



April 21, 2020

VIA ELECTRONIC DELIVERY

Ms. Vanessa A. Countryman
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

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

Dear Ms. Countryman:

On behalf of AQR Capital Management, LLC (“AQR”),¹ thank you for the opportunity to provide comments to the Securities and Exchange Commission (“SEC” or “Commission”) on re-proposed Rule 18f-4 (the “Proposal”)² under the Investment Company Act of 1940 (the “1940 Act”). We fully support the Commission’s commitment to provide clear and comprehensive guidance regarding how funds may trade in derivatives. We acknowledge the challenge the Commission has faced in this area. The SEC must seek to both protect investors and support evolving markets—markets that legislators could not have anticipated when they intended to curb undue speculation under the 1940 Act.

AQR has been actively engaging with the Commission on the issue of appropriate derivatives risk management since the Commission issued its initial proposed regulation on fund use of derivatives in 2015 (the “2015 Proposal”).³ We appreciate the Commission and its staff’s willingness to consider the perspectives of AQR and other derivatives users since that time. The Commission and its staff have taken a thoughtful approach to crafting the new Proposal, seeking to support the appropriate use of derivatives while mitigating undue risk.

¹ “We,” “us,” “our” and “ourselves” as used in this letter refer to AQR.

² See 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, 85 Fed. Reg. 4446 (Jan. 24, 2020) (“Proposed Rule”).

³ See Use of Derivatives by Registered Investment Companies and Business Development Companies, 80 Fed. Reg. 80,884 (Dec. 28, 2015).



Overall, we support the framework of the Proposal and believe that it strikes an appropriate balance of protecting investors while enabling mutual funds to identify and manage the particular risks stemming from their instruments and strategies. We are especially pleased that the Proposal contemplates a multi-faceted approach to risk management founded on a robust risk management program, which in our experience is the most effective way to manage the risks of derivatives transactions.

However, as detailed below, we have significant concerns related to the Proposal's leverage limit based on value at risk ("VaR"). We believe that the VaR limit as currently proposed is overly restrictive, may unintentionally impact more funds than suggested by the Proposal, and could have particularly problematic effects on certain classes of funds. Despite these concerns, we believe that the Commission can implement a workable final rule by making a series of modifications to the Proposal, including the following:

- Remove the presumption in favor of relative VaR, provide clear guidance that certain types of funds would as a matter of course use the absolute VaR test, and give guidance that a fund's performance benchmark may not be suitable for purposes of the VaR test;
- Raise the absolute VaR threshold to at least 20% and revise the limit to be the maximum of the fixed threshold and 150% of the then current VaR of the S&P 500;
- Allow funds to extrapolate the VaR calculations from a 95% confidence level to a 99% confidence level and certain funds to adjust their VaR methodology consistent with their volatility targeting strategies;
- Revise the relative VaR threshold to be the maximum of the benchmarked relative VaR limit and an absolute VaR of 10% of the fund's net assets;
- Extend the VaR breach remediation period from three business days to five business days and remove the three-day time out after a fund's VaR is below the limit following a breach of the remediation period; and
- Remove certain public reporting requirements.

These modifications will ensure that the Commission continues to protect investors from the impact of undue speculation without unnecessarily limiting their choice of strategies and funds for investment.

I. Background

AQR is a global asset management firm with approximately \$143 billion in assets under management⁴ across both traditional long-only equity strategies and alternative investment strategies. AQR has been providing diversifying strategies and their risk/reward benefits to a broad range of clients

⁴ Assets under management includes assets managed by AQR and its advisory affiliates as of 3/31/20.



for more than two decades. For more than 10 years (since January 2009), we have provided these same benefits through mutual funds registered under the 1940 Act.

AQR has been at the forefront of offering alternative investment strategies through registered mutual funds.⁵ We have a deep understanding of derivatives, and we are firmly committed to managing the risks associated with their usage. Our experience with investors in alternative mutual funds has shown that investors use alternative strategies as a means of diversifying their risk – and even to decrease it – but generally not to increase risk. Some observers mistakenly believe that alternative mutual funds are designed to take on excessive risk in order to generate outsized returns. In fact, alternative mutual funds tend to operate with less risk than traditional equity funds and do not seek higher returns than equity funds. We believe that the continued growth in alternative mutual funds reflects investors’ efforts to diversify some of their traditional equity risk by adding exposure to uncorrelated and less correlated sources of returns.

II. The Re-Proposed Rule Marks a Significant Improvement over the 2015 Proposal

The Commission’s 2015 Proposal included a number of requirements that would have negatively impacted investor choice and inhibited investors from accessing alternative mutual funds. Most significantly, the 2015 Proposal set a limit on the gross notional amounts of a fund’s derivatives transactions. As we and other derivatives users explained at that time, gross notional amounts are not indicative of the riskiness of the derivative instrument. In fact, high notional exposures of low risk instruments may pose much less risk than relatively low exposures of more volatile instruments. The 2015 Proposal additionally had an asset segregation requirement, which included only cash and cash equivalents as qualifying coverage assets. Although the 2015 Proposal required a derivatives risk management program, it framed the program as “complementary” to the proposed centerpiece of the proposed rule, the gross notional limit. The 2015 Proposal suggested certain components of a derivatives risk management program, but set forth few requirements and did not provide clear guidance regarding foundational elements of the program.

Following the 2015 Proposal, AQR engaged extensively with the Commission and staff. We advocated for a well-rounded approach to derivatives risk management that could be tailored to the specific risks of a fund’s portfolio. We explained that in our experience, a robust risk management program, with varied elements tailored to the specific risks of the derivatives used, was the key to effectively managing derivative risks.

The current Proposal reflects the Commission’s evolved understanding of derivatives and their usage in current markets. Significantly, the Proposal recognizes that leverage is not a full measure of risk. Based on this understanding it eschews an absolute limit on leverage – which would be unduly burdensome and would seriously inhibit investor choice – in favor of a fund-specific VaR test.

⁵ For purposes of this letter, we define alternative mutual funds as those included in the Morningstar broad category of “Alternative,” excluding leveraged and inverse strategies as defined in the Proposal.



Most importantly, the current Proposal contemplates a multi-faceted approach to governing derivatives usage, grounded in a comprehensive risk management program. We strongly agree that a formalized risk management program is foundational to any effective regulation in this area.⁶ For a fund engaging in significant or complex derivative usage, the key to curbing excessive borrowing and undue speculation lies in implementing an effective risk management program.

III. We Support the Proposal's Requirement for a Derivatives Risk Management Program

We agree with the Commission that a derivatives risk management program, such as that outlined in the Proposal, is critical to appropriate derivatives risk management and foundational to any regulatory scheme governing significant derivatives users. An effective derivatives risk management program should be premised on assessment of key risks to which a specific fund is exposed, considering the complexity and type of derivatives used. The program should then have specific safeguards and metrics tailored to the identified risks.

We believe that the formalized derivatives risk management program set forth in the Proposal will enable funds to identify the risks of their particular portfolios and take appropriate steps to manage those risks. Indeed, we believe a robust risk management program such as that contemplated in the Proposal could sufficiently address the concerns of section 18 and curb the unduly speculative use of derivatives.

Consistent with our strong belief in the importance and effectiveness of a comprehensive derivatives risk management program, we have worked to develop best practices in derivatives risk management, many of which are elements of the Proposal. Based on our experience managing derivatives risk we strongly support key elements of the proposed derivatives risk management program, including a designated derivatives risk manager, oversight by the fund board, backtesting of VaR calculations, and stress testing.

We believe that a comprehensive risk management program is critical to a successful overall portfolio management process, and the Proposal's derivatives risk management program reflects this principle. With the inclusion of stress testing on top of the other aspects of the proposed program, we believe that this portion of the Proposal will be the primary way that the Commission's ultimate regulation in this space will be able to prevent undue speculation in funds that use derivatives. This robust and multi-faceted approach embedded within the Proposal also makes the efficacy of the Proposal much less dependent on a single component, including the proposed VaR limits. In fact, a well-designed and implemented derivatives risk management program consistent with the Proposal, combined with appropriate reporting to the Commission, fund board, and in certain instances the public, would sufficiently regulate the use of derivatives by funds regardless of whether the Commission ultimately adopts a specific numerical outer bound limit.

⁶ See Letter from Brendan R. Kalb, Managing Director and General Counsel, AQR Capital Management, LLC, to Mr. Brent Fields, Secretary, SEC, at 22 (March 28, 2016), *available at* <https://www.sec.gov/comments/s7-24-15/s72415-171.pdf>.



IV. Our Concerns with the Proposed VaR Limit and Recommended Modifications

Despite our general support for the overall structure of the Proposal, we believe that important changes are needed to the Proposal's VaR test to ensure that it serves as an appropriately calibrated limit without unintentionally restricting the activities of funds that are not unduly speculative.

Our analysis of the proposed VaR limit begins from the underlying premise that the purpose of this test is to provide a numerical outer bound on the use of derivatives by funds as a final safeguard in the event that a fund's derivatives risk management program fails. The VaR limit is not the primary safeguard against inappropriate derivatives usage by funds, nor is it capable of serving such a purpose. The Commission highlighted this point in the Proposal by emphasizing that "we do not believe that [the VaR tests] should be the sole component of a derivatives risk management program."⁷ Despite the VaR test's role as an outer bound limit, the inherent limitations of VaR as a metric mean that it may be somewhat ill-suited to serve this role. This fact is supported by the Commission's statement in the Proposal that "the proposed rule would require a fund to establish risk guidelines and to stress test its portfolio as part of its risk management program in part because of concerns that VaR as a risk management tool may not adequately reflect tail risk."⁸

Notwithstanding the limitations of VaR as an outer bound test given that it "does not reflect the size of losses that may occur on the trading days during which the greatest losses occur...,"⁹ we recognize the Commission's desire to impose a hard limit as a final safeguard and would support a properly calibrated outer bound limit. In our view, an appropriately calibrated VaR test designed to identify and restrict unduly speculative activity would be set at a level such that it would not serve as a day-to-day constraint on fund activities or have a disproportionate impact on certain classes of funds. Instead, the test should be designed to constrain fund activity where it would be excessively abnormal when compared to funds with similar strategies or the market as a whole.

Unfortunately, based on our analysis of the proposed VaR limits we do not believe that they represent an appropriately calibrated outer bound. Instead, the levels at which the proposed VaR tests have been set, and the calculation methodology used, would severely restrict many funds that are not engaged in unduly speculative activity. Due to their overly restrictive impact, the proposed VaR limits would essentially become the primary day-to-day driver of risk management decisions of funds. Derivatives risk managers would be forced to supplant their risk management programs tailored to the unique characteristics of their funds with the rough VaR metric that is an inherently incomplete way of managing risk. The Commission stated that "[w]e do not intend to encourage risk managers to over-rely on VaR as a stand-alone risk management tool."¹⁰ However, the restrictive nature of the proposed VaR limits would lead to precisely that result as risk managers would be forced to focus primarily on managing

⁷ Proposed Rule, *supra* note 2, at 4470.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*



to the Commission-set limits rather than holistically managing the risks in their funds through a comprehensive derivatives risk management program.

In the discussion below, we provide analysis underscoring the overly restrictive nature of the proposed limits and the impacts these limits would have on funds. We also provide recommended modifications to the proposed VaR tests that would allow them to operate as outer bound limits as intended.

A. The Proposal Should Provide More Clarity on the Selection of Relative or Absolute VaR

As a first step in applying the proposed VaR test the Proposal appropriately places the burden of selecting whether the relative or absolute test should be used on the derivatives risk manager. However, the Proposal also incorporates a presumption that the fund will apply the relative VaR test based on a designated reference index and only use the absolute VaR test after making an affirmative determination that 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.”¹¹

We believe that the presumption of relative VaR is unwarranted and may create confusion or allow for second-guessing of the derivatives risk manager’s decision, or both. For many funds, the derivatives risk manager will most properly elect to apply the absolute VaR test and these funds should not be subjected to regulatory obligations or risks over and above those experienced by funds where the derivatives risk manager has chosen to apply a designated reference index. The Commission could alleviate concerns about the selection of the absolute VaR test by removing the presumption in favor of relative VaR and providing additional guidance in a final rule.

1. A fund’s performance benchmark may not be a suitable reference index for relative VaR

As an initial matter, it is important to reiterate that although all open-end funds have a performance benchmark, for many classes of funds the performance benchmark would not necessarily be appropriate for use in a fund’s VaR calculation. The performance benchmark is designed to show “how much value the management of the fund added by showing whether the fund ‘out-performed’ or ‘under-performed’ the market...”¹² Due to this design and specific regulatory purpose, the performance benchmark may reveal very little about the risks inherent to a fund. As a result, the performance benchmark may or may not represent an appropriate benchmark for purposes of analyzing a fund’s risk. Although we do not believe that the Commission intended for all funds to use their performance benchmarks as the designated reference index and thus subject themselves to the relative VaR test, some confusion on this point remains and we believe that fund managers would benefit from further clarity.

¹¹ Proposed Rule, *supra* note 2, at 4559.

¹² See Disclosure of Mutual Fund Performance and Portfolio Managers, Investment Company Act Release No. 19,382 (April 6, 1993).



Recommendation: Provide clear guidance that a fund's performance benchmark may not necessarily be appropriate for use as a designative reference index for the relative VaR test.

2. *The presumption in favor of relative VaR should be removed*

Despite the presumption in favor of relative VaR, the Proposal appropriately places the ultimate burden of deciding whether to apply the relative or absolute VaR test with the individual most able to analyze and determine which VaR test most appropriately reflects a given fund's risk: the derivatives risk manager. The derivatives risk manager knows the details of the fund's derivatives usage, how those transactions relate to the fund's risks, and which of the two VaR tests would most accurately reflect the fund's risk. The derivatives risk manager's decision on the VaR test is also subjected to review and oversight by the fund's board.

Given the expertise of the derivatives risk manager and the engagement of the board on the VaR test determination, we do not believe it is necessary for the Commission to place a presumption on the relative VaR test. The derivatives risk manager will make the appropriate determination with or without a presumption from the Commission, and this decision and its justification will be reviewed with the fund's board. Adding the presumption of relative VaR will merely increase the burden on derivatives risk managers and unnecessarily elevate the regulatory risk attached to the VaR decision. It could also create confusion concerning whether a derivatives risk manager must in all cases undertake an analysis of how a designated reference index might work for a fund even where that derivatives risk manager clearly knows that absolute VaR is the most appropriate test.

We do not believe that it is necessary to impose these burdens, compliance risks, and the opportunity for second-guessing on a decision that is well within the core competency of the derivatives risk manager. Ultimately, the Commission should incorporate into the rule a presumption in favor of the skill and expertise of the derivatives risk manager, rather than a presumption in favor of one type of test.

Recommendation: Remove the presumption in favor of relative VaR and provide clear authority for the derivatives risk manager to choose whichever of the two VaR tests is most appropriate for a given fund.

3. *The absolute VaR test may be more suitable for some funds than relative VaR*

Despite the Proposal's presumption in favor of the relative VaR test, for many funds an absolute VaR limit may be a better measure of the fund's risk than the relative VaR test because no unlevered benchmark index could accurately represent the risks of the fund.

There are at least three broad categories of funds that would fall within this situation. First, absolute return funds (*e.g.*, managed futures, global macro, equity market neutral) generally have no unlevered index that represents the fund's risk because they are designed to have no (or low) correlation to either the equity or fixed income markets. Second, some multi-asset funds (*e.g.*, risk parity) use derivatives to invest in a wide range of asset classes in ways that result in no unlevered benchmark being able to adequately represent the risks of these types of portfolios. A third category is equity long/short



funds that have net, but not full market exposure (*e.g.*, equity long/short + 0.5 x S&P 500). These hybrid funds combine long/short exposures and some level of market risk. By design, the active risk target for these funds (*i.e.*, the long vs. short exposure) may be high relative to the funds' risk exposure to the benchmark (*e.g.*, where a fund targets less than full equity market risk), which would mean that an unlevered benchmark – even the benchmark incorporated into the funds' strategies – would not appropriately capture risk for purposes of a VaR calculation.

Further, any funds that target a steady level of risk will find an unlevered benchmark to be a poor fit for measuring comparative risk (*e.g.*, relative VaR) because the risk to an unlevered benchmark necessarily varies through time while the fund will be actively managing to more constant risk levels.

Although we recognize that the Proposal may not necessarily prohibit these funds from using the absolute VaR test, the presumption in favor of relative VaR and the additional work required of a derivatives risk manager in order to justify the use of absolute VaR does not reflect the clear market understanding that a relative VaR test would not provide an appropriate picture of risk for these funds. Without more clear and direct guidance we believe that funds using the absolute VaR test may face unnecessary costs, burdens, and regulatory risk.

Recommendation: Provide clear guidance that certain types of funds, such as those listed above, would as a matter of course use the absolute VaR test.

B. The Absolute VaR Test as Currently Proposed is Overly Constraining

The Proposal states that in order to comply with the absolute VaR test, the VaR of the fund's portfolio must not exceed 15% of the value of the fund's net assets. We believe that this 15% limit is overly constraining and does not appropriately set an outer bound threshold on undue speculation. Rather, a 15% absolute VaR limit may operate as a day-to-day constraint on funds that are not engaged in unduly speculative activity, particularly in certain market environments. This unintended outcome is the result of the limit itself being too low as well as the way that the proposed absolute VaR test is calculated.

In analyzing the application of the absolute VaR limit we believe that it is important to remember why derivatives are used by alternative mutual funds, many of which will apply the absolute VaR test. As noted above, these funds seek to provide returns uncorrelated to those of traditional equity funds, and one of the key features of uncorrelated return sources is that they tend to be lower risk. As a result, alternative mutual funds often need some leverage to make them relevant from an investment return perspective. Thus, alternative mutual funds often use derivatives to moderately increase the risk profile of low risk assets in order to make them attractive as an investment, not to make them extremely risky. We believe that the use of derivatives in this manner provides a variety of benefits to investors and should not be overly constrained by a rule designed to restrict undue speculation.

In the discussion below we provide analysis highlighting the problematic nature of the absolute VaR test along with recommended modifications.



1. *The 15% absolute VaR limit is too low*

The Proposal states that in order to comply with the absolute VaR test, the VaR of the fund's portfolio must not exceed 15% of the value of the fund's net assets. In justifying this limit, the Commission looked primarily at the S&P 500 as an appropriate risk-based reference point.

Relying on analysis by staff in the Division of Economic and Risk Analysis ("DERA"), the Proposal notes that the historical mean VaR of the S&P 500 is approximately 10.4%. The Proposal also looks to the S&P 500 as a useful metric in comparing the treatment of funds applying the absolute and relative VaR tests. The Proposal suggests that basing the absolute VaR test on the VaR of the S&P 500 may provide comparable treatment to funds using the relative VaR test given that funds often select broad-based large capitalization equities indexes such as the S&P 500 for performance comparison purposes. Finally, the Proposal highlights the fact that given the common use of broad-based large capitalization equities indexes such as the S&P 500, investors may understand the risk inherent to these indexes.¹³

In order to determine the potential impact of the proposed VaR tests, the Proposal cites the DERA staff analysis relying on data as of December 31, 2018. Based on this data, the Proposal indicates that only six funds would exceed the proposed relative VaR test, with only one of these six funds also failing the absolute VaR test.¹⁴ The Proposal then summarizes its impact analysis by stating that "[a]s a result, we estimate that there would be only a very small number of funds, if any, that would have to adjust their portfolios in order to comply with the VaR-based limit on fund leverage risk. This is consistent with the VaR-based limit on fund leverage risk functioning as an outer bound on fund leverage risk."¹⁵

We agree with the Proposal's clear statement that the VaR limit should function as a true outer bound limit on fund leverage risk and that a limit operating in that manner should not impact many funds, if any. However, based on our analysis, the proposed 15% absolute VaR limit does not operate this way and we believe that it will impact a much larger set of funds than assumed in the Proposal. We also believe that the framework used by the Commission in the proposal for determining the 15% absolute VaR limit – namely, analysis of the VaR of the S&P 500 – in fact supports a higher limit and suggests that a 15% limit is overly constraining.

In analyzing the S&P 500 as the risk-based reference point for setting the absolute VaR limit, we first note that the Commission does not suggest that the S&P 500 itself represents undue speculation. We agree with this perspective. This extremely common index (and many other similarly common indices) experience periods of heightened and reduced volatility and expose investors to varying levels of risk as market environments change. Yet they represent standard types of risk-taking in the markets and should not be viewed as unduly speculative.

A second noteworthy aspect of the analysis in the Proposal is that it primarily relies on the historical average level of the VaR of the S&P 500. However, we do not believe that the average is the

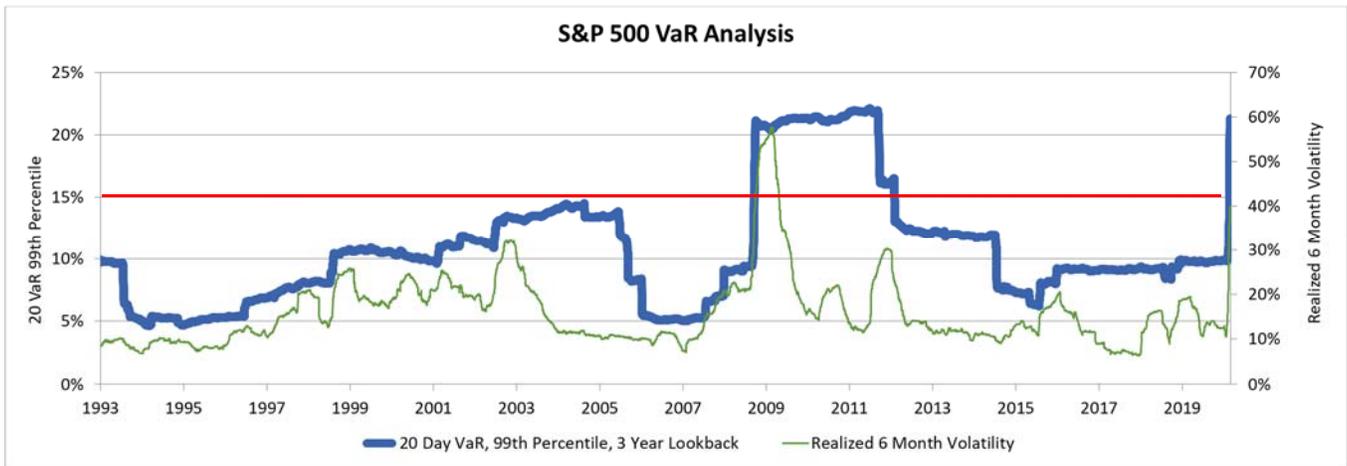
¹³ See Proposed Rule, *supra* note 2, at 4475.

¹⁴ See *id.* at 4519.

¹⁵ *Id.*

only – or even most relevant – metric for determining an appropriate outer bound VaR threshold to prevent undue speculation. While informative, an average does not provide useful information about the number of times that the S&P 500 index itself would breach a given limit, the magnitude of such breach, or how long the breach would last. Each of these data points is important to understanding the potential impact of a rule that imposes specific limitations on fund management for individual VaR breaches.

Figure 1: S&P 500 VaR Analysis¹⁶



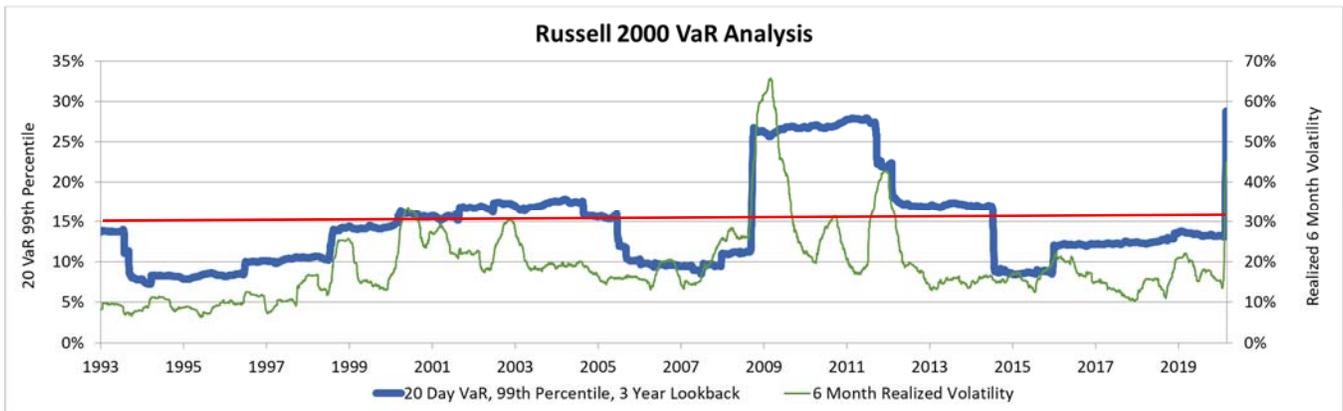
As seen in Figure 1 above, while the historical average VaR of the S&P 500 may be 10.4%, analysis of the VaR of the S&P 500 since 1993 reveals that the index itself would experience significant breaches of the proposed 15% limit. These breaches begin during the 2008-2009 financial crisis in 2009 where the S&P 500 experienced a VaR of 22%. However, it is important to note that the S&P 500 would continue to breach the proposed 15% limit for a nearly 3-year period, including well after the volatility of the S&P 500 – which spiked during the financial crisis – came back down to typical historical levels.

In addition to the fact that the S&P 500 itself would breach the proposed absolute VaR test for a lengthy period of time, the magnitude of the S&P 500 breaches is also relevant to setting an appropriate absolute VaR threshold. The Proposal appropriately requires that a fund breaching the VaR limit must reduce its risk in order to reduce its VaR below the prescribed limit. The greater the magnitude of the exceedance, the greater the risk reduction required. Based on the analysis seen in Figure 1, a fund taking risk equivalent to the S&P 500 would need to reduce its risk by 32% in order to come within the proposed 15% VaR limit, and it would need to do this two years after the crisis, well beyond the period when the volatility of the market had returned to more normal levels. A reduction of this magnitude would meaningfully reduce the amount of risk a fund could take, and the potential return it provided to investors, resulting in a large divergence from investor expectations.

¹⁶ Data from Bloomberg. VaR is calculated at a 99% confidence level with a 3-year lookback, using 20-day rolling demeaned returns.

The Commission based its absolute VaR analysis on the S&P 500, but investors may also understand the risk inherent to a number of other commonly used benchmarks that could be instructive for these purposes. One such benchmark is the Russell 2000 – which tracks small cap stocks in the U.S. – and experiences similar problems as the S&P 500 under the proposed 15% VaR limit, though of even greater magnitude.

Figure 2: Russell 2000 VaR Analysis¹⁷



As seen in Figure 2 above, the Russell 2000 would experience a severe, multi-year breach of the proposed 15% VaR limit around the time of the 2008-2009 financial crisis and well into the recovery. This breach would last far longer than the breach experienced by the S&P 500. The Russell 2000 would also experience a lengthy, multi-year breach in the early 2000s, and thus would exceed the proposed limit for 41% of the period from 1993 to the present.

It is important to note that the analysis in Figures 1 and 2 is based on the VaR of very common indices that are frequently used as risk-based reference points. Neither of these benchmarks represent unduly speculative activity. Thus, neither index should be captured under a VaR test designed as an outer bound limit to curb unduly speculative activity. As a result, we believe that VaR analysis on these common benchmarks strongly supports raising the absolute VaR limit. A data-driven analysis of these benchmarks suggests that a limit of at least 20% would be appropriate as an outer bound limitation on undue speculation. While a limit of 20% would be consistent with the absolute VaR test in the UCITS regime, an even higher limit may be warranted if the goal is to truly focus on restricting undue speculation.

Recommendation: Raise the absolute VaR threshold to at least 20%.

¹⁷ Data from Bloomberg. VaR is calculated at a 99% confidence level with a 3-year lookback, using 20-day rolling demeaned returns.



2. *The 99% VaR confidence level may not provide an accurate picture of risk for some funds*

One of the foundational decisions made by the Commission for the proposed VaR test was the selection of a 99% confidence level. While we recognize the benefits identified by the Commission in choosing the 99% confidence level, it also comes with certain tradeoffs. One such tradeoff is that because the 99% confidence level is so far out in terms of “tail” risk, it implies an inherently imprecise, unstable, and unnecessarily sensitive metric of risk. As an example, if we calculated a 3-year VaR with 20-day non-overlapping periods, the 99% VaR is based on less than one observation. Even expanding the lookback period to 7 years, the 99% VaR would still be based on less than one observation. This means that a single large event (or the absence of one) could have a disproportionate impact on the VaR result during the entire period during which it is required to be included in the calculation of VaR.

One way to address this limitation is to provide derivatives risk managers with discretion to choose a 95% confidence level in order to obtain additional observations to produce a more robust and stable measure of risk, but then rescale the 95% confidence level VaR results to a 99% confidence level equivalent. This common technique may provide a more accurate picture of fund risk.

In suggesting this modification, we note that the change would be consistent with the UCITS rules concerning VaR confidence intervals.¹⁸ The Proposal specifically cites to the UCITS regime as a similar regulatory scheme when describing the selection of a 99% confidence level.¹⁹ However, the Proposal does not address the fact that the UCITS regime explicitly provides for extrapolation given the limitations of a 99% confidence level. We believe that this provision within the UCITS rules is an extremely important component of its overall VaR regime that should also be incorporated in the Commission’s final rule.

¹⁸ See Committee of European Securities Regulators, CESR’s Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS, Section 3.6.1 (July 28, 2010), *available at* https://www.esma.europa.eu/sites/default/files/library/2015/11/10_788.pdf.

¹⁹ See Proposed Rule, *supra* note 2, at 4476 n.231.

Figure 3: Extrapolating From 95% to 99% Confidence Level²⁰

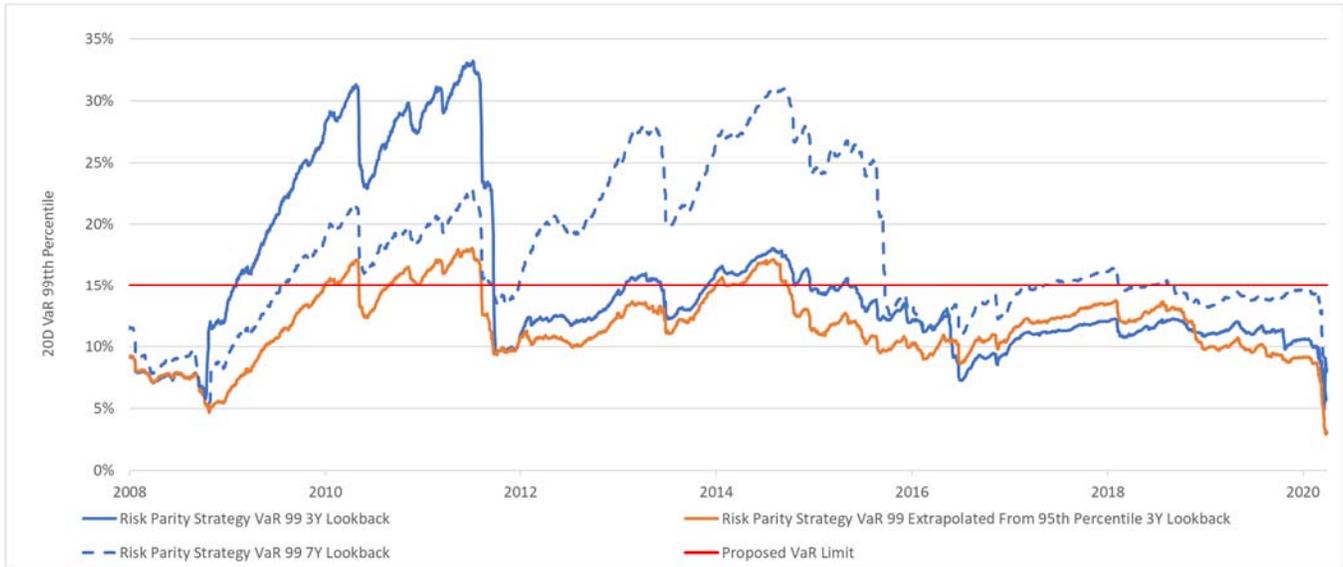


Figure 3 above compares the results of a VaR analysis for AQR’s risk parity strategy calculated under both the 99% confidence level as required by the Proposal, and 95% confidence level VaR extrapolated to a 99% confidence level. As shown in this chart, the extrapolated results provide a steadier VaR result that more accurately reflects fund risks and is not skewed by a single data point driving a dramatic increase in the fund’s VaR. This analysis reveals that if left unmodified a single data point has the potential to materially impact the ability of a fund to meet the proposed regulatory risk limits, and this material impact would continue for years after the period of market volatility.

Figure 3 also includes results for the same fund calculated using a 7-year lookback. These results show that even meaningfully extending the lookback period from 3 to 7 years will not materially reduce the challenges with using a 99% confidence level and 20-day time horizon. Even with this much longer lookback period the number of distinct observations is still quite small which leads to a less accurate picture of fund risk.

Importantly, Figure 3 shows that extrapolation does not necessarily lead to a lower VaR result. In fact, during multiple years during the past decade the extrapolated VaR number would provide a higher result than a 99% confidence level calculation. This finding is consistent with the purpose of applying a 95% confidence level, which is that it provides much greater confidence in the quality of the calculation, not simply a way to lower the VaR result. We believe that the Commission could improve its VaR

²⁰ Data from AQR. The risk parity strategy data is for a backtested, 15% volatility targeted fund. The 99% confidence level VaR calculations include 3-year and 7-year lookbacks, each using 20-day rolling demeaned returns. Extrapolation is done by using the normal relationship between 99th and 95th percentiles (effectively 99th percentile z-score/95th percentile z score * VaR 95).



methodology and lessen the disproportionate impact of the test on certain categories of funds by allowing for the common practice of extrapolation.

Recommendation: Allow funds to extrapolate the VaR calculations from a 95% confidence level to a 99% confidence level.

C. The Absolute VaR Test as Proposed May Not Give an Accurate Picture of Risk for Funds that Target Portfolio Volatility

While analysis of the level and calculation methodology of the proposed absolute VaR test supports important changes to the Proposal, the disproportionate impact of the proposed historical VaR test on certain classes of funds and in certain market environments suggests that additional modifications to the test are warranted.

The most significant of these disproportionate impacts would apply to funds that target a constant volatility or volatility range (“volatility targeting funds”), which are an important class of strategies for mutual fund investors. Volatility targeting funds adjust their position sizes to account for asset volatility changes in an effort to better maintain a specific fund volatility. Managed this way they are able to provide investors the option of a more consistent risk level than many other types of funds. These funds will predominately use the absolute VaR test as no unlevered benchmark would provide an accurate picture of fund risk. However, the methodology applied by the proposed absolute VaR test could result in a misleading assessment of risk for these funds.

1. Limitations of VaR model assuming constant leverage

In analyzing the impact of the proposed absolute VaR test on volatility targeting funds it is first important to understand why investors may choose these funds and how they operate.

Figure 4: Constant Exposure Versus Volatility Targeting of the S&P 500²¹

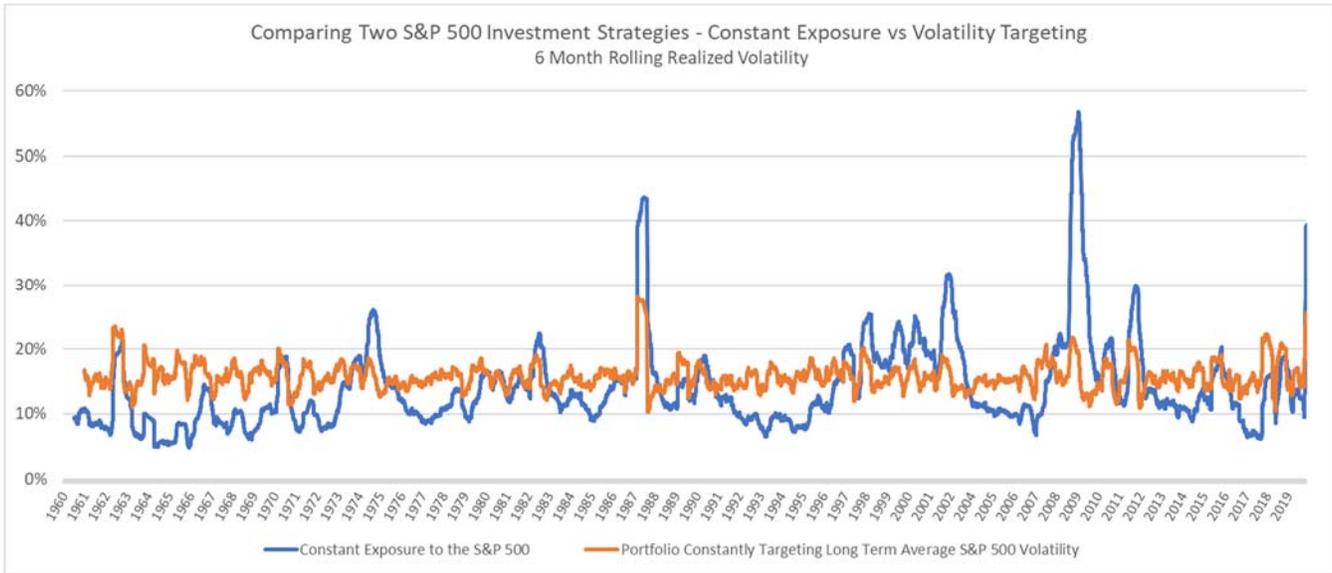


Figure 4 highlights the unique characteristics of volatility targeting funds by comparing two S&P 500 strategies, one taking constant exposure to the benchmark and one targeting a volatility of 15% (the average volatility of the S&P 500). Whereas the strategy taking constant exposure maintains the same position sizes of S&P 500 investments and thus experiences sizeable fluctuations in portfolio volatility consistent with the large fluctuations in benchmark volatility, the volatility targeting strategy adjusts position sizes in the S&P 500 investments up or down based on volatility in the underlying benchmark with the goal of achieving constant volatility of 15%. When market risks are higher, the strategy holds a reduced position in the S&P 500 plus cash, and when market risks are lower, the strategy holds a leveraged position in the S&P 500.

As shown in this chart, the volatility targeting strategy is able to achieve a fairly consistent level of volatility and is not subject to the same wide volatility swings as constant exposure to the S&P 500 would provide. This is achievable because there is strong persistence in market volatility even though there is very little persistence in market returns. In this way volatility targeting funds can meaningfully reduce tail risks (because they are much less likely to realize very high volatility) while more consistently delivering the amount of risk desired by investors to achieve their return objectives.

Importantly, the investing methodology that volatility targeting funds follow – namely, adjusting position sizes based on underlying market volatility – is inconsistent with the assumptions embedded in

²¹ Data from Bloomberg. The chart compares the returns of a portfolio of the S&P 500 resized daily to 15% ex-ante volatility (the long-term average volatility of the fully invested index), to a constant notional S&P 500 exposure. Three month realized volatility is used as an ex-ante volatility estimate.

the methodology of the proposed VaR test. The proposed VaR test implicitly assumes constant position sizes throughout the duration of the lookback period.

Figure 5: Mismatch of Construction of Volatility Targeting Funds and Construction Implicit in Historical VaR Calculation

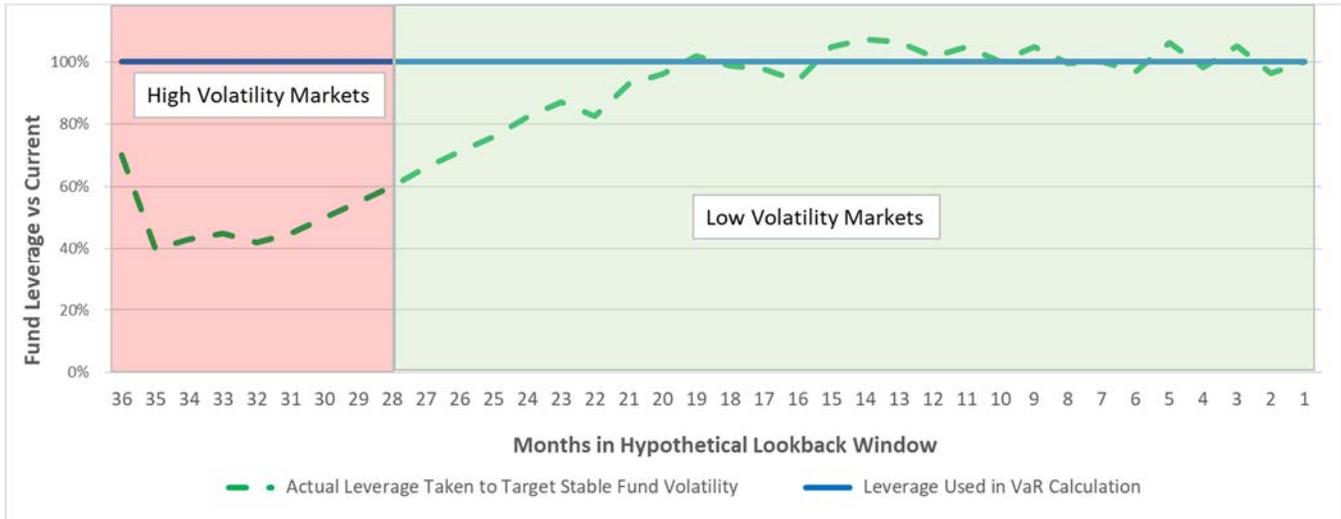


Figure 5 above highlights the mismatch between the construction of volatility targeting funds and the construction methodology assumed by the proposed VaR test. As shown by the blue line in this chart, the proposed VaR calculation assumes that the fund leverage (*i.e.*, position sizes) stays constant throughout the entire 3-year lookback period at the same level as held on the day the calculation is undertaken (at the far-right end of the graph). However, the actual leverage taken by the volatility targeting strategy – depicted in this chart by the green dashed line – would necessarily change in different market environments in order to target a consistent portfolio volatility.

This mismatch between the fundamental way that volatility targeting funds operate and the assumptions built into the VaR calculation will be most impactful during market environments where a period of low market volatility follows a period of high market volatility, as it does schematically in Figure 5, as we observed in reality for the years following the 2008-2009 financial crisis, and as we are very likely to see after the current COVID-19 crisis. In Figure 5, the fund leverage used for the VaR calculation is definitionally asserted to be at a higher (and constant) level than the fund would have actually taken during the earlier, high volatility period. This leads to an artificially inflated calculated VaR as the methodology presumes that during the higher volatility environment the fund would hold larger positions than it in fact would have held.

This discrepancy will not appear in analysis during all market environments. For example, in a situation where overall market volatility has remained relatively constant during the minimum 3-year lookback period outlined by the proposed VaR calculation, the fund positions assumed may not meaningfully diverge from the actual positions held by a fund during that same 3-year period. This is likely the case for the analysis undertaken for the economic analysis in the Proposal, which is based on

data from December 31, 2018. The relatively low market volatility during the three years that preceded the point at which the Proposal runs its analysis means that the data in the economic analysis will not capture the problematic impacts for volatility targeting funds and may be why that analysis did not find that many funds would be forced to adjust their portfolios in response to the Proposal.

However, we know that volatility in markets will change over time and believe that it is important for this rulemaking to operate appropriately throughout a variety of different market environments. It is also important to note that the way VaR is calculated does not pose a problem for volatility targeting funds during periods of heightened volatility. Rather it is in the years after a volatile market event, when markets return to more normal levels, that the VaR calculation can be misleading for volatility targeting funds. In fact, today’s current extremely high levels of market volatility driven by the COVID-19 pandemic provide a concrete example of the Proposal’s limitations in some market environments. If at any time during the next 2-3 years the market returns to a lower level of volatility, all volatility targeting funds that gradually re-leverage exposure if and when market volatility falls would suffer from severely inflated VaR results and be extremely restricted by the proposed VaR test.

The real-world impacts of the mismatch in the way that volatility targeting funds operate and the assumptions underlying the proposed VaR calculation, particularly in certain market environments, can be seen in Figure 6 below.

Figure 6: VaR Results of AQR Risk Parity Strategy²²



²² Data from AQR. The risk parity strategy data is for a backtested, 15% volatility targeted fund. VaR is calculated at a 99% confidence level with a 3-year lookback, using 20-day rolling demeaned returns



Figure 6 shows the absolute VaR results of an AQR risk parity strategy targeting 15% volatility. As shown in this chart, the VaR of this fund increases during the 2008-2009 financial crisis and would result in a significant breach of the proposed absolute VaR limit. However, the most severe VaR results for this fund do not occur during the 2008-2009 financial crisis, nor during the ongoing COVID-19 crisis, as might be expected. That is because during periods of extremely heightened market volatility the fund actively reduced its positions in order to achieve its internal volatility target.

Instead, the highest VaR results for this fund occur after the 2008-2009 financial crisis when market volatility had subsided. This result is due to the fact that once market volatility leveled off, fund exposures were regrown – consistent with the fund’s volatility targeting strategy and as disclosed to investors – and those larger positions held in the lower volatility period that followed the crisis would induce a higher calculated VaR when that VaR is calculated using the method prescribed in the Proposal.

Figure 6 also reveals a precipitous drop in the fund’s VaR heading into 2012. This drop is not the result of a large de-risking of the fund, but rather the consequence of the financial crisis data dropping out of the 3-year lookback period. The dramatic decrease in VaR around 2012 is thus another sign of the misleading picture of risk given by the proposed VaR test’s assumption of constantly held positions.

2. *The current market environment will distort future VaR results*

Our concerns about the potentially flawed application of the VaR calculation methodology for funds that target levels or ranges of risk are not theoretical or based solely on past events. In fact, the current market environment is an excellent example of the extremely problematic results that could occur if the Commission adopts the Proposal unchanged.

Figure 7: Impact of Current Market Environment on Future Calculation of VaR²³

	<u>Normal Volatility Environment</u>		<u>High Volatility Environment</u>		<u>Hypothetical Future Return to a Normal Volatility Environment</u>	
	12/31/2019		Current COVID-19 Crisis		Any Time in the Next 3 Years	
	Ex-Ante Volatility	20D 99 VaR	Ex-Ante Volatility	20D 99 VaR	Ex-Ante Volatility	20D 99 VaR
S&P 500 (Constant Unit Exposure)	12%	10%	40%	21%	12%	21%
S&P 500 (15% Ex-Ante Volatility)	15%	12%	15%	8%	15%	26%
Risk Parity (15% Ex-Ante Volatility)	15%	12%	15%	7%	15%	44%

²³ S&P 500 volatility is computed using a 6-month lookback window. Risk parity strategy volatility is computed using a 3-month lookback window. The “Hypothetical Future Return to a Normal Volatility Environment” VaR is computed by using 12/31/2019 positions any time in the 3 years after the current spike in market volatility. This is a proxy for the VaR that would be observed if the more moderate market risk profile from 12/31/2019 occurs anytime in the next 3 years. VaRs are calculated at a 99% confidence level with a 3-year lookback, using 20-day rolling demeaned returns.



The example in Figure 7 above helps illustrate this concern. It provides data on three sample funds used previously in this letter. One maintains constant exposure to the S&P 500, one invests in the S&P 500 but daily re-sizes exposures to target a steady 15% volatility, and one is an AQR risk parity fund targeting 15% volatility.

Figure 7 provides the VaR results for these three funds in three different market environments. First is a “normal” market environment represented by the end of December 2019. Second is the current high volatility environment in response to the COVID-19 crisis. The third set of VaR results project the VaR for each fund at any point in the next 3 years if market volatility stabilizes and returns back to the same level as at the end of December 2019.

This analysis shows that each fund’s VaR in a normal market environment was quite low. During the current high volatility period only the unleveraged fund seeking constant exposure to the S&P 500 would experience heightened VaR, while the two volatility targeting funds see a lower VaR result because they reduced their position sizes in order to maintain the targeted level of volatility.

Despite the fact that neither volatility targeting fund would experience a significant VaR increase as a result of the current high volatility environment, each would be severely restricted under the Proposal’s VaR test in a future period of lower volatility. This impact would not occur due to either fund taking on unduly speculative positions, but rather as a function of the methodology incorporated into the proposed VaR test (*i.e.*, the assumption of constant leverage throughout the 3-year lookback period that is inconsistent with the way these funds operate). As market volatilities return toward a more typical level, asset exposures would rise in an attempt to maintain steady portfolio volatility. The VaR calculation methodology would then use those larger positions held only in a future lower volatility environment and apply them to the extreme market movements of today. The application of high volatility market returns to low volatility market position sizes creates the inaccurate VaR calculation.

In short, concerns around the disproportionate impact of the proposed absolute VaR calculation for volatility targeting funds are not hypothetical. The proposed absolute VaR limit would become an immediate constraint on these types of funds the moment a final rule goes into effect given recent market volatility.

3. *The proposed VaR model leads to inconsistent results*

A further example of the proposed VaR test’s incongruous results for volatility targeting funds is revealed through a comparison with a benchmarked fund.

Figure 8: Comparison of the Volatility of Two Commodities Funds²⁴

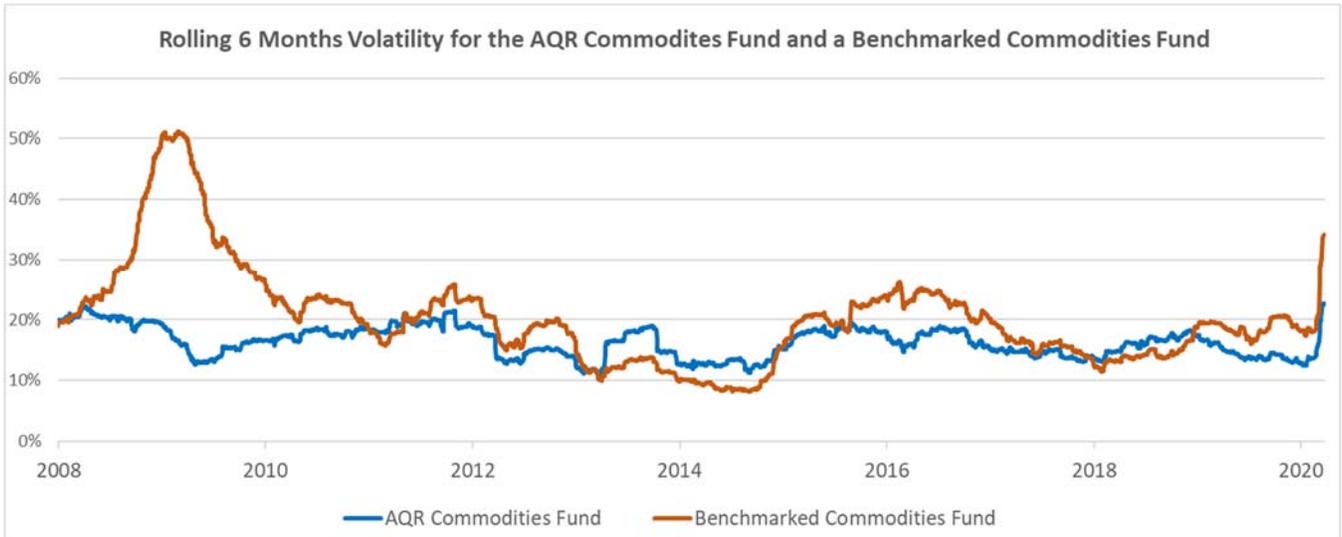


Figure 9: Comparison of the VaR of Two Commodities Funds²⁵

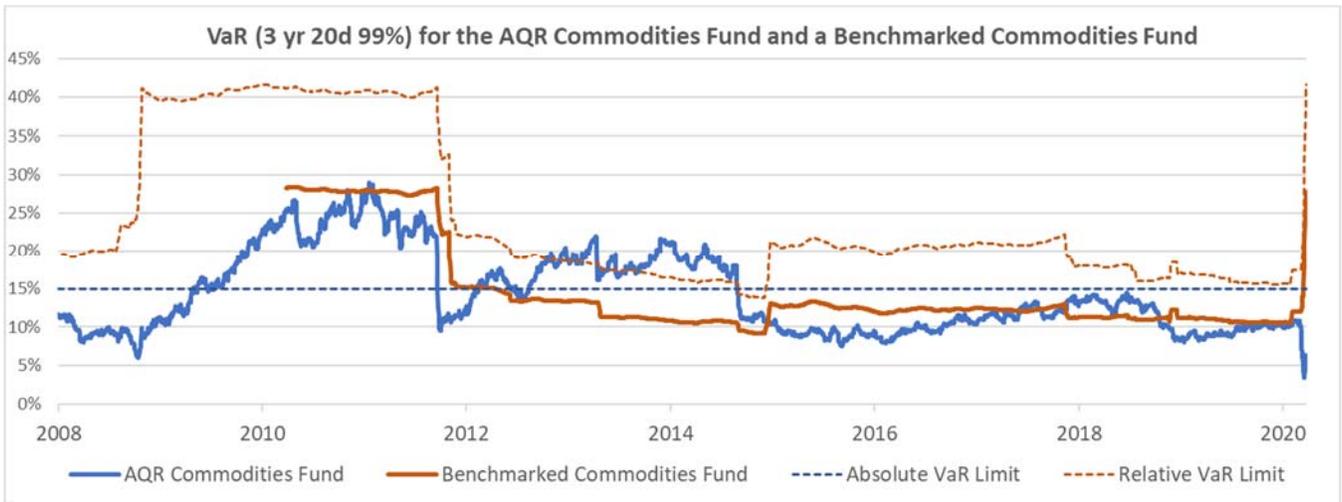


Figure 8 compares the volatility of two commodities funds that trade common instruments. One fund is an AQR commodities fund that targets a constant volatility of 18%. The other is a fund that is

²⁴ Data from Bloomberg for benchmarked commodities fund. Data from AQR for the AQR commodities fund.

²⁵ Data from Bloomberg for benchmarked commodities fund. Data from AQR for the AQR commodities fund. Analysis uses returns-based VaR for the benchmarked fund and holdings-based VaR for the AQR fund. VaRs are calculated at a 99% confidence level with a 3-year lookback, using 20-day rolling demeaned returns.



benchmarked to a standard commodities index, does not target volatility, and would be subject to the proposed relative VaR test.

As highlighted by Figure 8, the AQR commodities fund delivers a much steadier risk exposure to its investors than investors would experience from the benchmarked fund. This result is not surprising given that the AQR commodities fund uses a volatility targeting investment strategy designed to limit large swings in volatility while the benchmarked fund is designed to closely track its index even in periods of heightened volatility. What is surprising are the inconsistent results of these two funds under the proposed VaR test, as seen in Figure 9.

The analysis in Figure 9 shows that the VaR results for the benchmarked commodities fund generally align with those of the AQR commodities fund. However, despite the fact that these two funds share similar VaRs, only the volatility targeting fund exceeds its proposed VaR threshold while the benchmarked fund stays well below its proposed relative VaR limit during the entire testing period.

This disparity in application of the Proposal's VaR limit to two funds with similar VaR results and the same scope of investments is even more confounding when compared with the realized volatility of the two funds as shown in Figure 8. Despite the fact that the AQR commodities fund would expose investors to less risk than the benchmarked fund, only the AQR commodities fund would be constrained by the proposed VaR limits.

The experience of these two types of commodities strategies highlights both the disproportionate impact of the proposed VaR test on volatility targeting funds and the unintended consequences that an overly restrictive VaR limit could have on fund incentives. As proposed, the VaR test could encourage funds with volatility targeting strategies that seek to limit potential risk to investors to alter their strategies by benchmarking to indices with greater inherent risk. These strategic decisions would be driven entirely by the limits imposed by the Commission's rule and could deprive investors of an investment strategy that many find desirable for managing market exposures.

4. *Modifications are needed given the disproportionate impact of the proposed VaR methodology on volatility targeting funds*

As highlighted by the preceding examples, the disproportionate impact of the proposed absolute VaR test on volatility targeting funds is an inherent limitation of the test. We believe this disproportionate impact justifies modifications designed to reduce the unintended consequences of the VaR methodology while preserving the test as a way for the Commission to place limits on undue speculation. We provide two suggested changes below, each of which would help refine the VaR test in unique ways and which we believe are not mutually exclusive. These modifications – if combined with the other necessary changes to the VaR test noted above – would allow the test to operate as intended for the full range of fund types and in a variety of market environments.



i. Modification #1 – Add an alternative limit

The analysis above highlights the limitations of the calculation methodology used for the proposed absolute VaR test and the resulting misleading picture of fund risk for certain classes of funds and market environments. These limitations are particularly concerning where they lead to two funds with the same investable universe and similar VaR results being treated dramatically differently under the proposed VaR tests, such as those analyzed in Figures 8 and 9.

One modification to the VaR test that could alleviate this problematic outcome is to provide funds that are subject to the absolute VaR test with an alternative limit that would be based on an objective level of risk that the Commission has already deemed to not be unduly speculative. We believe that an appropriate alternative limit would be 150% of the VaR of the S&P 500. The Commission in the Proposal has already identified the S&P 500 as an appropriate risk-based reference point. The Commission also proposed a relative VaR test that would set an outer bound limit at 150% of a fund's benchmark. In fact, the Proposal specifically references the 150% relative VaR test utilizing S&P 500 as the designated reference benchmark as comparable to the proposed absolute VaR test. Thus, it is reasonable to conclude that a fund appropriately utilizing the absolute VaR test, but that does not exceed 150% of the then current VaR of the S&P 500, is not unduly speculative and should not be restricted by the rulemaking.

Recommendation: Revise absolute VaR threshold to be the maximum of the fixed limit and 150% of the then current VaR of the S&P 500.

ii. Modification #2 – Provide flexibility in choosing the VaR model

As noted above, one of the fundamental limitations of the proposed absolute VaR calculation methodology is that it assumes constant positions during the entire lookback period even for funds whose investment strategy targets a specific level or range of volatility, and thus would necessarily not hold those same positions in periods with different market volatility.

One way to address this problematic result would be for the Commission to provide derivatives risk managers with flexibility to choose a modified VaR methodology that reflects the way in which funds would change their position sizes based on their publicly disclosed investment strategies.

Figure 10: Adjusted VaR Calculation²⁶



Figure 10 above compares the results for an AQR risk parity fund targeting 15% volatility using both the VaR calculation methodology included in the Proposal and a VaR model that adjusts position sizes consistent with the fund’s volatility target.

The results in Figure 10 represent a more accurate picture of the fund’s risk than the methodology used in the Proposal. This point can be seen by the results during the years after the 2008-2009 financial crisis, which as we have previously discussed show a misleadingly high level of fund risk using the proposed VaR methodology. The results obtained by adjusting the VaR model consistent with how the fund operates still reveal an increase in VaR during the financial crisis, but that increase is much less dramatic than shown by the proposed VaR model due to the fact that the fund reduced its positions in response to increased market volatility. However, despite having a lower VaR in the adjusted model during the financial crisis, it is important to note that use of a model more reflective of how volatility targeting funds operate does not inherently result in a lower result than the proposed VaR model. In fact, the adjusted model would result in a higher VaR number during some periods in the analysis (e.g., as the crisis hit in 2008).

In recommending this modification we acknowledge that adjusting a VaR calculation methodology would not be appropriate for all funds as it could be misused by funds that may not have strategies that require them to reduce position sizes during more volatile market periods. However, we believe that the Commission could provide guidance detailing when it may be appropriate for a derivatives risk manager to select this VaR methodology. That guidance should be based on a fund’s publicly disclosed investment strategy and limited to only those funds that have an explicit strategy of targeting a specific volatility level

²⁶ Data from AQR. The risk parity strategy data is for a backtested 15% volatility targeted fund. The alternative VaR model adjusts historical returns data by considering the ex-ante volatility of the holdings on each day in the lookback window and scaling those returns to reflect the target volatility of the fund.



or range that is disclosed in its principal investment strategy in its prospectus. We believe that funds following these types of strategies may obtain more accurate VaR results if they adjust the methodology in this way, and that those funds could be identified by the public disclosure of their strategies.

Recommendation: Allow funds that have a publicly disclosed volatility target or range to adjust their VaR methodology consistent with such strategies.

D. The Relative VaR Test as Currently Proposed is Overly Constraining

Although the proposed absolute VaR test has the most potential to result in unintended consequences for certain types of funds and in certain market environments, we believe that the Commission should also consider potential unintended consequences of the relative VaR test.

Our analysis of the impact of the relative VaR test begins with the understanding that some funds have investment strategies that generally track a specified benchmark – thus would appropriately apply the relative VaR test – but may also add amounts of active market risk to the benchmark as part of these strategies. These types of funds may find the relative VaR test overly constraining despite the fact that they may not be engaged in unduly speculative activities.

This problematic result may have the greatest impact on funds with low volatility benchmarks, like a bond index. Many of these funds also incorporate an active risk component to their strategies. The active component added to a low volatility benchmark could cause a fund to exceed the proposed limit, which is proportional to the VaR of the benchmark. This could occur even when the risk of a fund (and its corresponding absolute VaR) is relatively low. In such instances, a fund may be incentivized to find a higher volatility benchmark or switch to the absolute VaR test which would allow significantly more risk taking.

Figure 11: VaR of Bond Fund 1²⁷

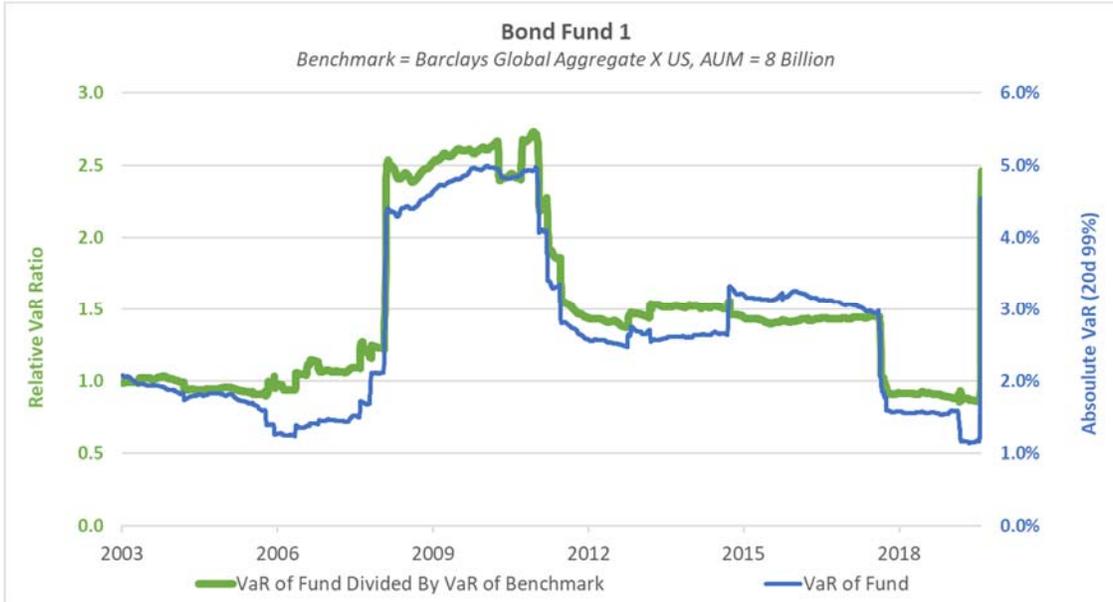
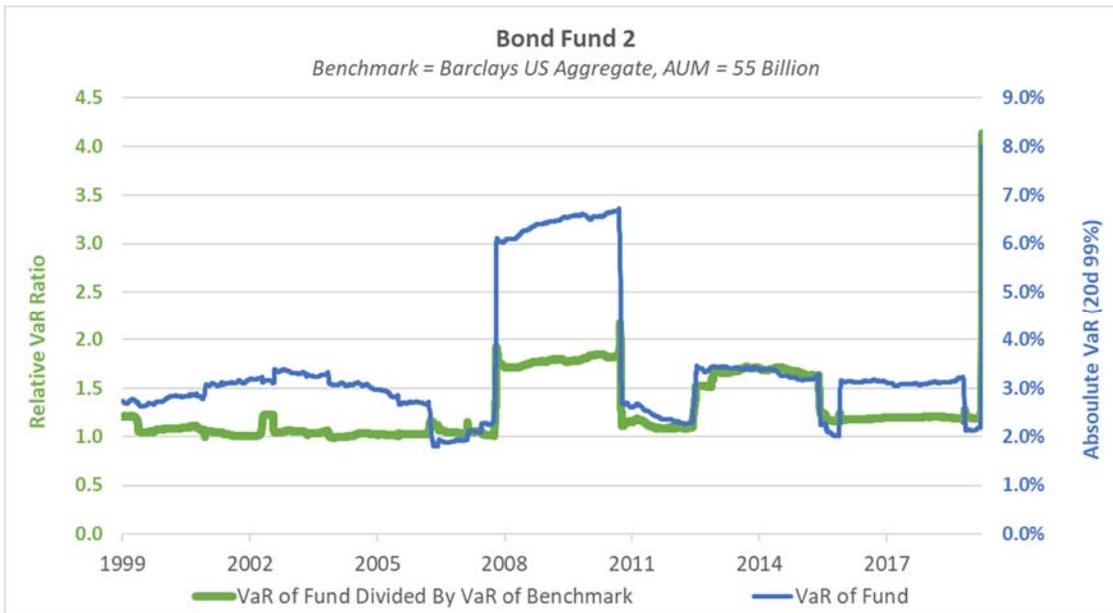


Figure 12: VaR of Bond Fund 2²⁸



²⁷ Data from Bloomberg. VaR is calculated at a 99% confidence level with a 3-year lookback, using 20-day rolling demeaned returns.

²⁸ Data from Bloomberg. VaR is calculated at a 99% confidence level with a 3-year lookback, using 20-day rolling



Figures 11 and 12 above highlight this point and reflect the results of two different funds under the proposed relative VaR test. Each of these funds tracks a relatively low volatility benchmark. The left axis of each chart shows that the relative VaR result for each fund would dramatically exceed the proposed relative VaR threshold (150% of the benchmark VaR) during the financial crisis and for a lengthy period after.

At the same time, however, the risk of these funds in an absolute sense would remain relatively low even when they exceed the relative VaR threshold. This point is highlighted by the absolute VaR results shown on the right axis of the charts. Even at their highest level of relative VaR exceedance, these funds would still only represent an absolute VaR of between 5-7%.

We recognize that even a relatively low absolute VaR of 5-7% may be greater than the risk in the benchmark that these funds track. However, these funds are designed to not merely track the benchmark, but to also generate additional return through exposure to some market risk. We do not believe that the levels of risk revealed in our analysis suggests that these funds represent undue speculation and should be restricted by the rulemaking.

For these reasons, we suggest that the Commission provide an objective alternative limit for benchmarked funds set at a level that does not represent undue speculation. This limit should be substantially lower than the limit set by the Commission for the absolute VaR test given that these are benchmarked funds that may set expectations for investors that differ than funds using the absolute VaR test. However, we believe an alternative limit could be set at a level that clearly does not represent undue speculation and would allow these funds to function as intended without being overly constrained by the relative VaR test.

Recommendation: Revise the relative VaR threshold to be the maximum of the benchmarked relative VaR limit and an absolute VaR of 10% of the fund's net assets.

E. The Remediation Process for VaR Compliance Should be Modified

Under the current Proposal, when a fund is out of compliance with the VaR limit for more than three business days, it must undertake three steps before it can enter into additional derivatives transactions. First, the derivatives risk manager must report to the fund's board of directors and explain how and when the fund will come back into compliance. Second, the manager must analyze the circumstances that caused the fund to exceed the VaR limit and update program elements as appropriate. Third, the fund may not enter into any derivatives transactions (other than those designed to reduce the fund's VaR) until the fund is within the VaR limit for at least three consecutive days.



1. *The proposed three-business-day remediation period is unnecessarily short*

We recognize the need for the Proposal to include a specific remediation period for funds to come back into compliance after an exceedance of the VaR limit. The limit is designed as an outer bound to prevent undue speculation and any exceedance could be viewed as potentially placing investors at risk by subjecting them to unduly speculative activity. At the same time, we believe that the test should be designed such that the remediation period encourages funds to come back into compliance efficiently without exacerbating risks to fund investors.

Given this perspective we believe that the Proposal should be modified to provide funds with five business days to remediate after a VaR breach rather than the three days proposed. While we expect most funds would seek to expeditiously engage in VaR-reducing trades in an effort to come back into compliance as quickly as possible, in certain situations three days may prove to be an insufficient time to complete those activities. A three-day remediation period could force funds into unnecessarily aggressive trading and could lead to market impacts that would negatively affect fund investors. These problematic results could be exacerbated if combined with significant redemptions in what could foreseeably be a volatile market environment. A more reasonable five-business-day remediation period would still accomplish the Commission's goal of ensuring that funds quickly come back into compliance while providing more ability for funds to do so in a way that would not negatively impact investors.

Recommendation: Extend the VaR breach remediation period from three business days to five business days.

2. *The Proposal's three-day time out should be removed*

While the Proposal's three-day remediation period may present unnecessary risks to funds and their investors, we are concerned that the proposed three-day time out after a failure to come back into compliance within the remediation period could result in even greater risks.

The purpose of the VaR limit is to ensure that funds do not exceed a risk-based metric that the Commission has determined represents undue speculation. Where a fund has reduced its VaR to a level below the VaR limit that fund should no longer be viewed as unduly speculative and should not face additional restrictions.

There are a number of reasons why a fund may need to trade derivatives that could result in severe negative impacts on the fund if prohibited from such trading for three days. These include derivatives trades to manage other risk factors, including changing asset liquidities or market dislocations, and rebalancing to adjust market (beta) exposures to fund objectives and benchmarks. The proposed time out could preclude a fund from responding to these factors despite the fact that the fund does not have a VaR in excess of the rule's limit and thus cannot be viewed as unduly speculative.

Further, the three-day prohibition on trading derivatives creates significant operational risk. Broad trading restrictions, such as those contemplated by the Proposal, require extraordinary process controls



and errors will inevitably occur. These errors could result in investor harm. Accordingly, a trading prohibition intended to curb risk may unintentionally create new risks.

We do not believe that concerns around gaming of the VaR test – such as activities designed to repeatedly exceed the VaR limit, drop below it, and then exceed it again – are viable from a business standpoint or are realistic possibilities. Even if the Commission is concerned about such activities, the reporting provisions in the Proposal sufficiently protect against gaming. The Commission and the fund board will both have reporting of any failure to comply with the VaR limit remediation period. Within this type of oversight any fund seeking to game the VaR limits would immediately stand apart as an outlier and the fund board and Commission staff could address concerns through their existing authorities.

Recommendation: Remove the three-day time out after a fund’s VaR is below the limit following a breach of the remediation period.

V. The Proposal’s Fund Reporting Requirements Should Be Modified with Respect to Public Disclosures

The Proposal would amend reporting forms N-PORT and N-LIQUID to include certain derivatives data. Form N-PORT, as amended, would require funds to provide information about their derivatives exposure. Form N-PORT would also require funds to report certain VaR-related information, including the fund’s highest daily VaR and its median daily VaR. Funds applying the relative VaR test must identify the designated reference index. N-PORT would also require disclosure of the number of exceptions that the fund identified as a result of the backtesting of its VaR calculation model. The Proposal contemplates that this N-PORT data would be reported to the Commission and to the public.

The Proposal provides that Form N-LIQUID would be retitled Form NRN and would require reporting certain data to the Commission when a fund is out of compliance with its VaR limit and has not come into compliance within the remediation window. This information would not be publicly reported.

We support the Commission’s efforts to monitor funds’ derivatives risk management through regular and periodic reporting. We ask only that the Commission carefully consider the added requirements and determine whether the new information is duplicative of already reported information and relevant to the fund’s derivatives risk management efforts.

We are concerned about a lack of clarity in the requirement to report “derivatives exposures.” We understand that the Proposal allows a fund to convert the notional amounts of certain derivatives, but this sophisticated conversion method may result in confusion or errors during the conversion process. Form N-PORT already requires disclosure of all portfolio holdings. We suggest that this unmediated report may provide sufficient insight into a fund’s derivatives exposures without risk of errors or confusion.

We also believe that the additional Form N-PORT data should not be publicly disclosed, and we strongly agree that the VaR compliance data contemplated in Form N-LIQUID/NRN should not be publicly reported. The VaR data reported through Form N-PORT would not provide sufficient context for the investing public to effectively utilize the data. As explained above, certain types of funds utilizing both the absolute and relative VaR tests may be disproportionately impacted by the proposed limits, and



some funds with similar investment scopes and VaR levels may nonetheless have very different VaR results under the proposed test. These realities will make VaR comparisons across funds more difficult and public disclosure of VaR results could be misleading given that they would not present investors an “apples to apples” comparison across funds. Absent a detailed contextual explanation regarding the fund’s choice and application of its VaR limit, the Form N-PORT VaR data could potentially confuse investors.

In addition, the VaR backtesting data proposed to be reported on Form N-PORT would also not be useful for investors and may ultimately be misleading. VaR breaks revealed through backtesting are a normal occurrence and the sign of a properly calibrated VaR test. Were a fund to reveal that it did not have any VaR breaks through its backtesting, that would likely be a sign that the VaR model was not properly calibrated. However, that information could instead be inadvertently interpreted by some investors as a sign of lower risk. The nuances around risk management practices are generally not widely known in the investing community and could lead some investors to believe that certain funds represent greater or lesser risk than others simply based on a comparison of VaR breaks when that is not an appropriate metric for that type of determination.

Finally, we strongly agree with the determination in the Proposal that the VaR compliance data in Form N-LIQUID/NRN should be reported to the Commission but not publicly disclosed. As the Commission recognizes in the Proposal, publicly disclosing this information could lead to investor confusion. For example, investors might mistakenly assume that a fund that breached the applicable VaR test actually had suffered substantial losses or that substantial losses necessarily were imminent. This information, though useful from a regulatory perspective, may not provide helpful information to investors.

Recommendation: Remove certain public reporting requirements that could be misleading.

VI. Conclusion

We applaud the Commission for developing a rule proposal that indicates a more evolved understanding of the use of derivatives by funds and for proposing a multi-faceted approach to derivatives risk management. The Proposal has been a collaborative effort and reflects extensive discussions with industry participants and particularly those that deploy significant derivatives use like AQR.

As noted above, we believe that a well-designed and implemented derivatives risk management program consistent with the Proposal, combined with appropriate reporting to the Commission, fund boards, and in certain instances the public, would sufficiently regulate the use of derivatives by funds regardless of whether the Commission ultimately adopts a specific numerical outer bound limit. If the Commission does determine to adopt an outer bound VaR limit, the modifications we detail in this letter will ensure that the VaR limit operates as intended without potentially severe unintended consequences. In adopting these modifications, the Commission would maintain its record of protecting investors while supporting a vibrant market of products that allow investors to hold well-diversified, professionally-managed portfolios.



We hope the Commission and its staff find our comments above helpful and we would be pleased to discuss any aspect of the letter with the Commission or its staff. Please feel free to contact us with any questions at [REDACTED] or [REDACTED]

Sincerely,

/s/ Michael Mendelson

Michael Mendelson
Principal
Portfolio Manager

/s/ Michael Patchen

Michael Patchen
Principal
Chief Risk Officer

/s/ Richard Grant

Richard Grant
Managing Director
Head of Regulatory and Government Affairs