



November 3, 2016

Mr. Brent J. Fields  
Secretary  
U.S. Securities and Exchange Commission  
100 F Street, N.E.  
Washington, D.C. 20549-1090

Re: File No. S7-24-15  
Use of Derivatives by Registered Investment Companies and Business Development  
Companies  
Release No. IC-31933 (the "Proposing Release")

Dear Secretary Fields:

Stone Ridge Asset Management ("Stone Ridge") appreciated the opportunity to meet with the Commission Staff for a second time on October 28, 2016, to discuss proposed Rule 18f-4 relating to the use of derivatives by registered investment companies and business development companies.

Attached as Appendix A is a revised version of the proposal outline and accompanying slides that we provided to the Commission Staff in connection with our October 28, 2016 meeting, which were posted on the Commission's page reflecting comments and meetings regarding proposed Rule 18f-4. We have revised and supplemented the outline to address matters raised by the Commission Staff during our meeting.

We appreciate the opportunity to submit these additional comments for the Commission's consideration. If you have any questions or would like any additional information regarding these comments, please feel free to contact Jim Rothwell at [REDACTED] or [REDACTED].

Sincerely,

A handwritten signature in blue ink, appearing to read "Jim Rothwell", written in a cursive style.

James T. Rothwell  
Head of Legal  
Stone Ridge Asset Management LLC

## Appendix A

### Stone Ridge Rule 18f-4 Proposal Outline

#### Materials prepared exclusively for meeting with the Staff of the U.S. Securities & Exchange Commission

##### Background:

- Stone Ridge is grateful to the Staff and the Director for their generosity with their time to meet with us a second time about Rule 18f-4.
- On March 16, 2016, we met with the Staff (Dan Townley, Brian Johnson, Thoreau Bartmann, Adam Bolter, John Cook and Yue Tang) to discuss proposed Rule 18f-4. We submitted a comment letter on March 28, 2016.
- In that comment letter, we made four proposals:
  - To permit netting of certain narrowly-delineated offsetting transactions, with a reduced (from the proposed 150%) notional exposure limit.
  - To provide grandfathering for existing funds, with prominent disclosure that the fund operates under pre-Rule 18f-4 rules and guidance.
  - To permit a fund to exceed notional exposure limits if the fund has low VaR.
  - To provide for specific exemptive authority.
- We continue to believe that all four proposals would enhance investor protection and investor choice.
- Retail investors face unattractive investment choices. Traditional long-only equity strategies are very risky – the S&P 500 has experienced a drop of over 50% in the past 10 years, and has experienced a drop of over 80% in the Great Depression. Traditional fixed income is very low-yielding, and faces high duration risk if interest rates rise. And equity and fixed income markets around the world are highly correlated with each other, so diversification is difficult.
- As written, the Rule will limit investor choice and push retail investors into riskier strategies, such as “vanilla” (i.e. unhedged long-only) equity strategies, while reserving less risky, less correlated strategies for wealthy investors and institutions.
- We support the ICI’s recent proposal for an alternative VaR test. We propose to expand on that proposal to flesh out further our third proposal above.

##### Our Proposal for an Additional Alternative VaR test:

- We support the use of the VaR test that the ICI proposed in their September 27, 2016 supplementary comment letter. Specifically, we support:
  - Daily ex ante testing using a 10-day horizon and a 95% percent confidence level as common parameters for ex ante VaR estimation.<sup>1</sup>
  - The requirement for rigorous daily ex post back-testing.
  - The requirement for robust recordkeeping and reporting.
- Under our proposed additional alternative VaR test, a fund would be subject to a higher, 600%<sup>2</sup> limit on the notional amount of derivatives employed, calculated using a risk-adjusted notional amount based on PR/CFTC/IBS haircuts as proposed by other commentators, but only IF:

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<sup>1</sup> We would not object to different common parameters than those proposed by the ICI.

- The ex ante 10-day, 95% confident-level VaR of the fund does not exceed 5% of the fund's net assets (vs. 10% under the ICI test).<sup>3</sup>
- The fund follows the ex post backtesting, recordkeeping and reporting requirements recommended by the ICI.
- In addition, the fund periodically conducts a rigorous, comprehensive and risk-adequate stress testing program, the results of which are reported to the fund's board of directors in connection with their oversight of the fund's derivatives risk management program, as described in more detail below.

Our Specific Proposal for Stress Test Requirements:<sup>4</sup>

- **Summary:** For a fund to rely on our proposed 5% alternative VaR test with a 600% risk-adjusted notional limit,
  - the fund's derivatives risk management program must contain a strict requirement for **ex ante** and daily ex post portfolio-level stress testing;
  - the fund must clearly **disclose** in its prospectus that the fund relies on the 5% alternative VaR test, and must disclose the specific parameters of its stress testing requirement.
- The portfolio-level stress testing requirements must specify:
  - Which variable or combination of variables is to be stressed. (For example, the level of a particular index or commodity referenced by derivatives used by the fund.)
  - What stress levels will be used to stress those variables. (For example, a change of +/- 3% in the S&P500 combined with a change of 5% in the price of oil.) To enhance administrability, ease of back-testing and SEC examination, stress testing would be performed by only stressing the specified variables, with no assumptions regarding correlation to other variables.
  - What tolerance level will be set to determine whether the fund "passes" or "fails" the stress test. (For example, a 50% decline in NAV.)
- The stress testing requirements may be tiered – i.e. a tolerance level of 50% of NAV might be set for one set of stresses, and a lower tolerance level of 25% of NAV might be set for a different, less extreme set of stresses.
- The fund would be required to adopt reasonable procedures to perform these portfolio-level stress tests ex ante, before making any new investment or putting on any new derivative position. If a particular investment or position would cause the fund to fail its stress test, then the fund would be prohibited from putting on the new position.
- The details of the stress test, including the specific variable to be stressed, the specific stress levels to be used, and the specific tolerance level or levels, as well as the fund's policies and procedures to prevent the fund from making new investments or putting on new derivatives

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<sup>2</sup> 600% is twice 300%, at ½ the VaR level suggested by the ICI.

<sup>3</sup> Alternatively, we would support requiring the VaR to be less than that of a common investible benchmark, such as the S&P 500 (which has a historical 10-day, 95% confidence-level VaR of less than 5%) – i.e. a "relative VaR" test instead of an "absolute VaR" test.

<sup>4</sup> We understand that stress testing is already on the rulemaking agenda. Given that stress testing could play a central role in crafting limits on derivatives use by funds, we suggest delaying adoption of Rule 18f-4 until a general stress testing approach is proposed and adopted.

positions that would cause the fund to fail its stress tests, would be approved by the fund's board.

- Importantly, a fund relying on the 5% VaR test would be required to disclose prominently in its prospectus that it was doing so, and would be required to disclose all of the same details of its stress tests, including an analysis of how the specific stress levels used by the fund compare to historical values of the variables stressed. This will ensure that investors have the opportunity to understand exactly the risk tolerances chosen by the fund and its board in establishing stress tests. This disclosure could take the form of a new, standardized "Derivatives Risk Stress Testing" section of the prospectus. It could also be systematically reported on new Form N-PORT, so the SEC could analyze the XML data across funds.
- In addition to ex ante portfolio-level testing for every new investment and derivatives position, the fund would also be required to perform the same stress test on its current portfolio daily. If, despite following its procedures for new transactions, a fund were to fail a stress test at any time, whether because of unexpected market movements or otherwise, the fund would be required to notify its board, and confidentially notify the Commission, and would be required to explain in a report to the board the extent and causes of the occurrence, and how the fund plans to bring its portfolio back into compliance with the stress tests within 30 days. If the fund is not in compliance with its stress tests within 30 days of such occurrence, the fund would no longer be permitted to rely on the 5% VaR test with a 600% risk-adjusted notional limit for a specified period (the "penalty period") following the end of such 30 day period, and would be required to bring its portfolio into compliance with a different test in Rule 18f-4 within a specified period (the "cure period") following the end of such 30 day period. This is similar to, but stricter than, the liquidity management Rules recently adopted by the Commission. Each of the penalty period and the cure period could be specified in the Rule, or could be specified by the fund in its derivatives risk management program and disclosed as part of the fund's Derivatives Risk Stress Testing disclosure.

#### Our Argument:

- Section 18 of the 1940 was intended to address three concerns expressed by Congress, as outlined in the Rule 18f-4 Proposing Release:
  - excessive borrowing and the issuance of excessive amounts of senior securities by funds which increased unduly the speculative character of their junior securities;
  - funds operating without adequate assets and reserves; and
  - potential abuse of the purchasers of senior securities.
- Rule 18f-4 attempts to address the first two concerns. It does not attempt to address the third.
- The asset segregation requirements in Rule 18f-4 address the second concern.
- The portfolio limitations in Rule 18f-4 are intended to address the first concern.
- However, portfolio limits on the total notional amount of derivatives in a fund are not an effective way to address the first concern because these limits are both over-inclusive and under-inclusive:
  - The proposed portfolio limits would prohibit strategies that use high notional amounts of derivatives but do not make a fund "unduly . . . speculative";<sup>5</sup> and

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<sup>5</sup> Funds that rely heavily on derivatives can be less risky than the S&P 500. We have attached data for certain funds that are less risky than the S&P 500, and others that are more risky than the S&P 500, measure by historical

- The proposed portfolio limits would allow strategies that could make a fund very “speculative” (i.e. risky).

This is because the notional amount of a derivative does not measure its riskiness – there are very low-risk derivatives with high notional amounts (e.g. interest rate swaps), and there are very risky derivatives with low notional amounts (e.g. unhedged out-of-the-money options).<sup>6</sup>

- VaR, unlike notional amount, is a direct measure of risk. It better addresses the “speculative character” of a fund.
- Admittedly, VaR is an imperfect test, for two principal reasons:
  - Estimating VaR ex ante is model-driven and requires making assumptions about probability and correlation. There may be a range of assumptions that are reasonable and intellectually honest. And a dishonest actor could try to game those assumptions to achieve a particular result.
  - VaR does not measure maximum possible loss – it measures loss to a specific confidence level. No matter the confidence level chosen, there is a “tail risk” with higher potential losses.
- Our proposed VaR test tackles both of these critiques head-on.
  - Historical VaR, unlike estimated ex ante VaR, is just math – it cannot be gamed. Our proposal, like the ICI’s, requires ex post backtesting to confirm that actual results are consistent with ex ante VaR modeling, and recordkeeping and reporting of discrepancies.
  - Also, like the ICI proposal, our proposal would require a fund’s board to formally approve its VaR model as part of the fund’s derivatives risk management program. The model, and the process arounds its approval, would be available for audit upon SEC exam, which would discourage the use of unreasonable or intellectually dishonest assumptions.

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VaR. The Rule 18f-4 Proposing Release, and the earlier DERA white paper, do not make the empirical case that funds that use high notional amounts of derivatives are “unduly speculative.”

<sup>6</sup> The Committee of European Securities Regulators recognized this in adopting UCITS risk guidelines in 2010. Those guidelines require a UCITS to rely on a “an advanced risk measurement methodology (supported by a stress testing program) such as Value-at-Risk” if “it engages in complex investment strategies which represent more than a negligible part of the UCITS’ investment policy” or “the commitment approach doesn’t adequately capture the market risk of the portfolio.” The Guidelines note:

“Additionally there are investment strategies that can be pursued by UCITS through the use of financial derivatives instruments for which the commitment approach does not adequately capture the related risks (for instance non-directional risks like volatility risk, gamma risk or basis risk) and/or for which it does not give, with regard to the complexity of the strategy, and adequate and risk sensitive view of the related risks (for instance hedge fund-like strategies). Illustrative examples (non-exhaustive list) of such investment strategies might be:

- Option strategies (e.g. delta-neutral or volatility strategies)
- Arbitrage strategies (e.g. arbitrage on the interest rate curve, convertible bond arbitrage etc.)
- Complex long/short and/or market neutral strategies.”

We would not object to a similar requirement under 18f-4.

- Stress testing in the matter we propose will help ensure that “tail risk” scenarios are captured, and will provide disclosure to investors as to the specifics of the tests performed.
- Funds that produce a daily NAV already have the valuation infrastructure to perform these tests in a transparent, verifiable way.
- VaR is also a better complement to asset segregation to address the “adequate assets and reserves” concern. Asset coverage requirements alone may not completely address that concern because asset coverage looks to current exposures. Although the asset coverage requirements of Rule 18f-4 include a risk-based coverage amount, if market movements cause exposures to increase quickly and unexpectedly, a fund that is fully covered with respect to its current obligations could find itself under-covered in the future. Portfolio limits on the total notional amount of derivatives do not fully address this shortcoming of asset coverage alone because notional amounts do not correlate to risk in the portfolio, as noted above. VaR is a direct measure of risk, so constraining VaR better addresses this risk than constraining notional amount. Our proposal does not conflict with asset coverage requirements, which we support generally with changes suggested by numerous other commenters.
- Even with its imperfections, VaR addresses both the “speculative” concern and the “adequate assets and reserves” concern better than notional amount. The superiority of the VaR approach to meeting the goals of Section 18 should not be discarded simply because of worries regarding administrability or the possibility of “gaming” the system. Rather those worries should be addressed head-on.

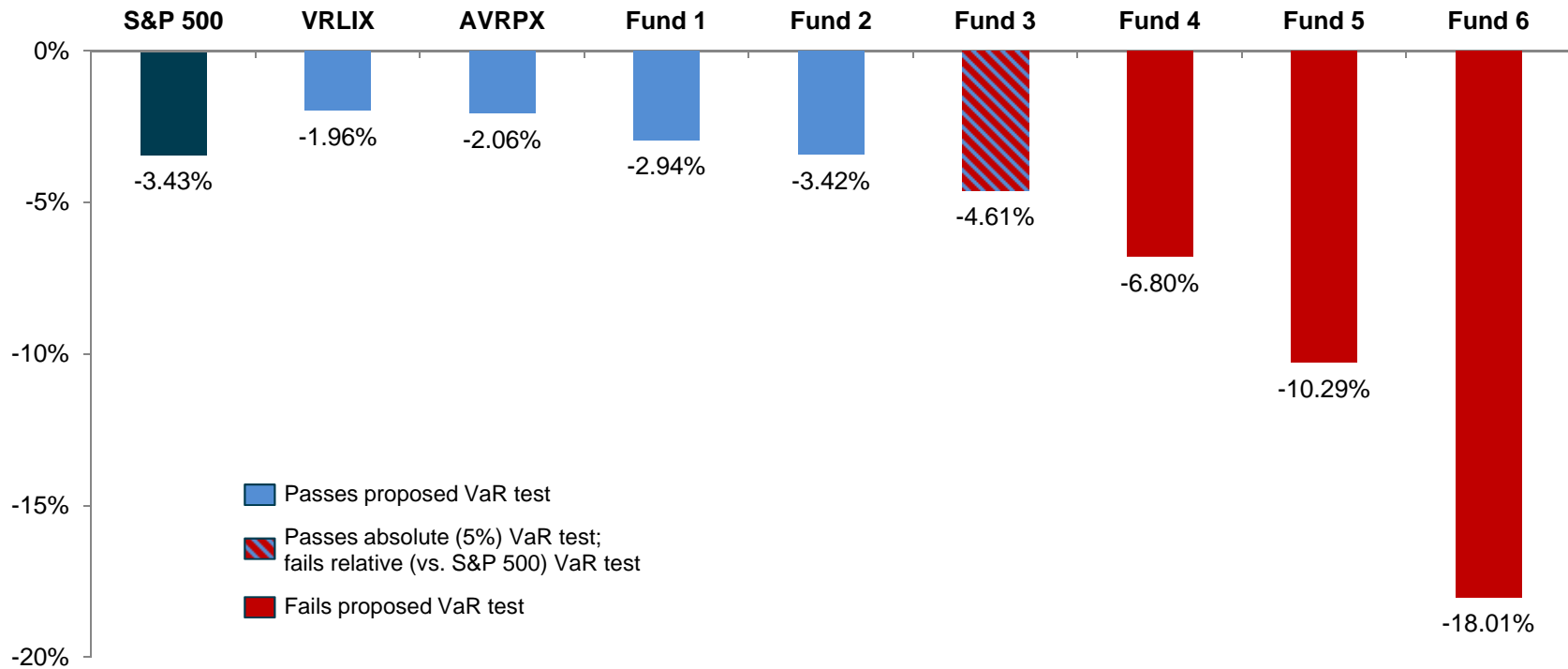
#### About Stone Ridge and AVRPX:

- Stone Ridge manages registered investment companies with approximately \$8 billion in total assets under management, in three principal investment strategies – reinsurance risk premium, alternative lending risk premium, and variance risk premium.
- Our investors understand that investment returns are earned for taking risk. The word “Risk” appears in the name of each of our funds. We offer investment funds that allow investors to gain exposure to diversifying, uncorrelated and hard-to-access risks.
- The Stone Ridge All Asset Variance Risk Premium Fund (“AVRPX”) earns investment returns by collecting option premium for selling options across asset classes. AVRXPX hedges market risk by entering into offsetting transactions in the underlying assets, so AVRXPX is generally not exposed to the direction of markets movements – rather, AVRXPX is exposed to the speed and magnitude of market movements. If the markets for the underlying assets move sharply, AVRXPX can lose money because it may be required to pay out more money on the options it sold than the money that it collected in premium. If those markets are relatively steady, AVRXPX will make money because it will keep the option premium, and will be required to pay out less money on the options that it sold. Essentially, AVRXPX collects “insurance premium” for insuring counterparties against financial risks.
- As outlined in our March 28 comment letter, AVRXPX is designed to be, and since inception has been, less risky than a traditional investment in the S&P 500.
- AVRXPX currently has approximately \$1bn of net assets.
- Because the option strategies in AVRXPX are hedged using offsetting options and futures contracts, the total notional amount of derivatives in AVRXPX exceeds 300% of net assets.



# 10-Day VaR

## 10-Day VaR (95% Confidence Level)



### Fund Descriptions

Fund 1	\$14B Multi-Asset Managed Futures Fund	Fund 4	\$400M Multi-Asset Managed Futures Fund
Fund 2	\$4B Multi-Asset Managed Futures Fund	Fund 5	\$600M 3x Leveraged S&P Index ETF
Fund 3	\$200M Multi-Asset Managed Futures Fund	Fund 6	\$500M Leveraged Volatility ETF

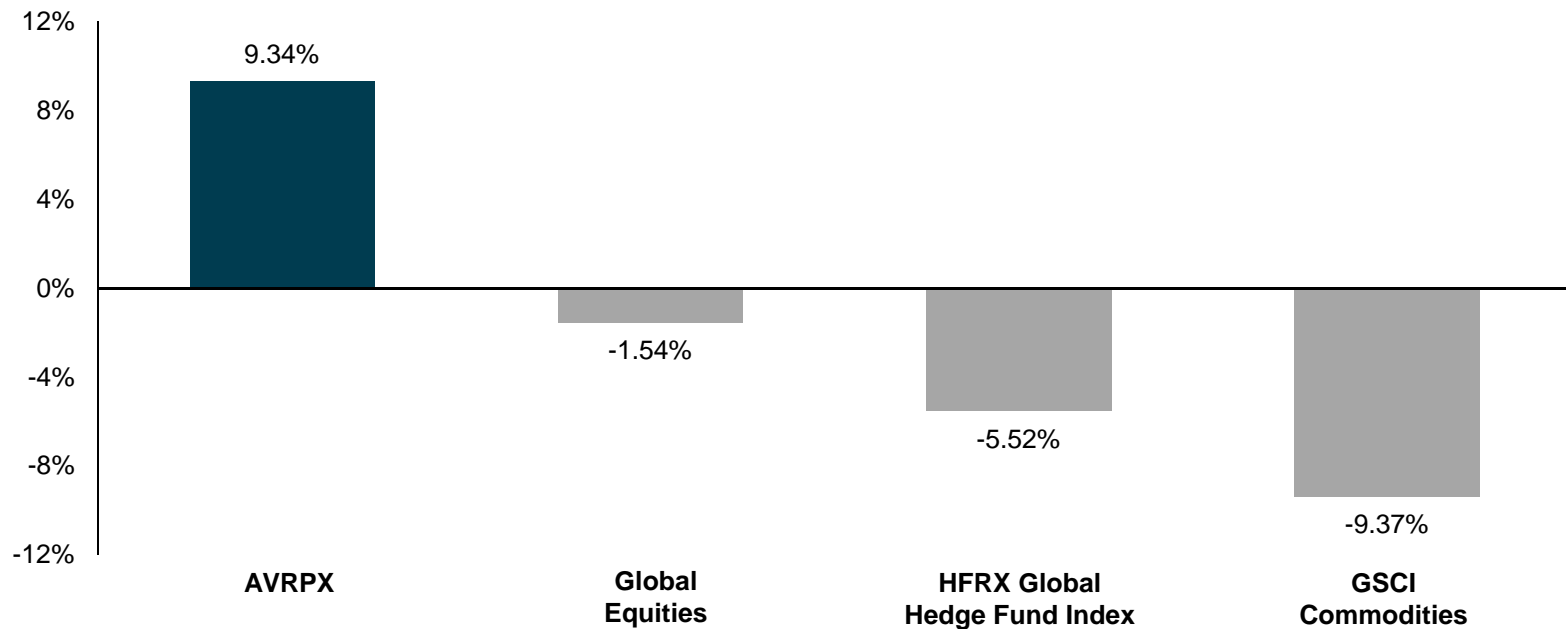
Note: As of 10/21/2016. The start of the measurement period is 10/11/2011 for all funds except those launched after that date. For such funds the measurement start dates are as follows: VRLIX (4/30/2013), AVRPX (4/13/2015), Fund 3 (4/30/2013).

**Materials prepared exclusively for meeting between Stone Ridge and Commission Staff discussing proposed Rule 18f-4. Past performance is not indicative of future results.**



# AVRPX Performance

## Performance of AVRPX Relative to Broad Market Indices Since Inception (4/13/2015-10/27/2016)



<b>Annualized Volatility</b>	9.9%	13.7%	3.9%	23.7%
<b>Maximum Drawdown</b>	6.6%	18.9%	11.3%	39.8%
<b>10-Day VaR (95%)</b>	-2.1%	-4.8%	-1.8%	-7.2%
<b>Correlation to AVRPX</b>	1.0	0.11	0.14	-0.18

Note: Global Equities refers to MSCI ACWI. HFRX Global Hedge Fund Index data is shown through 10/26/2016, the most recent data available.

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