

March 28, 2016

VIA E-MAIL

Mr. Brent Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090
rule-comments@sec.gov

Re: *Use of Derivatives by Registered Investment Companies and Business Development Companies*
(File No. S-7-24-15)

Dear Mr. Fields:

This letter presents the comments of John Hancock Advisers, LLC and John Hancock Investment Management Services, LLC (collectively, “**John Hancock Investments**”) with respect to the U.S. Securities and Exchange Commission’s proposed new rule 18f-4 (“**Proposed Rule**”) under Section 18 of the Investment Company Act of 1940 (“**1940 Act**”). John Hancock Investments is a premier asset manager representing one of America’s most trusted brands, with a heritage of financial stewardship dating back to 1862. We provide investment management services to the John Hancock Group of Funds; a family of 228 registered funds with approximately \$195 billion of assets.¹ In our capacity as a manager of managers, John Hancock Investments supervises 32 subadvisers that manage several distinct investment strategies for the John Hancock Group of Funds. This position affords us a unique perspective and insight into the benefits and risks associated with the use of derivatives in registered funds managed according to a broad array of investment strategies. We have therefore had the opportunity to consider the impact of the Proposed Rule on registered funds with diverse investment strategies and on subadvisers that implement an assortment of portfolio management activities.

We appreciate the opportunity to comment on the Proposed Rule, and we support the Commission’s goal of modernizing and harmonizing decades of Commission and staff guidance regarding the use of derivatives and financial commitment transactions by registered funds.² In particular, we generally support the provisions of the Proposed Rule related to qualifying coverage assets for derivatives and financial commitment transactions. We also support the requirement for most funds that use derivatives to adopt and implement a written derivatives risk management program, subject to clarification that a board can meet its oversight obligations by establishing a derivatives risk management program and periodically reviewing the adequacy and effectiveness of the program’s policies and procedures.

¹ Information regarding the John Hancock Group of Funds is stated as of December 31, 2015.

² Unless otherwise noted, the terms “derivative,” “financial commitment transaction,” “notional exposure,” and similar terms of art have the meaning given to them in the Proposed Rule.

John Hancock Investments is a member firm of the Investment Company Institute (“ICI”). We generally support the comments and proposals advanced in the ICI’s comment letter to the Proposed Rule (“ICI Letter”), particularly those intended to clarify the scope and operation of the Proposed Rule as it applies to the segregation of qualifying coverage assets and the derivatives risk management program. Rather than restating those comments here, we wish to focus the attention of the Commission on one provision of the Proposed Rule that we believe will have a significant negative impact on registered funds: the imposition of portfolio limitations for derivatives transactions. In our view the portfolio limitations, as proposed, are not appropriately designed to achieve their stated goal of curbing undue speculation in registered funds. While we support the spirit of the comments and proposals of the ICI Letter with respect to portfolio limitations, this letter reflects our own comments and proposals on this aspect of the Proposed Rule.

The Commission stated that the Proposed Rule’s portfolio limitations are designed primarily to address the undue speculation concern expressed in section 1(b)(7) of the 1940 Act.³ Section 1(b)(7) is a statement of policy that was recognized by Congress when it passed the 1940 Act. It provides that the public interest and the interest of investors are adversely affected, “... when investment companies by excessive borrowing and the issuance of excessive amounts of senior securities increase unduly the speculative character of their junior securities[.]”⁴ We agree. But we note that leverage is not identified as a risk in its own right. Rather, section 1(b)(7) states, and we believe, that the interest of the investing public is adversely affected when registered funds, through the use of leverage, *unduly increase the speculative character of their securities*. This is an important distinction, and it is critical to understanding our concerns with the Proposed Rule and our recommendations.

The balance of this comment letter is organized into five sections:

- I. an executive summary of our comments and proposals;
- II. a discussion of the benefits of derivatives to registered funds and their investors;
- III. a discussion of aspects of the Proposed Rule that we support;
- IV. a survey of certain shortcomings of the Proposed Rule; and
- V. our proposals to address these shortcomings.

I. Executive Summary

We believe that the use of derivatives provides several significant benefits to registered funds and their investors. Namely, derivatives provide funds the opportunity to obtain cost-effective exposure to markets with reduced risk and the opportunity through hedging and risk reduction techniques to reduce and manage a fund’s portfolio risks. These benefits, in turn, have enabled the creation of liquid alternative funds that provide diversification benefits to investors when combined with riskier assets.

We recognize, however, that the misuse of derivatives can result in excessive directional leverage, which can render registered funds unduly speculative. For this reason, we generally support the provisions of the Proposed Rule related to qualifying coverage assets and written derivatives risk management programs. We consider these proposals to be appropriately designed to ensure that funds and their managers, through a robust and defined supervision and oversight process, (i) will set aside adequate reserves to meet future obligations, and (ii) will ensure that each fund’s use of derivatives and associated risk controls will be tailored to that fund’s specific situation.

³ See *Use of Derivatives by Registered Investment Companies and Business Development Companies*, SEC Release No. IC-31933, 80 Fed. Reg. 80884 (Dec. 28, 2015) at 80901, available at <https://www.gpo.gov/fdsys/pkg/FR-2015-12-28/pdf/2015-31704.pdf> (“Release”).

⁴ Section 1(b)(7) of the 1940 Act.

We cannot, however, support the imposition of inflexible portfolio limitations for derivatives transactions contemplated by the Proposed Rule. In our view, these limitations are not appropriately designed to curb undue speculation in registered funds. We believe that this aspect of the Proposed Rule was developed in reliance on incomplete data, that notional exposure is an ineffective proxy for determining whether a fund's use of derivatives cause it to be unduly speculative, and that risk-reducing derivatives should not be treated in the same manner as derivatives that provide leveraged market exposure. Therefore, we believe the portfolio limitations should be eliminated because they will inhibit beneficial risk-management activities and result in unintended, adverse consequences for registered funds.

To address the limitations of the Proposed Rule, John Hancock Investments is proposing four modifications to the Proposed Rule:

Remove the portfolio limitations from the Proposed Rule entirely. We believe that the qualifying coverage requirements of the Proposed Rule will have a limiting effect on the ability of registered funds to significantly leverage a fund, and that the requirement for most funds that use derivatives to adopt and implement a written derivatives risk management program is a better framework to ensure that funds, through the use of leverage, do not unduly increase the speculative character of their securities. Therefore, we propose that the portfolio limitation provisions of the Proposed Rule be eliminated given the adverse and unintended consequences of these limitations described below.

Replace the portfolio limitations with an alternative risk management framework. In lieu of an inflexible rules-based regime, we would support the imposition of a Value-at-Risk (“**VaR**”)-based regime similar to that applicable to UCITS funds. Registered funds could elect to comply with (i) a Relative VaR approach, pursuant to which the VaR of a fund's entire portfolio may not exceed the VaR of a reference portfolio by greater than a set measure; or (ii) an Absolute VaR approach, pursuant to which the VaR of a fund's derivatives portfolio may not exceed a defined amount of the fund's net assets under management. We believe that either of these approaches would present a more accurate assessment of the extent to which a fund's leverage actually increases its speculative character.

Apply discount factors when calculating the portfolio limitations. If the Commission elects to retain portfolio limitations, we propose the application of discount factors to the notional value of certain types of derivative instruments for purposes of calculating the portfolio limitations, and increasing the Exposure-Based Limit from 150% of a fund's net assets to 200%. Systematically discounting the notional exposure of certain derivatives would address some of the rule's shortcomings, while retaining a simple, rigid, “administrable” test that may be equally applied to all funds, and better aligns the Proposed Rule's treatment of a derivative position to the contribution of risk produced by the position.

Permit netting of imperfect hedges. If the Commission elects to retain portfolio limitations, we also propose that a fund be permitted to establish reasonable procedures, as part of its derivatives risk management program, for determining whether a derivative is a risk-reducing transaction that should be omitted from portfolio limitation calculations. This approach would mitigate one of the Proposed Rule's more perverse consequences: the inhibition on the use of derivatives for portfolio risk reduction and risk management.

II. Benefits of Derivatives

The Proposed Rule appears to be based on the common misconception that the use of derivatives is inherently risky and that greater use of derivatives by a fund implies greater risk. Derivatives are tools that can be used by funds in both safe and unsafe ways. The “safe” uses of derivatives allow a fund manager to obtain cost-effective exposure to markets and to reduce a fund's exposure to market and other

risks and enhance the benefits of diversification. These outcomes have been proven by academic literature to improve an investor's risk-return utility.⁵ Additionally, derivatives have enabled the creation and management of liquid alternative funds that provide diversification benefits to investors when combined with riskier assets. These uses of derivatives to reduce and manage risk is fundamentally different from the use of derivatives to provide leveraged exposure to securities markets, a use that, in extreme circumstances, may be considered speculative or "unsafe."

a. Cost-Effective Market Exposure With Reduced Risks

In many contexts, derivatives provide a cost-effective opportunity to gain exposure to securities markets and other asset classes. Examples of the benefits of derivatives compared to securities that trade in the cash market and investments in similar physical assets abound. As one example, credit default swaps often provide funds greater liquidity and pricing transparency than corresponding credit securities. A fund that obtains synthetic exposure to a credit instrument through the use of a credit default swap effectively replicates the credit exposure of the reference entity, but with improved liquidity. In our experience, derivatives are commonly used to obtain investment exposure that is no more speculative, and in fact subjects fund shareholders to fewer risks, than an equivalent securities position. When used appropriately, derivatives can allow funds to achieve investment objectives in a manner that is both safer and at a lower cost than funds not using derivatives.

Derivatives are also commonly employed in funds with low-risk investment strategies. Consider the case of a Eurodollar futures contract, which is widely used in the industry to express views on the direction of short-term interest rates and to hedge portfolio duration. Whether used to obtain exposure to interest rate risks or to hedge those risks, the actual risk associated with such a position is a small fraction of the risk compared to a direct position of a similar size in a High Yield bond or a blue chip common stock. In light of this risk disparity, we believe that trading in Eurodollar futures contracts should not be characterized as an unduly speculative activity.

b. The Benefits of Derivatives Outweigh Their Risks

We also recognize that, in certain situations, the opportunity to obtain exposure through derivatives comes at the expense of certain risks that are distinct from those present in an equivalent securities position. Notably, a total return swap on a security exposes the fund to both the investment risks of the underlying security and counterparty credit risk of the swap counterparty. However, we believe that the posting of collateral or (in the case of cleared derivatives) margin appropriately addresses this risk. A fund manager can, and should, consider all risks and benefits associated with the use of derivatives to determine whether a derivative position is more advantageous to a fund and its shareholders than an equivalent physical position. Derivatives that introduce counterparty credit risk will often present superior transparency, valuation, and liquidity profiles compared to physical securities. We believe that fund managers can reasonably identify opportunities where the use of derivatives to gain investment exposure carries less risk than equivalent positions in the cash market, and that fund managers rightly should consider these opportunities in the context of a robust risk management program.

c. Effective Means of Managing and Reducing Portfolio Risks

Derivatives also provide fund managers the opportunity to reduce and manage risks in fund portfolios in a cost-effective manner. For example, interest rate derivatives afford a fund manager the opportunity to

⁵ See James A. Overdahl, Ph.D, Delta Strategy Grp., Proposed Rule 18f-4 on the Use of Derivative Instruments by Registered Investment Companies: Data and Economic Analysis 22–24 (2016), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2754153.

adjust portfolio duration and manage the risk of rising interest rates, and the use of derivative “overlays” allow a fund manager to manage the aggregate risks of several distinct “sleeves” of a single fund’s portfolio. Not all risk management transactions represent perfect hedges; in some cases, perfect hedges are more expensive or otherwise impractical, and in other cases portfolio managers will use derivative transactions to hedge risks at the portfolio level rather than on an asset-by-asset basis. We believe that these risk management activities provide fund managers the opportunity to effectively reduce targeted risks in a fund’s portfolio, and should not be curtailed. Rather than increasing the speculative character of a fund, risk management transactions of this type mitigate risks within the fund’s portfolio, with the intent and the effect of *reducing a fund’s speculative character*. Indeed, funds that make significant use of derivatives to mitigate and manage risk often have lower portfolio-level risk when compared to funds that invest exclusively in securities.

d. Liquid Alternative Strategies

Finally, the use of derivatives is critical to the implementation of liquid alternative strategies, which expand the universe of investment options available to investors. John Hancock Investments has observed that the prevailing low interest rate environment has induced yield-seeking investors to invest in riskier asset classes. Liquid alternative strategies can provide diversification benefits to these investors when coupled with riskier assets, which in turn can help alleviate potential retirement shortfall for investors who cannot find safe assets with adequate yield. We believe that the Proposed Rule would require significant changes to the manner in which these funds seek to obtain their investment objectives, and encourage fund managers to invest in instruments other than liquid derivatives, such as bespoke ETNs, to replicate their existing portfolio. These changes would likely result in funds assuming additional liquidity risk, credit risk, and other risks associated with bespoke investment products, resulting in a less optimal expression of the strategy. Other alternative strategies would become more expensive to manage, and certain liquid alternative strategies likely could not be implemented by registered funds at all. This in turn would reduce the universe of investment options available to investors and inhibit the potential benefits of financial innovation for these investors.

III. Qualifying Coverage Assets and Derivatives Risk Management Program

As noted above, John Hancock Investments generally supports the provisions of the Proposed Rule related to qualifying coverage assets for derivatives and financial commitment transactions, and the requirement for most funds that use derivatives to adopt and implement a written derivatives risk management program, subject to the recommendations contained in the ICI Letter. We also support provisions of the Proposed Rule regarding additional record-keeping requirements related to the use of derivatives and financial commitment transactions, and those that address the need for better transparency regarding a fund’s use of derivatives in regulatory reports.

While we believe that the establishment of a formalized derivatives risk management program and board oversight of the risks associated with a fund’s derivatives transactions are appropriate requirements for any registered fund that makes significant use of derivatives, we are concerned that the scope of a board’s obligations in this respect are unclear in the Proposed Rule. The Proposed Rule appears to impose on fund boards the obligation to analyze and approve highly technical concepts such as the specific design of the VaR test used to determine whether a fund meets the risk-based portfolio limitation, and of risk-based coverage amounts for various types of derivatives, including “complex” derivatives, based on the results of stress-testing.⁶ In our view, requiring board approval of these concepts is inconsistent with a board’s traditional oversight function, and instead requires the board to make investment decisions with respect to the design and implementation of a fund’s investment program. We believe that fund boards should be

⁶ See Proposed Rules 18f-4(a)(5), 18f-4(b)(2); *see also* Release at 80944-45.

able to rely on the expertise of the derivative risk manager(s) of the funds under their supervision to establish and administer the specific risk monitoring techniques applicable to each fund, and recommend that the Commission clarify that a board will meet its oversight obligations by establishing a derivatives risk management program and periodically reviewing the adequacy and effectiveness of the program's policies and procedures.⁷

IV. Shortcomings of the Proposed Rule

While we generally support the provisions of the Proposed Rule related to qualifying coverage assets for derivatives and financial commitment transactions, we believe that the Proposed Rule suffers from several shortcomings, primarily related to the imposition of portfolio limitations for derivatives transactions. We believe that the Exposure-Based Limit and the Risk-Based Limit as conceived in the Proposed Rule fail to address the undue speculation concern expressed in section 1(b)(7) of the 1940 Act that the Commission cited as the impetus for their creation. Specifically, we believe that the simplistic portfolio limitations were assessed through an incomplete analysis reflecting a single point in time that may not be representative of the past or future use of derivatives by registered funds, and that the portfolio limitations do not adequately distinguish between derivatives that increase risk in a fund's portfolio and derivatives that decrease risk in a fund's portfolio. We also believe that insufficient consideration was given to whether risk-reducing derivative transactions should be omitted from the portfolio limitation calculations, the extent to which the portfolio limitations will inhibit beneficial risk management activities to the detriment of fund investors, and other potential unintended consequences of the portfolio limitations.

a. The Division of Economic and Risk Analysis Study

The Commission proposed the portfolio limitations, in part, in reliance on a study ("**DERA Study**") conducted by its Division of Economic and Risk Analysis.⁸ The Commission recognized that the DERA Study suffered from incomplete data regarding the impact of certain aspects of the portfolio limitations, but we believe that the scope of the DERA Study's limitations exceeds that recognized by the Commission.⁹

First, contrary to the Commission's assertions based on this study, we believe that managed futures funds cannot be implemented under the Proposed Rule, and that many currency funds, as they are presently managed, cannot be implemented under the Proposed Rule. These are not especially speculative or "risky" products, in that they historically have not exhibited markedly more volatile returns than other registered funds. Indeed, many categories of registered funds have been *more* volatile over time than currency and managed futures funds. These strategies have also proven to provide important diversification benefits when combined with more traditional securities strategies because they do not tend to suffer precipitous declines in value in concert with securities markets. While there is no certainty

⁷ We note the inconsistency between the requirement in the Proposed Rule that a fund's board "review" a fund's derivatives management program, and the requirement in Rule 38a-1 under the 1940 Act that a fund's board receive the Chief Compliance Officer's annual written report concerning the adequacy of a fund's compliance policies and procedures and the effectiveness of their implementation. We recommend that the obligations of the board under the Proposed Rule be synchronized to Rule 38a-1 to avoid confusion regarding the scope of the board's obligations.

⁸ See Daniel Deli, Paul Hanouna, Christof Stahel, Yue Tang & William Yost *Use of Derivatives by Registered Investment Companies*, SEC Division of Economic and Risk Analysis (2015), available at <http://www.sec.gov/dera/staff-papers/white-papers/derivatives12-2015.pdf> ("**DERA White Paper**").

⁹ In addition to the limitations discussed herein, we reference the results of the study performed by the ICI and the results of that study presented in the ICI Letter. At the time this letter was drafted, this study determined that 471 registered funds with \$613 billion in assets would exceed the proposed 150% Exposure-based Limit and 173 funds with \$338 billion in assets would exceed the 300% Risk-Based Limit. See Letter from David W. Blass, Gen. Counsel, Inv. Co. Inst., to Brent J. Fields, Sec'y, SEC, Fig.1 (Mar. 28, 2016) ("**ICI Letter**").

that these products will continue to provide similar risk-mitigating benefits, they likewise cannot be characterized as “unduly speculative” when compared to funds with traditional securities portfolios.

Second, the DERA Study is based on funds’ use of derivatives at a moment in time in a “normal” market environment.¹⁰ Funds’ use of derivatives is likely to increase in times of market stress in order to increase liquidity and hedge investment exposures. This practice has been recognized by the Commission in its recent rule proposal regarding liquidity risk management programs for open-end registered funds.¹¹ The DERA Study and the Commission’s analysis of the impact of the Proposed Rule do not adequately consider the impact of portfolio limitations under stressed market conditions, which we expect would cause a higher percentage of existing registered funds to exceed the portfolio limitations. Even in normal market conditions, a fund’s notional exposure to derivatives, financial commitment transactions, and other senior securities will fluctuate as market conditions, risks, and opportunities change over time. We do not believe that a point-in-time assessment is an appropriate measure of the impact of the Proposed Rule, which requires ongoing compliance across time and diverse market environments. This discrepancy is particularly troubling in light of the fact that the Commission’s statements in the Release and the Proposed Rule itself recognize the importance of considering a fund’s use of derivatives in stressed market conditions.

Finally, we agree with the view expressed by Commissioner Piwowar in his dissenting statement at the Commission’s Open Meeting on Use of Derivatives by Registered Investment Companies and Business Development Companies regarding the timing of the proposal and the Commission’s opportunity to collect better data regarding the use of derivatives by registered funds than the data used in the DERA Study.

“The timing of today’s proposal, other than the proposed asset segregation requirements, is not appropriate given other recently proposed or adopted rules that address derivatives or funds’ use of derivatives. Many of these rules will either have a direct impact on the risks of derivatives positions held by funds, or will provide us with data that could be used to better understand how we should regulate this market. [...]

The Investment Company Reporting Modernization Proposal included proposed new Form N-PORT, which would require almost all funds to report information about their monthly portfolio holdings to the Commission in a structured data format. Form N-PORT would include extensive information on a fund’s derivatives investments. Part of the rationale for this data gathering proposal was that the Commission and investors are not always able to accurately assess funds’ derivatives investments and the exposures they create, which is important to understanding funds’ investment strategies, use of leverage, and risk of loss. The data collected under that proposal would bear directly on issues of leverage and risk that are at the heart of today’s recommendation.

Thus, I strongly believe that the Commission should first adopt the Investment Company Reporting Modernization Proposal before proposing a new leverage limit on funds. Adoption of that proposal would provide investors and the Commission with a much better understanding of funds’ derivatives use and exposures, which should address many of the concerns regarding funds use of derivatives for leveraging purposes. In addition, it would provide the Commission with much needed data that can be analyzed, in accordance with our current guidance on economic analysis in rulemakings, to determine

¹⁰ DERA White Paper at 1.

¹¹ See *Open-End Fund Liquidity Risk Management Programs*, 80 Fed. Reg. 62274 (Oct. 15, 2015), available at <https://www.gpo.gov/fdsys/pkg/FR-2015-10-15/pdf/2015-24507.pdf>.

whether there is any need to further limit funds' use of derivatives. If the data supported further limits, it could then be used to determine what such limits should be in a thoughtful, empirically driven manner." (Internal references omitted.)¹²

As Commissioner Piwowar noted, the DERA study suffers from two distinct data deficiencies. First, pending Commission rulemaking, including the Proposed Rule and the Commission's proposed rule regarding liquidity risk management, will have an impact on the actual use of derivatives by registered funds. The DERA study, however, is based on a point in time that precedes these changes, and thus conclusions about the impact of the portfolio limitations in the Proposed Rule drawn from the DERA study will necessarily be derived from data that does not accurately reflect the use of derivatives by registered funds in the new regulatory environment. Second, the Commission has proposed rules that would afford it much more robust data regarding the use of derivatives by registered funds and their attendant risks, but it has chosen to advance the Proposed Rule before reviewing this data.

We believe that these deficiencies in the DERA Study, as well as the deficiencies noted above, render any conclusions drawn from the study at risk of being materially inaccurate.

b. The Calculation of Gross Notional Exposure

We believe that the Commission's proposed method for ascertaining whether a registered fund's use of derivatives results in undue speculation, and for mitigating this risk, is inappropriate. The Exposure-Based Limit and the Risk-Based Limit would limit a fund's aggregate "exposure" to 150% or 300% (respectively) of the fund's net assets. For these purposes, "exposure" is the sum of the fund's aggregate (i) notional amounts of the fund's derivatives transactions; (ii) obligations under financial commitment transactions; and (iii) indebtedness with respect to any senior securities transactions. As the Commission recognizes, this method is "a relatively blunt measurement in that different derivatives transactions having the same notional amount but different underlying assets . . . may expose a fund to very different potential investment risks."¹³ We agree. But we do not agree that the proposed methods "balance concerns about the limitations of an exposure measurement based on notional amounts with the benefits of using notional amounts."¹⁴ If anything, the Commission appears to have considered and rejected any adjustments to the "blunt instrument" of notional exposures in favor of their limited benefits. The resulting portfolio limitations limit a fund's ability to engage in one measure of leverage, but do not distinguish derivatives used for risk management purposes from derivatives used for speculative purposes or to gain investment leverage. Consequently, the portfolio limitations expressly do not consider whether funds' derivatives *unduly increase the speculative character of their securities*. We believe this represents a fundamental flaw in the Proposed Rule.

This flaw is apparent if one considers the relative risk of different types of derivatives, and the fact that gross notional exposure is rarely an accurate reflection of the market exposure created by a derivative instrument because the cash flow obligations under most derivatives are a small percentage of notional exposure.¹⁵ For example, the volatility of most interest rate derivatives is much lower than the volatility of equity derivatives. This can be readily observed by reference to the historical volatility of various interest rate futures contracts compared to the volatility of S&P 500 contracts across the same timeframe. We have provided such an analysis in Exhibit A. This difference in volatility means that an interest rate

¹² Commissioner Michael S. Piwowar, Dissenting Statement at Open Meeting on Use of Derivatives by Registered Investment Companies and Business Development Companies (December 11, 2015), available at <http://www.sec.gov/news/statement/piwowar-dissentingstatement-use-of-derivatives-funds.html>.

¹³ Release at 80903.

¹⁴ *Ibid.*

¹⁵ See Overdahl, Ph.D, *supra* note 5, at 12–17.

swap with notional exposure of \$20 million will contribute much less risk to a fund's portfolio than an equity swap with notional exposure of \$8 million. Additionally, we note that for certain types of derivatives, particularly interest rate derivatives, notional exposure is simply a reference point for calculating the payment of cash flows, and does not necessarily represent or imply any principal commitment or future obligation with respect to the derivative instrument. This discrepancy between a derivative's notional exposure and the actual impact of the derivative on a portfolio's risk is also true for derivative transactions that are entered into for the purpose of reducing portfolio risk. A fund that enters into derivatives with low volatility for the purpose of reducing portfolio risk will necessarily have high levels of notional exposure, and the fund may suffer from resulting constraints on its manager's ability to reduce risks in its portfolio.

The two most obvious consequences of portfolio limitations based on a simplistic calculation of notional exposure are constraints on the ability of fund managers to (i) reduce or manage the risks of fund portfolios through the use of derivatives (particularly derivatives with low volatility profiles), and (ii) use derivatives to obtain synthetic exposure to securities or other assets. Reducing the risk management options available to fund managers will result in portfolios with higher risk profiles.¹⁶ Likewise, the impact of limiting or removing the ability to express investment strategies through synthetic exposures in fund portfolios is a lost opportunity to reduce risks related to liquidity, valuation, and transparency that can arise from holding certain physical positions. It is possible that the portfolio limitations in the Proposed Rules will reduce risks in certain portfolios that engage in directional leverage, but they will also increase risk in portfolios of funds that use derivatives for risk management and risk reduction. In other words, for funds employing low risk investment strategies, the Proposed Rule as written effectively reduces risk management options for funds which may decrease the fund's expected return or increase its risk to achieve that level of return.

c. Netting of Offsetting Positions

For purposes of determining compliance with the portfolio limitations, the Proposed Rule allows funds to net and disregard offsetting derivative transactions where the underlying reference asset, maturity, and material terms are identical, but does not allow netting of transactions where there is any variance in these terms. We believe that netting offsetting positions is appropriate, but that the rigid requirement that all terms of offsetting transactions be identical is inconsistent with modern portfolio management practices. In practice, fund managers may eliminate substantially all of the market risk associated with derivative instruments by entering into imperfect offsetting transactions, but this reduction in risk exposure is ignored by the Proposed Rule.

For example, a fund manager seeking to isolate the specific risk of a particular security may enter into a physical short position in a similar security, or take a short position in a representative index through a total return swap. In these risk management transactions, the fund has offset the market risk shared by the two positions, and is exposed only to the much more limited idiosyncratic risk of the security (and potentially that of the short position). However, the fund must consider the entire notional exposure of the risk management transaction when calculating its compliance with the applicable portfolio limitation. The exposure would be doubled if both sides of the transaction were effected through derivatives, even though the market risk has been neutralized. Although the use of derivatives and financial commitment transactions in these scenarios reduces the investment risk of the portfolio, the portfolio limitations inappropriately treat them as positions that increase the speculative character of the fund. We do not believe that this outcome is sensible.

¹⁶ In addition, we note that the imposition of a new test based on notional exposure is inconsistent with registered funds' current practice of using mark-to-market exposure for purposes of testing compliance with Subchapter M of the Internal Revenue Code and certain exposure-based tests of the 1940 Act and the rules thereunder.

Furthermore, we note that the rule does allow for the netting of offsetting transactions with different counterparties, and thus recognizes that offsetting transactions may retain some risk. We consider it arbitrary to omit offsetting transactions that retain counterparty credit risk from the portfolio limitation calculations, but to include the entire notional exposure of one or both legs of other imperfect hedges. While we recognize the Commission's interest in establishing standards that are administrable and can be applied consistently across funds, we note that certain other aspects of the Proposed Rule impose on funds, as part of the derivatives risk management program, the obligation to make extraordinarily complex determinations, and that these requirements will likely result in standards that differ across funds.¹⁷ Why, for example, may a fund establish risk-based coverage amounts for purposes of determining its obligations with respect to qualifying coverage assets, but not establish reasonable procedures for determining whether a derivative is a risk-reducing transaction that should be omitted from portfolio limitation calculations because it *reduces, rather than increases, the speculative character of the fund?*

d. The Exposure-Based Limit and the Risk-Based Limit

We believe that there are also less obvious consequences of using “blunt” notional exposures to measure the risk accruing from a fund's use of derivatives. For example, the Proposed Rule may incentivize fund managers to use derivatives with higher risk profiles and lower notional exposure to manage or reduce the risks of fund portfolios in an effort to comply with the portfolio limitations. This may, in turn, result in adverse consequences for funds, their investors, and securities markets generally, as fund managers may be forced to use derivatives that are more expensive, and that *increase* basis risk--the risk that the derivatives will not hedge the portfolio risks they are intended to hedge. For example, the manager of a traditional fixed income fund seeking to manage the duration of the fund's portfolio may use an interest rate derivative with an extended tenor because it provides more duration protection per unit of notional exposure. However, this practice (even if properly disclosed) may introduce basis risk to the detriment of fund shareholders if a derivative with a shorter term would provide a more perfect duration hedge in light of the fund's securities portfolio.

Similarly, we believe that the VaR-based test proposed by the Commission to determine whether a fund may apply the Exposure-Based Limit or the Risk-Based Limit also does not adequately distinguish between derivatives used for risk management purposes and derivatives used for speculative purposes or to gain investment leverage. This test, which intentionally considers only a fund's entire derivatives portfolio and does not distinguish between specific derivatives used for risk management purposes and those used for speculation or leverage, is an imprecise standard that in practice will be met only by funds with high volatility securities portfolios, but not by funds with low volatility securities portfolios. As an example, a fund with a securities portfolio composed of high volatility small cap stocks could enter into derivatives transactions that incrementally reduce the portfolio's VaR and meet the Risk-Based Limit, but a fund composed primarily of cash, cash equivalents, and synthetic exposure to currencies and sovereign credit would not, even if it enters into additional derivative transactions to significantly reduce certain risks associated with those synthetic positions. In this example, the absolute volatility of the equity fund would be much higher than the volatility of the currency and credit fund.

¹⁷See, e.g., the obligation to perform two VaR tests on each occasion that a fund relying on the Risk-Based Limit enters into a derivative transaction, financial commitment transaction, or other senior security transaction. (Proposed Rule 18f-4(c)(11); Release at 80916). See also the obligation to determine appropriate risk-based coverage amounts based on estimates of the amounts payable by the fund if it exits derivative transactions under stressed conditions. (Proposed Rule 18f-4(c)(9); Release at 80929-31).

This example also highlights another unintended consequence of the Proposed Rule--the interplay between the Risk-Based Portfolio Limit and the provisions of the Proposed Rule related to qualifying coverage assets for derivatives and financial commitment transactions. In most cases, a fund that maintains a significant amount of cash or cash equivalents as collateral for derivative transactions cannot pass the VaR test because these assets have very low volatility. The securities portfolios of currency and managed futures funds, for example, would typically be composed mostly of cash and cash equivalents. Virtually any derivative positions in such funds, even those with very low absolute volatility, would increase VaR of the fund's total portfolio, causing the fund to be unable to rely on the Risk-Based Limit. Consequently, fund managers seeking the ability to manage risks through the use of derivatives in excess of the Exposure-Based Limit will need to obtain some measure of market exposure through cash instruments rather than derivatives, even when derivatives are more cost effective and provide better liquidity, as noted above. Unfortunately, the obligation to maintain qualifying coverage assets in the form of cash and cash equivalents will restrict the ability of these funds to obtain market exposure in the cash market. This interplay may incentivize certain funds to invest in riskier physical securities, which may not be the most effective way to implement the fund's investment strategy, to increase the risk of a fund's securities portfolio in an effort to enable the fund to comply with the Risk-Based Limit. This would have the adverse effect of *increasing* aggregate portfolio risk.

Generally, we perceive that the Risk-Based Limit allows flexibility for funds with high volatility strategies to manage portfolio risks through the use of derivatives, but the same cannot be said for funds with low volatility strategies. While we believe that there is a rational basis to afford high volatility funds the opportunity to manage risk through derivatives, we cannot discern a rational basis to restrict the ability of lower volatility funds to do the same.

V. John Hancock Investments' Proposals

To address the many limitations of the Proposed Rule, we urge the Commission to consider the following modifications to the Proposed Rule.

a. Remove the portfolio limitations from the Proposed Rule entirely.

The use of derivatives by registered funds is already limited by segregation requirements articulated in Commission and staff guidance. As noted above, we support the provisions of the Proposed Rule related to qualifying coverage assets for derivatives and financial commitment transactions. If adopted, we believe that the qualifying coverage regime of the Proposed Rule will have an even more limiting effect on the ability of registered funds to enter into significant leverage. We also believe that this aspect of the Proposed Rule does not suffer from the perverse incentives and unintended consequences of the portfolio limitations described herein.

Additionally, we believe that the requirement for most funds that use derivatives to adopt and implement a written derivatives risk management program is a better framework to ensure that funds, through the use of leverage, do not unduly increase the speculative character of their securities. A fund's manager, subject to the supervision of the fund's derivatives risk manager and oversight of the board, is the appropriate person to consider the risks and benefits of derivatives in light of the specific investment strategies implemented for the fund. We believe that a fund, through this process of supervision and oversight, is in the best position to determine appropriate limitations on the use of derivatives, tailored to its specific situation. By contrast, the imposition of a "one-size-fits-all" approach will have many adverse and unintended consequences. In addition to the consequences discussed above, we believe it will likely create market inefficiencies with consequences that are difficult or impossible to foresee.

Removal of the portfolio limitations would also ensure that liquid alternative funds with robust risk management programs would continue to operate as intended and fulfill institutional and individual investor needs. As noted above, liquid alternative strategies can provide diversification benefits when coupled with riskier assets, which is beneficial to investors. We expressly reject the Commission's suggestion that registered funds with significant derivatives holdings should consider deregistering under the 1940 Act, and instead offer their securities to "a more targeted investor base."¹⁸ We believe that the benefits of investment diversification and financial innovation should not be limited to institutions and the wealthiest investors. To the extent that liquid alternative funds do introduce complex risks due to their use of derivatives, the best way to protect investors in these products is to control those risks through the management expertise of a professional asset manager under the oversight of an experienced board, within the framework of a comprehensive regulatory regime.

b. Replace the portfolio limitations with an alternative risk management framework.

If the Commission believes that the qualifying coverage regime and written derivatives risk management program provisions of the Proposed Rule do not provide adequate protections to investors in funds that use derivatives, we urge the Commission to consider the adoption of a principles-based risk management framework in lieu of rigid portfolio limitations. Under this approach, a fund could elect to comply with one of two VaR-based regimes similar to the guidelines applicable to UCITS funds: (i) a Relative VaR approach, pursuant to which the VaR of a fund's entire portfolio may not exceed the VaR of a reference portfolio by greater than a set measure;¹⁹ or (ii) an Absolute VaR approach, pursuant to which the VaR of a fund's derivatives portfolio may not exceed a defined amount, *e.g.* 20 percent of the fund's net assets under management.

We believe that the VaR regime is superior to the proposed portfolio exposure limits for several reasons. First, the VaR regime would likely have an even more limiting effect on the ability of registered funds to enter into significant directional leverage than would the portfolio limitations described in the Proposed Rule. Second, a principles-based risk management framework such as the VaR regime does not suffer from the perverse incentives and unintended consequences of the portfolio limitations described herein. Third, the VaR regime appropriately distinguishes between derivative transactions that increase portfolio risk and those that reduce portfolio risk. Fourth, rather than assessing the notional exposure of derivatives, which is an imprecise proxy for whether leverage actually increases risk, the VaR regime *actually assesses the extent to which leverage increases the speculative character of a fund*. In these respects, the VaR regime is both a more effective means of measuring and managing a fund's derivatives risk and more closely related to the undue speculation concern expressed in section 1(b)(7) of the 1940 Act.

We recognize that the VaR regime, considered in a vacuum, does have certain drawbacks. The Commission cites as one drawback the difficulty in selecting an appropriate benchmark for a relative VaR test.²⁰ However, as discussed above, a relative VaR test could be based on endogenous characteristics of a fund's portfolio rather than an external benchmark. If the Commission adopts a VaR regime that does not require any reference to an external benchmark, this concern would be entirely moot. The Commission also cites as a drawback of the VaR approach the possibility that a fund could obtain enormous offsetting exposures and still pass either VaR test described above. However, we believe this concern is mitigated by the other provisions of the Proposed Rule. The qualifying coverage regime of the

¹⁸ See Release at 80912.

¹⁹ We note that the reference portfolio under the Relative VaR approach may be based on an external benchmark, such as an appropriate broad-based securities index, or by some other measure, for example one derived from the fund's securities portfolio or derivatives portfolio.

²⁰ See Release at 80918.

Proposed Rule effectively limits this possibility by requiring that a fund earmark a risk-based coverage amount with respect to each derivative transaction entered into by the fund.

c. Apply discount factors when calculating the portfolio limitations.

If the Commission neither removes the portfolio limitations entirely nor elects to replace them with an alternative risk management framework, we believe that another appropriate alternative would be the application of “haircuts” to the notional value of certain types of derivative instruments for purposes of calculating the portfolio limitations, and increasing the Exposure-Based Limit from 150% of a fund’s net assets to 200%. Although we believe it is preferable for each registered fund to tailor derivatives risk controls to the fund’s specific situation through the derivatives risk management program, we also believe that systematically discounting the notional exposure of certain derivatives would address some of the rule’s shortcomings, while retaining a simple, rigid, “administrable” test that may be equally applied to all funds.

Under this proposal, a derivative’s notional exposure for purposes of assessing compliance with the portfolio limitations would be reduced by a discount factor or “haircut,” determined by the class of the derivative position. Larger haircuts would be applied to derivatives that are less volatile, and smaller haircuts would be applied to derivatives that are more volatile. This proposal retains the ease of administration associated with notional exposures, and is also better aligned with other U.S. regulatory regimes. Indeed, the Commission claims in the Release that notional amounts of derivatives transactions are used in numerous regulatory regimes as a means of determining the scale of the derivatives activities of market participants; many of those regimes also apply a discount factor to better align the deemed exposure of a derivative with its actual risk. This proposal also better aligns the Proposed Rule’s treatment of a derivative position to the contribution of risk produced by the position, although it still would not account for imperfect hedges that reduce, rather than increase, a fund’s speculative character.

With respect to establishing a standardized table of discount factors, we support the proposal in the ICI Letter that the Commission look to the discount factors set forth in the ICI Letter’s Proposed Notional Amount Conversion Factor Chart, which reflects that the notional amount should be risk-adjusted.²¹

If this proposal is adopted, we also believe that the Exposure-Based Limit should be increased from 150% of a fund’s net assets to 200%, to provide additional risk management flexibility to funds with low-volatility securities portfolios.

d. Permit netting of imperfect hedges.

Finally, if the Commission elects to retain portfolio limitations, either with or without the application of discount factors, we urge the Commission to reconsider the inflexible position that a fund may only net and disregard offsetting derivative transactions where the underlying reference asset, maturity, and material terms are identical. As noted herein, we believe that netting offsetting positions is appropriate, but that the rigid requirement that all terms of offsetting transactions (other than the counterparty) be identical is both inconsistent with modern portfolio management practices and bears a tenuous relationship to the undue speculation concern expressed in section 1(b)(7) of the 1940 Act.

²¹ ICI Letter, *supra* note 9, tbl. Proposed Notional Amount Conversion Factor Chart; *see Margin and Capital Requirements for Covered Swap Entities*, 80 Fed. Reg. 74839 (Nov. 30, 2015) at Appendix A; *Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants*, 81 Fed. Reg. 636 (Jan. 2, 2016) at Section 23.154(c); *Further Definition of “Swap Dealer,” “Security-Based Swap Dealer,” “Major Swap Participant,” “Major Security-Based Swap Participant” and Eligible Contract Participant*, 77 Fed. Reg. 30596 (May 23, 2012).

We propose instead that a fund be permitted to establish reasonable procedures, as part of its derivatives risk management program, for determining whether a derivative is a risk-reducing transaction that should be omitted from portfolio limitation calculations. In this manner a fund, pursuant to its derivatives risk management program, can establish appropriate standards, informed by its specific investment activities. If the Commission is concerned about how such a standard may be applied across different funds, the Commission could amend Form N-PORT to require reporting on the percentage of a fund's notional derivatives exposure that is deemed to be risk reducing, and disregarded for purposes of the portfolio limitations. In this manner, the Commission and its staff could observe the extent to which funds make use of this opportunity, and address any perceived "red flags."

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John Hancock Investments appreciates the opportunity to comment on the Proposed Rule and hopes that the Commission finds these comments helpful and constructive. If you wish to discuss these comments further, please contact Phil Fontana, Head of Product Development, at (██████████) or John Danello, Chief Counsel, US Wealth Management, at (██████████).

Sincerely,



Phil Fontana, CFA, CAIA
Head of Product Development
John Hancock Investments

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

David W. Grim, Director
Diane C. Blizzard, Associate Director
Division of Investment Management

Exhibit A

Historical Risk Measures of Futures Contracts

The table below reflects the historical volatility of the designated futures contracts compared to the volatility of S&P 500 futures contract across the same timeframe. Data is presented for the ten year period from December 31, 2005 to December 31, 2015.

Futures Contract	Volatility	Correlation to S&P 500	1 Day VaR (99%)	10 Day VaR (99%)	1 Month VaR (99%)	Maximum Drawdown
S&P 500 Futures	20.9%	0.98	-3.9%	-12.3%	-18.3%	-57.1%
Eurodollar Futures	1.4%	0.02	-0.1%	-0.4%	-0.6%	-3.0%
5Y T-Note Futures	4.2%	-0.33	-0.8%	-2.4%	-3.6%	-6.5%
10Y T-Note Futures	6.5%	-0.36	-1.1%	-3.6%	-5.4%	-11.5%

Futures prices are sourced from Factset; data analysis performed by John Hancock Investments. Data for all futures contracts are continuous, calculated in accordance with market convention; rollover methodology for specific futures contracts may vary. Maximum Drawdown measures the largest peak to trough loss during the stated time period.