March 28, 2016

VIA ELECTRONIC DELIVERY

Mr. Brent J. Fields
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; 1940 Act Release No. 31,933; (File No. S7-24-15)

Dear Mr. Fields:

AQR Capital Management, LLC ("AQR")[1] is pleased to provide comments on proposed Rule 18f-4 (the "Rule")[2] under the Investment Company Act of 1940 (the "1940 Act"). The Proposal represents a serious effort by the Securities and Exchange Commission (the "SEC" or the "Commission") to provide guidance and consistency for funds that use derivatives and financial commitment transactions[3] and reflects considerable thinking about the very complex issues presented. We agree with the Commission's approach of consolidating the prior informal and formal guidance of the Commission and its staff regarding how funds may trade in derivatives and financial commitment transactions into a single, uniform rule.[4]

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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*, 1940 Act Release No. 31,933 (Dec. 11, 2015), 80 Fed. Reg. 80,884 (Dec. 28, 2015), *available at* https://www.gpo.gov/fdsys/pkg/FR-2015-12-28/pdf/2015-31704.pdf (the "Release" or the "Rule"). Page references to the Release in the text of this letter are to the Release as published by the Commission and not to the Release as it appears in the Federal Register.

3 The Commission uses the term "derivatives" to mean "any swap, security-based swap, futures contract, forward contract, option, any combination of the foregoing, or a similar instrument." See proposed Rule 18f-4(c)(2). The Rule defines a "financial commitment transaction" as "any reverse repurchase agreement, short sale borrowing, or any firm or standby commitment agreement or similar agreement." See proposed Rule 18f-4(c)(4). Unless the context otherwise requires, we use the term "derivatives transactions" to encompass derivatives and financial commitment transactions.

4 *See*, e.g., Securities Trading Practices of Registered Investment Companies, Investment Company Act Release No. 10666 (Apr. 10, 1979), *available at* http://www.sec.gov/divisions/investment/imseniorsecurities/ic-10666.pdf.

AQR is a global asset management firm with over $145 billion in assets under management across both traditional long-only equity strategies and alternative investment strategies, of which the firm is one of the world's largest providers. We offer investors access to these investments through separate accounts, UCITS funds, pooled vehicles, and through sub-advised mutual funds and the AQR Funds, a family of open-end mutual funds registered under the 1940 Act.[5] AQR has been providing diversifying strategies and their risk/reward benefits to pension plans and their beneficiaries for many years. Since January 2009, AQR has offered registered mutual funds that provide these same benefits to individual investors.

AQR has been a pioneer in offering alternative investment strategies as registered mutual funds[6] and emphasizes risk control and best practices in fund governance. We submit that our deep understanding of derivatives and alternative investment strategies positions us well to comment knowledgeably on the terms, conditions and potential consequences of the Rule if adopted as proposed, particularly as they relate to alternative mutual funds. For purposes of this letter, we define alternative mutual funds as those included in the Morningstar broad category of "Alternative," excluding levered and inverse strategies.

The Rule would, if adopted as currently drafted, have far-reaching, negative implications for investor choice and the ability of investors to continue to access alternative mutual funds that are less correlated with equity markets. We expect that alternative mutual funds would be required to restructure their investment strategies, sometimes drastically, in a manner that will increase risks and reduce the benefits investors receive from such investments. The Rule would also generally limit the ability of investment companies registered under the 1940 Act (each a "fund" or "mutual fund") to appropriately manage their portfolios and invest in the lowest volatility instruments where appropriate through use of derivatives. Based on a study of just over 80% of the industry by the Investment Company Institute (the "ICI"),[7] the Rule would require retooling and, in some cases, possible closure of funds with over $600 billion in aggregate assets.

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5 AQR is registered with the SEC as an investment adviser under the Investment Advisers Act of 1940 and as a commodity pool operator and a commodity trading advisor with the Commodity Futures Trading Commission under the Commodity Exchange Act. Our investors, such as U.S. state and local pension plans, private pension plans, endowments, foundations, sovereign wealth funds, and financial advisors investing on behalf of their clients, typically seek to follow conservative investment strategies. As of February 29, 2016, AQR and its affiliates had approximately $145 billion in assets under management, of which $40.1 billion consist of the AQR Funds and sub-advised mutual funds.

6 The AQR Funds include 9 alternative mutual funds with assets of $19.8 billion as of February 29, 2016. AQR is viewed as the "clear leader in delivering alternative strategies to retail investors," according to Morningstar, and "has developed strategies that . . . fulfill the promise of delivering uncorrelated returns that will diversify a traditional portfolio." *See* Andrew Bary, *How AQR's Liquid Alternative Funds Are Outperforming Competitors*, BARRON'S, Feb. 27, 2016, *available at* http://www.barrons.com/articles/how-aqrs-liquid-alternative-funds-are-outperforming-competitors-1456549367?tesla=y&mod=BOL_twm_ls?mod=BOL_hp_highlight_1.

7 The ICI recently conducted a survey of funds that provides useful insight into the likely impact of the Rule on various categories of funds (the "ICI Survey"). An ICI draft analysis as of March 11, 2016 reports that the survey received responses from 6,661 funds with assets totaling $13.6 trillion, which represents over 80% of the industry's total assets. The numbers reported in the ICI's draft analysis are preliminary and subject to revision.

Notwithstanding our serious concerns about the Rule as drafted, we believe that the policy goals underlying the Rule are sound. The Commission should adopt the Rule only if it makes the few, but important, modifications we suggest.

The marked growth in alternative mutual funds since the crisis of 2008-2009 suggests to us that investors are diversifying some of their traditional equity risk by adding exposure to uncorrelated and less correlated sources of returns to their portfolios. We suggest that, particularly in a world that many view as having lower prospective returns to traditional asset classes but enormous needs from individual investors who now shoulder more of their own retirement burdens, it could prove counterproductive to adopt a rule that would necessarily close some alternative mutual funds or cause them to be significantly revamped in ways that would result in more risk concentration, higher costs and less effectiveness.

We believe that the Commission's goals would be achieved, and these adverse impacts to individual investors and their portfolios could be avoided, by making three straightforward adjustments to the Rule:

1) replace "aggregate notional amounts" with "aggregate risk-adjusted notional amounts" that account for the relative riskiness of a derivative's underlying reference asset when calculating a fund's total "exposure,"

2) utilize a combination of:

   (i) an absolute full portfolio VaR measure based on a fixed, standardized VaR model,

   (ii) a fixed exposure limit based on risk-adjusted notional amounts subject to a 400% limit for funds that elect to comply with the risk-based portfolio limit under the Rule,

3) expand "qualifying coverage assets" for derivative positions to include highly liquid assets adjusted by a haircut schedule.

We firmly believe that with these modifications, the Rule would better achieve the goal of protecting investors by limiting the ability of funds to increase asset exposures in a manner that would cause a fund to become "unduly speculative."[8] At the same time, these proposed modifications will preserve the ability of investors to diversify risk and improve their portfolios through allocations to alternative mutual funds and avoid significant disruption, or partial elimination, of a class of investments investors have chosen with meaningful allocations of their capital. Importantly, if the SEC determines not to make these changes, we recommend that the SEC not adopt the Rule because it would do more harm than good.

[8] *See* Section 1(b)(7) of the 1940 Act.

I. Risk-Controlled Derivatives Use Helps Investors Diversify Their Portfolios

Although alternative mutual funds are not the only funds affected by the Rule, the Rule as proposed will force damaging modifications to them and curtail their availability. This will harm the significant number of investors who currently use alternative mutual funds to diversify their holdings and retirement savings and harm future investors who seek to apply this most essential principle of investing, that diversification is essential to the responsible construction of investment portfolios with the best possible risk/reward tradeoff.[9]

A. Derivatives are Essential to the Implementation of Alternative Investment Strategies

The nature of alternative mutual funds requires that they make extensive use of derivatives to achieve their investment objectives. In its study of the use of derivatives in 1940 Act funds, the SEC's Division of Economic and Risk Analysis ("DERA") found that in its sample of 1188 funds, alternative mutual funds were much more likely to use derivatives than traditional funds (73% vs. 29%) and their use was more extensive, averaging 121% gross notional vs. 10% for traditional funds.[10] Alternative mutual funds generally have exposures to more asset classes and underlying reference assets than traditional funds, and those exposures can vary widely in size to achieve the funds' strategies. Derivatives in the form of futures, currency forwards and simple swaps are well suited to facilitate the implementation of the strategies followed by alternative mutual funds and the DERA Study shows that funds with high exposure to derivatives tend to gain exposure through those most simple derivatives.[11] Derivatives allow funds to gain exposures in an efficient and cost-effective way. In some cases, a derivative is the only feasible way of obtaining an exposure[12] or even access to an asset class, like physical commodities. Furthermore, the derivatives that alternative mutual funds tend to use are frequently more liquid than their underlying cash reference assets and utilize market mechanisms that are more resilient in times of market distress, as were the futures and currency forward markets in 2008.

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9 *See* James A. Overdahl, Ph.D., *Delta Strategy Group, Proposed Rule 18f-4 on the Use of Derivative Instruments by Registered Investment Companies*, at 45-49 (March 22, 2016) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2754153 (the "Overdahl Study").

10 Daniel Deli, Paul Hanouna, Christof Stahel, Yue Tang & William Yost, *Use of Derivatives by Registered Investment Companies*, Division of Economic and Risk Analysis (December 2015), *available at http://www.sec.gov/dera/staff-papers/white-papers/derivatives12-2015.pdf.*) (the "DERA Study").

11 *See* Overdahl Study, *supra* note 9 at pages 27-28.

12 The Rule as proposed would limit the availability to investors in funds that seek to gain exposure to certain emerging markets. Countries such as China, India, Taiwan and South Korea currently prohibit direct investments by foreigners without a specified license. A fund, for example, would have difficulty obtaining direct exposure to A shares in China. A fund or other foreign investor typically is denied access to the A-shares market unless it obtains a license to be a qualified foreign institutional investor. Faced with this barrier, a fund could obtain indirect exposure to the A-shares market by entering into a total return swap or other form of derivatives contract. Chinese A-shares are Renminbi (RMB)-denominated common stock listed and traded on the Shanghai or Shenzhen exchanges in China. They account for nearly 95% of total tradable shares in the People's Republic of China stock exchanges.

The ICI Survey supports the fact that alternative mutual funds are heavy users of derivatives and, thus, would be significantly impacted by the Rule.[13] In the ICI sample, which included 70% of all alternative mutual funds, 221 alternative funds with $79 billion in assets exceeded the 150% limit and 36 alternative funds with $42 billion in assets had greater than 300% exposure. The ICI Survey also found that the percentage of alternative mutual funds affected by the limits was large. Alternative mutual funds with aggregate notional exposures to derivatives above 150% (or 300%) account for 53% (or 28%) of alternative mutual fund assets in the study's sample. This data demonstrates that the Rule could drastically reduce the alternative mutual funds available to investors or cause those funds to be materially restructured in a suboptimal manner, sacrificing some or many of the benefits derivatives enable for alternative mutual funds.[14]

The reason many alternative (and taxable bond) mutual funds have higher exposures to derivatives is that they use derivatives to gain exposure to low-risk assets. The DERA Study showed that alternative funds with the highest derivatives exposure sought exposure to the lower risk asset classes – fixed income and currencies – and the same was true for traditional funds.[15] To our knowledge, most funds – other than leveraged and inverse exchange-traded funds ("ETFs") – that use derivatives with large gross notional amounts do so in order to provide exposure to lower-risk assets, not higher-risk assets. The largest notional exposure amounts of derivatives employed by the AQR Managed Futures Strategy Fund, for example, relate to short-term interest rate futures, as the expected very low volatility of these instruments requires higher notional amounts to achieve a useful investment role in the portfolio as a whole. The fund's exposure to futures on higher-risk equities and commodities, on the other hand, tends to be far lower and not meaningfully constrained by the Rule. In many ways, this is typical of the broader impact of the Rule – it has a disproportionate effect on investors' ability to gain exposure to lower volatility assets like bonds and currencies, driving risk taking toward stocks and commodities. Even within an asset class, the Rule tends to disadvantage lower risk assets like shorter-duration debt in favor of longer-duration debt or developed currencies in favor of riskier emerging market currencies.

B. Alternative Investment Funds Enable Investors to Diversify Portfolio Risk

Some observers have a misperception about alternative mutual funds – namely, that such 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 funds and do not seek higher returns than equity funds. Figure 1 compares the volatility of four categories of alternative mutual funds to the volatility of the S&P 500 Index. In all cases, the alternative fund categories are less or substantially less volatile than the equity index. Our extensive experience with investors in alternative mutual funds confirms that investors use alternative strategies as a means to diversify their risk, and even to decrease it, but not to increase it.

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[13] *See* ICI Survey, *supra* note 7.

[14] We focus our comments on the impact of the Rule on alternative mutual funds. The ICI Survey shows that the impact extends far beyond alternative mutual funds, with over $600 billion in assets exceeding the 150% limit when all asset classes are included.

[15] DERA Study, *supra* note 10 at Figure 3.1.

Our view that investors in alternative mutual funds are primarily concerned with diversification and the ability to mitigate overall portfolio risk is further supported by the nature of many of the comments pertaining to the Rule submitted by investors and financial advisors.[16] While alternative mutual funds have existed for decades, we believe a desire for diversification accounts for the marked increase in assets of alternative mutual funds since the 2008 financial crisis. Investors are seeking strategies that enable them and their advisors to create portfolios that are less correlated to equities. Investors have realized that equities are too correlated to their incomes, their employment stability, and their home values.

A recent study by Craig Lewis describes a wide range of benefits that alternative mutual funds provide to investors.[17] In this study, Lewis found that alternative mutual funds expand the efficient frontier available to investors. The efficient frontier is a description of the potential trade-offs between risk and return available to investors. The Lewis Study shows that when the array of potential investment options is expanded beyond stocks and bonds to include alternative investments, the efficient frontier expands – meaning that an investor can create portfolios that expect a similar return for lower risk, or higher return for the same level of risk, or a combination of the two. Figure 2 shows a graph of the expanded opportunity set.

The Lewis Study also finds that alternative investment strategies are generally lower risk than equities and provide returns somewhere between those of bond funds and stock funds, returns that are commensurate with their moderate levels of risk.[18] Further, the study shows that alternative mutual funds achieve these important goals while abiding by 1940 Act rules critical for investor protection.[19] Lewis also found that the democratization of these strategies has enabled ordinary investors to access an asset class that had previously been available only to institutions and the wealthy.[20]

We view the ability for average investors to access strategies that may successfully provide diversification benefits and mitigate losses in the most difficult times (like 2008) as an essential benefit of the availability of alternative mutual funds. We expect that the demand for highly diversifying strategies will not abate regardless of what limitations are imposed. The need is great because investors are too concentrated in equity exposure and require diversifying sources of return.

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16 *See, e.g.*, Letter from Al Hemmingsen, CFA, Director of Research, Highland Consulting Associates, Inc., to Mr. Brent J. Fields, Secretary, SEC (Mar. 24, 2016); Letter from Jared Kizer, Chief Investment Officer, et al., Buckingham Asset Management, LLC, to Mr. Brent J. Fields, Secretary, SEC (Mar. 24, 2016).

17 *See* Craig M. Lewis, *Liquid Alternative Mutual Funds: An Asset Class that Expands Opportunities for* Diversification, March 2016, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2755368 (the "Lewis Study").

18 *Id.* at 13.

19 *Id*.

20 *Id.* at 20.

C. The Rule Would Significantly Disrupt Alternative Mutual Funds and Their Investors

Based on the DERA study, the Release suggests that many alternative strategy funds, particularly managed futures funds and currency funds, may fail both of the two proposed portfolio limits.[21]

As noted above, the extensive ICI Survey also found that the impact extends beyond just currency and managed futures funds, and that alternative mutual funds more generally would be dramatically affected.[22] Of course, sponsors of alternative mutual funds could choose to restructure the funds in a manner that complies with the Rule and we expect them to do so. In our view, any such restructuring, which is likely to require radical surgery to the way certain alternative strategies are managed, is likely to result in offerings that are less diversifying, with lower return per unit of risk, and that are less effective in meeting the diversification needs of investors.[23] For example, under the Rule as proposed, a managed futures fund could decrease its exposure to low-risk assets (such as currencies, government bonds, and short term interest rates) that require high notional exposures, but in order to maintain adequate investment exposure would likely need to increase its exposure to higher-risk assets that "use up" less of the maximum derivatives limit under the Rule.[24]

Based on our own study of modifications that would be required to conform the AQR Managed Futures Strategy Fund to the Rule as proposed, we anticipate that expected returns could fall by as much as 2% per year[25] and that the fund could be expected to experience larger drawdowns.[26] We believe that this would be typical of many managed futures strategies and so would deprive investors of access to a strategy that was one of the few sources of positive return in 2008. The propensity for managed futures strategies to provide positive returns when stocks deliver their most negative returns can be seen in Figure 3, which shows yearly returns of the S&P 500 Index as compared to the category average of managed futures mutual funds.

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21 80 Fed. Reg. at 80,911.

22 *See* ICI Survey, *supra* note 7.

23 Overdahl Study, *supra* note 9 at 45-49.

24 As the Commission notes in the Release, funds unwilling or unable to restructure may be forced to de-register, causing current investors to relinquish the protections of the 1940 Act and potentially suffer adverse tax consequences. However, we believe that even for strategies such as managed futures many funds would restructure their portfolios rather than deregister.

25 This estimate compares the back tests of both the existing and modified strategies and finds that the modified strategy would have both a lower return per unit of risk (Sharpe ratio) and would have to target a lower level of volatility than desirable.

26 In this letter, for convenience we used the managed futures strategy and the AQR Managed Futures Strategy Fund to illustrate the impact of the Rule and our recommendations. Nonetheless, the same considerations apply to many other alternative mutual funds, such as multi-strategy funds, fund-of-funds, and global macro funds, as well as multi-asset global asset allocation funds.

II. Our Concerns with the Proposed Rule and Our Recommended Modifications

A. A Limit on Risk-Adjusted Exposure Should Be Used in Lieu of a Limit on Notional Exposure

1. Gross notional exposure does not reflect the relative volatility or riskiness of an instrument, and, as a result, failure to risk-adjust notional exposure under the exposure limits will have unintended detrimental consequences for investors

Our central concern with the Rule is that it effectively discourages investments in low risk asset classes like fixed income and currencies, and indirectly encourages investment in higher risk asset classes, like equities and commodities, within multi-asset class funds. In setting exposure-based and risk-based limits, the Rule defines "exposure" as the "aggregate notional amounts of the fund's derivatives transactions." However, gross notional amounts are not indicative of the riskiness of the derivative and the Rule treats highly risky instruments in the same manner as the lower risk instruments. That is, $1 of exposure to, say, a U.S. Treasury Note futures counts the same toward the limit as $1 of exposure to volatile natural gas futures. This discourages the use of low risk instruments since they require too much consumption of the exposure limit of multi-asset class portfolios. In contrast, a modest amount of high risk instruments easily can have portfolio impact without consuming much of the exposure limit, so their use is effectively encouraged. This perverse treatment of low and high risk derivatives would not achieve the Commission's goals to curb undue speculation and could, in fact, encourage the opposite.

The Commission itself recognizes this drawback, stating in the Release that: "a derivative's notional amount does not reflect the way in which the fund uses the derivative and that the notional amount is not a risk measure. An exposure-based test based on notional amounts therefore could be viewed as a relatively blunt measurement in that different derivatives transactions having the same notional amount but different underlying reference assets . . . may expose a fund to very different potential investment risks and potential payment obligations."[27]

i. Notional exposure and the risk of derivatives are not closely related

If the relative riskiness of underlying asset types in derivatives contracts were similar to each other, creating a limit on aggregate notional exposure would be consistent with putting risk guardrails around fund portfolios. However, there are vast differences in these relative risks, which makes a simple sum-of-the-notionals nearly meaningless in terms of the riskiness or the speculative character of a fund. One dramatic example of this is the difference in risk between stocks and government bonds. Figure 4 provides a long historical view of the magnitudes of the relative drawdowns of stocks (as represented by the S&P 500 Index) and 10-year U.S. Treasury Note futures. The line for each asset represents the losses accrued when its accumulated value declines from a previous peak; that is, it represents the drawdowns experienced by an investor holding these assets. We have taken special care to include the spectacularly bad bond market of 1980 and 1981 when 10-year yields rose to 15.84%. Nevertheless, and unsurprisingly,

[27] 80 Fed. Reg. at 80,903.

drawdowns in stocks still dwarf drawdowns in bonds, because stocks are substantially riskier. Holding an equal dollar amount of each exposes an investor to significantly more stock market risk than bond market risk.

ii. Total gross notional exposure of a mutual fund is not closely related to the risk of the fund

High notional exposure in a mutual fund is not necessarily an indication of risk. The ICI Survey shows that the volatility of all but one fund out of 36 alternative mutual funds with over 300% gross notional exposure in their sample was less than 15.5%, the volatility of the S&P 500 Index over the same time period.[28] We performed a similar analysis on a more limited data set of the 10 largest managed futures mutual funds, based on notional exposure data from public filings.[29] The data, shown in Figure 5, supports our conclusion that there is no relationship between notional exposure and volatility, and reflects that the risk of each fund (measured by volatility) is less than the risk of the S&P 500 Index. We use the S&P 500 Index as the reference point because it is a widely used index with a risk profile that is well understood and commonly acceptable to investors.

iii. High levels of gross notional exposure are related to higher levels of exposure applied to low-risk assets

The gross notional exposures associated with many alternative funds can be well over 500%, which can cause "sticker shock" for observers unfamiliar with the details of alternative strategies. As discussed above, based on our own experience and knowledge of alternative strategies in general, the reason why notional exposures can appear high is that the strategies maintain high notional exposure to low-risk assets.[30] We use our own AQR Managed Futures Strategy Fund as an example of a fund with gross notional exposure of approximately 1000%. In Figure 6, we show the fund's notional exposures as of December 31, 2015. Fully 769% of the gross notional exposure comes from positions in short term interest rate futures (futures on 3-month time deposits), which have very low volatility. Despite the large notional exposures, this asset class only contributes 0.3% to the fund's overall volatility of 8.2%. In contrast, the two

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28 ICI Comment Letter regarding the Rule, to be filed with the Commission on or about March 28, 2016. We refer to Figure 5, Upper Panel, which shows the volatility of alternative mutual funds versus notional exposure. The data in this sample includes 36 funds with notional exposure in excess of 300%, representing $42 billion in assets. The one fund with volatility above the S&P 500 Index was a fund with a stated prospectus volatility range of 7-20% with a target volatility of 15%.

29 The sample consisted of the 10 largest funds as of December 31, 2015 according to Morningstar data, excluding two funds for which exposure from public filings, as calculated by AQR based on latest available public filings as of December 31, 2015, was not meaningful.

30 As recognized by the SEC in the Proposing Release for the Rule, for example, notional levels on listed 3 month Eurodollar futures contracts are exceptionally high and, as a matter of market convention, are typically referenced as one-quarter actual size. See 80 Fed. Reg. at 80,908 ("We understand that the notional amounts for Euribor and Eurodollar futures are often referenced by market participants by dividing the amount of the contract by four in order to reflect the three-month length of the interest rate transaction, and our staff took this approach in evaluating funds' notional exposures, as discussed in the DERA White Paper. For these very short-term derivatives transactions, calculating notional amounts without dividing by four would reflect a notional amount that could be viewed as overstating the magnitude of the fund's investment exposure.").

riskiest asset classes (commodities and equities) only have gross notional exposure of 35% and 40%, respectively, but their expected volatility in the fund is 3.0% and 1.6%, respectively – still modest but much larger than the contribution from the high notional exposure to short term interest rate futures. That is, with exposures roughly 5% of the short term interest rate exposures, stocks contribute more than ten times as much risk to the portfolio. This illustrates something that we believe to be typical of alternative funds: they do not use derivatives exposure to amplify the risk of already-risky assets. Instead, they increase exposure to low-risk assets to achieve a moderate level of risk consistent with their moderate risk objectives.

It is worth noting that Figure 6 also illustrates the framework by which AQR's and, to our knowledge, other similar alternative mutual funds are generally managed. The investment process for the AQR Managed Futures Strategy Fund starts with a portfolio volatility target and allocates risk across the fund's asset classes roughly in equal proportion across stock index futures, commodity futures, currency forwards, and the combination of fixed income and interest rates. The notional exposures required to achieve the desired risk allocation are determined by the riskiness of each asset. To achieve the same risk allocation to a low risk asset as with a high risk asset, you need larger notional exposures. We believe that alternative mutual funds that employ derivatives extensively are typically managed with a specific level of risk in mind. Appropriately sized exposure limits are then used as "guardrails" to ensure that notional exposure is not excessive regardless of estimated risk, but these should not be so extremely limiting that they preclude appropriate and sensible exposure to low-risk assets or cause the guardrails to drive the risk allocation process.

iv. Exposure limits based on notional exposure without risk-adjustment would have perverse and unintended consequences to the detriment of investors

With tightly binding exposure limits that are set based on notional amounts, fund managers would have to construct portfolios that are much less effective at meeting investor objectives.

In the case of alternative mutual funds that diversify their strategies across many asset types, many would find it difficult to utilize low-risk assets such as short-term interest rates, government bonds, or currencies as part of their overall portfolio. In Figure 7, we show one way we could have to modify the holdings of the AQR Managed Futures Strategy Fund to conform to the Rule and its 150% notional exposure limit. Of the fund's 127 holdings, we would expect to eliminate 65 of them (and add only 4 replacements). The strategy would then become more concentrated and offer less diversification, lower expected returns, larger potential drawdowns, and a weaker risk/reward tradeoff. We believe this would be typical of the result of efforts to conform portfolios to the Rule. The potential portfolio benefit to investors of these now less-diversifying strategies would be reduced.[31]

2. We recommend implementing a risk adjustment framework based on a published table of risk-adjustment factors

[31] *See* Overdahl Study, *supra* note 9 at 45-49.

We urge the Commission to establish a risk-adjustment framework in the Rule that would provide a simple, yet highly functional, table of "risk adjustment factors" by which gross notional exposure of each asset type would be multiplied to calculate "risk-adjusted exposure" before summing to compute aggregate risk-adjusted exposure. The definition of "exposure" in the Rule would be changed to mean "risk-adjusted exposure" throughout.[32]

We show below a proposed table of risk-adjustment factors as Table 1. Table 1 is a direct application of a schedule for "Standardized Gross Initial Margin Requirements for Non-Cleared Security-Based Swaps", from the Margin and Capital Requirements for Covered Swap Entities, adopted by the Comptroller of the Currency, Federal Reserve Board, FDIC, Federal Credit Administration, and Federal Housing Finance Agency on November 30, 2015.[33] The Gross Initial Margin numbers in the second column were derived based on the amount the particular category (i.e. Credit 0-2 year duration) could fall in value in a stressed situation (2% for that particular category).[34] These Gross Initial Margin amounts differ by asset class and duration because they reflect the differences in riskiness of the different categories in the table. Using this table as a guide, we can easily construct a set of risk adjustment factors that takes into account the relative riskiness across different categories. While this table was originally designed for a different regulatory goal, we believe this schedule to be directly applicable to assigning a meaningful risk-adjusted exposure measure for mutual funds, because its purpose is the same – to differentiate the riskiness of different asset classes.

As shown on the far right column, the calculation for the adjustment factors is simple. The factors proposed in this table have been calibrated with a baseline that compares the risk of each of the various categories to the risk of equities (which has Gross Initial Margin of 15%). In the table, "risk" is measured in terms of Gross Initial Margin per unit of notional, which in this case was set largely relative to risk (as we demonstrate in Figure 8). The risk adjustment factor for the "Credit 0-2 year duration" category is arrived at by dividing its Gross Initial Margin of 2% by the 15% for the Equity category, or 2/15 = 13%. Risk-adjusted notional exposures are calculated by multiplying the gross notional exposure for each asset type by the adjustment factor for that asset type. Lower risk assets have smaller factors, higher risk assets, higher factors. For example, $1 of commodities exposure would count ($1 * 100% = $1) toward the risk adjusted exposure limit. Likewise, $1 of a currency forward exposure would count ($1 * 40% = $0.40) toward the risk adjusted exposure limit.

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[32] While we are aware that the ICI and several other trade associations may be proposing a 200% exposure-based portfolio limitation, it is important to note that such a threshold, were it not to take into account a risk-adjustment framework similar to that described herein, would still force most alternative mutual funds to substantially alter their investment strategies, thereby resulting in negative implications for investor choice by severely limiting an investor's ability to invest in a diversifying, risk reducing asset class that provides protection in down markets.

[33] Margin and Capital Requirements for Covered Swap Entities: Final Rule, 80 Fed. Reg. 74,839 (Nov. 30, 2015) and Interim Final Rule, 80 Fed. Reg. 74,915 (Nov. 30, 2015) (Prudential Regulators).

[34] *See* Overdahl *supra* note 9 at 18; "The measure, published by the BIS (the BIS approach), aims to establish an initial margin baseline, based on the potential future exposure that reflects an extreme but plausible estimate of changes in value of the instrument that is consistent with a one-tailed 99 percent confidence interval over a 10-day horizon."

Table 1: Proposed Risk-Adjustment Factors

Asset Class	Gross Initial Margin per Table A from Appendix A	Risk Adjustment Factor	Calculation of Risk Adjustment Factor
Credit: 0–2 year duration	2	**13%**	=2/15
Credit: 2–5 year duration	5	**33%**	=5/15
Credit: 5+ year duration	10	**67%**	=10/15
Commodity	15	**100%**	=15/15
Equity	15	**100%**	=15/15
Foreign Exchange/Currency	6	**40%**	=6/15
Cross Currency Swaps: 0–2 year duration	1	**7%**	=1/15
Cross-Currency Swaps: 2–5 year duration	2	**13%**	=2/15
Cross-Currency Swaps: 5+ year duration	4	**27%**	=4/15
Interest Rate: 0–2 year duration	1	**7%**	=1/15
Interest Rate: 2–5 year duration	2	**13%**	=2/15
Interest Rate: 5+ year duration	4	**27%**	=4/15
Other	15	**100%**	=15/15

i. Developing a table of risk-adjustment factors

We submit that the risk-adjustment table adopted should stand the test of time. We also believe that the table presented above meets this test and could be implemented as is.

In Figure 8, we provide empirical evidence that supports the conclusion that the factors presented in Table 1 are well-supported by long-tern historical data on relative risk. If deemed helpful, the table could be modified by the Commission to reflect the likely higher level of risk of individual commodity futures (though not commodity indices) by setting the commodities risk-adjustment factor above 100%. The data supports a value of approximately 130% for futures on individual commodities, but only about 100% for the widely used futures on commodity indices. The largest deviation between relative risk in the historical data and the risk adjustment factor computed above is in short term interest rate underliers. Here, the table uses a conservative 7% even though the riskiness of these underliers is far less as a fraction of equity risk. Nevertheless, this schedule would still allow nominally high exposures to short term interest rate futures and the Commission could choose to create a minimum risk adjustment factor that was higher.

We do not believe that in order to resolve our concerns with the notional exposure test of the Rule that it is essential or even desirable that these factors be determined in an overly precise manner. We believe it is important only that the schedule generally reflect the long-term relative risks of the various asset classes that are employed by 1940 Act funds.

ii. The risk-adjustment factors would be as appropriate during stressed periods as any explicit test

We suggest that the risk-adjustment factors should be conservative, and that their development should take into account historical periods of stress and reasonable future stress

scenarios. But, regardless of whether risk-adjustment factors are used or not, no explicit, permanent limit can protect against all conceivable future market environments, irrespective of whether a fund employs derivatives or not. As shown in Figure 1, alternative mutual funds use derivatives in a risk-controlled manner that seeks to provide moderate risk, and the desired exposures typically are guided by a risk target. In periods of stress, fund managers seeking to provide targeted risk levels consistent with their prospectus mandates, are more likely to reduce exposures to levels well below the maximum permissible limits as part of their own risk management practices than managers of traditional funds, which typically do not have a risk target.

iii. There is ample precedent for risk-adjustment in other regulatory frameworks

There are several risk-adjustment frameworks that have been developed by different regulators in different contexts with a virtually identical intent.

We have already drawn the Commission's attention to the table for "Standardized Gross Initial Margin Requirements for Non-Cleared Security-Based Swaps" adopted by the Comptroller of the Currency, Federal Reserve Board, FDIC, Federal Credit Administration, and Federal Housing Finance Agency on November 30, 2015[35], which is included in Appendix A hereto. A similar framework has been adopted by the Commodity Futures Trading Commission.[36] Both tables explicitly recognize the differences in riskiness based on the likelihood of an adverse price movement for different assets.

It is also worth noting that gross notional exposure is not a widely used portfolio risk metric for other regulatory agencies, whether in the United States or internationally. For example, under the UCITS Directive,[37] Europe's regulatory framework for governing registered alternative investment funds, the risk method used is one which is largely based on risk adjustment, including daily VaR monitoring complemented with stress testing of portfolios. Finally, the Intercontinental Exchange (ICE)/ICE Clear Europe as well as the Commodity Mercantile Exchange (CME)/CME Clearing, two of the largest central counterparty clearing houses globally, utilize SPAN margining (including historical simulation and offsetting trades)[38] as a means of measuring risk on a portfolio-based level.

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35 *See supra* note 33.

36 *Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants*, 81 Fed. Reg. 636, at Section 23.154(c) (Jan. 2, 2016) (Final Rule).

37 *See the Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities* (UCITS), *available at* http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L: 2009:302:0032:0096:en:PDF; *see also* European Securities and Markets Authority (formerly Committee of European Securities Regulators), *Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS*, CESR/10–788 (July 28, 2010), *available at* https://www.esma.europa.eu/ fr/system/files/10_788.pdf.

38 SPAN margin is short for standardized portfolio analysis of risk (SPAN). This is a leading margin system, which has been adopted by most options and futures exchanges around the world, and has been reviewed and approved by market regulators and participants. Options and futures writers are required to have a sufficient amount of margin in their accounts to cover potential losses. The SPAN system, through its algorithms, sets the

iv. A table of risk-adjustment factors would be easy to administer

One of the key concerns expressed by the Commission with respect to risk-adjustment is that such an approach would be difficult to administer. In weighing the pros and cons of risk adjustment, the Commission asserts that funds "may benefit from the ease of application of a bright-line straightforward metric" such as the proposed "exposure" test, "as compared to a test that would require consideration of the manner in which a fund uses derivatives in its portfolio."[39]

We submit that applying a table of risk factors to gross notional amounts would be extremely simple, unambiguous, easy to administer, and easy to audit. Once established, the application of the framework is no more difficult than the portfolio limitation test in the Rule. The methodology is identical to that used in collateral management, which is used daily and carried out efficiently by funds.

v. Risk-adjustment factors should not be only based on duration

One of the questions to which the Commission solicited comments is whether the Rule should provide for risk-adjustment based on duration.[40] Our response is no, or not solely so. Duration-adjustment is a potential way to adjust for risk *within* fixed income instruments only, but it is entirely silent on the fundamental question of comparison across asset classes. We submit that the proposed Rule is of a scope and import that requires it to be comprehensive across derivatives based on all asset classes and for funds that invest across them. Recognizing the differences in risk between equities and fixed income, or currencies and commodities is just as essential as adjusting for the differences in risk within fixed income only. An approach that leaves out risk-adjustment across asset classes would generate perverse incentives in global allocation funds and multi-asset alternative funds, among others.

The ICI Survey data estimates that about 80% of funds' assets affected by the Rule are taxable fixed income funds.[41] It is tempting to conclude that crafting a Rule that "works" for fixed income funds would be sufficient. However, we would argue that the bond funds that may need to modify their strategies in the absence of risk-adjustment are a small minority of bond funds. There would still be hundreds of other potential choices of taxable fixed income funds with relatively similar risk-return characteristics available to investors.

In contrast, the impact on alternative mutual funds would be far more significant. Whole categories of alternative mutual funds, such as managed futures funds, global macro funds, funds-of-funds and multi-strategy funds, would either need to cease operations or materially

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margin of each position to its calculated worst possible one-day move. SPAN is a market simulation-based Value at Risk system that allows effective risk assessment on an overall portfolio basis. SPAN assesses risk for a wide variety of financial instruments including: futures, options, physicals, equities, or any combination.

[39] 80 Fed. Reg. at 80,964.

[40] On page 89 of the Release, the Commission asks: "Should we consider permitting or requiring that the notional amounts for interest rate futures and swaps be adjusted so that they are calculated in terms of 10-year bond equivalents or make other duration adjustments to reflect the average duration of a fund that invests primarily in debt securities?" 80 Fed. Reg. at 80,908.

[41] ICI Survey, *supra* note 7.

modify their investment strategies for the worse, by eliminating investment in high notional, lower risk government bonds for investment in higher risk assets, as discussed above. Investor choice and the ability to invest in a diversifying, risk reducing asset class would be severely impaired if risk-adjustment were limited to duration adjustment.

B. Adopt a Full Portfolio Absolute VaR Test for the Utilization of the Risk-Based Portfolio Limit

We broadly support providing for two alternative portfolio limitations in the Rule, with the first alternative based solely on a fund's derivatives exposure (so long as the final Rule provides for risk adjustment of the notional amounts used to measure exposure), and the second alternative permitting a higher level of exposure provided that the fund complies with an appropriate risk-based test. We believe, and in our own portfolio management act on the belief, that portfolios should be actively risk controlled, but with guardrails in place to limit exposures so as to protect against the potential shortcomings of any risk model. Two lines of defense are created when there is first a limitation on portfolio risk and second, explicit limits on portfolio exposures. In the following paragraphs we describe how we would modify the risk-based test in the Rule to place limitations on portfolio risk, which, if met, would allow the higher limit on risk-adjusted exposure.

With knowledge of its own portfolio strategy and implementation, an investment manager can most effectively determine an appropriate simple exposure limit. However, the challenge to the regulator is greater; rules must be written that apply across a wide range of strategies, strategies whose risk is best managed by different limitations specific to the facts and circumstances faced by each. The cure for this is twofold, first to have a risk-control test that limits total portfolio risk and second, to have exposure limits that recognize gross differences in the nature of various asset types to be effective robust guardrails even when risk models fail.

The first line of defense, risk limitation, must be a limitation on portfolio risk as it is portfolio losses and the ability to meet portfolio obligations that matter. The risk-based portfolio test's use of risk measurement (i.e., VaR) with the guardrails of exposure limits represents a potential improvement over the approach in other regulatory settings. However, we submit that the risk-based portfolio limit proposed in the Rule suffers from some major flaws.

1. Key flaws in the proposed risk test

The fundamental issue with the current "risk test" is that the first line of defense is a limitation on how risky the portfolio is compared to how risky the portfolio is without derivatives, but is not a limitation on portfolio risk. It is the latter that must be controlled by investment managers for the benefit of fund investors.

The test proposed in the Rule characterizes a portfolio as eligible for higher derivatives notional exposure even if that portfolio is highly risky. For example under the Rule, a portfolio composed of a narrow list of high volatility equities (which would have a high VaR) would pass the risk test as long as the derivatives hedged any of that risk. The resulting portfolio still may be quite risky.

In contrast, a foreign bond fund that at times hedges both currency and U.S. dollar interest rate risk might have a low VaR commensurate with the modest risk of the portfolio, but could fail the Rule's VaR test and be precluded from executing these hedges that might require more than 150% derivatives exposure. A hedged portfolio can have a higher VaR than the securities portfolio even though some of the derivatives hedge important security specific risk exposures. Likewise, derivatives which are standalone risk increasing can reduce portfolio VaR. The current risk test can result in arbitrary outcomes not related to what really matters to investors and regulators – the risk of the entire fund.

Second, the risk-based limits subject to the VaR test cannot be relied upon by funds whose primary risk taking is through derivatives and whose securities portfolio consists of cash and low risk securities. For example, a fund whose physical portfolio consists of short maturity fixed income securities may have a very low securities VaR, and thus could only rely on the exposure-based test. This would effectively punish funds that use derivatives in lieu of physical positions, even if their decision to do so provided important benefits in terms of liquidity, transaction costs, and operational efficiency. Ironically, though alternative mutual funds are frequently risk targeted to seek only specific moderate levels of risk, many of them would be severely constrained. By disproportionately hurting these funds, the Rule may cause investors to lose the important portfolio benefits the moderate risk alternative mutual funds offer (as noted above). The risk-based test in the proposed Rule could thus encourage funds to use less efficient means to obtain their investment exposures.

2. We propose an absolute VaR test coupled with a risk-adjusted exposure limit of 400%

For all of the above reasons, we recommend that, in seeking to include a risk-based portfolio limit that would best serve the risk control purposes the Commission seeks while being of greater practical use to funds and investors, the Commission should amend the proposed Rule to utilize a maximum absolute portfolio VaR measure based on a narrowly specified, standardized VaR model. Funds that meet this test then would be required to meet a risk-adjusted exposure test that allowed a higher limit.

We propose that to fall within the risk-based exposure limit test, a fund's 10-day 99% portfolio VaR should be less than 15% of the fund's net asset value ("NAV"). This value is suggested so that funds that are as risky as common stock or less risky be permitted to use the higher exposure limit test.

We would recommend 400% rather than 300% as the risk-based exposure limit so as better to allow this limit to serve as a guardrail rather than the driver of risk limitation for funds subject to the risk-based test. This revised limit would allow for risk-adjusted notional exposure of up to 400%, so long as the 10-day 99% portfolio VaR was less than 15% of NAV.[42]

[42] We submit that 15 percent 10-day 99% VaR is an appropriate reference point, as it is modestly higher than the VaR of the S&P 500 Index, but less than the VaR of many traditional mutual funds. As of March 24, 2015, the S&P 500 Index's VaR is approximately 12.5 percent. We believe keying the Absolute VaR test not to a fluctuating benchmark, but to a fixed number that represents a reasonable approximation of the S&P 500's Index's VaR would be easier to administer and monitor. Under our proposed Absolute VaR test, the 15 percent

The risk-based test we are advocating would employ a VaR model that satisfies very specific parameters to be set by the SEC and included in a final rule (*e.g.*, 99th percentile using a 10-day horizon over a 7-year lookback period that appends the crisis period of October 1, 2007 through March 31, 2009, and is calculated by averaging equal-weighted non-overlapping 10-day periods), which would ensure consistency of use across funds and investment managers and ease of calculation and review by compliance personnel and SEC staff examiners. The Rule could require that the soundness of the model and the assumptions being used in the model be subject to periodic external review by an independent third party under the supervision of the fund's board of trustees (i.e., a review and certification process similar to a SSAE 16 review used to evaluate the integrity of custodial procedures). Furthermore, the Rule could require that users of this provision periodically publish the VaR of their portfolio and their VaR model's calculation of the VaR of a reference portfolio, such as the S&P 500 Index or their fund benchmark. Finally, funds could be required to include disclosure regarding the fund's VaR in the fund's prospectus or statement of additional information to provide transparency for investors into the fund's risk management process. With these refinements, we believe that the potential variations across investment managers in the results of the VaR model would be modest, and the ability to possibly "game" the VaR model would be even more limited than with the "relative" VaR calculation in the Rule as proposed.

The modified risk-based test as described above with a 400% limit would be more straightforward than the risk test under the proposed Rule, and through the combination of portfolio VaR, asset segregation requirements, and risk-adjusted exposure limit tests would help to ensure that portfolios that are extensive users of derivatives would be risk-controlled and exposure-limited.

The revised test would also recognize that alternative mutual funds use derivatives appropriately for purposes other than pure risk reduction, and would allow funds characterized by moderate risk to invest in derivatives up to a fixed risk-adjusted exposure limit of 400%.

Our proposed test, through its limit on the absolute level of VaR, would continue to limit the exposure of funds that apply high leveraged (i.e. 3x) notional exposure to high risk assets, as they would readily fail the VaR test. Instead, those vehicles would continue to operate under the 150% exposure limit.

In reference to the Commission's concern with Amaranth, it's our understanding that while Amaranth's portfolio likely would have failed our modified risk-based test, they definitely would not have been able to comply with the risk-adjusted exposure test of 400%. As such, our proposed modified test would have prevented Amaranth's portfolio from being implemented.

10-day 99% VaR limit would apply to all funds, regardless of strategy. Just as a single limit on investment in illiquid securities is currently applicable to mutual funds, this test would create a single maximum risk limit to which all funds with extensive derivatives use would need to adhere. A single number applicable to all funds would, we believe, promote consistency and ease of administration and facilitate investor understanding of risk. Funds could choose lower VaR and exposure limits.

The Commission at page 346 of the Release suggests that it has concerns regarding a VaR test of the sort adopted with respect to UCITS.[43] The absolute VaR test suggested here would differ significantly from the current UCITS approach as it would subject funds to both a limit on VaR (which would be calculated in a very narrowly defined manner) and a risk-adjusted exposure test.[44] In addition, our proposed test would not include a benchmark-comparison VaR option that could be more difficult to apply in a standardized way across similar funds.

3. Discussion of parameters for allowable VaR models

We believe that narrow specification of an approved VaR model would add consistency to calculations across investment managers and funds and also make it more difficult to manipulate the results. The historical VaR model proposed herein is simple to construct and need not be consistent with the VaR model used by an investment manager for other risk management purposes.

We believe that using a 99% VaR model (vs. 95%) would more properly reflect the impact of stress conditions that the Commission seeks to control. However, the substantially fewer events implied by the 99% VaR (vs. 95%) lead us to recommend a 10-day horizon rather than a 20-day horizon so as to enable the computation of more meaningful statistics. The selection of a 10-day horizon also leads to smaller calculated VaR (roughly 70% of a 20-day VaR), so the absolute VaR limit should be scaled accordingly. Should the Commission adopt an absolute VaR limit but specify a 20-day horizon model, we recommend that 20% of NAV be used as that limit instead of 15%. We also believe that to fully specify the VaR model we would compute VaR as an average of the 1% tail events across ten sample sets, each with a sample start date offset by one day, so as to compute an average over ten non-overlapping samples. We also recommend a seven year look back period, equally weighting all days, so as to capture a greater range of market environments. And, we believe that the 2008 financial crisis period (say October 1, 2007 through March 31, 2009) should remain in the look back period by appending it to the moving seven-year window of future VaR calculations, effectively creating an eight and one half-year window that always includes at least eighteen months of "crisis."

For illustrative purposes, we have applied our proposed risk-based test to the S&P 500 Index as a reference portfolio and to the AQR Managed Futures Strategy Fund, as the largest representative of an important category of alternative funds. As applied, our proposed test would appropriately, in our view, distinguish between mutual funds that would have failed the Rule's risk-reduction test merely due to the fact that they implement much of their strategy through derivatives, from funds that use significant leverage to high risk underliers and so fail the absolute VaR test. As discussed above, levered ETFs that are structured to provide a multiple of the riskiness of the S&P 500 Index would generally not pass the absolute VaR test and would operate under the 150% limit, as they would under the Rule as proposed.

Figure 9 shows the VaR as calculated each day from 2010 through 2015. Note the following:

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[43] *See* 80 Fed. Reg. at 80,977.

[44] *See* Directive 2009/65/EC of the European Parliament and of the Council, *supra* note 37.

1) The VaR of the S&P 500 is approximately 12.5%, so the 15% limit of the recommended absolute VaR test represents a portfolio risk level that is at a modestly higher level than large cap domestic equities.

2) The VaR of leveraged S&P 500 portfolios would fail the 15% test and such portfolios would be subject to the exposure based limit.

3) The VaR of the AQR Managed Futures Strategy Fund changes through time as its positions change, but is generally below that of the VaR of the S&P 500 Index and so passes the VaR test, but modest modifications to the implementation must be made to conform to the risk-adjusted portfolio limitation, if the risk-based portfolio limit remained at 300%.

Questions have been raised about reliance on a VaR model in general to limit risk and how it could be inappropriately manipulated to permit a fund to use the higher exposure limit. To address these concerns, as noted above, we suggest that the parameters to be applied to the VaR model used as part of the test be fixed by Rule to assure uniform calculations and that disclosure requirements be established. Moreover, compliance with the Rule will be a part of a fund's compliance program where the fund's chief compliance officer and the fund's governing board will have important roles to play. For funds like alternative mutual funds, a derivatives risk manager – whose function will be separate from portfolio management – will have responsibility to oversee the derivatives risk management program. Governing boards will also be keeping a watchful eye as they receive regular reports on both derivatives risk management and compliance with the Rule as modified. Derivatives are not new and compliance with new rules and regulations are something with which funds, advisers and boards are familiar. Provided that the absolute VaR test is clearly articulated in the Rule, we would not anticipate any particular concerns with its implementation.

4. Additional benefits of an absolute VaR test

The exposures within a fund and their contribution to portfolio risk change over time as portfolio positioning and market conditions evolve. We expect that for some funds, the derivatives portfolio will at times be VaR increasing and at times VaR decreasing. Should portfolio positioning need to change at a time when overall exposure exceeds 150% in a manner that the derivatives portfolio shifts from VaR decreasing to VaR increasing, substantial and disruptive trading would be forced on the fund – even if it were allowed to shift from being subject to the risk-based test to being subject to the exposure-based test without prior board approval. The absolute VaR test avoids this potentially disruptive behavior by making appropriately risk-controlled funds subject to the same test at all times.

C. Amending "Qualifying Coverage Assets" to Include Highly Liquid Assets

We support the Rule's general approach to asset segregation and believe the approach correctly eliminates what appears to be an arbitrary distinction between an obligation to set aside the notional amount of a position in some cases and the mark-to-market amount in others. The reason for this ambiguity is that the language in the definition of mark-to-market amount could be read to require delivery of notional because the definition describes the amount as "the amount that would be payable by the fund if the fund were to exit the derivatives transaction"

rather than the fund's unrealized gain or loss. We also support the Rule's providing for a liquidity "cushion" to the mark-to-market set-aside that takes stressed market conditions into account in determining the amount to be segregated. We are firm believers that liquidity is a key element in ameliorating the risks of contingent obligations be they from portfolio losses or redemptions, and we seek in managing a fund's portfolio to assure that liquid assets are available to meet the fund's obligations when due.

Notwithstanding our support for the Rule's overall approach to asset segregation (i.e., mark-to-market segregation with a risk-based cushion), we disagree with the position taken in the Rule that qualifying coverage assets for derivatives should, with few exceptions, be limited to cash and cash equivalents.[45]

1. Concerns with the current proposal

Our alternative mutual funds generally use derivatives to gain exposure to various asset classes and use cash and cash equivalents as cover for these positions. As a result, most of them have very high cash positions, which could be used to meet the asset segregation requirements of the Rule. Certain of our funds, however, invest directly in highly liquid assets (such as most listed equity securities) that can be sold and settled to provide cash in a short timeframe. We believe these highly liquid assets should be available as "qualifying coverage assets" for derivatives transactions under any final Rule. Allowing highly liquid assets to be used for this purpose would be consistent with current market practice and consistent with the Staff's prior positions that have been relied on by funds for 20 years. Limiting cover to cash and cash equivalents could cause us to change the way we manage the funds, without any discernible benefit from an investor or regulatory perspective.

2. We recommend including highly liquid assets with a haircut

To our minds, the goal of asset segregation should be to place a fund in a position in which it has sufficient assets to meet its obligations in a timely fashion even under stressed market conditions. At all times, funds must have sufficient liquidity to meet their obligations—including when the obligations increase in value and the segregated assets depreciate in value. We submit that this goal would be significantly furthered by making all liquid assets (e.g., those that can be sold and settled to provide cash within three days) available as qualifying coverage assets with a volatility "haircut" to address the possibility of depreciation. This haircut would be designed to account for the more volatile nature of various instruments when compared to cash, which would be consistent with industry practice in other areas of derivatives regulation designed for the same purpose - to account for possible correlation of collateral value with the underlying payment obligation. The haircut, which we suggest could be based on an objective standard such as that set out in Table B in the Margin and Capital Requirements for Covered

[45] *See* Rule 18f-(c)(8). The Rule states that current U.S. generally accepted accounting principles define cash equivalents as "short-term, highly liquid investments that are readily convertible to known amounts of cash and that are so near their maturity that they present insignificant risk of changes in value because of changes in interest rates." *See also* Release No. 10666 (permitting segregation of cash, U.S. government securities, and other high-grade debt obligations); Merrill Lynch Asset Management, L.P., SEC Staff No-Action Letter (July 2, 1996) (permitting segregation of any "liquid assets," including equity securities and non-investment grade debt securities).

Swap Entities[46] promulgated pursuant to the Dodd-Frank Act and as set out in Appendix B to this letter, would address the Commission's concern noted in the Release at pages 39–44 that segregated assets could decline in value coincident with a fund payment obligation's coming due.

Allowing use of liquid assets with a haircut would result in a fund's not having to increase its cash holdings beyond the needs of prudence, a result that we believe would be beneficial to the fund. Increasing cash holdings would in our judgment reduce the fund's assets available to be invested in accordance with its investment objective, policies or strategies and thereby create "cash drag" on the fund's performance, or cause the fund not to avail itself of derivatives for portfolio management purposes, even when derivatives could be the most liquid, most cost-effective way for the fund to achieve a desired investment outcome. We believe it would be counterproductive indeed if, for example, a fund's opportunity to hedge risk or enhance return was missed because the fund needed to raise cash for asset segregation when adequate high quality liquid assets were available for segregation in the fund's portfolio and held at the fund's custodian.

3. Clarification of Certain Terms

We believe that, even if our recommendation regarding assets that can be used to meet the Rule's asset segregation requirements is not accepted, the Commission should modify the definition of "mark-to-market coverage amount" as used in the Rule so as to clarify the term's meaning. The term as proposed is defined as "the amount that would be payable by the fund if the fund were to exit the derivatives transaction" at the time of determination. This language, in our experience, uses terminology that is different from that currently used in the derivatives market. We believe that the term would be more consistent with existing market terminology if it were revised to be "replacement value," as used in the credit support annex to the standard ISDA Master Agreement.[47] Such a change would result in the term more clearly indicating that the amount to be segregated is the amount the fund's owes on the transaction at the time of determination.

A further change to the Rule we recommend relates to the definition of "qualifying coverage assets" as applied to financial commitment transactions. The definition as proposed includes assets that are "convertible to cash or that will generate cash" prior to the date on which a financial commitment transaction is due. The quoted language would seem intended to encompass securities that can be sold with short settlement periods (e.g., listed equity securities,

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[46] *Supra* note 33.

[47] Under the credit support annex, the process for measuring a party's mark-to-market "exposure" is described in the credit support annex to the Master Agreement published by the International Swaps and Derivatives Association, Inc. ("ISDA") by reference to the "replacement value" of the party's net positions. The value is calculated to determine the amount of collateral required to be posted or received by a party, using the midmarket price of each outstanding transaction for these purposes, based on the net termination payment due under all of the outstanding transactions between the parties under the netting agreement. This term or similar terms are used in other types of netting agreements. In light of the fact that this term is the one generally used in the industry, we believe it is more precise and more widely understood than the definition of "mark-to-market coverage amount" in the Proposed Rule, which could be misread to mean the "notional amount."

traded fixed income securities). We believe the definition should be amended to reflect that intent.

III. We Support the Requirement for a Derivatives Risk Management Program for Significant Derivatives Users

We agree that risk management is critically important for funds that use derivatives, and that funds that are significant derivatives users should be subject to formalized risk management program requirements that are tailored to the particular types of derivatives used by the fund and the manner in which they are used in the Fund's investment portfolio, as contemplated by the proposed Rule.

We have, in connection with the use of derivatives by our funds, developed sophisticated risk management systems, and we have worked closely with the board of the AQR Funds to develop best practices in fund governance that facilitate the board's oversight over strategies that employ derivatives. AQR already employs a Chief Risk Officer who is a Principal of the firm and whose sole responsibility is monitoring the risk of investments, including investments in derivatives, made across the AQR platform (the Chief Risk Officer is not a portfolio manager and is independent from the portfolio management process). The Chief Risk Officer chairs AQR's Risk Committee, which meets on at least a weekly basis and more frequently as needed. The Chief Risk Officer informs the portfolio management teams at AQR, and directly reports to AQR's chief executive regarding risks arising from investment activities across the AQR platform, including derivatives.

The AQR Funds' Board of Trustees has also implemented a number of governance practices related to derivatives and risk management. A written risk update report is provided to the AQR Funds Board on a quarterly basis and presented during the quarterly board meetings of the AQR Funds. This report covers various risk monitoring metrics on a fund-by-fund basis over the relevant period, including leverage, realized volatility, VaR, and liquidity/concentration of large positions within a fund's portfolio. The Chief Risk Officer has authority to engage in direct discussions regarding risks arising from AQR Funds investments, including derivatives, with the board of the AQR Funds. AQR has provided extensive education to Board members on derivatives, familiarizing them with portfolio construction and operations risks, among others. The Board as a whole has the judgment and capability to properly oversee derivatives usage in the AQR Funds, and has supplemented its ranks to add a trustee with more than 30 years' experience in derivatives based on various positions in the private sector and academia.

We strongly support industry suggestions that the Commission make clear in any final Rule that any good faith decisions made by a conscientious, informed derivatives risk manager would not result in liability. As with risk management relating to investments generally, decisions regarding derivatives risk management are fundamentally forward-looking in nature. Accordingly, the Commission should make clear in any final Rule that so long as a derivatives risk manager is qualified to serve in such capacity and performs his or her duties conscientiously and in good faith, the derivatives risk manager would not be liable for the performance of derivatives transactions or their effects on a portfolio, nor would the derivatives risk manager be the target of Commission enforcement actions in the event that a good faith decision ultimately turns out to be wrong. In addition, we recommend any final Rule expressly state that a derivatives risk manager's duties only extend to overseeing the derivatives risk management

program and do not relate to portfolio management decisions, such as approving individual transactions or investment decisions.

IV. Conclusion

The Rule has laudable goals. However, without some critical adjustments to some of the key elements, the Rule could harm investors by forcing fund managers to adversely restructure alternative mutual fund strategies, which have been an effective diversification tool that has worked well even in crisis situations.

Although the large majority of registered funds may not be affected by portfolio limits, the limits affect a substantial minority of funds and focus should be given to the number of these funds and their assets under management and less to the large number of funds that are not affected.

Studies clearly show that alternative funds, when operated with appropriate risk management and oversight, provide a reliable means for investors to diversify risk away from equities and build portfolios with better risk/reward tradeoffs. Adopting a provision that forces the restructuring of many of them in a way to reduce their benefits would result in investors having little practical choice but to live with increased market risk and concentration, whether they wish to or not.

We strongly believe that the Commission can provide investors with the benefits they are seeking while ensuring that funds have appropriate safeguards in place by amending the Rule along the lines suggested above. In so doing, the Commission would maintain its record of protecting investors, instead of encouraging them to move to a less well-regulated investment environment, and allow investors to save for retirement through a well-diversified, professionally managed portfolio.

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. Questions regarding this letter may be directed to Nicole DonVito [redacted]) at [redacted] or Brendan Kalb [redacted]) at [redacted].

Very truly yours,

/s/ Brendan R. Kalb

AQR CAPITAL MANAGEMENT, LLC

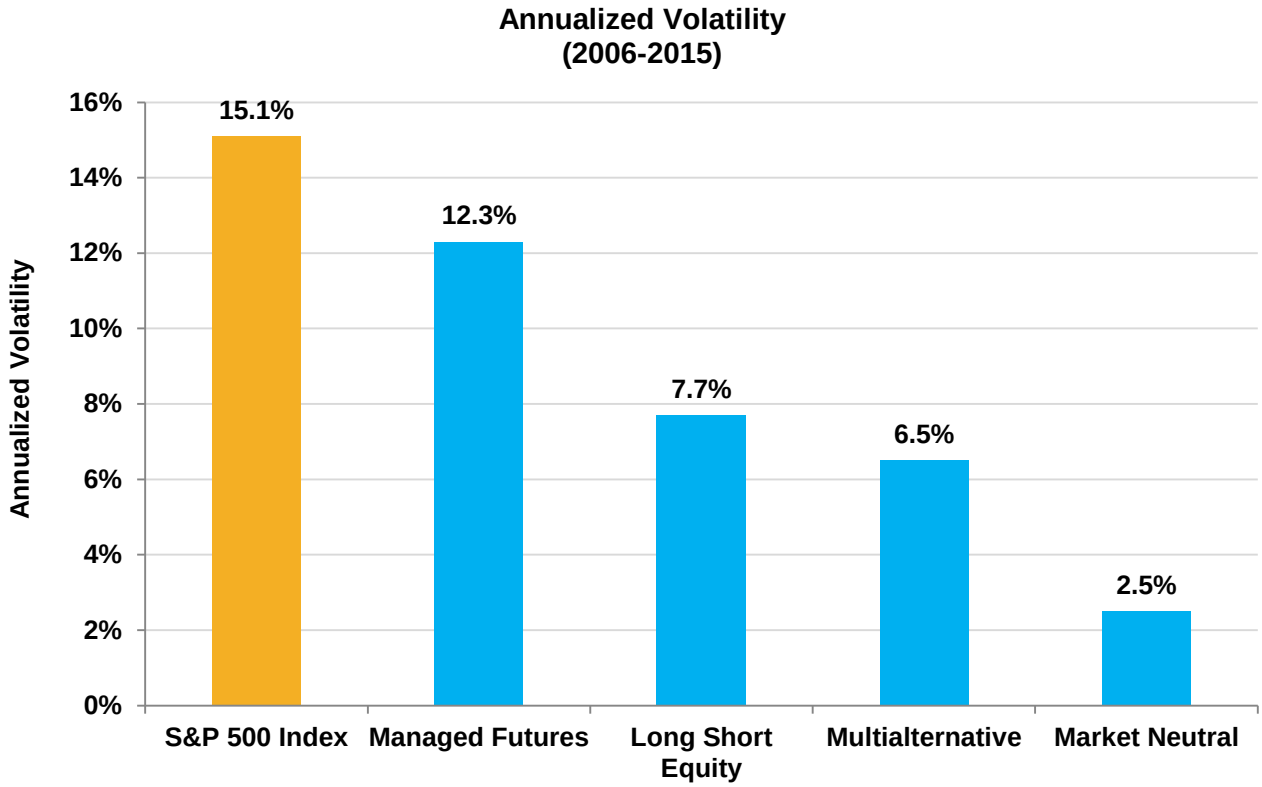
By: Brendan R. Kalb
Title: Managing Director and General Counsel

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

David Grim, Director, Division of Investment Management
Diane Blizzard, Associate Director, Division of Investment Management

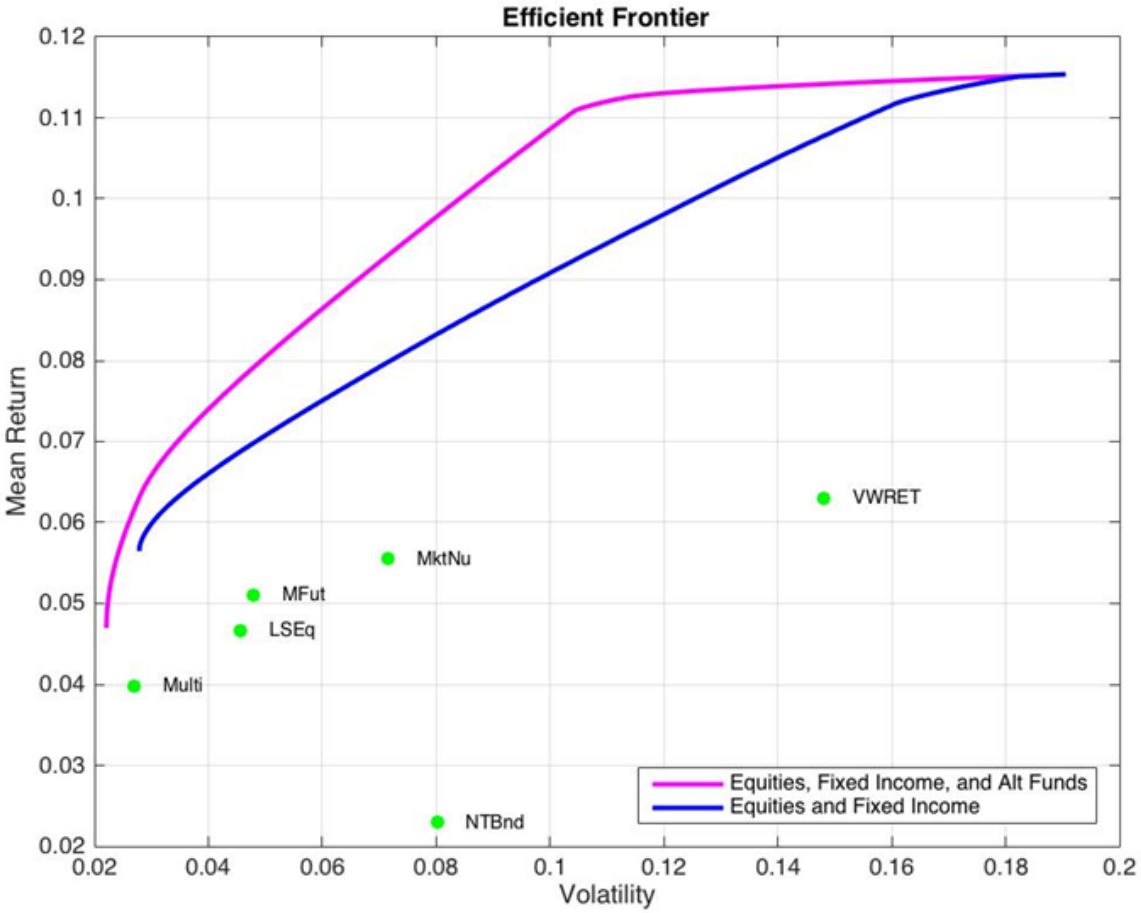
Exhibits and Figures

Figure 1: Annualized Volatility for Alternative Mutual Funds from 2006 to 2015



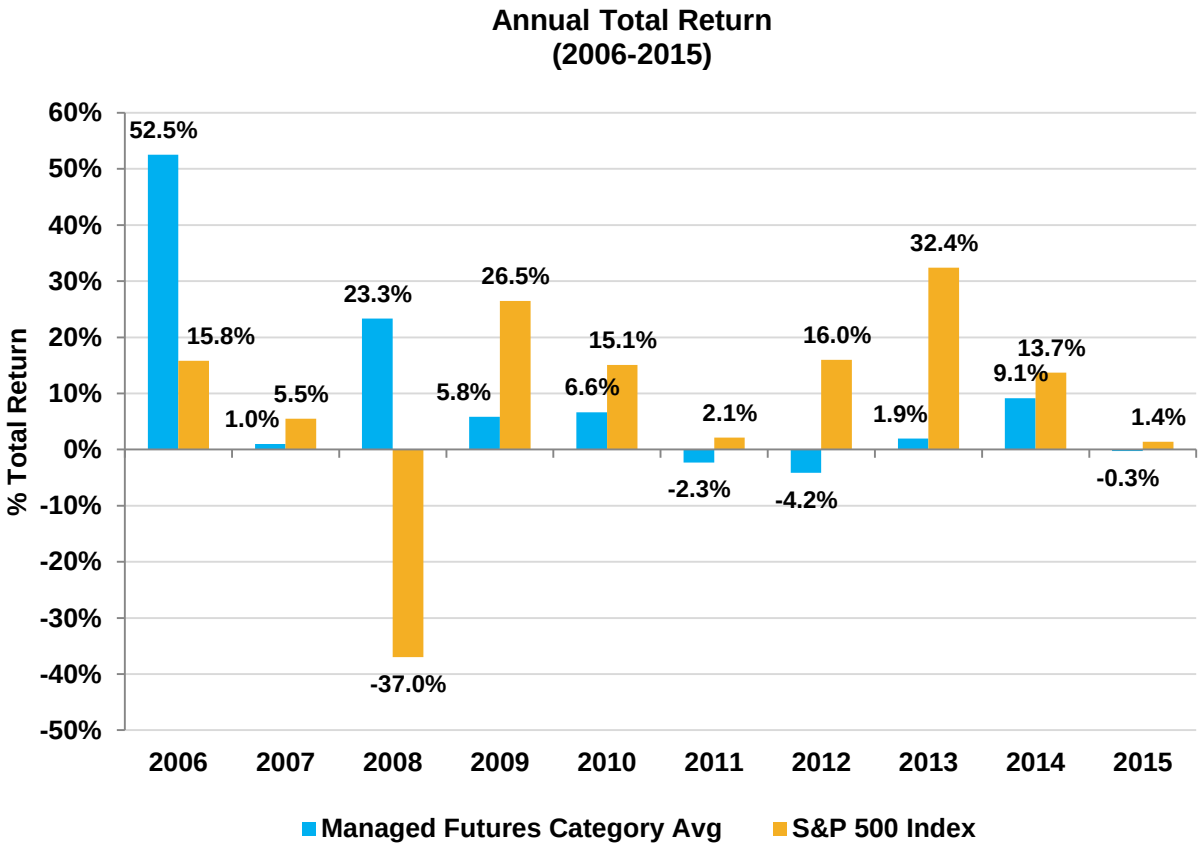
Source: Morningstar. Morningstar categories shown are the four largest categories in the Morningstar Broad Category Group "Alternative" as of 12/31/2015. Category averages are the arithmetic average of all funds in the category. Volatility is based on annualized monthly returns of each category average. 2006 is the first year data is available for all four alterative categories.

Figure 2: Efficient Frontier With and Without Alternative Mutual Funds



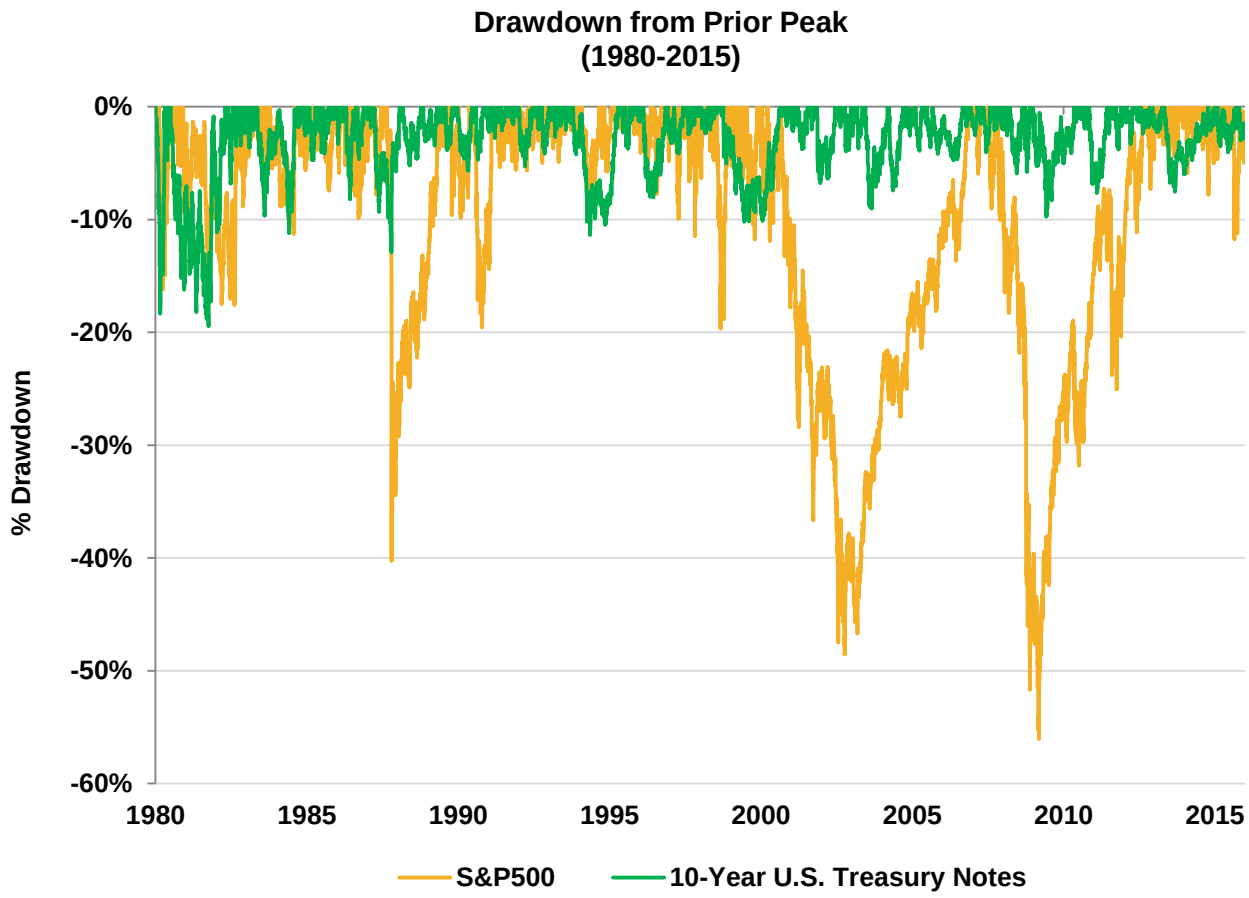
Notes: Excerpt from Craig M. Lewis, *Liquid Alternative Mutual Funds: An Asset Class that Expands Opportunities for Diversification*, March 2016. Reproduced by author's permission. The graph shows the highest level of return that can be obtained for a given level of volatility through an optimal mixture of stocks, bonds, and the four major alternative mutual fund categories, i.e. Multi-alternative, Long Short Equity, Managed Futures and Market Neutral.

Figure 3: Annual Return of Managed Futures Mutual Fund Category Average vs. S&P 500 Index (2006-2015)



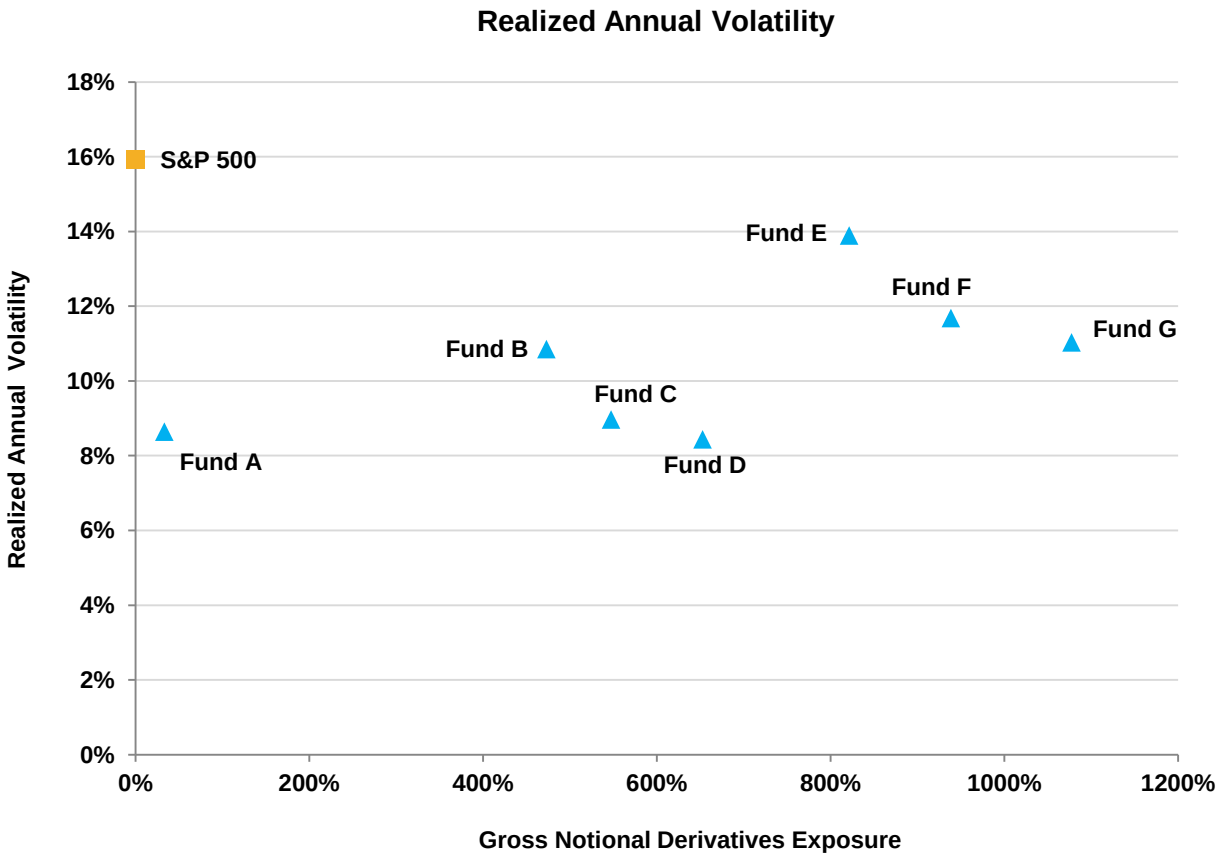
Source: Morningstar. Morningstar Category Average is the arithmetic average of all funds in the Managed Futures Morningstar Category.

Figure 4: Historical Drawdowns of the S&P 500 Index and 10-Year U.S. Treasury Notes



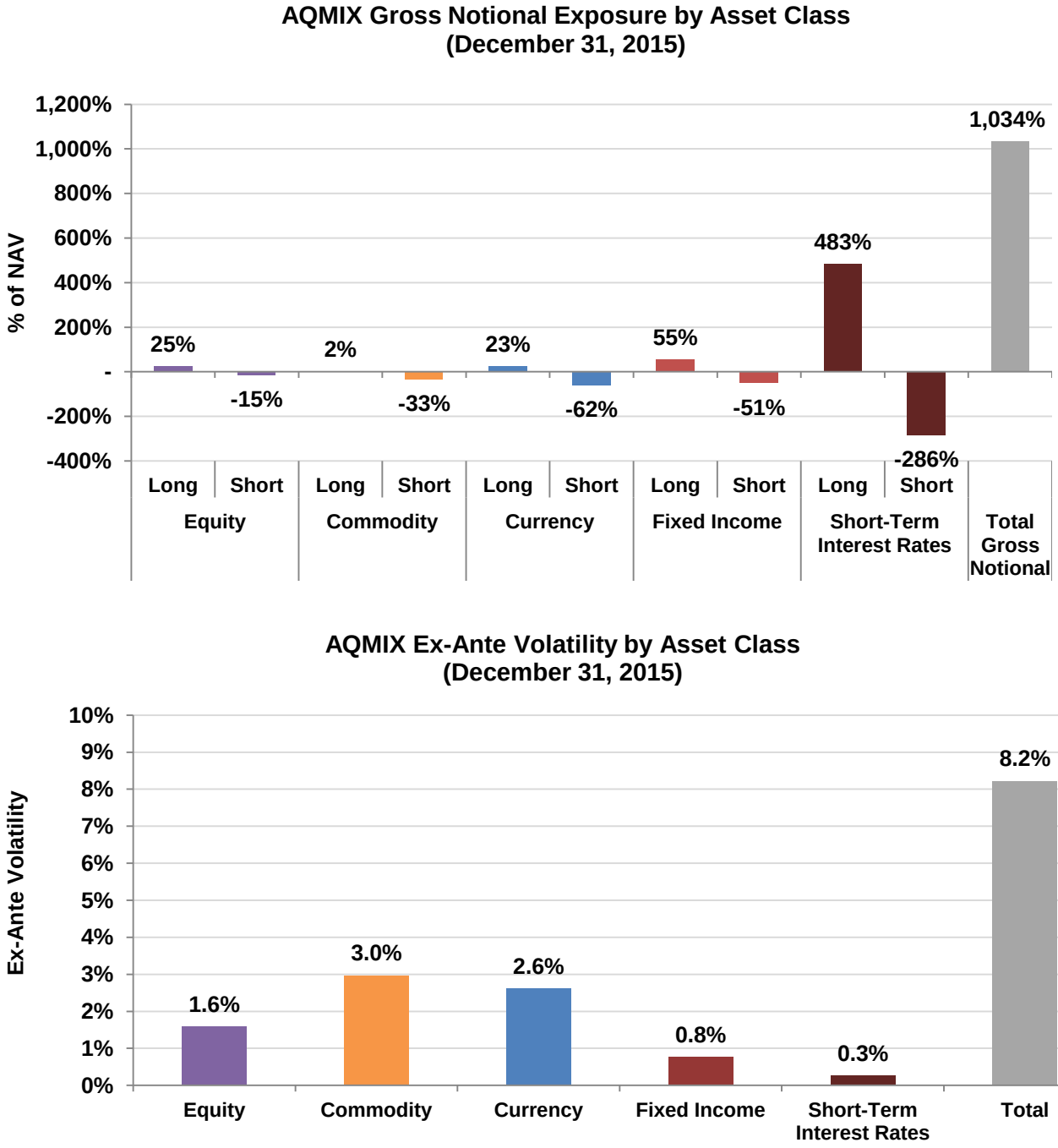
Source: AQR, Bloomberg. Drawdown represents the percentage decline in value from the prior peak. S&P 500 Index and 10-year U.S. Treasury Notes are represented by their corresponding futures contract.

Figure 5: Fund Volatility vs. Fund Gross Notional Exposure for Seven of the Top 10 Largest Managed Futures Mutual Funds and for the S&P 500 Index



Source: Morningstar, Form N-SAR and N-Q filings, AQR analysis. Volatility covers the time period from 2006 or the fund's inception date to 2014, and may be different for each fund. Sample includes 7 of the top 10 managed futures mutual funds as of 12/31/2015 for which meaningful exposure data could be obtained from public filings. Notional exposure for short-term interest rate futures was calculated based on Number of Contracts * Point Value * Price (e.g. $250,000) which is consistent with the calculation used by the DERA Study.

Figure 6: Notional Exposure and Volatility by Asset Class for AQR Managed Futures Strategy Fund (AQMIX) as of December 31, 2015



Source: AQR. Ex-ante volatility is calculated based on historical volatilities and correlations for holdings as of December 31, 2015. Notional exposure for short-term interest rate futures was calculated based on Number of Contracts * Contract Unit (e.g. $1,000,000), which is consistent with the Rule.

Figure 7: Modifications to the List of Portfolio Holdings for AQR Managed Futures Strategy Fund (AQMIX) Needed to Comply with the 150% Exposure Limit of the Rule

List of Holdings by Asset Type

Equities
Australia (ASX SPI 200)
Canada (S&P/TSX 60)
Europe (EuroStoxx 50)
France (CAC 40)
Hong Kong (Hang Seng)
Germany (DAX)
Italy (FTSE-MIB)
Japan (TOPIX)
Japan (Nikkei)
MSCI EAFE Index
Netherlands (AEX)
Spain (IBEX 35)
Sweden (OMX30)
Switzerland (SMI)
United Kingdom (FTSE 100)
United States (S&P 500)
United States (S&P 400)
United States (NASDAQ 100)
United States (Russell 2000)
United States (DJIA)
Brazil (Bovespa)
China (HSCEI)
China (FTSE China A Share)
India (Nifty)
MSCI Emerging Index
Singapore (MSCI)
Taiwan (MSCI)
Taiwan (TAIEX)
South Africa (All Share Index)
South Korea (KOSPI 200)

Commodities
Cocoa (ICE)
Cocoa (LIFFE)
Coffee
Corn
Cotton
Soybeans
Soymeal
Soyoil
Sugar
Wheat (Chicago)
Wheat (Kansas)
Aluminum
Copper (COMEX)
Copper (LME)
Gold
Palladium
Platinum
Nickel
Silver
Zinc
Brent Oil
Gas Oil
Heating Oil
Natural Gas
RBOB Gasoline
WTI Crude Oil
Cattle
Lean Hogs

Currencies
~~Australia~~
~~Canada~~
Euro
Japan
United Kingdom
~~New Zealand~~
~~Norway~~
~~Sweden~~
United States
~~Brazil~~
~~Chile~~
~~Colombia~~
~~Czech Rep.~~
~~India~~
~~Indonesia~~
~~Israel~~
~~Korea~~
~~Turkey~~
~~Malaysia~~
~~Mexico~~
~~Philippines~~
~~Poland~~
~~Singapore~~
~~South Africa~~
~~Taiwan~~

Fixed Income
~~3-Yr Australia~~
~~10-Yr Australia~~
~~2-Yr Germany~~
~~5-Yr Germany~~
~~10-Yr Germany~~
~~30-Yr Germany~~
~~10-Yr U.K.~~
~~10-Yr Canada~~
~~10-Yr France~~
~~10-Yr Japan~~
~~10-Yr Italy~~
~~2-Yr U.S.~~
~~5-Yr U.S.~~
~~10-Yr U.S.~~
~~20-Yr U.S.~~
~~Ultra Long Bond U.S~~

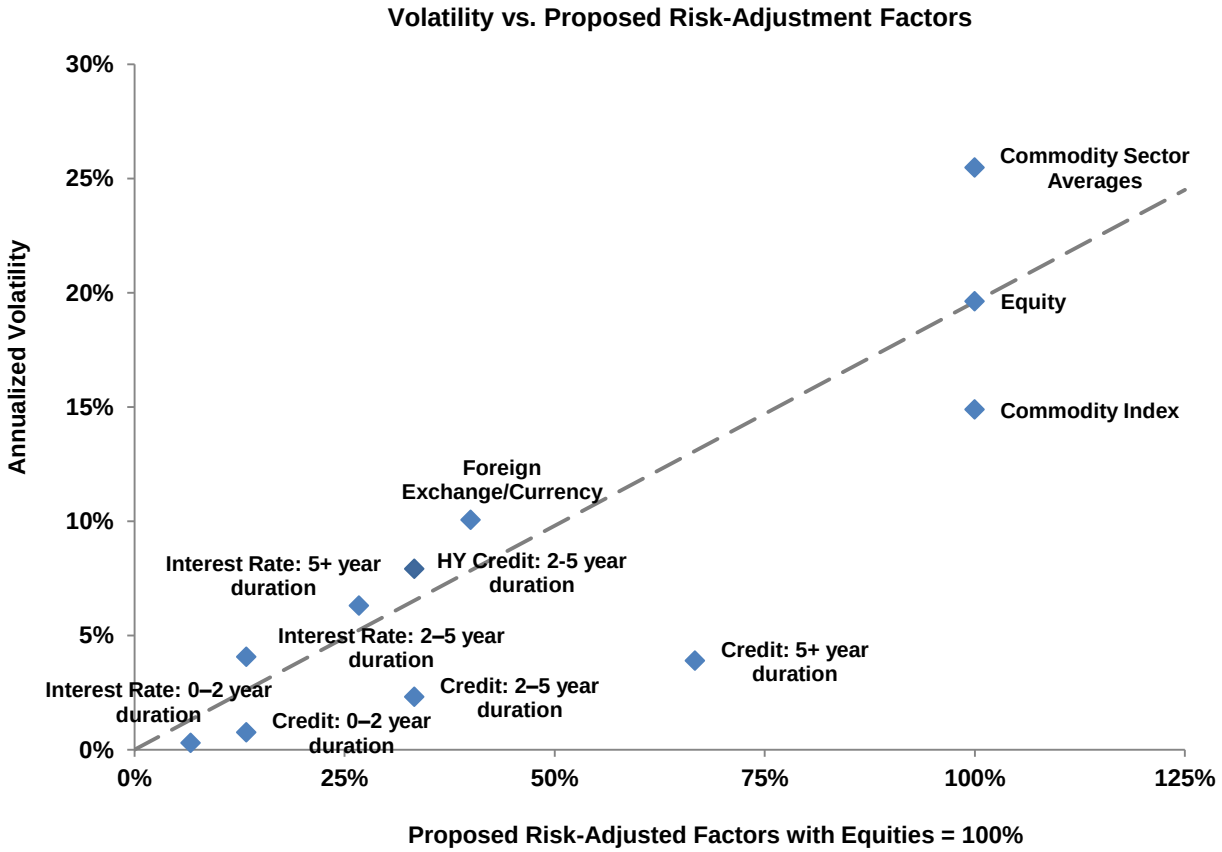
Short Term Interest Rate Futures
~~Euro (7 contracts)~~
~~Switzerland (3 contracts)~~
~~United Kingdom (7 contracts)~~
~~United States (7 contracts)~~
~~Canada (2 contracts)~~
~~Australia (2 contracts)~~

Interest Rate Swaps (new)
30-Yr Euro Swap
30-Yr U.K.
30-Yr Japan
30-Year U.S.

Source: AQR Managed Futures Strategy Fund holdings as of 12/31/2015. List shows holdings that would need to be removed or added if fund were constrained to 150% gross notional exposure.

Color Code	Contract A	Held with or without 150% limit
	~~Contract B~~	Removed under 150% limit
	Contract C	Added under 150% limit

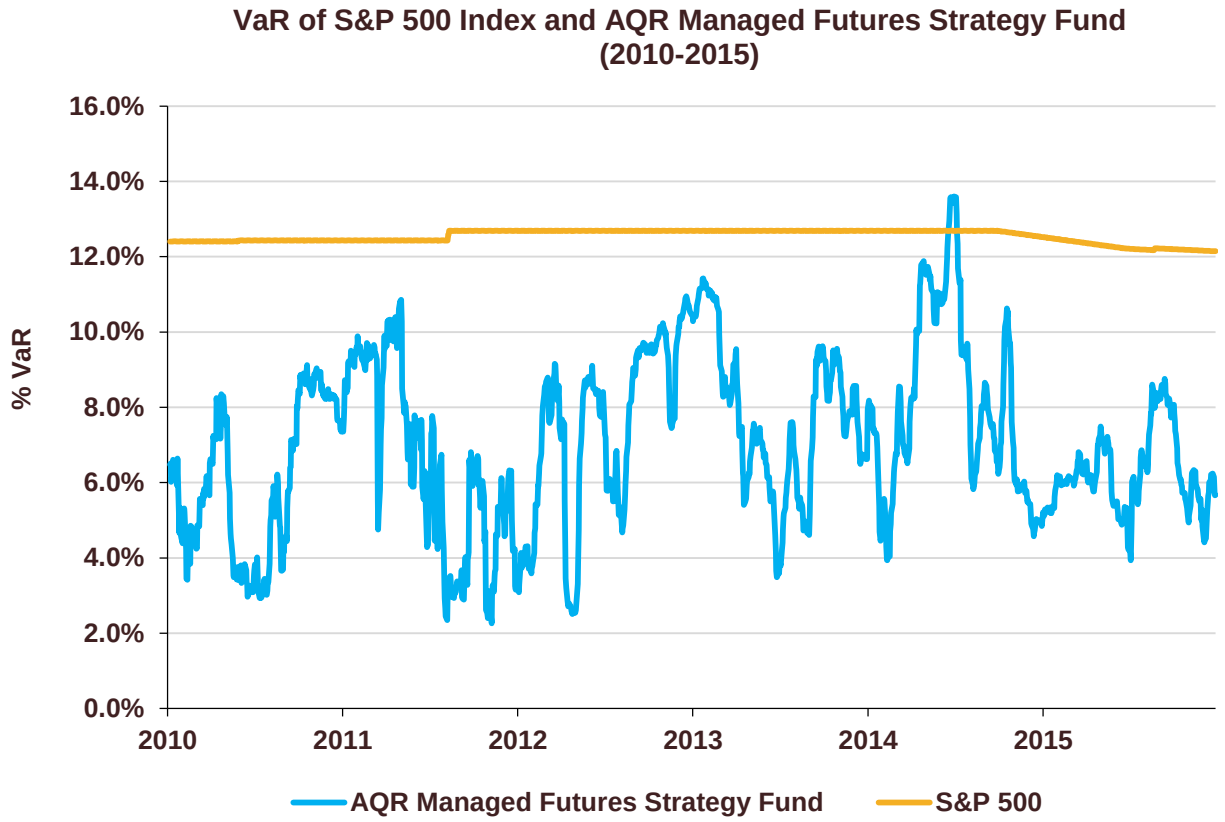
Figure 8: Volatility of Various Asset Classes Versus the Proposed Risk-Adjustment Factors



Source: Bloomberg, Datastream, Markit Partners. Annualized volatility is based on daily data from 1/1/1986 or from date of inception of the data series to 12/31/2015. Proposed risk adjustment factors are calculated per the methodology described in Section II.A.2. herein, and is related to Table A of the "Margin and Capital Requirements for Covered Swap Entities" described in Appendix A.

Risk Adjustment Factors are based on Equity = 100%. Points above/below the line represent contracts where the risk-adjustment factor is lower/higher than implied by volatility relative to equities. For example, Credit 2-5 year duration has a volatility that is 12% of the volatility of equities (2.3%/19.6%). This is lower than the proposed risk adjustment factor of 33%.

Figure 9: Value-at-Risk (VaR) for the S&P 500 Index and AQR Managed Futures Strategy Fund (AQMIX) Under Our Proposed VaR Methodology (2010-2015)



Source: AQR. VaR is calculated based on the methodology described in Section II.B.2. herein, i.e., 99th percentile, 10 days, 7-year lookback.

Appendix A

Gross Initial Margin Requirements for Non-Cleared Swaps and Non-Cleared Security-Based Swaps

Table of Gross Initial Margin Requirements

TABLE A—STANDARDIZED MINIMUM GROSS INITIAL MARGIN REQUIREMENTS FOR NON-CLEARED SWAPS AND NON-CLEARED SECURITY-BASED SWAPS[1]

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

Table A from the "*Margin and Capital Requirements for Covered Swap Entities*" adopted by the Comptroller of the Currency, Federal Reserve Board, FDIC, Federal Credit Administration, and Federal Housing Finance Agency on November 30, 2015. Federal Register: 80 FR 74839.

The table shows the gross initial margin requirement for different asset classes, and can be used as a reference point for measuring their relative riskiness. For example, the ratio of margin required for 2-5 year Credit versus Equity is 5 to 15. A risk-adjustment table based on equity equivalents, (i.e. Equity = 100%) would assign a risk-adjustment factor of 33% to 2-5 year Credit.

Appendix B

Proposed Discount Factors for Calculating Qualifying Coverage Assets for Derivative Positions Under the Rule

Table of Discount Factors for Eligible Noncash Margin Collateral

Appendix B to [Part]—Margin Values for Eligible Noncash Margin Collateral.

TABLE B—MARGIN VALUES FOR ELIGIBLE NONCASH MARGIN COLLATERAL

Asset class	Discount (%)
Eligible government and related (e.g., central bank, multilateral development bank, GSE securities identified in §__.6(a)(2)(iv) or (b)(5) debt: residual maturity less than one-year	0.5
Eligible government and related (e.g., central bank, multilateral development bank, GSE securities identified in §__.6(a)(2)(iv) or (b)(5) debt: residual maturity between one and five years	2.0
Eligible government and related (e.g., central bank, multilateral development bank, GSE securities identified in §__.6(a)(2)(iv) or (b)(5) debt: residual maturity greater than five years	4.0
Eligible GSE debt securities not identified in §__.6(a)(2)(iv) or (b)(5): residual maturity less than one-year	1.0
Eligible GSE debt securities not identified in §__.6(a)(2)(iv) or (b)(5): residual maturity between one and five years:	4.0
Eligible GSE debt securities not identified in §__.6(a)(2)(iv) or (b)(5): residual maturity greater than five years:	8.0
Other eligible publicly traded debt: residual maturity less than one-year	1.0
Other eligible publicly traded debt: residual maturity between one and five years	4.0
Other eligible publicly traded debt: residual maturity greater than five years	8.0
Equities included in S&P 500 or related index	15.0
Equities included in S&P 1500 Composite or related index but not S&P 500 or related index	25.0
Gold	15.0

[1] The discount to be applied to an eligible investment fund is the weighted average discount on all assets within the eligible investment fund at the end of the prior month. The weights to be applied in the weighted average should be calculated as a fraction of the fund's total market value that is invested in each asset with a given discount amount. As an example, an eligible investment fund that is comprised solely of $100 of 91 day Treasury bills and $100 of 3 year US Treasury bonds would receive a discount of (100/200)*0.5+(100/200)*2.0=(0.5)*0.5+(0.5)*2.0=1.25 percent.

Table B from the "*Margin and Capital Requirements for Covered Swap Entities*" adopted by the Comptroller of the Currency, Federal Reserve Board, FDIC, Federal Credit Administration, and Federal Housing Finance Agency on November 30, 2015 Federal Register: 80 FR 74839.

The table shows the discount factors that would be applied to assets other than cash for purpose of compliance with the asset segregation requirements for derivatives positions under the Rule.