

# SEC PROPOSED RULE 18F-4

Aviva Investors Comments

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# AVIVA INVESTORS COMMENTS



Introduction	3
Part 1: Comments on the proposed exposure calculation methodology:	3
Part 2: Comments on the proposed 150% exposure limit	6
Part 3: Comments on the proposed VaR test	8
Part 4: Summary of our recommendations	10
Exhibits	11

## Introduction

Aviva Investors appreciates this opportunity to comment on the proposed rule 18f-4. Our strategy is to be a Global Leader in outcome oriented solutions, and **we strongly believe that embedding risk management at the heart of the investment process is the most effective way to deliver clients the outcomes that they are seeking.** As a large global asset management firm with experience operating funds across many different regulatory regimes, we offer our insights and thoughts on the proposed rule. **Aviva Investors shares the Commission's view on the importance of higher standards of risk management and increased Fund Board supervision.** Many of the proposals, such as the use of Value at Risk (VaR), and documented Risk Management Programs (RMPs) have operated successfully in a number of markets and we clearly support these.

In the proposal, the Commission sought answers from industry participants. Aviva Investors ("AI") has sought to address those questions based on our experience and knowledge. AI believes that investors typically have one of a small number of outcomes that they want to achieve with their investments: achieving capital growth, beating inflation, meeting a defined liability and generating income. These outcomes may appear simple on the surface; nonetheless we recognize that markets do not always rise, and simplistic long only funds may not deliver on these outcomes. Hence, **AI is clear that investors are best served by having access to a range of well-controlled investment strategies.** As a result, restrictions such as those proposed in 18f-4 need to balance the goals of investor protection against the merits of derivatives usage in the investment strategy undertaken on their behalf. AI believes that this can be achieved through a combination of principle based regulation and more prescriptive measures. We set out our detailed thoughts in the letter below.

## Part 1: Comments on the proposed exposure calculation methodology:

**SEC Question 1** (1st bullet on Page 84): Is the proposed rule's use of notional amounts as the basis for calculating a fund's exposure under a derivatives transaction appropriate? Does the notional amount of a derivatives transaction generally serve as an appropriate means of measuring a fund's exposure to the applicable reference asset or metric? Are there particular types of derivatives transactions or reference assets for which the notional amount would or would not be effective in this regard? For such derivatives, what alternative measures might be used and why would they be more appropriate? Would such alternative measures be easier for funds and compliance staff to administer?

**Response by Aviva Investors:** We agree with the Commission that the notional amount of derivatives may not be an appropriate measure of risk. Indeed, in some cases, it may well be *at best* unhelpful and *at worst* mislead clients as to the true level of risk they are employing in their investments<sup>1</sup>.

**AI does not believe that a single methodology exists at present to accurately explain fund leverage, and therefore any purely prescriptive approach will unfairly penalize some investment strategies.** This does not imply that the approach presented in the proposal is without merit but instead recognizes that there are flaws in any approach and that these should be compensated for where possible.

We support the Commission in seeking to highlight to clients where and when leverage is being used and particularly where it can magnify the risks of an investment. However, we believe that the term leverage needs to be clearly defined. Generally speaking, leverage can be achieved through the use of borrowing cash to reinvest or via the use of derivatives. In the former case we agree with the Commission that clients should be clearly informed, or possibly better protected, by a tight restriction on borrowing. **In line with this, we would suggest the Commission introduces a fund level restriction of 10% for borrowing which should be temporary in nature to facilitate short-term cash management and fund liquidity.**

The second instance where leverage can be achieved is through the use of the financial instruments generally referred to as derivatives. We believe that the generation of 'leverage' through this means should be clearly

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<sup>1</sup> Some simple examples of which are illustrated in the supporting documents that AI has supplied with its responses to the Commission's proposals.

disclosed to investors by the investment company and that suitable controls should be in place to measure, monitor and control the use of this leverage. Al believes that the establishment of the RMP is a vital component of this process and that this document should clearly state the mechanisms through which the controls operate. A vital component of this control should be a clearly stated and explained methodology for calculating leverage. We believe the majority of the proposal is in line with other globally observed practices and shares their collective strengths and weaknesses. **We would encourage the Commission to consider that ‘physical’ assets should carry leverage within the calculation; hence the base leverage for all funds is 100%.** We propose that this is a fairer representation of the risk and also avoids the pitfall of a derivative only replication position appearing more risky than the equivalent investment in assets. Indeed, there is much supporting evidence to suggest that in the case of synthetic replication the investment might well have better risk and return characteristics.

In answer to the question raised by the Commission as to instruments where notional was less suitable to measuring the risks involved, **we believe that the current proposal unfairly penalizes Fixed Income and FX risk relative to Equities.** For example, on the basis of the current calculation a \$1million of equity notional has the same leverage as \$1million of Fixed Income or FX notional irrespective of the levels of volatility and hence risk. This can be illustrated through the examples in the supporting appendices which demonstrate that, in many cases, the risk of Fixed Income investments can be substantially lower than the equivalent level of Equity investments. As a result, we feel that the ‘sum of the notionals’ approach may unfairly generate an expectation that the level of risk is the same to the end client. **We would suggest that in the case where the Commission prefers to stick with the simplicity of the proposed calculation that they grant a significantly higher level of leverage** and that they pass the responsibility to the Fund Board to set an appropriate level of leverage in line with the Fund’s investment objective under that threshold. In order to facilitate this, we believe that the Investment Company should publish the maximum level of expected leverage to the investors in the prospectus and, during the production of required investor information, include the level of leverage as of the appropriate date in said information. Furthermore, the Fund Board should ensure that they are comfortable that the investment manager is capable and skilled in the use of the derivatives deployed in pursuit of the investment objective.

As a result of the aforementioned weaknesses in the assumption of the equivalence of risk between investments, **we believe a suitable alternative should be employed by the Investment Manager.** This should take into account the risks of the underlying investment from a market risk perspective. The Fund may use this definition if the Fund Board considers it suitable and appropriate public disclosures on the methodology have been provided to the investors.

1. **Interest Rate ‘sensitive’ products:** We suggest that swaps/futures/interest rate sensitive products<sup>2</sup> could be expressed as a ‘delta’ equivalent of the risk-free 10-year bond. For example, a fund buying USD swaps can equate the risk of that position through IR01<sup>3</sup> to the equivalent amount of the ‘generic/on the run’ 10-year US Treasury.
2. **Foreign Exchange ‘sensitive’ products:** We suggest that FX sensitive products could be expressed as a ‘delta’<sup>4</sup> equivalent. This is for either leg of the currency pair and should be expressed as an amount of the base currency of the fund.
3. **Credit Spread ‘sensitive’ products:** In line with the suggestion with regards to Interest Rate sensitive products, we believe an acceptable approach would be to measure the equivalence on a CS01<sup>5</sup> basis’, which could be combined with the IR Delta.

<sup>2</sup> An interest rate sensitive product should primarily have ‘sensitivity’ to changes in the price of the underlying rate curve.

<sup>3</sup> IR01 being defined as the interest rate sensitivity to a 1bp change in the underlying ‘risk-free’ curve, this may be referred to as IR Delta or Delta amongst other terms in the industry.

<sup>4</sup> FX Delta being defined as the sensitivity to a 1% change in the underlying currency.

<sup>5</sup> CS01 being defined as the credit spread sensitivity to a 1bp change in the underlying credit curve; this may be referred to as CS Delta.

**Where a product contains more than one type of risk, all relevant risks should be included in the exposure calculation.** Where CS01 & IR01 are applicable, the larger of the two must be included. While we acknowledge that this approach has some shortcomings, it may represent a more accurate picture of leverage to the underlying investor.

Regardless of the approach taken, be it a simple ‘sum of the notionals’ or the approach described above, **AI believes that transparency is in the client’s best interest**, and hence a practical example of how each instrument in the portfolio is being handled should be publicly available for investors to review. While the approach described above improves the accuracy of the calculation for the investor in the fund, we agree that this does not make it possible for funds to be compared between providers with different approaches. Therefore, **if the fund chooses to utilize its own definition of leverage, a ‘sum of the notionals’ leverage total should be disclosed along with the level of fund VaR.** In the case of VaR, it is our thought that the investor disclosure documents should also contain a ‘plain English’ explanation of the term VaR<sup>6</sup>. As the ‘sum of the notionals’ approach is clearly understood, the requirement to calculate VaR would be in place and the fund would be able to define leverage accordingly. We do not believe this approach would likely place an onerous load on the compliance and risk staff of the Investment Company. However, we recognize that this ‘triple-lock’ approach to the disclosure requirements means that funds and their managers will have to invest in suitably skilled, trained and experienced experts, thereby increasing the level of protection that clients can reasonably expect.

**SEC Question 2** (3rd bullet on Page 89): Should the calculation of exposure be broadened to include not only derivatives that involve the issuance of senior securities (because they involve a payment obligation) but also derivatives that would not generally be considered to involve senior securities, such as purchased options, structured notes, or other derivatives that provide economic leverage, given that such instruments can increase the volatility of a fund’s portfolio and thus cause an investment in a fund to be more speculative than if the fund’s portfolio did not include such instruments?

**Response by Aviva Investors:** We advise the Commission to include all instruments held within a portfolio for the purpose of leverage calculations. We believe that physical and synthetic instruments introduce the same portfolio risks and therefore should be treated equally for the purposes of leverage calculations. **We also believe that both purchased options and sold options should be included in leverage calculations.** While the exclusion of purchased options would seem outwardly appealing to many, we believe this is merely because it reduces the leverage calculation as opposed to it having merit from a risk management perspective.

We can demonstrate through an example. If an investor wishes to replicate the S&P 500 index they may buy every share in the index to generate the exposure in Fund A or they could choose to buy a call and sell a put which will give them the same ‘exposure’<sup>7</sup> in Fund B. In the current proposal, only one leg of the transaction is included towards leverage, the sold put within Fund B because physical asset purchases are excluded as are purchased options which misleads the investors in Fund B and misrepresents the risk to the Fund. In our preferred methodology, Fund A reports physical assets as contributing to leverage and therefore shows a leverage number of 100%, Fund B under the ‘sum of the notionals’ reports 100% alongside the VaR and the fund’s alternative leverage measure. Under our approach, the investor gains better insight into the risks within their investment and the results are more consistent with the risks undertaken.

Furthermore, **AI recognizes that exclusion may contribute to undesirable outcomes.** As an example, assume on day 1 there are two investors in Fund A who each invest \$500 and the fund buys a ‘knock-out’<sup>8</sup> call on the S&P

<sup>6</sup> We agree with the Commission’s proposal for a 1mth 99% VaR using not less than 2 yrs of market data (where available or with a suitable substitute if actual market data is not available). In the case where non-linear risk is taken (such as in the case of using options) the VaR model is required to account for that such as through the use of Monte Carlo simulation or full-revaluation Historical Simulation. Parametric VaR would only be considered suitable in the case where-in the risk is ‘linear’ in nature, should the Investment Company wish to deploy a modified Parametric VaR approach it must demonstrate that the majority of the non-linear risk is modelled within the system.

<sup>7</sup> Exposure here is defined as the financial impact from a change in the value of the S&P.

<sup>8</sup> In this example a knock-out call refers to an option which becomes worthless if it reaches a certain value; please see the appendices for a graphical explanation of the return of a knock out option. This option may be referred to differently by otherwise, for example as a ‘one-touch’ however the principles

500 a thousand points above the current level. Under the current proposal, the fund has zero leverage. Suppose at the end of day 1, the S&P has rallied 900 points and Fund A's value has risen to \$2,000. At the start of day 2, one of the two investors decides to sell just as a new investor decides to enter the fund, and the existing investor gets \$1,000 back. At the end of day 2, the S&P remains unchanged from its previous level and the fund is still worth \$2,000<sup>9</sup>. On day 3, the S&P surges again and rises 200 points therefore 'crossing the barrier'<sup>10</sup> and knocking out the option. As a result of passing the 'barrier', the option is now worthless and the investors in the fund have lost all the value of the fund despite showing a leverage of zero. **Under the current proposal, the new investor could well feel that they were not adequately protected.** However, under AI's suggested approach, the leverage would have been reported as 100% for the sum of the notionals and the Fund VaR on day 2 would have displayed the level of potential risk as a result of being so close to the barrier – meaning the investors would have been better able to understand that they could lose all their investment.

Furthermore, **we agree that rules which might be considered too restrictive could lead to product innovations that create more opaque and complex instruments**, thus creating new challenges for the Commission and for risk and compliance managers. Most derivatives, such as swaps, futures and options are now well understood by the market place. Coupled with this more sophisticated knowledge is increased regulatory oversight and support which has produced better protection for investors.

Should the Commission feel that our suggested approach is not a more suitable route, **we would like further clarification on some of the details of the proposals as whether purchased options such as swaptions should be included** in the calculation of exposure and/or a VaR test used to determine if the fund qualifies for the 300% risk-based limit. The working assumption that the market would rely on is that these instruments should be excluded from both calculations at the time of purchase, but on exercise they would convert to a standard underlying derivative transaction. Clarification by the SEC on such detail would assist the market in understanding the scope of the proposals, and as such, it would be of significant assistance.

**SEC Question 3** (1st bullet on Page 90): Do commenters agree that it is appropriate to include exposure associated with a fund's financial commitment transactions and other senior securities transactions in the calculation of the fund's exposure for purposes of the 150% exposure limit in the exposure-based portfolio limit (and the 300% limit under the risk-based portfolio limit), as proposed, so that the exposure limit would include the fund's exposure from all senior securities transactions? Should we, instead, include only exposure associated with a fund's derivatives transactions but reduce the exposure limits so that a fund that would rely on the exemption provided by the proposed rule would be subject to a limit on leverage or potential leverage from all senior securities transactions? If we were to take this approach should we, for example, reduce the exposure limits to 50% in the case of the exposure-based portfolio limit and 100% in the case of the risk-based limit?

**Response by Aviva Investors:** We agree with the Commission that it is necessary to have a single combined exposure limit applicable to the aggregate of all transactions that generate exposure, regardless whether the exposure is generated through financial commitment transaction, derivative transactions or other senior securities transactions. It appears the proposal does not specify the borrowing limit as a result of other senior securities transactions under the new rule. As previously discussed in this response to the Commission's proposals, **our preference is a more nuanced approach to the setting of leverage restrictions and the separation of borrowing to create leverage versus the use of derivatives.** Should the Commission accept our proposed refinements, we believe this could also allow for a reduction of the restrictions on borrowing to a significantly lower level.

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remain the same. In this case an investor might buy a knock-out option because it is cheaper than a standard call and the investment manager does not believe the S&P will rally by more than 900 points during the life of this option.

<sup>9</sup> In this example the numbers are only hypothetical and do not represent the true change in value, it is merely used for the purpose of illustration.

<sup>10</sup> Crossing the barrier refers to when the price of the underlying rises beyond the level of the 'barrier', at the point when it crosses the barrier the option becomes worthless.

## Part 2: Comments on the proposed 150% exposure limit:

**SEC Question 4 (2<sup>nd</sup> bullet on Page 107):** The 150% exposure limit (and the 300% exposure limit in the risk-based portfolio limit) would apply to all funds without regard to the type of fund or the fund's strategy. Are there certain types of funds for which a higher or lower exposure limit would be appropriate?

**Response by Aviva Investors:** While we applaud the goal of the SEC to improve investor protection from inappropriate levels of risk, **we believe the exposure limit as proposed does not provide sufficient flexibility to some low risk funds, such as outcome oriented funds which use derivatives to achieve return objectives and low volatility.** These are commonly referred to as liquid alternative funds. The proposed risk-based limit heavily restricts the use of derivatives to transactions which are classically referred to as 'hedged'. Hedged are trades, typically through derivatives, which specifically reduce market risk. However, the proposals as currently crafted restrict the use of derivatives to construct significantly more robust portfolios, and therefore, may worsen the outcomes that clients receive. **We believe using derivatives to gain exposure does not inherently increase the risk of the fund since derivatives and physical assets display similar return and risk characteristics.** See **Exhibit 3** for an example which demonstrates Treasury bonds and its swap displaying identical price movement throughout a 20-year period spanning across multiple market cycles. With proper risk controls, using derivatives to gain exposure has certain benefits as listed below, and therefore, should not be penalized compared to those funds using derivatives as a hedging tool in a traditional sense:

1. Derivatives may allow funds to gain unique exposures that physical assets cannot provide. As a result, they may provide better diversification than traditional balanced portfolios, especially during stressed market conditions when volatility for physical assets, such as stocks and bonds, tends to go up simultaneously as shown in **Exhibits 1 and 2**. Please see **Exhibit 4** for an example demonstrating how swaps can gain exposure to certain spots on the yield curve when there are no physical bonds with maturity dates between November 23 and February 22.
2. Derivatives, if deployed properly, offer better liquidity than many physical assets, especially credit-fixed income. Regulatory changes in the banking industry since the financial crisis have reduced the number and scale of market makers. Better liquidity provided by derivatives allows fund managers to increase and decrease exposure more quickly, which is critical for risk management purposes.
3. There are certain asset classes, such as FX, where the bulk of the market is OTC and derivative.

As a result, **we suggest the Commission considers extending the same flexibility to funds already using the VaR approach similar to UCITS, conditional upon meeting additional controls such as back testing.**

We appreciate the Commission's concerns regarding managed futures funds and leveraged ETFs, which pursue their strategies almost exclusively through significant derivative use and sometimes leverage. **However, the proposed exposure limit at 150% appears to cause issues for other liquid alternatives and fixed income funds that use derivatives to achieve a wide array of client outcomes.** The preliminary results from a more recent ICI survey in which we participated indicate that the proposed exposure limit only impacts alternative funds, but also taxable bond funds as classified by Morningstar. The ICI survey appears to present different results from the study conducted by DERA staff, which shows only 1% of the sample funds with exposure over 150%. One possible explanation, in our view, is the timing of the DERA study. While ICI's survey was done in early 2016, the DERA study was based on late 2014 data collected through Form N-CSR. Because the **market conditions were much more favorable in late 2014, many funds did not need to use derivatives extensively to manage volatility at the time of DERA study;** however, their derivatives usage has increased significantly as market volatility continues to rise for both bonds and stocks as shown in **Exhibits 1 and 2**. In addition, we note that many mutual funds did not use derivatives at the time of DERA study even though the prospecti of the funds indicate they are allowed to do so. For example, the white paper from DERA indicated that 77% of all funds that completed Form N-SAR for 2014 have investment policies that allow the use of equity options, but only 6% reported that they have actually used equity options during the reporting period. **We believe this itself may support the notion that derivatives usage by mutual funds will go up from the low point in late 2014 since most mutual funds retain that flexibility for good reason.**

**Without providing sufficient flexibility to mutual funds to deploy derivatives, there may be unintended negative impacts to investors such as the following:**

1. Force a greater concentration of mutual fund assets into long-only strategies that are increasingly susceptible to market volatility and liquidity risk, and may be more susceptible to suffering negative total returns.
2. Drive demand for offshore funds which will continue to access derivative strategies. Although many retail investors don't have direct access to offshore vehicles, a review of shareholder information for certain large alternative funds indicates that many large shareholders of these funds are institutional vehicles with retail assets such as pension funds. The demand for stable return and low volatility may force those pension funds to increasingly rely on offshore vehicles such as those in Cayman Islands and British Virgin Islands, **which places US mutual funds at a significant competitive disadvantage for institutional clients and denies retail clients access to many suitable or indeed superior products.**

### Part 3: Comments on the proposed VaR test:

**SEC Question 5 (1<sup>st</sup> bullet on Page 132):** For the purposes of the risk-based portfolio limit, should the proposed rule use an approach such as (or similar to) the relative VaR or absolute VaR approach for UCITS funds, instead of or as an alternative to the proposed VaR test? Why or why not? Would it be more efficient to allow funds to use such an approach – e.g., because some advisers already use this approach for UCITS funds? Under a relative VaR approach, what sort of benchmarks would or would not be appropriate, and how should the benchmarks be chosen? Under an absolute VaR approach, what would be an appropriate VaR limit (e.g., 20%, as for UCITS funds, or a higher or lower limit)? Would a relative VaR or absolute VaR approach appropriately address the undue speculation concern underlying section 18? Why or why not?

#### Response by Aviva Investors:

We understand some of the Commission's concern regarding the reliability of using relative or absolute VaR as the only investment risk limit. However, **we do believe a significantly higher notional guideline with an approval on a fund-by-fund approach, coupled with an absolute VaR (limited to 20% common) or relative VaR (limited to two times a suitable benchmark) similar to UCITS funds achieves a better balance between providing flexibility regarding the use of derivatives while limiting the potential risks associated with leverage.** The fund may also be asked to meet the following requirements:

1. **Back testing:** Monitor VaR overshootings on a daily basis. Defined as when the one-day change in the fund's value exceeds the related one-day VaR measure at 99% confidence level calculated by the VaR model. On a semi-annual basis, the fund manager informs the Commission if the number of overshootings for the most recent 250 business days exceeds 4.
2. **Stress testing:** Run stress testing for a comprehensive range of scenarios reflecting possible market conditions relevant to the fund.
3. **Independent model validation:** Engage a party independent of the building of the model, or suitable skilled third parties such as public accounting firms to validate the VaR model.
4. **Control Assurance:** Key operational and governance controls related to the VaR model validation and counterparty risk management framework must be independently examined in an annual Type 2 SOC 1 report, or its equivalent, and the examination must be conducted by a Certified Public Accounting firm subject to regular inspection by the PCAOB.

Providing such flexibility will also bring the following benefits to the industry and investors:

1. Incentivizing the US mutual fund industry to quickly build its risk management capability based on existing guidelines approved by European regulators and widely adopted in Europe.
2. Improving US fund industry's competitive position when compared to their international peers.

Aviva Investors – along with many large and sophisticated asset managers who manage to their client's best interests across the globe – is familiar with the UCITS structure which has become widely recognized not just in but

beyond the European Union. As such, **we believe that the introduction of VaR based restrictions is not a significant challenge for large managers operating in the US market place.**

With regards to the relative VaR restrictions, which we suggest can be up to two times the benchmarks similar to UCITS, **we believe that the investment manager is best placed to choose a suitable reference benchmark which should be clearly disclosed to investors and approved by the Fund's board.** While in the majority of cases there is no complexity in deciding on the suitable benchmark for a relative VaR calculation, AI recognizes that in some cases the choice maybe less clear cut. However, the investment manager should be able to demonstrate that the appropriate consideration was applied to the decision and that the disclosure to the investors is fair and transparent. In the case of absolute VaR, we believe that 20% (similar to the restriction in UCITS) is an appropriate maximum level of risk. While these are the upper restrictions for a fund, we believe that the investment manager should operate with a lower guideline level of VaR which more accurately reflects the investment manager's expectations of risk. This guideline may be amended from time to time through an appropriately controlled approach. Likewise, the manager's risk management process should indicate clearly the approach when an excess occurs (passive or active breaches may have separate treatments).

**As discussed above, we believe that the current proposed restriction of 150%/300% leverage may prevent investors from achieving their outcomes.** Instead, we believe that the approach of utilizing a VaR based restriction as described above is more appropriate. Moreover, we respectfully suggest that the investment manager should disclose in their fund's disclosure documentation the maximum expected leverage. While this may not constitute a limit, it would be expected that the manager should not exceed this disclosed level in the normal course of management, and higher levels of leverage should only occur for short periods of time.

**SEC Question 6 (1<sup>st</sup> bullet on Page 152):** The proposed rule would not require a fund to terminate a derivatives transaction if the fund complied with the applicable portfolio limitation immediately after entering into the transaction, even if (for example), the fund's net assets later declined with the result that the fund's exposure at that later time exceeded the relevant exposure limit. Do commenters agree that this is appropriate? Conversely, should we instead require a maintenance test for notional amounts such that funds would be required to adjust their derivatives transactions if the exposure exceeds 150% of net assets for longer than a certain period of time, even if the fund has not entered into any senior securities transactions? If so, should we consider including a cushion amount – for example, by only requiring a fund to adjust its positions if its exposure reaches a higher level, such as 175%? Should we limit the time period (e.g., to 30 days, 60 days, or 90 days) in which an exposure could exceed 150% of net assets (or 300% under the risk-based portfolio limit) as a result of changes in the fund's net assets so that a fund cannot persistently exceed the rule's exposure limits? Would such an approach better promote investor protection? Would there be operational challenges with this requirement?

**Response by Aviva Investors:** We do not believe it is necessary to expand the notional amount test beyond the time of entering the derivative transactions.

## Part 4: Summary of our recommendations:

In summary, we suggest the Commission considers the following five adjustments:

1. **Permitting the use of an absolute VaR limit of 20%** (or two times) an appropriate reference benchmark as an option to restrict a fund's leverage, if the fund complies with control requirements such as back testing as outlined in our response to Question 5 above.
2. **Normalizing the notional amount for derivatives by calculating them in 'delta' equivalent** of the underlying investment exposure. For example, normalizing the notional amount for all interest rate swaps and futures by calculating them in terms of the 10-year bond equivalent.
3. Requiring an investment fund to supply in its public documents all appropriate data with regards to the maximum notional leverage use. **This can be greater than the 300% proposal.**
4. Restricting the amount a fund can borrow through other senior **securities transactions to 10% of the fund's NAV and only permitting** such borrowing in temporary nature to facilitate short term cash management and fund liquidity.
5. Requiring the Fund Board to approve the Risk Management Process of the fund including its use of VaR, leverage and the limits for these.
6. Excluding the fund's base currency leg of the contract when calculating notional amount for FX forwards and futures.

We believe making the aforementioned adjustments will bring the following benefits to the industry and to investors:

1. Incentivizing the US mutual fund industry to quickly build its risk management capability based on existing guidelines approved by European regulators and widely adopted in Europe.
2. Improving US fund industry's competitive position when compared to their international peers.

**In addition, we would like to seek clarification on whether purchased options such as swaptions should be included** in the calculation of exposure and/or a VaR test used to determine if the fund qualifies for the 300% risk-based limit. The working assumption that the market would rely on is that these instruments should be excluded from both calculations at the time of purchase, however, on exercise they would convert to a standard underlying derivative transaction.

We appreciate the Commission's consideration of our recommendations. Please do not hesitate to reach out to **Sean Brumble Chief Operating Officer at Aviva Investors Americas** if you have any additional questions or would like to discuss our views further.

Sincerely,



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Exhibit 1: S&P 500 Index (Historical Volatility)



S&P 500 Index (Implied Volatility)



Exhibit 2: Barclays US Aggregate Bond Index (Historical Volatility)

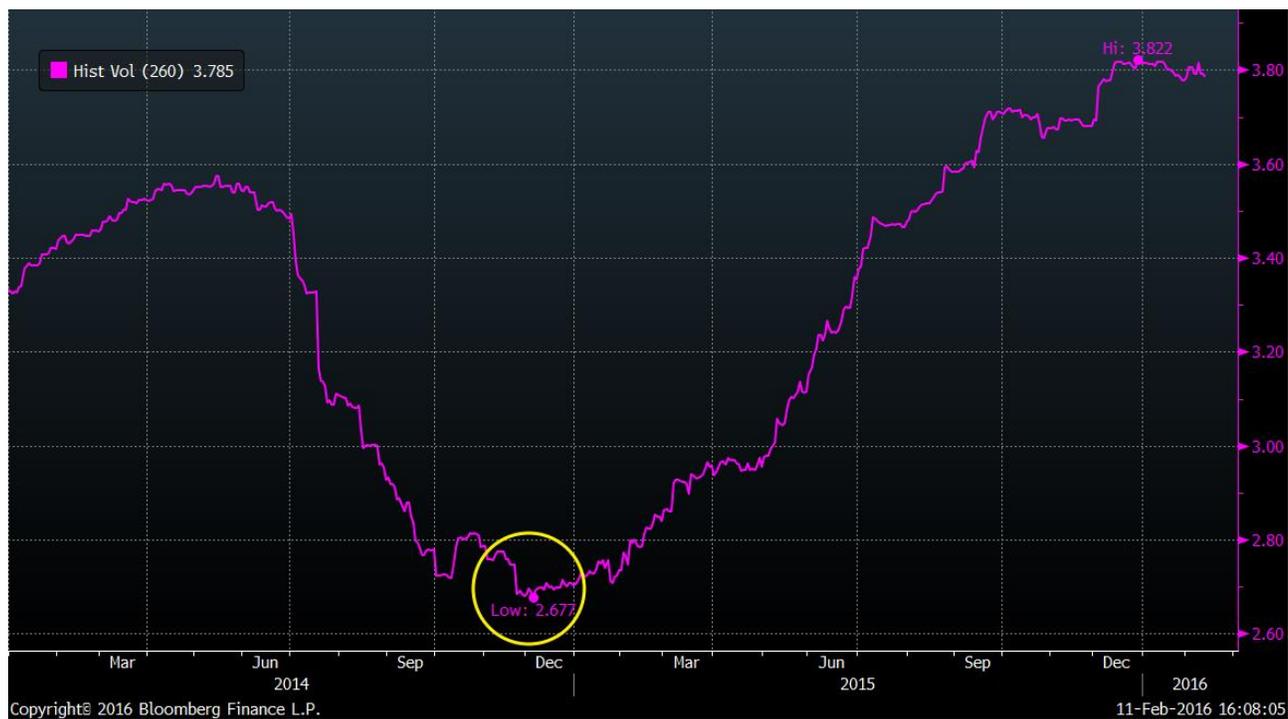


Exhibit 3: 10Y Treasury Yield vs. 10Y Swap Rate

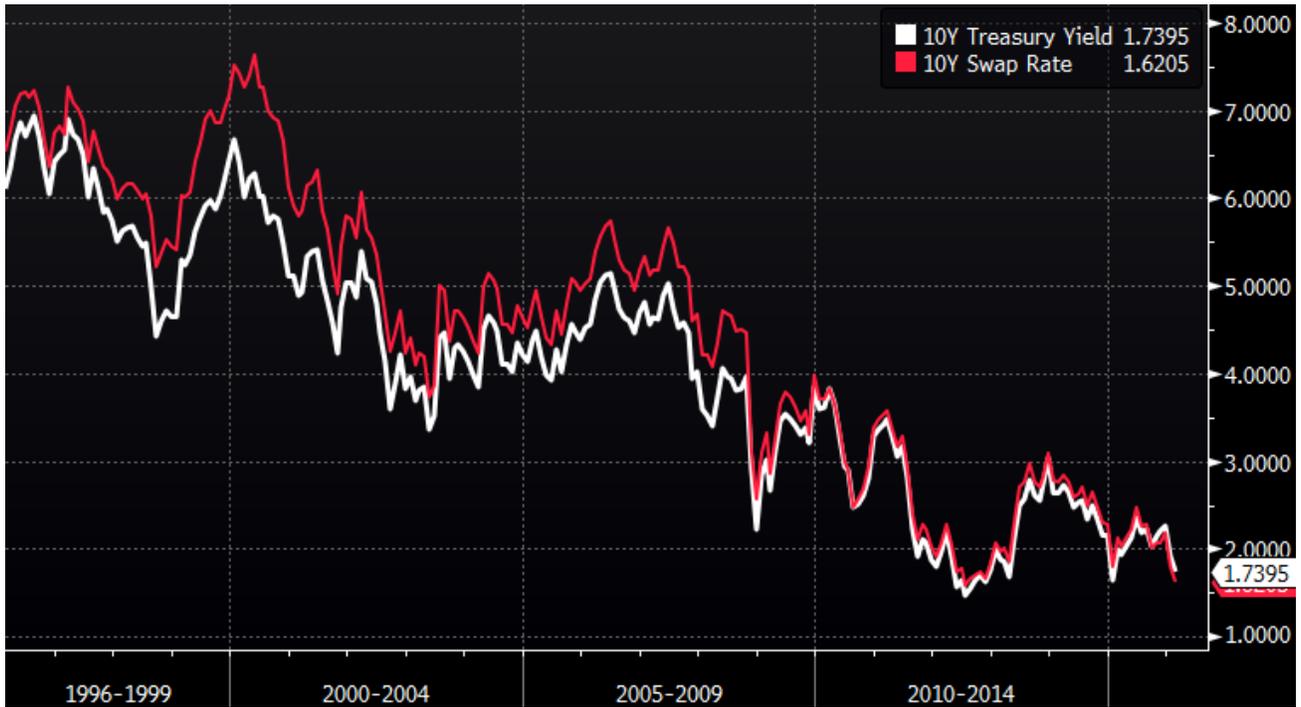
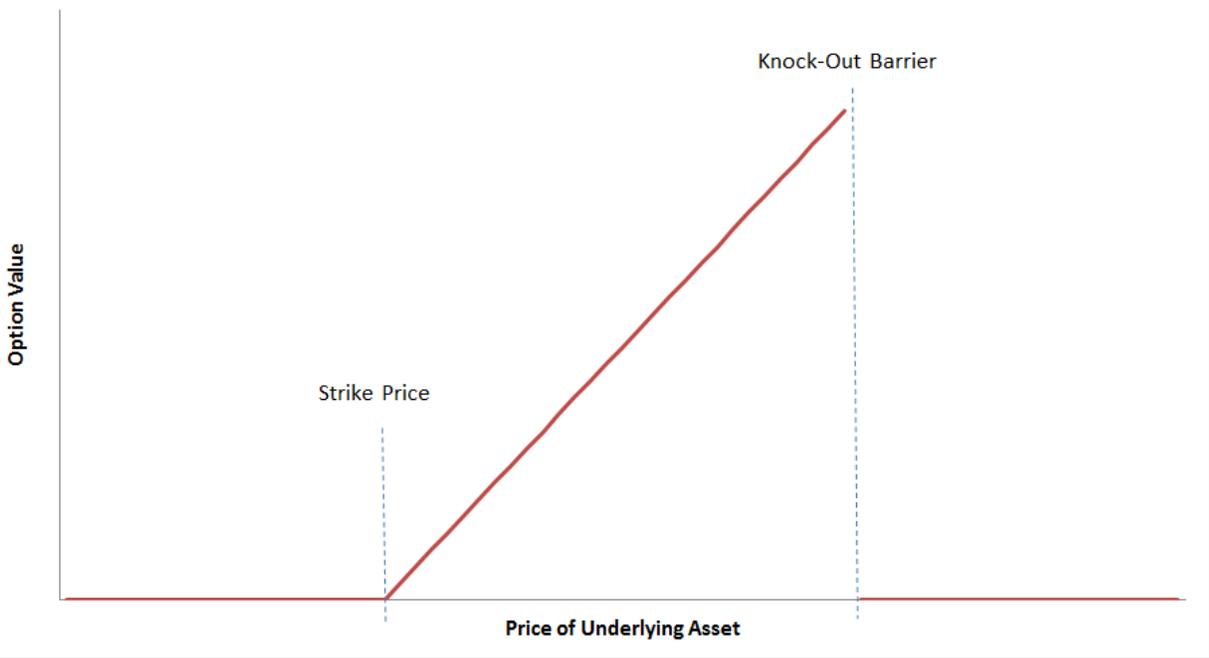


Exhibit 4: Using swaps to gain exposure on yield curve that physical bonds cannot provide

United States		1) Actions	
10:12			
4) Actives	5) Bills	6) Notes	7) TIPS
21) T/0-1	22) T/1-2	23) T/2-4	24) T/4-7
25) T/7-10			
31) 2 <sup>1</sup> / <sub>8</sub> D22		104-09+ / 104-10	1.464 - 02
32) 1 <sup>3</sup> / <sub>4</sub> 123		101-24 / 101-24+	1.482 - 02
33) 2 223		103-15+ / 103-16+	1.470 - 02+
34) 7 <sup>1</sup> / <sub>8</sub> 223		137-26 / 137-28	1.428 - 03+
35) 1 <sup>3</sup> / <sub>4</sub> 523		101-18+ / 101-19+	1.515 - 02+
36) 2 <sup>1</sup> / <sub>2</sub> 823		106-29 / 106-30	1.519 - 02+
37) 6 <sup>1</sup> / <sub>4</sub> 823		133-20 / 133-22	1.492 - 03+
38) 2 <sup>3</sup> / <sub>4</sub> N23		108-23+ / 108-24+	1.546 - 02
39) 2 <sup>3</sup> / <sub>4</sub> 224		108-22 / 108-23	1.587 - 02+
40) 2 <sup>1</sup> / <sub>2</sub> 524		108-23 / 108-24	1.623 - 03
41) 2 <sup>3</sup> / <sub>8</sub> 824		105-22 / 105-23	1.652 - 03
42) 7 <sup>1</sup> / <sub>2</sub> N24		147-24 / 147-26+	1.620 - 03+
43) 2 <sup>1</sup> / <sub>4</sub> N24		104-19 / 104-19+	1.682 - 03+
44) 7 <sup>5</sup> / <sub>8</sub> 225		149-26+ / 149-28	1.647 - 05+
45) 2 225		102-13+ / 102-14	1.707 - 03
46) 2 <sup>1</sup> / <sub>8</sub> 525		103-15 / 103-16	1.714 - 03
47) 6 <sup>7</sup> / <sub>8</sub> 825		145-10+ / 145-12	1.690 - 05
48) 2 825		102-10+ / 102-11	1.730 - 02+
49) 2 <sup>1</sup> / <sub>4</sub> N25		104-19 / 104-19+	1.734 - 02+
50) WI 10YR		1.740 / 1.735	+0.010
51) 10Y ROLL		-0.392 / -0.278	



Appendix: Knock-out option



Strike	K.O.	
50	80	
30	-	
40	-	
50	-	
60	10.00	
70	20.00	
75	25.00	
79	29.00	
80		0.000001
90		0.000001
100		0.000001

## Important information

Unless otherwise stated, any sources and opinions expressed are those of Aviva Investors America, LLC. They should not be viewed as indicating any guarantee of return from an investment managed by Aviva Investors nor as advice of any nature. The value of an investment can go down as well as up and the investor may not get back the original amount invested.

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