESMA expects UCITS to use a maximum loss approach to assess whether the complex investment
<table>
<thead>
<tr>
<th>Exceptions (continued)</th>
<th>2020 Final Rule</th>
<th>2019 Proposal</th>
<th>CESR’s (now ESMA) Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS (Guidelines)</th>
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<td>them whether the investment adviser intends either:</td>
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<td>strategy or the use of exotic derivatives represent more than a negligible exposure</td>
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<td>(1) to reduce the fund’s derivatives exposure to less than 10% of the fund’s net assets promptly, but within no more than 30 calendar days of the exceedance, in a manner that is in the best interests of the fund and its shareholders; or</td>
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<td>(2) for the fund to establish a derivatives risk management Program, comply with the limit on fund leverage risk, and comply with the board oversight and reporting requirements, as soon as reasonably practicable</td>
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<td>Rule 18f-4(a) –</td>
<td>Derivatives exposure means:</td>
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<td>the sum of (1) the gross notional amounts of the fund’s derivatives transactions and, (2) in the case of short sale borrowings, the value of the assets sold short. If a fund’s derivatives transactions include reverse repurchase agreements or similar financing transactions, the fund’s derivatives exposure also includes, for each transaction, the proceeds received but not yet repaid or returned, or for which the associated liability has not been extinguished, in connection with the transaction. In determining derivatives exposure a fund may (1) convert the notional amount of interest rate derivatives to 10-year bond equivalents and delta adjust the notional amounts of options contracts and (2) exclude any closed-out positions, if those positions were closed out with the same counterparty and result in no credit or market exposure to the fund</td>
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| No Asset Segregation Requirement (including for Derivatives Transactions, Reverse Repurchase Agreements, Similar Financing Transactions, Unfunded Commitment Agreements and When Issued, Forward-Settling, and Non-Standard Settlement Cycle Securities Transactions) | No Asset Segregation Requirement (including for Derivatives Transactions, Reverse Repurchase Agreements, Similar Financing Transactions, Unfunded Commitment Agreements and When Issued, Forward-Settling, and Non-Standard Settlement Cycle Securities Transactions) | Section 5 – Cover rules for transactions in Financial Derivative Instruments –
(1) A UCITS should, at any given time, be capable of meeting all its payment and delivery obligations incurred by transactions involving financial derivative instruments
(2) Monitoring to ensure that financial derivative transactions are adequately covered should form part of the risk management process |
## Appendix C – Comparison of Certain Conditions under Proposed and Final Rules

<table>
<thead>
<tr>
<th>Condition to Enter Into Derivatives Transactions: Limit on Fund Leverage Risk</th>
<th>Condition to Enter Into Derivatives Transactions: Portfolio Limitations</th>
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</thead>
<tbody>
<tr>
<td><strong>Limit</strong></td>
<td><strong>Role of Board</strong></td>
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</tbody>
</table>
| 2020 Final Rule  
Rule 18f-4(c)(2) – A fund must comply with the relative VaR test unless the derivatives risk manager reasonably determines that a designated reference portfolio would not provide an appropriate reference portfolio for purposes of the relative VaR test, taking into account the fund’s investments, investment objectives, and strategy. A fund that does not apply the relative VaR test must comply with the absolute VaR test. | No specific board approval requirement with respect to selection of the applicable VaR test (but see board reporting requirements) |
| 2019 Proposal  
2019 Rule 18f-4(c)(2) – A fund must comply with the relative VaR test or, if the derivatives risk manager is unable to identify a designated reference index that is appropriate for the fund taking into account the fund’s investments, investment objectives, and strategy, the absolute VaR test. | No specific board approval requirement with respect to selection of the applicable VaR test (but see board reporting requirements) |
| 2015 Proposal  
2015 Rule 18f-4(a)(1) – A fund may enter into derivatives transactions provided that, immediately after entering into any senior securities transaction, the “aggregate exposure” of a fund would not be permitted to exceed either: (1) 150% of the value of a fund’s net assets; or (2) 300% of the value of the fund’s net assets, provided that the fund’s full portfolio VaR is less than the fund’s securities VaR. | 2015 Rule 18f-4(a)(5) – The fund’s board, including a majority of independent members, must approve the portfolio limitation under which the fund will operate |

### Conditions to Enter Into Reverse Repurchase Agreements, Similar Financing Transactions, Unfunded Commitment Agreements and When Issued, Forward-Settling, and Non-Standard Settlement Cycle Securities Transactions

<table>
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<th>Limit and Role of Board</th>
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| 2020 Final Rule  
Rule 18f-4(d) – A fund may enter into a reverse repurchase agreement or similar financing transaction, if the fund: (1) complies with the asset coverage requirements under Section 18 of the 1940 Act and combines the aggregate amount of all indebtedness associated with such transactions with the aggregate amount of any other senior securities representing indebtedness when calculating the asset coverage ratio; or (2) treats all reverse repurchase agreements or similar financing transactions as derivatives transactions for purposes of Rule 18f-4. | 2019 Final Rule  
2019 Rule 18f-4(d) – A fund may enter into a reverse repurchase agreement or similar financing transaction, if the fund: complies with the asset coverage requirements under Section 18 of the 1940 Act; and combines the aggregate amount of indebtedness associated with such transactions with the aggregate amount of any other senior securities representing indebtedness when calculating the asset coverage ratio. |
| 2015 Final Rule  
2015 Rule 18f-4(b) – A fund may enter into financial commitment transactions if the fund: (1) satisfies the Asset Segregation Requirements (see description below), (2) the fund’s board, including a majority of the independent members, has approved written policies and procedures reasonably designed to provide for the fund’s maintenance of qualifying coverage assets, and (3) the fund maintains 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. | 2015 Rule 18f-4(b) – A fund may enter into financial commitment transactions if the fund: (1) satisfies the Asset Segregation Requirements (see description below), (2) the fund’s board, including a majority of the independent members, has approved written policies and procedures reasonably designed to provide for the fund’s maintenance of qualifying coverage assets, and (3) the fund maintains 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. |
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<tr>
<td>Limit and Role of Board</td>
<td>Rule 18f-4(e) – A fund may enter into an unfunded commitment agreement, provided the fund reasonably believes, at the time it enters such agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to all of its unfunded commitment agreements as they come due, subject to certain limitations and guidelines for forming a reasonable belief and related documentation requirements thereof. <em>(Adopted as proposed in 2019 Proposal)</em></td>
<td>2019 Rule 18f-4(e) – A fund may enter into an unfunded commitment agreement, provided the fund reasonably believes, at the time it enters such agreement, that it will have sufficient cash and cash equivalents to meet its obligations with respect to all of its unfunded commitment agreements as they come due, subject to certain limitations and guidelines for forming a reasonable belief and related documentation requirements thereof.</td>
<td>No specific board approval requirement with respect to transactions.</td>
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<td>Rule 18f-4(f) – A fund or a money market fund may invest in a security on a when-issued or forward-settling basis, or with a non-standard settlement cycle, and the transaction will be deemed not to involve a senior security, provided that: (i) the fund intends to physically settle the transaction; and (ii) the transaction will settle within 35 days of its trade date. <em>(This is the only aspect of the 2020 Final Rule on which money market funds can rely)</em></td>
<td>No specific board approval requirement with respect to transactions.</td>
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<td>For derivatives transactions, segregate cash and cash equivalents equal to the mark-to-market coverage amount (the net amount currently payable by the fund if the fund exits the derivatives transaction) plus the risk-based coverage amount (a reasonable estimate of the potential amount payable by the fund if the fund were to exit under stressed conditions) with certain reductions for required margin</td>
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<td>For financial commitment transactions, segregate cash or cash equivalents or assets convertible to cash or that will generate cash, with a value at least equal to the value of the fund’s obligations under its financial commitment transactions prior to the date of the fund’s expected payment obligation</td>
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**Exception for Limited Derivatives Users**

| Rule 18f-4(c)(4)(i) – A fund is not required to adopt a Program, comply with the limit on fund leverage risk or comply with the board oversight and reporting requirements subject to the following conditions: |
| (1) The fund must adopt and implement written policies and procedures reasonably designed to manage the fund’s derivatives risks; and (Adopted as proposed in 2019 Proposal) |

| 2019 Rule 18f-4(c)(3) – A fund is not required to adopt a Program or comply with limit on fund leverage risk subject to the following conditions: |
| (1) The fund must adopt and implement policies and procedures reasonably designed to manage the fund’s derivatives risks; and |
| (2) The fund’s derivatives exposure may not exceed 10% of net assets; or the fund would need to limit its use of derivatives |

| 2015 Rule 18f-4(a)(4) – A Program is not required if a fund complies with a portfolio limitation under which: |
| (1) 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 |
| (2) The fund does not enter into complex derivatives transactions |
|-----------------------------------------|-----------------|---------------|---------------|
| (2) The fund’s derivatives exposure may not exceed 10% of net assets, excluding, for this purpose, currency or interest rate derivatives that hedge currency or interest rate risks associated with specific equity or fixed income investments held (which must be foreign-currency-denominated in the case of currency derivatives), or the fund’s borrowings, provided that the currency or interest rate derivatives are entered into and maintained by the fund for hedging purposes and that the notional amounts of such derivatives do not exceed the value of the hedged investments (or the par value thereof, in the case of fixed income investments, or the principal amount, in the case of borrowing) by more than 10% | transactions to currency derivatives to hedge the currency risks associated with specific foreign-currency-denominated equity or fixed-income investments held and the notional amounts of such derivatives does not exceed the value of the hedged instruments (or par value, for fixed-income investments) by more than a negligible amount | | |

Rule 18f-4(c)(4)(ii) – If a fund’s derivatives exposure exceeds 10% of its net assets, and the fund is not in compliance within 5 business days, the fund’s investment adviser must provide a written report to the board informing them whether the investment adviser intends either:

1. to reduce the fund’s derivatives exposure to less than 10% of the fund’s net assets promptly, but within no more than 30 calendar days of the exceedance, in a manner that is in the best interests of the fund and its shareholders; or
2. for the fund to establish a Program, comply with the limit on fund leverage risk, and comply with the board oversight and reporting requirements, as soon as reasonably practicable
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<td><strong>Rule 18f-4(a) (definitions)</strong></td>
<td>Derivatives transaction means (1) 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, whether as margin or settlement payment or otherwise; (2) any short sale borrowing; and (3) if a fund treats all reverse repurchase agreements or similar financing transactions as derivatives transactions for purposes of Rule 18f-4, any reverse repurchase agreement or similar financing transaction (Adopted as proposed in 2019 Proposal, and adds reference to option to treat reverse repurchase agreements and similar financing transactions as derivatives transactions)</td>
<td>Derivatives transaction means (1) 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, whether as margin or settlement payment or otherwise; and (2) any short sale borrowing</td>
<td>Complex derivatives transactions means: 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</td>
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<td><strong>Rule 18f-4(a) (definitions)</strong></td>
<td>Derivatives exposure means: the sum of (1) the gross notional amounts of the fund’s derivatives transactions and, (2) in the case of short sale borrowings, the value of the assets sold short. If a fund’s derivatives transactions include reverse repurchase agreements or similar financing transactions, the fund’s derivatives exposure also includes, for each transaction, the proceeds received but not yet repaid or returned, or for which the associated liability has not been extinguished, in connection with the transaction. In determining derivatives exposure a fund may (1) convert the notional amount of interest rate derivatives to 10-year bond equivalents and delta adjust the notional amounts of options contracts</td>
<td>The absolute VaR test means the VaR of the fund’s portfolio does not exceed 15% of the value of the fund’s net assets</td>
<td>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)</td>
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<tr>
<td>Rule 18f-4(a) (definitions)</td>
<td>The relative VaR test means (1) the VaR of the fund’s portfolio does not exceed 200% of the VaR of the designated reference index</td>
<td>The relative VaR test means the VaR of the fund’s portfolio does not exceed 150% of the VaR of the designated reference index</td>
<td>Exposure means the aggregate notional amount of the fund’s derivatives transactions, aggregate obligations under the fund’s financial commitment transactions, and the fund’s aggregate indebtedness with respect to other senior securities transactions; netting of directly offsetting derivatives transaction is permitted for purposes of calculating exposure</td>
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<tr>
<td>Rule 18f-4(a) (definitions)</td>
<td>Value-at-risk or VaR means an estimate of potential losses on an instrument or portfolio, expressed as a percentage of the value of the portfolio’s net assets, over a specified time horizon and at a given confidence level</td>
<td>The absolute VaR test means the VaR of the fund’s portfolio does not exceed 15% of the value of the fund’s net assets</td>
<td>Senior securities transaction means any derivatives transaction, financial commitment transaction or any transaction</td>
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<td>portfolio or (2) in the case of a closed-end company that has issued to investors and has then outstanding shares of a class of senior security that is a stock, that the VaR of the fund’s portfolio does not exceed 250% of the VaR of the designated reference portfolio.</td>
<td><strong>Rule 18f-4(a) (definitions)</strong> – The absolute VaR test means (1) the VaR of the fund’s portfolio does not exceed 20% of the value of the fund’s net assets or (2) in the case of a closed-end company that has issued to investors and has then outstanding shares of a class of senior security that is a stock, that the VaR of the fund’s portfolio does not exceed 25% of the value of the fund’s net assets.</td>
<td>involving a senior security entered into by the fund pursuant to Section 18.</td>
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<tr>
<td><strong>Rule 18f-4(a) (definitions)</strong> – Value-at-risk or VaR means an estimate of potential losses on an instrument or portfolio, expressed as a percentage of the value of the portfolio’s assets (or net assets when computing a fund’s VaR), over a specified time horizon and at a given confidence level. (Adopted as proposed in 2019 Proposal, and distinguishes between portfolio assets and fund net assets)</td>
<td><strong>Rule 18f-4(a) (definitions)</strong> – Any VaR model used by the fund must: (1) take into account and incorporate all significant, identifiable market risk factors associated with a fund’s investments, including, as applicable: (A) equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk; (B) material risks arising from the nonlinear price characteristics of a fund’s investments, including options and positions with embedded optionality; and (C) the sensitivity of the market value of the fund’s investments to changes in volatility; (2) use a 99% confidence level and a time horizon of 20 trading days; and (3) be based on at least three years of historical market data. (Model parameters were adopted as proposed in 2019 Proposal)</td>
<td><strong>2015 Rule 18f-4(c)(11)</strong> – Securities VaR means the VaR of the fund’s portfolio of securities and other investments excluding any derivatives investments.</td>
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</table>
| **Rule 18f-4(a) (definitions)** – Any VaR model used by the fund must: (1) take into account and incorporate all significant, identifiable market risk factors associated with a fund’s investments, including, as applicable: (A) equity price risk, interest rate risk, credit spread risk, foreign currency risk and commodity price risk; (B) material risks arising from the nonlinear price characteristics of a fund’s investments, including options and positions with embedded optionality; and (C) the sensitivity of the market value of the fund’s investments to changes in volatility; (2) use a 99% confidence level and a time horizon of 20 trading days; and (3) be based on at least three years of historical market data. (Model parameters were adopted as proposed in 2019 Proposal) | **2015 Rule 18f-4(c)(11)** – The requirements for any VaR model used by the fund are the same as under the Proposed Rule, except that the VaR model must use a time horizon of not less than 10 and not more than 20 trading days, and the requirement to be based on at least three years of historical market data only applied where using historical simulation.