

February 15, 2019

Via E-Mail (regs.comments@federalreserve.gov)

Ann E. Misback, Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, N.W.
Washington, D.C. 20551
RIN 7100–AF22 [Docket R–1629]

Via E-Mail (regs.comments@occ.treas.gov)

Legislative and Regulatory Activities Division Office of the Comptroller of the Currency 400 7th Street SW, Suite 3E–218 Washington, D.C. 20219

RIN 1557-AE44 [Docket OCC-2018-0030]

Via E-Mail (comments@fdic.gov)

Robert E. Feldman, Executive Secretary Federal Deposit Insurance Corporation 550 17th Street NW Washington, D.C. 20429 Attention: Comments

RIN 3064-AE80

RE: Standardized Approach for Calculating the Exposure Amount of Derivative Contracts—Notice of Proposed Rulemaking

Ladies and Gentlemen:

The Options Clearing Corporation ("OCC") appreciates the opportunity to comment on the rule proposal set forth in the above-referenced notice of proposed rulemaking (the "Proposal")¹ published jointly by the Board of Governors of the Federal Reserve System (the "Board"), the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency (together, the "Agencies").

¹ Standardized Approach for Calculating the Exposure Amount of Derivative Contracts—Notice of Proposed Rulemaking, 83 Fed. Reg. 64660 (December 17, 2018).

I. About OCC and the Listed Options Market

OCC, founded in 1973, is the world's largest equity derivatives clearing organization. In addition to clearing other products, OCC clears exchange-listed securities options ("<u>Listed Options</u>") as the sole clearing agency for all U.S. options exchanges. OCC operates under the jurisdiction of both the Securities and Exchange Commission ("<u>SEC</u>") and the Commodity Futures Trading Commission ("<u>CFTC</u>"). In July 2012, the Financial Stability Oversight Council designated OCC as a systemically important financial market utility ("<u>SIFMU</u>") under Title VIII of the Dodd-Frank Act. As a SIFMU, OCC is also subject to oversight by the Board.

Listed Options provide investors with a valuable risk management tool. They are an efficient and cost-effective means of adjusting an investment's risk/return characteristics; for instance, investors can use them to hedge their exposures to equity positions. These features tend to make participation in the underlying equity markets more attractive to many participants, thus increasing the liquidity of the equity markets and promoting capital formation and economic growth.

OCC's clearing members clear transactions for all participants in the Listed Options market, including market makers. Market makers supply liquidity to the Listed Options market by taking the opposite side of trades from buyers and sellers of options, including during times of market stress. In return for providing this liquidity, market makers seek economic returns based on trade spreads, while maintaining risk-neutral portfolios. Unlike the equity markets, where customer orders frequently interact directly, the Listed Options market relies on market makers as the predominant source of liquidity for the investing public.² Thus, market makers are critical to the market's proper functioning.

The stability that OCC provides the options market is intertwined with the financial strength of its clearing members. Clearing members that are affiliated with U.S. bank holding companies must comply with the Agencies' regulatory capital rules (collectively, the "Capital Rule"). The Capital Rule imposes capital requirements by reference to the risk-weighted asset ratios and the supplementary leverage ratios of the banking organizations of which the clearing members are a part.

II. Summary

OCC believes that it is vitally important for the Agencies to implement a new standardized approach for calculating credit exposure amounts with respect to derivative contracts under the Capital Rule. The approach set forth in the Proposal is called the standardized approach for counterparty credit risk ("SA-CCR"). Incorporating SA-CCR into the Capital Rule is critical to ensuring the continued vitality of the Listed Options market.

² For instance, in 2018, market makers registered with the Chicago Board Options Exchange ("Cboe") take one side of approximately 90.5 percent of all customer trades in options ("<u>SPX Options</u>") on the S&P 500 Index ("<u>S&P Index</u>") executed on Cboe, based on an analysis of SPX Options data for the calendar year 2018.

The Capital Rule's current approach for calculating banks' exposures to derivatives contracts—called the Current Exposure Method ("CEM")—is a risk insensitive approach to measuring exposures to derivatives, including Listed Options. More specifically, CEM limits recognition of risk-reducing positions of clearing clients (e.g., options and other positions, with respect to the same underlying security, on opposite sides of the market). That limitation in turn serves as a disincentive for hedging market exposures. CEM also overstates the exposure of clearing clients' options positions by estimating risk based on the notional value of an option without adjustment for how the value of the option will change with changes in the price of the underlying instrument (the option's so-called "delta"). These limitations of CEM are particularly acute when applied in the context of market maker clearing clients because those clients typically maintain large, but risk-neutral, inventories of positions.

Most significantly, these limitations are harming the Listed Options market. Market makers serve as the backbone of the Listed Options market, providing liquidity in the approximately 900,000 equity options series and other Listed Options products traded on the options exchanges. Unlike liquidity providers in other markets, Listed Options market makers typically do not end the trading day flat from a position perspective; rather, they end the day flat from a risk perspective. They have expressed significant concern that their ability to provide liquidity to the market is increasingly limited due to pressures from bank affiliated clearing members to reduce accumulated trade exposures because those exposures, while not producing significant risk, generate significant capital charges for the clearing members' consolidated organizations that are disproportionate to the risk presented by them. OCC is concerned that such constraints could reduce liquidity and exacerbate price swings and volatility in times of market stress—destabilizing markets and punishing investors during turbulent times.

In light of the above, OCC wishes to express its deep appreciation to the Board and the other Agencies for their efforts in developing and seeking public comment regarding the Proposal. OCC has discussed CEM's shortcomings with members of the Board's staff since 2014. The Proposal would address the key concerns raised by OCC during those discussions, including those described above regarding limitations on offsetting clearing client positions and adjustments to the option notional amounts. Moreover, the Proposal would give banking organizations the option to adopt SA-CCR before its adoption became mandatory, and OCC believes permitting that flexibility is important, given the urgent need for this reform.

OCC also welcomes the invitation to comment on whether independent margin should be recognized in the calculation of the leverage ratio. OCC strongly believes that SA-CCR should not be modified when incorporated into leverage ratio exposure calculations and should thus permit clearing members of central counterparties ("CCPs") to recognize risk-reducing independent margin

³ Options have a "delta-dependent" sensitivity to the price of the underlying shares. That means that, at any given point in time, the value of an option will respond differently to changes in the price of the underlying shares depending on how deeply the option is in-the-money (or how far the option is out-of-the-money). The notional value of the option will not change with market movements of the underlying security and therefore is not an accurate or relevant representation of the potential risk.

in connection with total leverage ratio exposure calculations. OCC's comments in that regard are set forth in Part III below.

As stated above, the Proposal addresses OCC's key concerns. There are, however, three related technical issues that bear further consideration, which are discussed in Part IV below and may be summarized as follows:

- Clearing members should be permitted to net a clearing client's Listed Options positions and cleared futures positions for purposes of calculating potential future exposure (PFE).
- Clearing member exposures related to cleared transactions should be calculated based on a minimum risk horizon of five days rather than 10 days.
- The Proposal appears to inappropriately restrict offsets within an equity hedging set in certain circumstances; banking organizations should be permitted to decompose certain exposures for SA-CCR calculation purposes.

III. Supplementary Leverage Ratio

A. <u>SA-CCR Should Permit CCP Clearing Members to Recognize Independent Margin in Connection with Total Leverage Ratio Exposure Calculations</u>

OCC acknowledges that supplementary leverage ratio capital requirements are intended to complement risk-weighted asset capital requirements and thus entail different calculations. However, OCC believes that SA-CCR should be incorporated into leverage ratio exposure calculations without requiring clearing members of CCPs, including OCC's clearing members, to de-recognize independent margin (referred to below as "Margin Derecognition").

The OCC believes that Margin Derecognition does not take into account the important risk-reducing properties of independent margin. The primary resource (or control) used by clearing members to mitigate market and credit exposure to clients is independent margin. Any failure to recognize the risk-reducing nature of independent margin would only serve to mis-align incentives and weaken the regulatory framework that has served to backstop our financial markets for many years. Clearing members require their clients to post independent margin to reduce their exposure to their clients in the case of a client default. Not recognizing this margin therefore overstates the exposure clearing members have to their clients. This is particularly concerning as independent margin is segregated and cannot be used to increase a clearing firm's leverage. As a consequence, Margin Derecognition leads to significantly higher capital requirements relative to actual risks, and the higher capital requirements have led bank-owned clearing firms to reduce their client clearing activity for listed derivatives. OCC's concerns in this regard echo concerns expressed by other

CCPs.⁴ These concerns are consistent with the findings of a derivatives assessment team (the "FSB DAT") that was convened by the Financial Stability Board to examine various incentives to market participants to centrally clear derivatives and that published its final report in November 2018 (the "FSB DAT Report").⁵ The FSB DAT Report stated that "[a]nalysis of quantitative and qualitative survey data and market outreach suggest that the treatment of initial margin in the leverage ratio can be a disincentive for client clearing service providers to offer or expand client clearing." Indeed, the FSB DAT Report went on to provide the following detail:

The only capital standard which the majority of respondents to the client clearing service provider survey stated acted as a disincentive to the provision of client clearing services was the leverage ratio. . . . When asked about the impact of the leverage ratio on their ability to offer client clearing, 89% of client clearing service providers responded that it had some negative impact or a significant negative impact on their ability to offer client clearing, with two thirds saying it had a significant negative impact.⁷

In addition to this disincentive, the increase in capital that must be held by clearing banks due to current leverage ratio requirements has heightened concerns regarding portability of client positions where a clearing member fails. If clearing members are less willing to take on clients due to the leverage ratio in normal times—as suggested above—they will be even more unlikely to consider taking on additional clients during a stressed period, when portability will be of utmost importance. That reluctance would make a successful default management auction of positions far less likely to succeed, as healthy clearing members would not be able or willing to bid as aggressively because of leverage ratio impacts. That circumstance would result not only in risk for individual clearing clients, but also in potential systemic risk. The FSB DAT Report indicated that 41% of the clearing clients surveyed in connection with the report said that, after the default of a client clearing service provider, "they expect they would lose access to the cleared OTC derivatives market (either permanently or temporarily) or have their positions closed out by the CCP. A further 18% believed that they would only be able to port successfully by paying higher clearing fees."

⁴ OCC is among the signatories of a letter, dated January 16, 2019, submitted by the Global Association of Central Counterparties (CCP12) to the Basel Committee in response to the Basel Committee's consultation regarding the leverage ratio treatment client cleared derivatives.

⁵ FSB DAT, *Incentives to centrally clear over-the-counter (OTC) derivatives: A post-implementation evaluation of the effects of the G20 financial regulatory reforms—final report* (November 19, 2018).

⁶ FSB DAT Report at 4.

⁷ FSB DAT Report at 64-65.

⁸ FSB DAT Report at 54.

Thus, OCC believes that the Proposal, in its treatment of independent margin through Margin Derecognition, would perpetuate, and perhaps exacerbate, disincentives for the central clearing of derivatives, and thus does not give adequate weight to the benefits of such central clearing. OCC therefore believes SA-CCR should not require Margin Derecognition when supplementary leverage ratio exposures are calculated with respect to clearing services.

IV. Other Considerations

A. <u>Clearing Members Should Be Permitted to Net a Clearing Client's Listed Options</u>

<u>Positions and Cleared Futures Positions for Purposes of Calculating Potential Future Exposure (PFE)</u>

The Proposal's treatment of "hybrid netting sets" limits the ability of banking organizations to net across such netting sets for purposes of calculating Potential Future Exposure ("PFE").

OCC is concerned that the limitation would result in OCC clearing members' not being permitted to net Listed Options (which are subject to daily margining to market) and cleared futures (which are subject to daily settlement to market) when calculating their PFE with respect to clearing clients. The limitation on netting may be appropriate in the case of most hybrid netting sets. However, the Agencies' rationale for the limitation—based on the fact that margined and unmargined positions typically have different risk horizons—would not support applying the limitation to OCC clearing members. Thus, OCC requests that the Agencies modify the Proposal in a manner that would permit OCC clearing members to offset Listed Options positions against cleared futures positions in the PFE component calculation.

When an OCC clearing member calculates its exposure to a clearing client, it must evaluate the netting set of derivative exposures resulting from the clearing client's cleared transactions. ⁹ Clearing clients, particularly market makers, often have portfolios that include cleared futures positions that offset the risk of Listed Option positions. Such futures positions represent an important means by which market makers maintain hedged (risk-neutral) portfolios. For instance, market makers in options on the S&P Index use futures on the S&P Index to hedge their exposures to such options. In this respect, the risk-reducing nature of offsetting futures and options positions (on the same underlying) has long been recognized in the Listed Options market through the crossmargining program that OCC and the Chicago Mercantile Exchange ("CME") have implemented. ¹⁰

⁹ SA-CCR, like CEM, would require a clearing member of a CCP to calculate credit exposure to clearing clients and to hold capital against that exposure accordingly. And like CEM, SA-CCR would not treat such exposures as "cleared transactions," despite the clearing context. By definition, "cleared transactions" result in a banking organization having credit exposure to a CCP. Thus, when a banking organization that is a CCP clearing member guarantees clearing client obligations—as do OCC clearing members—the clearing member does not treat the client exposure as a "cleared transaction" because it is exposed to clearing client credit risk (not to the credit risk of the CCP itself). *See* Proposal at 64680 (confirming that the definition of "cleared transaction" would not be changed).

¹⁰ OCC and CME first implemented their cross-margining program in 1989 to facilitate the cross-margining of positions in options cleared by OCC with positions in futures and commodity options cleared by CME. The program addressed the fact that clearing members may have been required to meet higher margin requirements at each

The OCC/CME program recognizes margin offsets between futures and options positions on the same underlying product.

However, from a Capital Rule margining perspective, the Proposal treats Listed Options and cleared futures differently. Listed Options are margined (i.e., collateralized); margin that is collected by OCC clearing members from their clearing clients is subject to adjustment on a daily basis ("Daily Margining"). Cleared futures, however, are treated as being "settled to market" on a daily basis ("Daily Settlement"); under the Proposal, they would be treated as unmargined derivative contracts. As a consequence, it appears that OCC clearing members would not be permitted to offset Listed Options and cleared futures in the PFE component of their exposure calculations related to clearing clients that trade both kinds of derivatives (including market makers). 12

OCC believes that such an outcome would not be warranted by the Agencies' rationale for not permitting PFE offsets between the margined and unmargined elements of a hybrid portfolio. The Proposal states the rationale as follows:

[M]argined derivative contracts cannot offset unmargined derivative contracts in the PFE component calculation [with respect to a hybrid netting set] because of different applicable risk horizons. Similarly, derivative contracts with different MPORs cannot offset each other.

However, the "applicable risk horizon" of Listed Options and cleared futures is the same. Moreover, not only is the risk horizon the same, but it is a single day. Although the rationale stated above makes sense for a typical hybrid portfolio—where unmargined derivatives have risk horizons that accord with their remaining terms rather than any related margining requirements—it does not make sense where the unmargined derivatives, like cleared futures, are subject to Daily Settlement. An OCC clearing member should not be required to hold different amounts of capital for two market maker clearing clients having portfolios with identical risk profiles where the only difference is that one market maker hedges its Listed Options solely with other Listed Options while the second market maker hedges its Listed Options with cleared futures transactions.

clearinghouse than were warranted by the risk of combined positions, because each portfolio was margined separately without regard to positions held in the other portfolio. *See* Securities Exchange Act Release Nos. 26607 (March 7, 1989), 48 FR 10608 (March 14, 1989) (SR-OCC-89-1); 27296 (September 26, 1989) (SR-OCC-89-11).

¹¹ "For a derivative contract in which on specified dates any outstanding exposure of the derivative contract is settled and the terms of the derivative contract are reset so that the fair value of the derivative contract is zero, the remaining maturity of the derivative contract is the period until the next reset date. <u>In addition, derivative contracts with daily settlement would be treated as unmargined derivative contracts.</u>" Proposal at 64678 (footnote excluded) (emphasis added).

¹² A netting set comprising cleared futures (derivatives that are subject to Daily Settlement) and Listed Options (derivatives that are subject to Daily Margining) would appear to be a hybrid netting set because a hybrid netting set is "a netting set composed of at least one derivative contract subject to variation margin agreement... and at least one derivative contract that is not subject to such a variation margin agreement." Proposal at 64668.

Thus, the OCC requests that the final rule permit OCC clearing members to offset Listed Options positions (which are subject to Daily Margining) against cleared futures positions (which are subject to Daily Settlement) in the PFE component calculation when they determine their exposure under SA-CCR with respect to the netting set of a clearing client.

B. <u>Clearing Member Exposures Related to Cleared Transactions Should Be Calculated</u> Based on a Minimum Risk Horizon of Five Days Rather than 10 Days

OCC believes that clearing member exposures related to cleared transactions—including exposures to clearing clients—should be calculated based on a minimum risk horizon of five days. However, under the Proposal, a minimum risk horizon of 10 days would be applied in two key areas related to the Proposal's treatment of minimum period of risk ("MPOR").

The Proposal describes an MPOR as "the period between the last exchange of collateral before the close out of the derivative contract (as in the case of default of the counterparty) and the replacement of the contract on the market." The Proposal makes the following three related statements regarding MPORs:

For derivative contracts that are not cleared transactions, MPOR would be floored at 10 business days.

For derivative contracts between a clearing member banking organization and its client that are cleared transactions, MPOR would be floored at five business days.

Under the capital rule, however, the exposure of a clearing member banking organization to its clearing member client is not a cleared transaction . . . where the clearing member banking organization provides a guarantee to the CCP on the performance of the client [as do OCC clearing members]. Accordingly, in such cases, MPOR may not be less than 10 business days. ¹⁴

As indicated in the last of the statements above, the Capital Rule does not currently treat exposures of CCP clearing members to their clearing clients as "cleared transactions." The Proposal would not alter that treatment. As a consequence, if the Proposal is not modified, such exposures will be subject to an MPOR floor (i.e., a minimum risk horizon) of 10 days. Moreover, clearing member exposures to CCP default fund contributions will be overstated because the Proposal would

¹³ Proposal at 64665.

¹⁴ Proposal at 64677.

require CCPs to apply a 10-day MPOR when CCPs determine their "hypothetical capital requirements" (" \underline{K}_{CCP} ") for use by their clearing members in related exposure calculations. ¹⁵

Those two elements of the Proposal overstate the risk of closeout with respect to the cleared derivative positions of clearing clients. Unlike exposures to margined OTC derivative positions, exposures to margined positions of clearing clients are subject to rigorous regulatory requirements that are imposed by, for instance, derivatives exchanges and CCPs (such as OCC) and that reduce risks associated with such exposures in a manner similar to exposures directly to a CCP (i.e., exposures to "cleared transactions" as defined under the Margin Rule). All clearing-related exposures are thus effectively subject to the same minimum margining levels and the same discipline with respect to daily adjustment, and all such exposures should be viewed as having equivalent risk horizons.

Moreover, both elements of the Proposal are inconsistent with two aspects of the Capital Rule's current treatment of clearing member exposures to clearing clients. First, the Capital Rule's current version of CEM allows clearing members to apply a scaling factor adjustment when they calculate their exposures to clearing clients; that scaling factor accords with a minimum risk horizon of five days; ¹⁶ the Proposal would not change CEM in that regard. Second, the Capital Rule's current internal models methodology ("<u>IMM</u>") permits advanced approaches clearing members to reduce MPORs in an equivalent manner when determining their exposures to clearing clients. ¹⁷

OCC thus requests that the Agencies modify the Proposal to permit clearing member banking organizations, such as OCC clearing members, to apply a minimum five-day MPOR when calculating exposures to clearing clients. Similarly, the Agencies should modify the Proposal with respect to the manner in which capital requirements are determined for qualifying CCP (" \underline{QCCP} ") clearing member exposures to QCCP default funds. The calculation of K_{CCP} (required in connection with such determinations) should also apply an MPOR of five days, rather than 10 days as reflected in the Proposal.

In the Proposal, the Agencies stated that they "intend for the proposed implementation of SA-CCR . . . to be substantially consistent with international standards issued by the Basel

¹⁵ See Proposal at 64682.

[&]quot;[A] clearing member banking organization may calculate its exposure amount to a client by multiplying the exposure amount, calculated using the CEM, by a scaling factor of no less than 0.71, which represents a five-day holding period. . . . The agencies believe that the recognition of a shorter close-out period appropriately captures the risk associated with such transactions while furthering the policy goal of promoting central clearing." 78 Fed. Reg. 62018 (October 11, 2013) (the "Capital Rule Adopting Release") at 62100.

[&]quot;Consistent with the scaling factor for the CEM . . . , an advanced approaches banking organization may reduce the margin period of risk when using the IMM to no shorter than 5 days [when calculating its exposure at default (EAD) for client-facing cleared derivative trades]." Capital Rule Adopting Release at 62140 n. 202.

Committee on Banking Supervision ("<u>Basel Committee</u>")."¹⁸ OCC notes that its requested modifications would be consistent with the international standards issued by the Basel Committee.¹⁹

C. The Proposal Appears to Inappropriately Restrict Offsets Within an Equity Hedging
Set in Certain Circumstances; Banking Organizations Should Be Permitted to
Decompose Certain Exposures for SA-CCR Calculation Purposes

OCC is concerned that the Proposal would inappropriately restrict offsets within hedging sets of OCC clearing clients, particularly Listed Option market makers. As noted, market makers are critical to the proper functioning of the Listed Options market, serving as the predominant source of liquidity in the market. Inappropriately limiting offsets within their portfolios could harm the overall market. As discussed below, OCC clearing members should be permitted to decompose certain exposures within such hedging sets for SA-CCR calculation purposes.

An example perhaps best demonstrates OCC's concern. Market makers often engage in Listed Option transactions for which the underlying economic exposure is an equity index, but the form that the exposure takes may vary. Thus, for example, market makers trade (i) options ("SPY Options") on shares of the SPDR S&P Index exchange-traded fund ("SPDR Shares") and (ii) SPX Options on the S&P Index itself. In many cases, the positions that a market maker takes in the course of meeting market demand for one kind of option (e.g., SPY Options) are hedged with the other kind of option (e.g., SPX Options) and/or the underlying (e.g., SPY Shares), in an effort to maintain a risk neutral portfolio.

The economic profiles of SPY Options and SPX Options are, for all practical purposes, the same, as are the economic profiles of SPDR Shares and the S&P Index itself. Indeed, they have historically tracked one another in an almost identical fashion.²⁰

However, the Proposal would permit full offset within an equity hedging set only for positions with respect to the same "reference entity" within the hedging set. For positions with respect to different reference entities, only a partial offset would be permitted. The Proposal explains:

The formula [to determine the hedging set amount for equity derivative contracts] would allow for full offsetting for . . . equity contracts referencing the same entity, and would use a single-factor

¹⁸ Proposal at 64662.

¹⁹ See Basel Committee, The standardized approach for measuring counterparty credit risk exposures, March 2014 (rev. April 2014) at 13.

²⁰ For instance, the SPDR Shares traded at a .04% discount to the net asset value of the SPDR Shares exchange-traded fund in the fourth quarter of 2018. *See* State Street Global Advisors, *SPDR S&P 500 ETF* (https://us.spdrs.com/en/etf/spdr-sp-500-etf-SPY).

model to allow for partial offsetting when aggregating across distinct reference entities.²¹

OCC believes it is unclear how to apply the described formula to, for instance, a portfolio that includes options on an exchange-traded fund that tracks a particular index and options directly on the same index—such as SPY Options and SPX Options, both of which relate to the S&P Index. From an economic perspective, the underlying is identical. However, the question arises as to whether both instruments represent the same "reference entity." In that regard, OCC is the issuer of both SPY Options and SPX Options, but holders of SPY Options would receive SPDR Shares upon exercise, whereas holder of SPX Options would receive the cash value of the index upon exercise.

OCC is concerned that because the Proposal focuses on "reference entities"—and, for example, because an exchange-traded fund and the underlying index itself are not the same legal entity—full offset may not be permitted among them. If full offset were not permitted, it would appear that the partial offset would be only 64% of the full offset.²²

OCC believes that, given the practical economic equivalence of these different instruments, permitting only a partial offset in the manner described would be unnecessarily punitive for OCC clearing members when they calculate the capital that they must hold against the credit risk of their clearing clients. In practical effect, there is no significant credit risk to a Listed Options market maker with respect to offsetting positions in the instruments described above, because of how closely they track the underlying index. A partial offset between different equity indexes is reasonable, as is a partial offset where single name entities represent different economic exposures. However, partial offsets would be unnecessarily conservative with respect to options on different instruments that are designed to closely track, and have historically closely tracked, the same index.

To address this problem, OCC requests that the Agencies modify the Proposal in a manner that would permit banking organizations to calculate exposures to positions such as SPY Options and SPX Options by reference to the positions' components. Thus, both a SPY Option and a SPX Option would be decomposed for calculation purposes, with exposures then determined based on their components (i.e., the equities that compose the S&P Index). Such an approach would ensure that economically equivalent positions are treated equivalently for exposure calculation purposes, and not inappropriately subject to partial offsets.

[an] equity index would receive a correlation factor of 80 percent The pairwise correlation between two entities is the product of the corresponding correlation factors, so that the pairwise correlation . . . between two indices is 64 percent.

Proposal at 64671.

²¹ Proposal at 64670.

²² The Proposal explains that:

* * *

We appreciate the opportunity to submit these comments, and would be pleased to discuss them in detail with the Agencies as the Proposal is further considered.

Respectfully submitted,

Craig S. Donohue Executive Chairman The Options Clearing Corporation