



EXECUTE SUCCESSSM

Edward T. Tilly
Chief Executive Officer

Phone [REDACTED]

March 31, 2016

Via Electronic Submission

Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

RE: File Number S7-24-15 Proposed Rule on the Use of Derivatives by Registered Investment Companies and Business Development Companies

Dear Mr. Fields:

The Chicago Board Options Exchange, Incorporated (“CBOE”) submits this letter in response to the Securities and Exchange Commission’s (“SEC” or “Commission”) request for public comment on proposed Rule 18f-4 (“Rule”) under the Investment Company Act of 1940 (the “Act”). The proposed Rule is intended to create a comprehensive approach to the use of derivatives trading by mutual funds, closed-end funds, exchange-traded funds and companies that elect to be treated as business development companies (collectively, “funds”).

CBOE is the largest U.S. options exchange and creator of listed options. CBOE sets the bar for options and volatility trading through product innovation, trading technology and investor education. CBOE offers options trading on various market indexes as well as options on the stocks of individual corporations and options on exchange-traded products, such as exchange traded funds and exchange traded notes.

In response to the Commission’s request for public comment, CBOE specifically asserts the following: (1) recent evidence shows that most funds that use exchange-listed options (“options-based funds”) are not leveraged; (2) the proposed Rule’s asset segregation requirements may impede the use of exchange-listed options for legitimate risk-reducing and risk management purposes; (3) qualifying-coverage assets should be expanded to include any liquid position security; (4) carve-outs and/or exceptions should be considered for centrally cleared, exchange-listed derivatives that are currently subject to SEC-approved margin requirements;

(5) requiring both portfolio limitations and asset segregation is unnecessarily redundant; and (6) the proposed Rule's definition of exposure and what can be used to offset exposure is ambiguous. These points are addressed in further detail below.

Recent Studies Reveal Less Volatility for Options-Based Funds

Multiple studies analyzing the performance of options-based funds show the inclusion of derivatives in funds tends to improve overall performance and reduce investor risk. CBOE has a specific interest in the performance of options-based funds and sponsored a 2015 study by the Institute for Global and Risk Management ("IGRM") regarding the performance of options-based funds.¹ This study found that strategies employed by options-based funds (including selling covered calls, selling cash-secured puts, buying protective put options, or investing in collared transactions) had volatility-reducing effects on fund performance. Specifically, the study performed an analysis of the equal-weighted performance of options-based funds that made significant use of U.S. stock index options and/or equity options during the 15-year period from 2000 through 2014, and found that: (1) the options-based funds had substantially lower annualized standard deviations (by 2.4 to 12 percentage points) than the Treasury Bond (Citi), S&P 500, MSCI EAFE, and S&P GSCI Indexes; (2) the options-based funds had lower maximum drawdowns than the S&P 500, MSCI EAFE, and S&P GSCI Indexes; (3) the options-based funds had similar returns as the S&P 500 Index, and higher returns than the MSCI EAFE and S&P GSCI Indexes; and (4) the options-based funds had higher risk-adjusted returns (as measured by the Sharpe Ratio, Sortino Ratio, and Stutzer Index) than the S&P 500 and S&P GSCI Indexes. In addition, the study also provided an analysis for performance since mid-1988 that showed lower volatility for key options-based benchmark indexes, including the CBOE S&P 500 BuyWrite Index (BXM). The study further noted that over the last ten years, the number of options-based funds has grown substantially. In fact, at the time of the study, there were at least 119 SEC-registered funds, with an aggregate value of more than \$46 billion in assets under management that were focused on the use of exchange-listed options for portfolio management purposes. A list of the 119 funds and their ticker symbols is provided in the study. CBOE believes this growth trend toward exchange-listed option use by funds is due to the aforementioned positive benefits conferred by funds' use of exchange-listed options and sees no reason to discourage the use of exchange-listed options by funds.

Other studies have yielded similar results to the IGRM study. A 2014 study from the University of Augsburg noted that option-based funds appear to have lower systemic risk and are mainly used for hedging strategies.² This study found that the use of options by mutual funds yields higher risk-adjusted performance compared to nonuser funds. Additionally this study noted that mutual funds' short options positions were the main drivers of the performance-enhancing effect. Research performed by Goldman Sachs similarly suggested that higher-returns

¹ Keith Black and Edward Szado, *Performance Analysis of Options-Based Equity Mutual Funds, CEFs, and ETFs* (January 2015) (<http://www.ingarm.org/papers/view/performanceanalysis>).

² Markus Natter, Martin Rohleder, Dominik Schulte and Marco Wilkens, *The Benefits of Option Use by Mutual Funds* (January 24, 2016), *Journal of Financial Intermediation* (<http://ssrn.com/abstract=2499524> or <http://dx.doi.org/10.2139/ssrn.2499524>).

and lower volatility for options-based funds (when compared to their peer/non-option using funds) resulted in higher risk-adjusted returns.³

Proposed Rule 18f-4

CBOE recognizes that the proposed rulemaking is designed to enhance investor protection and to provide a more comprehensive approach to the regulation of funds' use of derivatives. CBOE appreciates that absence of specific guidance on funds' use of derivatives creates marketplace uncertainty, and that guidance from the Commission can better direct funds in the use of derivatives. However, CBOE is concerned that the proposed Rule, as written, could significantly impair funds' current activities to the detriment of investors. In particular, the inclusion of new requirements, to which funds have not previously been subject, may impair existing, legitimate, and safe derivative use. For example, funds currently segregate assets based upon guidance given by the SEC in both Securities Exchange Act Release No. 10666 and a number of no-action letters. The additional restrictions outlined in the proposal, specifically in the areas of asset segregation and portfolio limitation, may impede funds' use of exchange-listed options, including in situations where options may be employed for risk-reducing purposes.

CBOE understands the SEC's position that some funds who use derivatives extensively have exposures that may substantially exceed the funds' net assets and that those highly leveraged funds could be operating in a manner that is inconsistent with the purposes and concerns underlying section 18 of the Act. However, a review of the proposal and the accompanying White Paper from the Commission's Division of Economic and Risk Analysis ("DERA") reveals that 96% of sampled funds had aggregate exposures of less than 150%.⁴ Further, DERA research did not suggest that the small cross-section of highly leveraged funds were options-based. To restrict the use of derivatives, particularly exchange-listed options, by non-leveraged or reasonably leveraged funds does not align with the objectives of the proposed rulemaking. The proposed Rule should be modified to target the limited funds that abuse the use of derivatives, thus allowing the vast majority of funds to continue to use derivatives to the benefit and protection of investors.

Asset Segregation

CBOE agrees that asset segregation is an important and essential part of any fund's strategy to manage risks associated with its derivatives portfolio. As such, asset segregation to cover potential derivatives losses has always been required of funds. However, CBOE fails to understand the need for the unduly restrictive definition of "qualifying-coverage assets." The proposed Rule would limit qualifying coverage assets to cash, cash equivalents, and underlying/delivery assets. The definition of qualifying-coverage assets should be expanded to include any liquid position security, i.e., securities that are listed for trading on a national securities exchange. The proposal asserts there is risk that liquid assets could decline in value at the same time the fund's potential obligations under its derivatives transactions increase. In the listed-option environment, segregation of liquid position securities, subject to reasonable

³ Goldman Sachs Research, *Mutual Fund Considerations: Enhancing Alpha with Options* (November 27, 2012).

⁴ Daniel Deli, Paul Hanouna, Christof Stahel, Yue Tang and William Yost, *Use of Derivatives by Registered Investment Companies*, Division of Economic and Risk Analysis (2015).

haircuts, has consistently been seen as an effective approach to managing the risk of short option positions. The proposal fails to sufficiently state why current best practices regarding what may be used as derivatives coverage is now insufficient to manage funds' derivatives exposure or why the Commission has so significantly shifted from the position it took in its 1996 no-action letter in which it stated "... it would be consistent with the language and policy of Section 18(f) and Release 10666 to permit a Fund to place any asset, including equity securities and non-investment grade debt, in a segregated account, so long as the asset is liquid and marked to the market daily."⁵

In addition, CBOE feels that the restrictive asset segregation requirements specifically fail to account for the fact that many funds choose to write cash-settled index options against an offsetting portfolio of stocks in order to minimize the potential risk of being assigned on said positions under stressed conditions. By way of example, CBOE is aware of funds that write SPX call options (options based on the S&P 500 Index) and carry a large basket of S&P 500 stocks to manage the risk of the short option position. In the case of a simple equity option, segregating the underlying equity would be sufficient to meet the obligations of the proposed Rule. However, because SPX options are cash-settled, it appears the fund option writers would need to carry cash, in addition to their S&P stock baskets, to meet the requirements of the proposed Rule. In this specific example, the risk of the funds' stock positions declining in value at the same time their short option positions increase in value is practically nonexistent. These funds would need cash to cover the liability of expiring short SPX options only if their stock portfolios increased in value, which would be the case in a rising market. CBOE believes that funds would have little difficulty selling stock to raise cash in such market conditions. If the value of a stock portfolio declined, it is likely that the short SPX option would expire out-of-the-money and, therefore, be worthless, and the fund would have no need to raise cash. CBOE strongly encourages the Commission to consider alternative and additional assets that funds may segregate to meet the obligations of the proposed Rule, especially in instances where the risks of those segregated assets declining in value at the same time their derivatives positions increase in value is minimal.

Central Clearing and Exchange-Listed Options

The Options Clearing Corporation ("OCC") provides central counterparty clearing and settlement services to the 13 listed options exchanges. OCC clearing members, including those carrying positions for funds, are already subject to risk checks and margin requirements. OCC acts as guarantor between clearing parties ensuring that the obligations of the options contracts they clear are fulfilled. As the guarantor for all exchange-listed options transactions, the OCC has a vested interest in developing objective and comprehensive margin requirements that apply to all options positions. The OCC's margin requirements allow for liquid position assets to be segregated to meet margin requirements. Again, it is unclear as to why the Commission would apply asset segregation requirements to listed options that are more restrictive than those of a central derivatives clearing agency. In the absence of a blanket allowance for the use of liquid securities (to meet the asset segregation requirements of the proposed Rule), CBOE would encourage the Commission to consider a carve-out for exchange-listed derivatives (including listed options) that are already subject to the margin requirements of central clearing agencies.

⁵ See Merrill Lynch Asset Management, L.P., SEC Staff No-Action Letter (July 2, 1996) ("Merrill Lynch No-Action Letter"), available at <http://www.sec.gov/divisions/investment/imseniorsecurities/merrillynch070196.pdf>.

Given the protections centralized clearing already offer listed derivatives, a one-size-fits all approach to any derivative, whether OTC or exchange-listed, is unduly burdensome and potentially damaging to investors.

Portfolio Limitations and Exposure Calculations for Exchange-Listed Options

The leverage limits imposed in the proposed Rule could hinder funds' ability to engage in risk-reducing and return-enhancing strategies, such as iron condors and iron butterflies. A recent study analyzed the performance of ten benchmark indexes since mid-1986 and found that the CBOE S&P 500 Iron Butterfly Index (BFLY) and CBOE S&P 500 Iron Condor Index (CNDR) had significantly lower annualized standard deviations and lower maximum drawdowns than the other stock and commodity indexes studied.⁶

In addition, CBOE agrees with the proposal's dissenting opinion, regarding the redundancy of having both asset segregation requirements and the portfolio limitations outlined in proposed Rule 18f-4(a)(1).⁷ There appears to be no need to require portfolio limitations on leveraged funds if they are already required to segregate assets meant to cover the cost of exiting their derivative positions under stressed market conditions. As the dissent suggests, the asset segregation requirement would effectively act as a leverage limitation and eliminate those situations where funds' exposures substantially exceed their net assets.

With respect to portfolio limitations, CBOE further asserts that what may be used to net offsetting derivatives positions may be too restrictive and/or ambiguous in its current form. CBOE notes that offsets under the proposed Rule must be of the "same type of instrument and have the same underlying reference asset, maturity and other material terms." CBOE does not believe that, at least with respect to listed-options, only long positions of the same exact instrument (with the same strike price and expiration date) would be applicable as offsets. The proposal states that the netting provision under the proposed Rule was not designed to enable a fund to liberally disregard or subtract from the fund's exposure calculation "those transactions the fund deems to be hedging or risk mitigating." That being said, CBOE feels that interpreting the netting provision of the proposed Rule to mean that only closing positions may be offsetting positions would be far too conservative in that, at least for listed-options, it fails to account for: (1) positions that, while having different material terms, have traditionally been determined to be offsetting; and (2) a wide-variety of risk-reducing strategies that are effectively proven to reduce exposure.

Accordingly, CBOE suggests it would be prudent to clarify the meaning of "notional exposure" as it pertains to options, and believes that the definition should account for the risk-reducing benefit of long options that offset, and in many cases cap, the exposure of short options held by funds. CBOE believes that a fund holding an aggregate option position with a maximum potential loss that is less than the fund assets without the option position is, by definition, not leveraged. Additionally, CBOE believes that the "maximum potential loss" for option positions

⁶ Keith Black and Edward Szado, *Performance Analysis of Options-Based Equity Mutual Funds, CEFs, and ETFs* (January 2015) (<http://www.ingarm.org/papers/view/performanceanalysis>).

⁷ See Dissenting Statement at Open Meeting on Use of Derivatives by Registered Investment Companies and Business Development Companies (December 11, 2015).

comprising both short puts and short calls should be the greater of either the call positions or the put positions, and not the sum of both exposures. The following examples reflect strategies that illustrate CBOE's position:

1. A fund holds a long portfolio of stocks tracking the Nasdaq-100 Index (NDX) having a value of \$440,000; a short position consisting of 4 NDX at-the-money (4400 strike) call options; and a long position consisting of 4 NDX out-of-the-money (4600 strike) call options each expiring on April 15, 2016. The notional exposure of the short call options is approximately \$880,000 (4 contracts * \$100 multiplier * 4,400 NDX level as of March 18, 2016 * underlying delta of 0.50), which is approximately 2 times the value of the stock portfolio. However, the short options exposure is reduced by the 4 long NDX call options such that the maximum loss of the option "spread" is \$80,000 ((4600 - 4400) * \$100 * 4), which is less than 20% of the value of the stock portfolio. CBOE would not consider this to be a leveraged position because the potential loss due to the short options position is less than the total assets of the fund. Further, the maximum potential loss due to the short options position occurs only if the stock portfolio increases in value.
2. A fund holds a long portfolio of stocks tracking the S&P 500 Index (SPX) having a value of \$205,000; a short position of 3 SPX out-of-the-money (2100 strike) call options and a long position consisting of 2 out-of-the-money (2200 strike) call options, each expiring on April 21, 2017; and a long position of 1 SPX at-the-money (2050 strike) put option and a short position consisting of 1 SPX out-of-the-money (1900 strike) put option each expiring on April 21, 2017. The notional exposure of the short options is approximately \$350,000 ((3 contracts * \$100 multiplier * 2050 SPX level as of March 18, 2016 * underlying delta of 0.45 for the call) + (1 contract * \$100 multiplier * 2050 SPX level as of March 18, 2016 * 0.35 for the put), which is approximately 1.8 times the value of the stock portfolio. However, exposure for 2 of the short options is reduced by the 2 long SPX call options such that the maximum loss of the option "spread" is \$20,000 ((2200 - 2100) * \$100 * 2), which is less than 10% of the value of the stock portfolio. The remaining short call is covered by the value of the stock portfolio. If the SPX rose above 2200, the value of the stock portfolio and remaining short call option would be capped at \$220,000, which would still be significantly greater than the maximum potential loss of the short call spread. The short put option is covered by the long at-the-money put option, which protects the stock portfolio from a loss down to an SPX value of 1900. CBOE would not consider this to be a leveraged position because the potential loss due to the short call options position is less than the total assets of the fund. The put option spread serves as a hedge, increasing in value as the stock portfolio declines.
3. A fund holds cash or cash equivalents equal to \$110,000 and an "Iron Condor" spread: a short position consisting of 10 Russell 2000 (RUT) out-of-the-money (1150 strike) call options and 10 RUT out-of-the-money (1050 strike) put options expiring on April 15, 2016; and a long position consisting of 10 RUT out-of-the-money (1200 strike) call options and 10 RUT out-of-the-money (1000 strike) put options expiring on April 15, 2016. The notional exposure of the short call options is approximately \$275,000 (10 contracts * \$100 multiplier * 1,100 the RUT level as of March 18, 2016 * underlying delta of 0.25), which is approximately 2.5 times the value of the cash held by the fund.

Additionally, the notional exposure of the short put position is approximately \$275,000 (10 contracts * \$100 multiplier * 1,100 the RUT level as of March 18, 2016 * underlying delta of 0.25), which is approximately 2.5 times the value of the cash held by the fund. The total notional exposure of short positions is approximately \$550,000. However, the exposure of the short call options is reduced by the 10 long RUT call options such that the total maximum loss of the call option "spread" is \$50,000 $((1200 - 1150) * \$100 * 10)$, which is less than 50% of the value of cash held by the fund. The exposure of the short put options is similarly reduced by the 10 long RUT put options such that the total maximum loss of the put option "spread" is \$50,000. The maximum loss for the combined put and call positions is \$50,000 due to the fact that if the call spread finishes in-the-money at expiration, the put spread will expire worthless; likewise, if the put spread finishes in-the-money at expiration, the call spread expires worthless. CBOE would not consider this to be a leveraged position because the potential loss due to the short options position is less than the total assets of the fund.

CBOE requests that the Commission carefully consider the examples above when determining: (1) what constitutes the definition of "exposure" and "notional amounts," and (2) what may be used to offset notional exposure under the proposed Rule.

CBOE appreciates the Commission's efforts to consolidate guidance on funds' use on derivatives and limit investor risk. We question the need to include listed options in the rulemaking. CBOE suggests the Commission reexamine the asset segregation and portfolio limitation requirements of the proposed rule to ensure they will not impede proven and prudent investment strategies. We welcome the opportunity to discuss any of these issues further.

Sincerely,



Edward T. Tilly

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