



Via Electronic Submission

August 26, 2019

Vanessa A. Countryman
Secretary
Securities and Exchange Commission
100 F. St. NE
Washington, D.C. 20549

Christopher Kirkpatrick
Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street NW
Washington, D.C. 20581

Re: Customer Margin Rules Relating to Security Futures

Dear Ms. Countryman and Mr. Kirkpatrick:

OneChicago, LLC (“OneChicago”) appreciates the opportunity to comment on the Commodity Futures Trading Commission’s (“CFTC”) and the Securities and Exchange Commission’s (“SEC”) proposed rule for Customer Margin Rules Relating to Security Futures. As the only domestic exchange listing Single Stock Futures (“SSFs”), OneChicago has the clearest understanding of how security futures are used by market participants and we are happy to share our perspective.

OneChicago is supportive of regulatory changes which more closely align the level of margin with the level of risk. While a change from 20% minimums to 15% minimums for security futures moves in this direction, it does not remove the burden of over-margining, the topic of this paper. Currently, 92% of OneChicago’s SSFs are margined at a level greater than is set by the clearinghouse for comparable products, which are equity swaps. Under the proposed rule, 84% of SSFs will still be over-margined. At best, the CFTC’s and SEC’s (collectively the “Commissions”) proposal is a first-step towards the risk-based margining that is needed in the SSF marketplace. In their analysis, the Commissions fail to compare SSF margins to the margins for competitive products and critically, seem to ignore the foundational cornerstone of future market protection, daily variation pay/collect. After reviewing all the Comment letters from 20 years ago, it is striking that variation pay/collect was not discussed. It is time for the Commissions to re-examine their positions given the passage of time and empirical evidence as to the use case for security futures. OneChicago believes moving to a risk-based model is appropriate and we develop our discussion below.

SSFs have the potential to bring significant positive innovations to the financial services sector. Unfortunately, the resultant margin regime kneecapped SSFs relative to their competition - total return swaps, and the transaction they are used in, stock loan and equity repos. While OTC market for U.S. equity derivatives grew 700% from \$134 billion notional to \$1,076 notional from 2002 to 2018, SSFs

have not flourished, SSF notional value is less than 1% of the OTC notional value.¹ Unfortunately, the margin regime in place today and the proposed margin regime incentivizes market participants to transact in other environments.

This is a very simple analysis. Customer A wants to get synthetic exposure to an equity. “A” sees two derivatives that appear to act identically and clear at the same clearinghouse. He puts 50% of his position on in each derivative. At the end of the day, it appears that both derivatives have moved in sympathy to the underlying in an identical way. But as those derivatives pass through the clearing portal into the same risk pool, something changes. One derivative requires \$5 in margin; while the second requires \$10 in margin. We ask the Commissions and all who read this paper, to think about which one you would choose going forward? This is the problem with the Commissions’ margin scheme; it is picking winners and losers in direct contravention of Congress’s directive.

By the end of this comment letter, several points should be clear. SSFs are a delta one derivative used in equity finance transactions and compete with OTC delta one derivatives such as the total return swap, master security lending agreements, and master security repurchase agreements. It is critical to understand that no option or combination of options can be used in these financing transactions. We will argue that the strategy based margin regime in place today does not level any playing field with options. Instead, they act as a barrier to entry for competition with OTC derivatives. SSFs are, and even with the proposal will continue to be, at a significant competitive disadvantage to their economic equivalents due to margin. Unlike equity markets and options markets, SSF markets (and all futures markets) have the frontline discipline and protection against systemic risk through variation pay/collect cycles which makes adding a strategy based margin on top of that an inefficient redundancy. The Commissions could correct this discrepancy by implementing the risk-based margining schemes used by all derivative clearinghouses and by all other SSF products around the globe.

Part 1: Equity Finance Transfers

a. What is the Purpose of Equity Finance?

In order to understand SSFs, one must understand the role they play in the marketplace and that means understanding equity finance.² The goal of equity finance is to realize the lowest cost to carry a position or receive the highest yield on idle assets. The capital outlays associated with purchasing a stock position tie up a large amount of capital for market participants, forcing participants to forego interest on that capital. These costs reduce returns and exert downward pressure on liquidity in equity markets. As a result, market participants engage in transactions to defray the financing costs of equity positions.

There are three basic types of equity finance transactions. First, they can be used to put customers into a synthetic equity position. In the OTC market, this transaction is done by large banks and broker-dealers (“BDs”) at a Delta One desk. The Delta One desk will give the customer synthetic exposure to the equity via a derivative. However, because the Delta One desk does not want exposure to the equity, they will pre-hedge the position by accumulating an equivalent position in the underlying shares. After the hedge is

¹OTC statistics from <https://stats.bis.org/statx/srs/table/d8?p=20021&c=> and <https://stats.bis.org/statx/srs/table/d8?p=20182&c=> last accessed on August 22, 2019.

While SSFs are not substitutes for equity options¹, for comparison purposes U.S. equity option volume grew almost 600% from 780 million to 5.2 billion contracts. <https://www.theocc.com/webapps/historical-volume-query> last accessed on August 22, 2019.

² For another explanation of this topic, see OneChicago’s 2018 comment letter on SFP position limits. Downey, David. “Re: Position Limits and Position Accountability for Security Futures Products”. October 1, 2018. Pg 1-3.

established, the desk prices the derivative by adding an interest rate to the hedge price. The interest rate is risk-free income for the desk. The derivative used in this transaction is a total return equity swap. On the retail side, this is accomplished via a margin loan.

Second, equity finance transactions can temporarily transfer³ a securities position to another party in exchange for an equivalent derivatives position and cash. This transaction allows the market participant to retain exposure to the equity (through the derivative) while recouping the capital used to purchase the stock. This gives the participant access to capital, and the opportunity to earn a profit on that capital, without having to sell their equity position. The other side of the transaction receives a long stock position through the transfer and a short derivative position. This combined position is perfectly hedged and the participant earns a risk-free profit which is the interest rate. We will note that this is identical to the Delta One desk position in a total return swap. At the end of the transfer period, a reversing transaction occurs, returning both participants to their original positions. This is an equity repo.

Third, transfer transactions are used in securities lending. In securities lending, the transfer transaction will look identical to one used for a repo except that the participant is seeking access to shares instead of access to cash. The participant that receives shares in the initial transfer will then sell the stock through the national market system to animate the surviving derivative. The transfer itself does not expose the party to risk, selling the stock does. At that point, they hold a derivative which gives them short exposure to the stock.⁴ Contrary to common misconception, the short seller does not realize their profit by buying back the short at a lower price. They realize their profit through the daily mark to market collateral payments over the life of the derivative. The other party's cost of carrying their equity exposure is reduced from the interest received for lending their securities.

b. What Type of Derivative is needed for Equity Finance Transaction?

For equity finance transfer transactions to successfully fulfill their purpose, the transaction must use a delta one derivative. A delta one derivative is a perfect substitute for the underlying and will give a market participant the same risk profile as holding the underlying asset throughout the course of the contract. Without a delta one derivative, the market participant would alter their risk profile by entering the transfer transaction, changing it from a financing transaction to a risk transaction. Equity finance transactions are designed to keep the participant in the same risk position, so only delta one derivatives work. In addition, using anything except a delta one derivative would cause significant tax liabilities for a market participant.⁵ Nothing besides a delta one derivative can successfully complete this type of

³ Note that this is not a buy/sell transaction but a transfer.

⁴ Stock loan transfer transactions are important for robust and liquid short markets. Though one could theoretically gain short exposure through any number of derivatives, in many cases, there is not likely to be a party on the other side willing to take a long position. In a transfer transaction, the opposite party does not need to take additional long exposure, they need to be willing to earn interest.

⁵ 26 US Code 1058(b)(1) "An agreement shall – (1) provide for the return to the transferor of securities identical to the securities transferred; (2) require that payments shall be made to the transferor of amounts equivalent to all interest, dividends, and other distributions which the owner of the securities is entitled to receive during the period beginning with the transfer of the securities by the transferor and ending with the transfer of identical securities back to the transferor; (3) not reduce the risk of loss or opportunity for gain of the transferor of the securities in the securities transferred..." All three of these requirements can only be met by a delta one derivative. Without protection under Section 1058, the transfer of securities in an equity finance transaction is considered a buy/sell and subject to capital gains taxation.

transaction. There are only two types of delta one derivatives. One is OTC total return swap and the other is highly regulated, exchange-traded SSF.⁶

Part 2: Margin schemes in Equity, Option, and Futures Markets

a. Margin as a Loan vs. Margin as a Performance Bond

Though the term margin is used in both the equity world and the futures world, it does not mean the same thing in both spaces. On the equity side, margin is a loan of money by a broker in order to allow a customer to purchase securities. The initial margin rate of 50% is the percent of the stock value that the broker can loan to the customer.⁷ By contrast, initial margin in options and futures is a performance bond used to reduce systemic risk by ensuring that the customer has the financial wherewithal to perform on the contract.⁸ Futures also utilize the discipline of daily variation pay/collect (often referred to as “variation margin”, “variation settlement” or “mark-to-market”). Options do not have such a discipline. Due to the differences between equities, options and futures margin, the margin regimes have different purposes and provide protection in different ways. Unfortunately, the SEC seems to miss this point.

The SEC demonstrates their conflation of stock and futures margins when they claim that a purpose of margin requirements is to prevent pyramiding credit.⁹ Whereas preventing pyramiding credit was an initial reason for setting long stock margins under regulation T,¹⁰ there are no such concerns in futures markets. Futures contracts do not involve a loan of funds and as such, do not involve an extension of credit.¹¹ Futures margins are solely a performance bond to protect against default risk which is significantly reduced by the discipline of daily variation pay/collect.

b. Variation pay/collect

The discipline of variation pay/collect plays a critical role in the margin scheme for security futures (and all futures) as it “prevents losses from accumulating over time and thereby reduces both the likelihood of default and the size of any default should one occur.”¹² Variation pay/collect has been recognized as a critical part of margin regimes by the Basel Committee on Banking Supervision (“BCBS”) and the Board of the International Organization of Securities Commissions (“IOSCO”).

⁶ In addition to traditional SSFs, STARS (Security Transfer and Return Spread) SSF transactions can facilitate transfers. For a more complete description of STARS and how they function please see <https://www.sec.gov/comments/s7-09-19/s70919-5879602-188756.pdf>

⁷ Stock maintenance margin is a minimum of 25%.

⁸ SSF maintenance margin is the same level as initial margin.

⁹ Commodity Futures Trading Commission and Securities and Exchange Commission “Customer Margin Rules Relating to Security Futures”. Release No. 34-086304; File No. S7-09-19. 84 FR 36434. 36450-36451.

“Historically, a key aspect of the rationale for regulatory margin requirements on securities transactions was the belief that such requirements could improve economic efficiency by limiting stock market volatility resulting from “pyramiding credit.” Leveraged exposures build up during price runs ups could lead to the collapse of prices when a small shock triggers margin calls and a cascade of de-leveraging... While the SEC believes that lower margin requirements can increase the risk and severity of market dislocations, the SEC does not believe – given the current limited scale of the security futures markets and the limited role played by SEC registrants in these markets – that the proposed reductions to minimum margin requirements present a material financial stability concern.”

¹⁰ Elliot, Douglas J.; Feldberg, Greg; and Lehnert, Andreas. “The History of Cyclical Macropudential Policy in the United States.” Office of Financial Research. (May 15, 2013). 18.

¹¹ It could be argued that there are still concerns about excessive leverage with regards to futures markets, but this topic will be discussed in detail later in this comment letter.

¹² Patent, Lawrence B. “Margin Requirements for Uncleared Swaps”. The Investment Lawyer, Volume 23, No. 2. (2016). Pg 1-2.

the BCBS and IOSCO recognise that the regular and timely exchange of variation margin represents the settlement of the running profit/loss of a derivative and has no net liquidity costs given that variation margin represents a transfer of resources from one party to another. The BCBS and IOSCO also recognise that the regular and timely exchange of variation margin is a widely adopted best practice that promotes effective and sound risk management.¹³

The failure to take variation pay/collect into account biases the Commissions' margin rules against SSFs.

In a security futures market, contracts are marked to market so that all gains and losses are realized at the end of each day. Options markets do not have variation pay/collect. The presence of variation pay/collect changes the appropriate level of initial (and maintenance) margin as well as enhancing customer protection. When the discipline of variation pay/collect is enforced and gains and losses are realized every day, the time horizon over which initial margin must cover risk is reduced. In futures markets, where variation payments are made every day (or in some cases multiple times a day), the initial margin must cover at most, the risk between variation periods.¹⁴ "The daily marking-to-market of positions reduces the default risk to the exchange clearinghouse to a one-day price movement."¹⁵ As a result, for SSFs, initial margins should be designed to cover risk over a single trading day. In contrast, as options do not have variation pay/collect, the risk period that margin on options must cover is the entire length of the contract as liabilities and potential systemic exposure are building up. Margins set for a longer risk period should be higher than margins set for a shorter risk period on the same underlying, because there is more opportunity for losses in a longer time horizon. Futures margins that are consistent with options margins should be set at a different percentage. This principle was recognized by then Federal Reserve Chairman Alan Greenspan during a hearing on the Commodity Futures Modernization Act of 2000 ("CFMA") in which he stated

It is very important to distinguish between consistent margins and the same level of margins. Margins basically should be constructed in a manner to protect counterparties against default or nonpayment. And in the commodities business or in the commodities markets, where there is a far more rapid payment of cash when prices move... that clearly is an issue of having lower margins than would necessarily be the case in securities markets... merely looking at the absolute percentages, is insufficient to make a

¹³ BCBS and IOSCO. "Margin Requirements for non-centrally cleared derivatives." March 2015. Pg. 9.

<https://www.bis.org/bcbs/publ/d317.pdf>

"2(d) With respect to other non-centrally cleared derivatives; the BCBS and IOSCO support margin requirements that, in principle, would involve the mandatory exchange of both initial and variation margin among parties to non-centrally cleared derivatives ("universal two-way margin").

2(e) In the case of variation margin, the BCBS and IOSCO recognise that the regular and timely exchange of variation margin represents the settlement of the running profit/loss of a derivative and has no net liquidity costs given that variation margin represents a transfer of resources from one party to another. The BCBS and IOSCO also recognise that the regular and timely exchange of variation margin is a widely adopted best practice that promotes effective and sound risk management."

¹⁴ "Because variation margin keeps the margin value of positions at current (or nearly current) prices, maintenance margin is effectively the financial coverage held against possible losses until the next cycle of variation margin... Due to the discipline of mark-to-market calculations that result in regular variation margin payments, the time horizon that maintenance margin seeks to cover ranges from a few hours to as much as a trading day or a weekend/holiday period." – Heckinger, Richard; Cox, Robert T.; and Marshall, David. "Cleared margin setting at selected CCPs" Federal Reserve Board of Chicago. (2016). Pg 4-5.

<https://www.chicagofed.org/~media/publications/economic-perspectives/2016/ep2016-4-pdf.pdf>

¹⁵ Federal Reserve Bank of Chicago. "Setting futures margins: Who?... and how high?". Chicago Fed Letter. May 1988. No. 9.

judgment as to whether they are consistent and indeed competitive.¹⁶ A similar definition of margin consistency was provided by Patrick M. Parkinson, Associate Director, Division of Research and Statistics, Federal Reserve: “The Board would note that, for purposes of preserving financial integrity and preventing systemic risk, margin levels on futures and options should be considered consistent even if they are not identical, if they provide similar levels of protection against defaults by counterparties.”¹⁷

Two economists from the Office of Economic Analysis at the SEC studied this topic shortly after the Commissions’ released their 2002 final margin rule for security futures.¹⁸ This study compared the strategy-based margin levels for SSFs with movements in stock prices to determine whether the margin levels were set appropriately.¹⁹ The study found that using the traditional futures variation pay/collect cycle overlaid by strategy-based margins over-margined almost all products, and most by a significant margin.²⁰ Despite this finding, the SEC economists concluded that “security futures exchanges can vary settlement periods to manage risk to minimize the impact of excessively high margin requirements that will detract from trading volume.”²¹ In other words, the study recommended processing variation pay/collect less frequently, so as to build up exposures similar to options which would begin to make the strategy based margin overlay reasonable. This is preposterous; removing the foundational cornerstone of futures market protections is not the answer. That the absurdity of overlaying strategy-based margins for SSFs can only be rationalized by an equally absurd proposition clearly demonstrates the flaws of the Commissions’ current approach.

c. Margin and Customer Protection

In addition to the role that variation pay/collect plays in preventing default and shortening margin cover time horizons, it also plays a role in customer protection. In the proposed rule, the SEC states that minimums on margins are needed because unsophisticated investors have the tendency to take ill-advised positions and could be exposed to large losses.²² The SEC points to studies which emphasize retail investor’s tendencies to make poor trading decisions.²³ What is missed by the SEC in this analysis is that variation margin in futures plays the same customer protection role as high strategy-based margins in

¹⁶ Alan Greenspan. Joint Hearing Before the Senate Committee on Agriculture, Nutrition, and Forestry and the Senate Committee on Banking, Housing, and Urban Affairs. Senate Hearing 106-922. (June 21, 2000). Page 18.

¹⁷ Patrick Parkinson before the Subcommittee on Hazardous Materials of the Committee on Commerce House of Representatives on July 12, 2000.

¹⁸ Dutt, Hans R., and Wein, Ira L. “On the Adequacy of Single-Stock Futures Margining Requirements”. The Journal of Futures Markets, Vol 23, No. 10. (2003). Pages 989-1002.

¹⁹ Two other topics of note addressed by this study were 1) the effectiveness of risk-based margins where they found “traditional risk-based margining system has empirically been extremely effective” (993) and 2) consequences of over-margining and under-margining where their literature summary concluded “In sum, the literature suggests that traditional futures margining adequately sets performance bond levels. Increasing margin requirements past these adequate performance bond levels will likely not reduce price volatility and may reduce trading volume, suggesting a potential deadweight loss to the economy. On the other hand, if margins are inadequate to act as performance bonds, it is generally accepted that default risk will increase. This suggests the possibility of systemic risk to the financial markets. Therefore, if strategy-based margining cannot be made to accurately replicate adequate performance bond margin requirements, there may be significant economic consequences.” (994).

²⁰ Ibid, Dutt et al. 991-992. “It is demonstrated that the variability of the strategy-based approach vis-à-vis a risk-based approach is considerable. It is also found that a passive 1-day margin collection policy will result in margin requirements for nearly half of analyzed equities that are more than twice that of a comparable risk-based margining system. However, the 1-day margin collection policy would be expected to leave only about one-third of 1% consistently under-margined relative to a comparable risk-based margining system.”

²¹ Ibid, Dutt et al. 1001.

²² Ibid, 84 FR 36448, 36450.

²³ Ibid. 84 FR 36450. See footnote 146.

securities markets. By forcing investors to pay their losses daily, futures markets impose a discipline on participants that causes them to continuously reexamine the wisdom of their investment decisions. Imposing high minimum margins on security futures while they already use the futures strategy of variation pay/collect is redundant and introduces capital inefficiencies, which hampers liquidity without increasing protection. In fact, variation pay/collect is a more efficient and effective method of customer protection than minimum margins because it counteracts the incentives that trigger ill-advised investment decisions, such as the disposition effect.²⁴

Regardless, the most important tools for customer protection in derivatives markets exist at the broker-dealer (“BD”) and Future Commission Merchant (“FCM”) level, such as know your customer rules and risk-disclosure.²⁵ BDs and FCMs have much more insight into their customers and can tailor the extent of their protection to the needs of the customer. These are bolstered by the required BD/FCM required risk controls. These tools are a much more effective means of customer protection than a margin scheme. This is consistent with the SEC’s statement that, “the ability of margin requirements to serve as an efficient instrument of customer protection is questionable”.²⁶ The study cited by the SEC²⁷ to support this statement gives three reasons as to why high minimum margins which over-margin the underlying are ineffective at customer protection which have been robustly demonstrated in academic papers. First, minimum margins do not discriminate between “sophisticated and naïve investors.”²⁸ Second, by creating a barrier to entry, high margins reduce exchange volume both in terms of number of trades and in terms of open interest, negatively impacting liquidity.²⁹ Third, high margins increase volatility.³⁰

Variation pay/collect is fundamental to the protections in futures markets, yet the discussion of margin in the Commissions’ proposal glosses over it completely. Not only does it counteract the biases that lead to

²⁴ For a more detailed explanation of how variation pay/collect counteracts these incentives, see Appendix A to this comment letter.

²⁵ Figlewski, Stephen. “Margins and Market Integrity: Margin Setting for Stock Index Futures and Options”. The Journal of Futures Markets. Vol. 4, No. 3. (1984). 385-416. 389

²⁶ Ibid 84 FR 36450. OneChicago is confused why the SEC claims margins are not an effective means of customer protection here and also claims that their use as a customer protection tool is what justifies minimum margins (Ibid 84 FR 36448) “Margin levels set by intermediaries may allow investors who do not fully understand the risk of security futures products to take highly level positions that may result in unexpected losses... such market failures provide an economic rationale for regulatory minimum margin requirements.” These two statements appear to contradict.

²⁷ Ibid, Figlewski, 1984.

²⁸ Ibid Figlewski, 1984. 396

²⁹ Ibid Figlewski, 1984. 396. See also, Ibid BCBS and IOSCO, 2015. 9 “2(f) In the case of initial margin, the BCBS and IOSCO recognise that initial margin requirements will have a measurable impact on market liquidity, as assets that are provided for collateral purposes cannot be readily deployed for other uses over the life of the non-centrally cleared derivatives contract.” See Dutt, Hans R. and Wein, Ira L. “Revisiting the empirical estimation of the effect of margin changes on futures trading volume”. The Journal of Futures Markets. Vol 23, No. 6. (June 2003). 561-576. <https://doi.org/10.1002/fut.10074> See also Chatrath, Arjun; Adrangi, Bahram; and Allender, Mary. “The impact of margins in futures markets: evidence from the gold and silver markets”. The Quarterly Review of Economics and Finance. Vol. 41, No. 2. (2001). 279-294. [https://doi.org/10.1016/S1062-9769\(00\)00068-5](https://doi.org/10.1016/S1062-9769(00)00068-5) And Daskalaki, Charoula and Skiadopoulos, George. “The effects of margin changes on commodity futures markets”. Journal of Financial Stability. Vol 22. (February 2016). 129-152. <https://doi.org/10.1016/j.jfs.2016.01.002>

³⁰ Ibid, Figlewski, 1984. 396. See also, Kupiec, Paul H. “Futures margins and stock price volatility: Is there any link?”. The Journal of Futures Markets. Vol. 13, No. 6. (September 1993). 677-691.

<https://doi.org/10.1002/fut.3990130608> Also see Hedegaard, Esben. “Causes and Consequences of Margin Levels in Futures Markets”. Arizona State University. (February 28, 2014). Pg 3-4. “margin increases are followed by a rise in the realized variance of future price process. These results imply that regulating margins may reduce participation of both hedgers and speculators, and increase trading costs and position risk for all market participants.”

inefficient trading more effectively, but it does so without bringing unnecessary costs to sophisticated investors, increasing volatility, and depressing volume. For these reasons, variation margin has been recognized as a best practice for risk management by BCBS and IOSCO.³¹ The real question that the SEC should be asking is why daily variation pay/collect is not used in the options market.

d. Portfolio Margining is Actually Strategy Based Margining for Naked SSF Positions

The portfolio margining methodology does not accurately reflect risk for naked positions. When used to calculate margin for a naked SSF position, the portfolio margin will perform exactly like a strategy-based margin. Though the Commissions repeatedly refer to portfolio margining as risk-based margining, with only a single naked futures position, the portfolio margin algorithm will always return a margin value of 15%. This has the potential to greatly overstate or understate the margin as it does not reflect the actual risk in the product. Whether the 15% rate over-margins or under-margins a product, it will impose costs on the marketplace. The Commissions' should not force SSFs to conform to inefficient and insufficient equity option margins.

Part 3: SSF Comparability with other Derivatives

a. Options are not comparable to SSFs

At several points throughout the proposed rule, the Commissions indicate that they believe that SSFs are equivalent to equity options. The Commission claims that even though the economic purposes of SSFs and options are distinct, they can still be compared for the purposes of margin as the risk profiles are similar.³² In particular, the Commissions claim that a long (short) SSF can be replicated by creating a synthetic forward by entering into a long (short) at-the-money call and a short (long) at-the-money put.³³ The Commissions also claim that a deep-in-the-money option position has the same risk profile as a SSF.³⁴ As we discuss further in this letter, the Commissions' claims are a theoretical exercise which are closer to fantasy than reality.

But why take our word for it? The Options industry has opined on numerous occasions that options and SSFs are different products that are not equivalent. The U.S. Securities Market Coalition comprised of the U.S. option exchanges declared in unrelated comment letters that options have different risk/reward than futures.

There is also a threshold question of whether options should be subject to these rules at all since they provide a fundamentally different type of risk/reward exposure than equity swaps (or futures and forwards), and are not economic substitutes for direct ownership of stock.³⁵

The Cboe argued that generally options were not equivalent to stock or delta one substitutes:

The difference in the economics of owning an option as opposed to the underlying stock or a derivative with a **fixed delta** may be seen in what is referred to as the "time premium" of the option, which is a function of "carrying costs" (based on estimates of dividends and interest rates) and, **to a much greater degree, volatility**. A small decrease in volatility can reduce an option's

³¹ Ibid BCBS and IOSCO, 2015. 9. 2(e)

³² Ibid, 84 FR 36435-36436

³³ Ibid, 84 FR 36440. Footnote 62

³⁴ Ibid, 84 FR 36440. Footnote 62

³⁵ Paul, Bill. "Proposed IRS Regulations Would Impose U.S. Withholding Tax on Certain Options Transactions Entered into by Non-U.S. Persons". Memorandum to Securities Markets Coalition. March 9, 2012.

time premium and result in a loss for the option holder, a loss that would not accrue to the owner of the underlying stock.³⁶ (emphasis added)

Further comments by the U.S. Securities Markets Coalition stated

The Coalition strongly disagrees, however, with the proposition that an option with an initial delta of 70 is an economic substitute for owning the underlying stock. Unlike typical equity swaps, forward contracts and futures contracts, which have constant deltas of 100, an option's initial delta applies only for a very small change in the price of the underlying stock. ... The fact that the delta of an option holds only for extremely small changes in the price of the underlying stock and that changes in other variables will cause the option's price to change even if there is no change in the price of the underlying stock make a 70-delta option a poor substitute for owning the underlying stock.³⁷

Finally, in their May 1, 2012 no-action request to the SEC, Cboe and FINRA requested that for the purpose of net capital calculations, security futures be treated as equivalent to the underlying instrument.³⁸ The SEC subsequently granted the no-action request so that security futures would be considered underlying instruments for the purposes of net capital calculations.³⁹ Appendix A does not consider security options to be an underlying instrument.⁴⁰ That security futures are considered equivalent to the underlying instrument, by both the options industry and the SEC, whereas security options are not demonstrates that the risk profiles are different.

We find it interesting that, as noted above, when it suits their political agenda, the options industry argues that options are not equivalent to stock or futures. Yet, we anticipate that they will continue to argue that SSFs and options require the same percentage of notional value for initial margin to prevent regulatory arbitrage. Options cannot be a substitute for stock and futures when discussing margin but not a substitute when discussing other topics. This is a double standard.

There are no comparable options to SSF products. Options have risks that are not present in SSFs. These risks preclude options from being used in financing transactions by taxpayers. Options have dividend risk, pin risk, and early assignment risk. All of these considerations make the risk profile of an option different than the risk profile of a SSF regardless of what option is used.

The Options Clearing Corporation ("OCC"), the world's largest equity derivatives clearinghouse and a Systemically Important Financial Market Utility, recognizes that options and SSF have difference risk profiles. "A total return SB Swap based on a single underlying security of a large cap company poses even less risk management challenge than a put or call option on the same underlying security and is much the same as a security future on the same underlying."⁴¹

³⁶ See January 20, 2015 letter to John Koskinen, Internal Revenue Service from Edward T. Tilly

³⁷ The members of the Coalition are BATS Options, the Boston Options Exchange, the Chicago Board Options Exchange, the International Securities Exchange, NASDAQ Options Market, NASDAQ OMX PHLX, NYSE Arca, NYSE Amex, and OCC. See March 5, 2014 letter to John Koskinen, Commissioner, Internal Revenue Service from William Paul

³⁸ Thompson, Timothy and Vogel, Grace. "Security Futures Contracts Under Appendix A to Exchange Act Rule 15c3-1". CBOE and FINRA. May 1, 2012.

³⁹ Macchiaroli, Michael. "Re: Security Futures under Appendix A to Exchange Act Rule 15c3-1". SEC. May 4, 2012. <https://www.sec.gov/divisions/marketreg/mr-noaction/2012/cboe-finra-050412.pdf>

⁴⁰ 17 CFR 240.15c3-1a(a)(4) "The term underlying instrument shall not be deemed to include securities options..."

⁴¹ April 9, 2011 letter to Elizabeth Murphy, SEC from William Navin, OCC

Furthermore, the specific strategies noted by the Commissions neither replicate SSF contracts or represent a viable trading strategy. The combination of a long call and short put (or a short call and long put for a short SSF) does not replicate a SSF due to the risk variables discussed above. Like all options, this position has significant dividend, pin, and assignment risk. A participant using this strategy would buy the combination at-the-money to limit early assignment risk, however, as the underlying moves across strikes, early assignment risk from dividend harvesting increases substantially. Buying the options at-the-money comes with its own challenges as pin risk becomes significant. In addition, this position is costly to get into due to execution fees and premium costs. Furthermore, an options trader looking for long (short) exposure to an equity would just buy a call (put) and limit their potential losses. Just because it is theoretically possible to construct a position with a certain risk profile does not make that a viable trading strategy. Given the differences in risk and the impracticalities of this position, it does not make sense to compare them with a SSF.

The Commission seems to recognize that this strategy is different than a SSF in the offset table. Item 10 on the offset table describes a position consisting of a “long security future and short security future on the same underlying security”. This position is margined at 5%. Item 11 on the offset table describes a position consisting of a “long security future, long put option and short call option. The long security future, long put and short call must be on the same underlying security and the put and call must have the same exercise price.” This position is margined at 10%. The difference between the two positions is one holds a short security future and the other holds a long put/short call combination. This is the exact options combination that the Commission claimed was equivalent to a long SSF. If this position really was equivalent, it would not make sense to margin item 11 at a higher level than item 10. However, recognizing the differences between the contracts, and the additional risks the option holder has, margining the option position at a higher level is appropriate.

Similarly, a deep-in-the-money option position is not equivalent to a SSF. There is no guarantee that a deep-in-the-money option will remain deep-in-the-money. If it moves closer to-the-money, its delta will change significantly. Like other options, this position has dividend risk. In a deep-in-the-money put, the long will exercise the option in order to earn additional yield on proceeds from the sale of the stock.⁴² Similarly, deep-in-the-money calls for hard-to-borrow stocks will be exercised early so that the long holders can loan out the shares for the rebate rate. At the very least, this early assignment risk for both deep-in-the-money calls and puts makes it difficult at best to compare to security futures. Because the specific contracts that are assigned are random, and many sophisticated traders will exercise the deep-in-the-money positions early, a good portion of the deep-in-the-money positions will be assigned early, making the size of the position that can be held long-term unpredictable. This unpredictability makes comparing short deep-in-the-money options with SSFs misleading.

Options cannot replicate a SSF, but the reverse is also true: SSFs cannot replicate options. No SSF position or combination of positions can create a risk profile that limits potential downside with unlimited upside like a long option. SSFs are always delta one so the only risk profiles a market participant can have are delta one (either long or short) or delta neutral (with offsetting SSF positions).

The economics and the use case differences between options and SSFs are demonstrated by the differences in the percentage of contracts taken through the delivery process. The Options Industry Council has calculated that approximately 7% of options are exercised.⁴³ In contrast, just over 73% of

⁴² See Ibid, Downey, 2018. Pg 3-4

⁴³ Option Industry Council. “Option Assignment”. <https://www.optionseducation.org/referencelibrary/faq/options-assignment> Accessed August 9, 2019.

SSFs go through delivery.⁴⁴ So many SSFs go through delivery because participants are using SSFs as a transfer mechanism to transition between stock and futures. The transfer only occurs when the SSF goes through delivery. In contrast, options are generally only exercised in order to harvest dividends in the case of calls or to earn interest on the short sale proceeds in the case of puts. The differences in delivery rates shows two products being used in vastly different ways. This is not consistent with a theory of comparability between options and SSFs.

b. Proposed SSF margins vs. Economic Equivalents

The Commissions should compare SSFs against their direct competitors, OTC total return equity swaps, equity index futures, and SSFs overseas. All these products compete directly with SSFs and receive more favorable margin treatment. OneChicago finds it disappointing that in their proposing release, the Commissions do not discuss the margins for these products aside from noting in passing that SSFs are essentially total return swaps.⁴⁵ If SSFs are equivalent to total return swaps, why do the Commissions not compare the margin requirements for SSFs with total return swaps?⁴⁶ Further, why do the SEC's Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") Title VII margin rules⁴⁷ not compare option margins with equity swap margins as would be necessitated if options are equivalent to SSFs and SSFs are equivalent to total return swaps?

i. Uncleared OTC Equity Swaps

Due to the recent passage of Dodd-Frank Title VII rules by the SEC, most uncleared OTC equity swaps will be margined⁴⁸ at 15%.⁴⁹ At first glance, this level appears consistent with what the Commission is proposing for SSFs. However, there are several factors that effect this calculation. First, not all Security Based Swap Dealers ("SBSDs") are required to use a 15% standardized haircut and some may apply to instead use a model approved by the Commission.⁵⁰ As a result, nonbank SBSDs can use risk-based models to calculate their initial margin. Second, the Commission included an exemption so that when the initial margin is less than \$50,000,000, initial margin does not need to be collected. Third, stand-alone SBSDs that trade security-based swaps may use the CFTC's capital and margin requirements, which are risk-based, instead of the SEC's 15% rate.⁵¹ This allows many participants who primarily partake in futures markets to use risk-based margining for their equity finance positions in uncleared equity swaps, giving these uncleared products an additional advantage over the Commissions' proposal for SSFs.

⁴⁴ See the Delivery Statistics listed in Figure 1 of Appendix B

⁴⁵ Ibid, 84 FR 36435; also Footnote 113.

⁴⁶ This question is raised by Commissioner Jackson in his dissent to the rule proposal. Commissioner Robert J. Jackson. "Statement on Margin for Security Futures". July 3, 2019.

⁴⁷ Securities and Exchange Commission. "Capital, Margin, and Segregation Requirements for Security-Based Swap Dealers and Major Security-Based Swap participants and Capital and Segregation Requirements for Broker-Dealers". File No. S7-08-12. <https://www.sec.gov/rules/final/2019/34-86175.pdf> ("Title VII Margin Rules")

⁴⁸ "The compliance date for these rules is 18 months after the later of: (1) the effective date of the final rules establishing recordkeeping and reporting requirements for SBSDs and MSBSPs; or (2) the effective date of the final rules addressing the cross-border application of certain security-based swap requirements."

SEC Press Release 2019-105. "SEC Adopts Capital, Margin, and Segregation Requirements for Security-Based Swap Dealers and Major Security-Based Swap Participants and Amends the Capital and Segregation Requirements for Broker-Dealers". June 21, 2019. <https://www.sec.gov/news/press-release/2019-105>

⁴⁹ Ibid, Title VII Margin Rules. Broker-Dealer SBSPs must use a standardized haircut to calculate their margin requirements for equity security based swaps. The standardized haircut is 15%.

⁵⁰ Ibid, Title VII Margin Rules.

⁵¹ Provided that the firm is not a BD or OTC derivative dealer, and their security based swaps do not exceed the lesser of 10% of the firm's notional value of swaps and security based swaps, or \$250 billion. Ibid, Release No. 34-86175. Pg 24-25.

Finally, participants in uncleared OTC markets do not pay SEC fees. This not only represents lost potential revenue for the Commission but increases the costs of trading SSFs compared to these products.

Even disregarding the parts of the rule which disadvantage SSFs compared to uncleared equity swaps, setting SSF margins at the same level as uncleared products fails to take account of the risk reduction that comes from central clearing. In its fifth progress report on OTC Derivatives Market Reforms, the Financial Stability Board (“FSB”) prescribed that cleared products should receive better margin and capital treatment than their uncleared OTC equivalents.⁵² To be consistent with FSB guidance, cleared products, such as SSFs, should receive better margin treatment than the products in uncleared markets. Furthermore, a 2018 FSB study concluded that initial margin on cleared products was the most significant factor that disincentivized central clearing.⁵³ Based on this guidance from FSB, margins should be set lower for cleared SSFs than uncleared equity swaps. OneChicago agrees.

ii. Cleared OTC Stock Loan

Although most delta one derivatives are uncleared, some delta one derivatives are cleared. In particular, the OCC, our central counterparty, clears stock loan agreements. Because these derivatives are called “agreements”, they are unregulated and are allowed to clear using clearinghouse level risk-based margins. Save for the interest rate component in the SSF, variation pay/collect in these agreements is identical to the SSF. These agreements also clear in the same risk pool as OneChicago SSFs. To put it mildly, it is inappropriate that two products with the same risks and in the same risk pool would have different applied margin rates. If participants in one product default, the participants in the other would be impacted. If risk-based margins are appropriate for cleared stock loan agreements, they are appropriate for SSFs. Margin for similar products should be aligned, particularly if they are clearing in the same risk pool at the same Central Counterparty (“CCP”).

iii. Non-U.S. SSFs

The most obvious competitor to SSFs trading in the United States are SSFs trading on overseas markets. As the Commissions’ note, these SSFs are traded using risk-based margins.⁵⁴ These rates are far lower the rates that U.S. SSFs receive either currently or under the Commissions’ proposal. As of July 25, 2019, the average margin rate for SSFs on the Dow Jones Industrial Average components (“Dow Components”) at

⁵² “Robust and globally adopted minimum capital and margin requirements for non-centrally cleared derivatives help increase the resilience of market participants and the broader financial system. Higher requirements for non-centrally cleared derivatives than those for centrally cleared derivatives reflect the additional protections to participants and markets afforded by CCPs.”

Financial Stability Board. “OTC Derivatives Market Reforms: Fifth Progress Report on Implementation”. (April 15, 2013). https://www.fsb.org/wp-content/uploads/r_130415.pdf?page_moved=1

⁵³ Financial Stability Board. “Incentives to centrally clear over-the-counter (OTC) derivatives: A post-implementation evaluation of the effects of the G20 financial regulatory reforms”. (August 7, 2018). <https://www.fsb.org/wp-content/uploads/P070818.pdf>

See Figure D.2 which identifies initial margin for cleared factor as the largest disincentive to clear. See also pg. 24 “Dealers identified initial margin requirements for centrally cleared trades, the high fixed costs associated with participating in clearing, and collateral eligibility criteria for centrally cleared trades as the top three disincentives to centrally clear.” The study was conducted by taking a survey of dealers about factors incentivizing and disincentivizing central clearing.

⁵⁴ Ibid, 84 FR 36436. Although the Commissions describe the margin system used by Eurex as a portfolio margin system, unlike the portfolio margin used in securities accounts, there is not a strategy-based floor and naked positions are margined at risk-based levels.

Eurex was 10.55%, ranging from 6.64% to 14.71%.⁵⁵ These additional margin costs are devastating to the ability of U.S. SSFs to compete with these overseas products and appear to be simply deadweight. OneChicago products would still be at a significant disadvantage compared to overseas SSFs even with the Commissions' proposal.

Consistent with Congressional intent that U.S. SSFs be globally competitive,⁵⁶ the Commissions should be aware that static strategy-based margins are not internationally competitive with foreign markets listing futures on U.S. underlyings, only risk-based margin are.

iv. Equity Index Futures

In addition to SSFs trading overseas, SSFs compete with index futures trading in the US. A OneChicago SSF on the SPDR S&P 500 ETF highly correlates with an E-mini S&P 500 futures contract⁵⁷ traded at CME. As these index ETFs tend to have lower volatility than individual stocks, the risk-based levels they are margined at are even lower than the levels for individual equities. Margins for equity index futures at CME range from 2.75% to 5% with most being around 4%.⁵⁸ There is no reason that SSFs on broad-based ETFs should be margined at 15% levels. At worst, the Commission should revise its levels for broad-based ETF SSF products to the same levels provided for SSFs (and options) on the same underlying in a portfolio margin account,⁵⁹ 8% for high capitalization broad based ETFs⁶⁰ and 10% for non-high capitalization broad based ETF.⁶¹ While these further reductions would not bring margins in line with risk, it would be a marked improvement from the 15% in the current proposal.

Even with the Commission's proposed rules, SSFs will be disadvantaged in comparison to uncleared OTC swaps, cleared stock loan, SSFs in foreign markets, and equity index futures. The proposal is a step in the right direction, but more work needs to be done.

⁵⁵ See Figure 2 in Appendix B for the full comparison of margin rates on Dow Components at OneChicago and Eurex.

⁵⁶ Rep. Thomas W. Ewing – CFMA Sponsor, House Agriculture Subcommittee Chairman House Floor - December 15, 2000 “By breaking down the Shad-Johnson barrier, the bill will foster a healthy competitive environment for futures on single stock and narrow-based futures indices, risk management instruments that heretofore have been prohibited by an outdated US law. Because foreign competitors have already focused considerable resources to attract these markets to their shores, I would urge all agencies involved in administering the new framework for single stock futures to act as expeditiously as possible to ensure that our markets in single stock futures and narrow-based futures indices are able to meet this competition promptly and not suffer from regulatory arbitrage with overseas markets.”

⁵⁷ These products are not exact substitutes since the e-mini S&P 500 contract is cash settled and is not dividend adjusted.

⁵⁸ See Figure 3 in Appendix B which compares margins between CME and OneChicago products for the S&P 500, S&P 500 sectors, DJIA, Nasdaq 100, and Russell 1000 futures.

⁵⁹ This is the same line of reasoning that the Commission uses to justify moving the margin to 15%.

⁶⁰ See FINRA Rule 4210(g)(2)(F). High Capitalization, Broad Based Market Index is shocked at ten equidistant intervals between +6%/-8%. The margin for a naked delta one position would be 8%.

⁶¹ See FINRA Rule 4210(g)(2)(F). Non-High Capitalization, Broad Based Market Index is shocked at ten equidistant intervals between +/-10%. The margin for a naked delta one position would be 10%.

Part 4: Proposal's Impact on SSF Marketplace

The proposal will bring the margin rates for SSFs closer in line with risk, most products will still be margined far above the level necessary to ensure performance. Currently, 92% of OneChicago's products have a risk level below 20%,⁶² meaning they are over-margined under the current 20% regime. Because OneChicago has directed the OCC to set margins higher than 20% when appropriate, 8% of OneChicago products are margined above 20%. The average over-margined product is margined at 235% of the risk-based level. Unfortunately, the Commissions' proposal does little to change this fact. With a 15% floor, 84% of OneChicago products will be over-margined. The average product would be margined at 181% of the risk-based level. For OneChicago SSFs, the median risk-based margin rate was 8.9%, and the mean risk-based margin rate was 10.4%.⁶³

The amount of over-margining is significant in absolute terms as well. On average, in the period between September 1, 2018 and August 1, 2019,⁶⁴ the notional value of margin collected on OneChicago positions was approximately \$540 million. Under the Commissions' proposal, the value of margin collected would have been \$410 million, a reduction of 25%. However, if OneChicago minimum margins were tied to the clearinghouse margins (which are risk-based), the value of margin collected would have been approximately \$210 million, a reduction of 61% from the current levels and an additional 48% reduction from the levels that the Commissions are proposing.

As a result of these high margins, OneChicago's volume has been plummeting in recent years. From 2017 to 2018, OneChicago's annual volume declined by 53% from approximately 14.9M contracts to 7.1M contracts. Through the first six months of the year in 2019, OneChicago's volume has declined an additional 26% compared to the first half of 2018. As customers have left the exchange, they have related to us that it has been the high margin levels that have caused them to leave, and they would need to see margins drop to risk-based levels in order to return. One such customer wrote:

As SSF are often used as a financing mechanism, the current IM prohibits the product to grow as the cost of IM is too high. We have observed end users actively looking for alternatives, which they have found at exchanges abroad (Eurex). In order for SSF to grow and efficiently facilitate the migration from OTC to listed derivatives, the initial margin should be aligned with other products and be allowed to be subject to risk based margin.⁶⁵

High initial margin for SSF products is barrier to customer using SSFs as they prefer the lower cost alternatives. Lowering margins to 15% does not change this dynamic. At best, the Commissions' proposal is a first step towards properly margining SSFs. It is important that the Commissions recognize that the proposal does not come close to fixing the margin problem in U.S. SSF markets.

⁶² This was calculated by looking at data provided by OCC showing the STANS margin rate (risk-based without floors) for each equity product that OneChicago lists.

⁶³ See Figure 4 in Appendix B for a comparison of proposed vs. risk-based margins on the most commonly traded OneChicago products.

⁶⁴ See Figure 5 in Appendix B for details on these statistics.

⁶⁵ Jurrie Reinders, Societe Generale. The complete letter is included as Appendix C to this comment letter.

Part 5: Responses to Commission Questions

a. Portfolio Margin Accounts

The SEC requested comment on the characterization of security futures accounts, specifically with regards to what extent customers use portfolio margin securities accounts vs. securities accounts. Only one broker connected to OneChicago currently has the capacity to carry security futures in a securities account (Interactive Brokers). OneChicago is not aware of any other firms that provides customer portfolio margining for security futures or even allows customers to carry SSFs in securities accounts.

OneChicago believes that it is appropriate for the Commissions to set margins in portfolio margin accounts, standard securities accounts, and futures accounts at the same level as the risks of positions in all of these accounts are identical.

b. Customer Offset Table

As the Commissions modernize the margin rate for SSFs, they should also modernize the offset table. The current offset table is outdated and over-margins delta-neutral positions. By making minor changes to the offset table, or by replacing the offset table with a simple algorithm, the Commission could improve the efficiency and ease of use.

First, when a customer is holding a delta-neutral position, they should be margined at the minimum level given that they have zero exposure to the underlying's movements. In the proposed (and current) offset table, positions that are delta-neutral are margined at a 5% level.⁶⁶ Specifically, offset items 4, 10, 13, 17, 18, and 19.⁶⁷ Because the participants hold equal and opposite positions in stock and/or SSFs, they do not have exposure to price movements in the underlying. Given the risk-free nature of these perfectly hedged positions, it is appropriate to reduce these offsets to levels more in line with risk. OneChicago suggests that the Commission lower the margin on these offsets to: "The lower of: (1) the total calculated by multiplying \$0.375 for each position by the instrument's multiplier, not to exceed the market value in the case of long positions; or (2) 2% of the current market value of the security futures contract".⁶⁸ This would appropriately recognize the risk in the contract by setting level equal to what the position would

⁶⁶ Item 19 is also delta neutral but is margined at a 3% rate. The maintenance margin for items 4 and 13 is 5% but the initial margin is the Reg T level for stock positions.

⁶⁷4: Long Security Future and short position in the same security (or securities basket) underlying the security future

10: Long security future and short security future on the same underlying security (or index).

13: Short security future and long position in the same security (or securities basket) underlying the securities future.

17: Long (short) a basket of security futures, each based on a narrow-based security index that together tracks the broad-based index and short (long) a broad based-index future.

18: Long (short) a basket of security futures that together tracks a narrow-based index and short (long) a narrow-based index future.

19: Long (short) a security future and short (long) an identical security future traded on a different market.

⁶⁸ 2% is an arbitrary number, but it is more appropriate than 5% for delta-neutral positions. It is certainly no less arbitrary than the portfolio margin minimum of \$0.375 per share.

receive in a portfolio margin account.⁶⁹ It would also ensure that participants are not paying high margin rates just because the price of the underlying security is low.⁷⁰

Second, the Commissions' should add other delta one derivatives, in particular total return equity swaps, to the offset table. A portfolio consisting of long (short) security futures and short (long) total return equity swap on the same underlying security (or basket of securities or equity index) should be margined consistent with long (short) SSF and short (long) SSF. Total return swaps are an exact substitute for SSFs and should be treated as such in the offset table.

Third, given the reduction of the margin requirement from 20% to 15%, the Commissions should reduce the maintenance margin requirements on other types of positions by a similar amount. There are several positions margined at 10% including offset 2, 8, 9, 11, 12, 14, 15, and 16. The Commissions should mirror the reduction of 20% to 15% by reducing the margin on these positions from 10% to 7.5%.

Finally, the Commissions should consider simplifying the offset table. As an alternative to amending the table as the Commission has proposed, the Commission could replace the table with an offset rule. Specifically, OneChicago proposes replacing the offset table with a rule that states positions will be margined at the greater of: (1) the total calculated by multiplying \$0.375 for each position by the instrument's multiplier, not to exceed the market value in the case of long positions; or (2) 15%⁷¹ of the delta exposed portion of the portfolio. The delta exposed portion of the portfolio could be calculated by adding the delta of the short position to the delta of the long position. For example, if an account was holding long SSF (delta = 1) and short stock (delta = -1), the net delta exposure would be 0, or delta neutral. The position would be margined at \$37.50 per (100-share) contract. However, if an account was holding long call option (delta = 0.6) and short SSF (delta = -1), the net delta exposure would be -0.4. In this case, 40% of the market value of the short SSF position would be margined at 15%,⁷² as this is the amount of delta exposure the participant has. If the delta on the option changed, the portion of the portfolio subject to the 15% margin would also change. Given the differences between options and SSFs it would also be prudent to limit the extent to which options could offset SSF products. OneChicago proposes that options with a delta above +/-0.9 should be treated as if their delta was 0.9 for the purposes of the offset calculation. For example, if a participant had a portfolio consisting of a long SSF (delta 1) and a short call/long put option combination with the same strike price (delta = -0.9999...), the net delta exposure in the offset calculation would be 0.1 (1-0.9=0.1). This would result in a margin equivalent to 10% of the market value of the SSF position at 15%. The same delta concept would be applied to maintenance margin levels. This simplified version of the offset table would allow the offsets to

⁶⁹ In a portfolio margin account, if a participant holds the portfolio's described in 4, 10, 13, 17, 18, or 19, they will always receive the minimum of \$0.375 per share. Positions in these portfolio's will always be delta neutral. With a portfolio consisting of options and SSFs the delta exposure will vary depending on the strike price of the option. This makes it difficult to determine the equivalent level using an offset table. Unlike positions involving options where the delta is variable,

⁷⁰ With an underlying price of \$18.75, margin collected at 2% and at \$0.375 per share is equivalent. For underlying with a price below \$18.75, margin at \$0.375 is greater than 2%. For underlying with a price above \$18.75, margin at \$0.375 is lower than 2%.

⁷¹ In cases where the margin was higher than 15% for a naked SSF position (due the SRO/DCM setting the margin higher) the delta exposed portion of the portfolio would be margined at that higher rate instead of 15%. If the Commissions agree to lower margins below 15% for some products as OneChicago has requested, that lower minimum would apply.

⁷² Or depending on the price of the security, \$37.50 per contract if that amount was greater.

accurately gauge the risk in each position without the need to enumerate the margin rate for each specific combination of derivatives.⁷³

c. Margins set Higher than Minimum Levels

The Commissions' proposal continues to allow Self-Regulatory Organizations ("SROs") to set margin levels for security futures higher than the minimum level in order to manage customer risks appropriately.⁷⁴ OneChicago believes that there are two changes that the Commissions should make to this part of the proposal. First, the Commissions should clarify that only the Exchange SROs who list Security Futures Products ("SFPs") can determine that the margin levels for the SFPs that they list be higher than the minimum level. For example, the New York Stock Exchange ("NYSE") currently has a rule stating that margin levels for SFPs must be 20% even though they do not, and have never listed SFP products.⁷⁵ As those SRO rules govern the behavior of their members, those SROs effectively control the margin level for products that they do not list. It is clearly inappropriate to have Exchange SROs who do not list/clear SFPs control the margin and thus the competitiveness of competing venues. The authority to set margin levels higher than minimums should be given to the exchanges and clearinghouses who list and clear the products respectively.

Second, the Commissions should require that margin levels be set higher than the minimum level whenever it is justified by risk. Some SSFs have risks higher than 15% and in those cases, SROs should be required to recognize those risks and set margins higher. Currently, at OneChicago's direction, the OCC will set margins higher than the minimum level if clearinghouse level margins, determined by a risk-based algorithm is set at a higher level. The way the rule is currently written, the Commissions leave open the possibility that a different SRO could set all SSF margins at 15% even when a risk-based algorithm would indicate a higher level.

Part 6: Alternatives to the Commissions' Proposal

Though a reduction from 20% minimum to 15% minimum is a step in the right direction, it does not give SSFs a level playing field compared to competing products. Further, it does not meet the Federal Reserve's directive in their delegation letter that the Commissions develop more risk sensitive portfolio-based approach for SSF margins.⁷⁶ OneChicago believes that there are two alternatives that are superior to the Commissions' current proposal. First, the Commissions could authorize risk-based margins for SSF products. Second, the Commissions could authorize risk-based margins for SSFs arising out of STARS transactions. Both alternatives are consistent with the Securities Exchange Act of 1934 ("34 Act") and are explained in further detail below.

⁷³ The revisions that we are proposing would result in margin levels that are equal to or higher than the margins that would be received in portfolio margin accounts. Thus, these changes are consistent with the approach the Commission is using for setting margin offsets.

⁷⁴ Ibid, 84 FR 36436

⁷⁵ For instance, see NYSE Rule 431(c)(5) and NYSE Rule 431(f).

⁷⁶ See Federal Reserve March 6, 2001 letter from Jennifer Johnson delegating the SSF margin authority to the Commissions.

a. Alternative 1: Risk-Based Margins for all SFPs

Every futures product in the United States uses a risk-based algorithm to calculate initial margin.

Except one.

Every SSF in the world uses a risk-based algorithm to calculate initial margin.

Except one.

It is long past time for the anachronistic system used to margin U.S. SFPs be brought into the 21st century. Risk-based margins have a 30-year track record of providing customer protection and defending against systemic risk while providing for the efficient use of capital. In the proposal, the CFTC notes that it supports risk-based margin models for all derivatives.⁷⁷ Adopting this system for SSFs is not a radical idea. Especially when SSF markets have variation pay/collect as the first line of defense against systemic risk.

Many of the reasons for adopting a risk-based margin have already been addressed earlier in this comment letter. Adopting risk-based margining would ensure that margins are sufficient to serve as a performance bond that covers the one day risk between settlement cycles while not tying up an excessive amount of capital. Over-margining products leads to decreased returns for customers, decreased liquidity, increased volatility, and drives participants into other markets with lower margins. Under-margining can lead to systemic risk. Under-margining can occur in portfolio margining as it caps margin for naked positions at 15%. Without margining at risk-based levels, SSFs will have more burdensome margin treatment than both cleared and uncleared alternatives, undermining the clearing mandate of Dodd-Frank and impeding security futures from innovating in the equity finance arena.

Another concern floated by the SEC is that minimum margins prevent CCPs from setting lower margins that do not take account of negative externalities.⁷⁸ While this is true, inappropriately low margins would only exist in a world where there was no regulatory oversight of margin requirements. This does not apply to a situation where margins are set based on the clearinghouse margin level, which in turn is calculated through regulator approved algorithms based on, among other things, historical volatility. Risk-based models will do a superior job compared to an arbitrary static strategy based percent of notional value of determining the level of margin needed to prevent negative externalities. During the 2008 financial crisis, margins in futures performed as designed and prevented firms from failing on their futures liabilities. The track record of risk-based margins in futures markets does not indicate that margin levels will be set too low.

The SEC and CFTC require clearinghouses to be set margins at risk-based levels.⁷⁹ Clearinghouse level margins protect the clearinghouse from default whereas customer level margins protect customers and firms from default. As a default at the clearinghouse level poses more systemic risk than a failure at the customer level, clearinghouse margins are more important in preventing systemic risk than customer margins. If 15% margins are needed to protect against systemic risk at the customer level, clearinghouse level margins (84% of which are lower than 15% for SSFs) do not protect against systemic risk. Put another way, if margins are enough at the clearinghouse level, they will be sufficient at the customer

⁷⁷ Ibid, 84 FR 36445.

⁷⁸ Ibid, 84 FR 36448

⁷⁹ 17 CFR 39.13 and 17 CFR 240.17Ad-22(e)(6)

level.⁸⁰ Since the Commissions and IOSCO have directed clearinghouses to use risk-based margins at the clearinghouse level, there is good reason to believe that risk-based margins are more than adequate. Setting minimum customer margins at the level of (or slightly higher than⁸¹) clearinghouse level margins will protect the markets against systemic risk.⁸²

Setting customer margins at risk-based levels would have significant benefits for U.S. financial markets. By bringing margin costs in line with competitive products, SSFs will become a viable alternative to traditional equity finance vehicles. SSFs can disrupt the equity finance market in a way that benefits the financial industry by encouraging liquidity. Additional liquidity will narrow spreads, allowing buyers to lower the cost of carrying risk positions, and allowing sellers to increase their yields by financing those positions. SSFs will introduce the market to competitive pricing, allowing all participants to receive similar rates for the same trades. It will also allow smaller participants to enter equity finance, bringing substantial benefits. Investors who have underperforming cash assets can use equity finance to earn risk-free profits on cash that are equivalent to or exceed the rates on CDs and can withdraw their funds without paying a penalty.⁸³ Other investors will be able to defray the costs of holding equities by substituting futures for stock through a repo-like transaction and earning additional income on the hard-to-borrow stocks that they may hold. A further benefit of robust SSF markets in the U.S. is detailed, accurate information about financing rates. These financing rates are determined by participants in equity finance markets, but have ramifications for all equity derivatives markets, including options. Currently, there is no reliable source of information on financing rates for individual equities as equity finance is an opaque OTC market.⁸⁴ From a transparency and efficiency perspective, having equity finance occur in an exchange-traded environment is superior to the status quo. A discussion on how risk based SSF margining is consistent with the '34 Act can be found in Appendix D.

b. Alternative 2: Risk-Based Margins for Selected SSF Products

If the Commissions are still uncomfortable with risk-based margins for all SFP products, another alternative is to allow risk-based margins for SSFs that result from STARS transactions. In other words, spread transactions which consist of a front leg expiring on the trade date and a back leg expiring at a deferred date would use risk-based margins. Trading STARS with a different symbol than other SSF products would ensure that the contracts would not be fungible with other SSFs and market participants couldn't use traditional SSF offerings to alter their STARS positions.

STARS are exchange-traded centrally cleared equity repo and stock loan equity financing transactions. The front leg of a STARS causes a T+1 stock transfer through the guarantees of the OCC and NSCC settlement cycles resulting in one party transferring their stock to the other party in return for cash. When the surviving back leg expires, a reversing transfer takes place that returns both parties to their initial positions. Like all OneChicago SSFs, STARS are centrally cleared by OCC. STARS function as an equity

⁸⁰ In addition to margin, there is additional capital pledged in the guaranty fund. Subject to their own capital standards, FCMs

⁸¹ CFTC Rule 39.13(g)(8)(ii) requires that customer margin be higher than clearinghouse level margin. For most futures, customer margin is collected at 110% of the clearinghouse level. OneChicago believes this would be appropriate for SSFs as well.

⁸² This would put margins at a rate competitive with other equity finance products. The Commissions would not need to designate a specific margining system or algorithm that would have to be used. Clearinghouses use margin models approved by the SEC and CFTC and any changes to those models need approval from the Commissions.

⁸³ If an investor needs to get out of a SSF position immediately, there may be some small costs associated with placing an order that trades at the bid (ask).

⁸⁴ The OCC stock loan agreements which clear in the same risk pool as SSFs have no transparency in financing rates as opposed to the transparency required by regulated markets.

repo by allowing the cash borrower to retain their exposure to the underlying through the SSF derivative while borrowing cash from the cash lender. The cash lender earns a risk-free profit for facilitating the loan. When used as a stock loan, the lender of stock earns additional yield without changing their risk profile while the borrower receives stock that they can use to short the underlying equity. The only differences between a STARS and OTC repo and stock loan transactions are their names, and the fact that STARS are exchange-traded.

Because STARS consist of a front leg and an equal but opposite back leg on the same underlying, STARS are perfectly hedged at transaction time. When the STARS is transacted the participants have not changed their risk profile as the front and back legs of the transaction offset each other. When the expiration of front leg causes a transfer of stock, neither side's delta exposure changes. If a market participant started out with a long stock position, they will transfer the stock position to the other party and be left with a long SSF with the same risk exposure. The other side will receive long stock from the initial transfer that is balanced against a short SSF position.⁸⁵ When the back leg of the transaction expires, the initial transfer is reversed through a second transfer which returns the parties to their initial positions. The only difference will be the income (costs) from the embedded interest component.

As an equity repo, STARS transactions are a substitution, replacing an existing stock position with an equivalent derivative. Though this transaction does not change the risk profile of the market participant, that is not necessarily clear from a snapshot of their portfolio. At any point in time between the initial transfer and the reversing transfer, a market participant would be holding a long SSF derivative which would look exactly like a naked position. The other side of the STARS equity repo is always hedged.

As a stock loan, STARS transactions allow a participant to establish a short risk profile on the underlying instrument. The participant does not get a short position through the STARS transaction itself, they get a long stock position and a short back leg. Only by selling the long position in the national market system can they animate the short position. There is no reason to margin an unleveraged short position at levels above risk. The other side of the stock loan transaction is a substitution transaction, exactly like the participant in the equity repo.

Finally, for customers carrying positions on margin at an interest rate that exceeds STARS rates, they could simultaneously use a STARS transaction to lower their carry fees and increase their returns.

We know of no other viable use cases for a STARS transaction. Given that STARS transactions are exclusively used for equity finance transfer transactions that don't change a participants risks profile, it is appropriate to margin them at risk-based levels. As has been demonstrated earlier in this comment letter risk-based margins are sufficient to protect against systemic risk. A discussion regarding how risk-based margining for STARS is consistent with the '34 Act is attached as Appendix E.

Part 6: Conclusion

It is OneChicago's hope that this comment letter has provided the Commissions with better insight into the nature of SSF markets and the challenges that they face due to the current margin treatment. This insight should lead the Commissions to several conclusions. The equity finance business is about the transfer and return of stock, something that options cannot replicate. Options have different risk and different uses from SSF products and should not be compared for the purpose of setting margin. Even the option portfolios the Commissions construct to be equivalent to SSFs are not equivalent to a SSF. Equity finance products that are equivalent to SSFs all receive more favorable margin treatment both under

⁸⁵ At this point in time, this party looks like a Delta One financing desk.

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current regulation and under the proposal. As a result, the proposal will not put SSFs on a level playing field and they will continue to be an unattractive choice because of their regulatory treatment.

Fortunately, the solution is simple. Risk-based margins combined with variation pay/collect would make SSFs competitive with equivalent products while ensuring sufficient risk protection. In conclusion, we note that then Fed Chairman Alan Greenspan gave testimony that the '34 Act does not require that margins between options and SSFs are the same, just that they provide consistent protection. Risk-based initial margin combined with the discipline of variation pay/collect provide that protection. Accordingly, the Commissions are right to consider risk-based margins for security futures products.

OneChicago thanks the SEC and the CFTC for releasing this proposal and giving OneChicago the opportunity to comment. We look forward to working with the Commissions as they finalize this rule. If you have any questions or comments regarding this submission, please feel free to contact me at any time by phone at [REDACTED] or through email at [REDACTED].

Sincerely,

Thomas G. McCabe

Thomas G. McCabe
Chief Regulatory Officer

Appendix A: Variation Settlement and Investor Biases

One factor that causes investors to take ill-advised positions is the disposition effect. The disposition effect is the tendency of investors to sell investments that have gone up prematurely to lock in gains and hold investments that have gone down too long in the hope of breaking even.⁸⁶ The studies cited by the SEC in the proposing release point to disposition effect as one of the reasons for low investor returns.⁸⁷ The disposition effect is driven by the utility of investor realizing gains and losses.⁸⁸ In other words, because an investor underweights unrealized losses compared to realized loss, they are more willing to keep a position with an unrealized loss, even when the costs of doing so may be significant. Similarly, because realized gains are preferential to unrealized gains, investors will lock in their gains by closing out a position even when there is still large potential for profit.

The fundamental characteristic of variation pay/collect counteracts the disposition effect. All gains and losses are realized daily. Therefore, there can be no disposition effect based on a suboptimal valuation of unrealized gains and losses versus realized gains and losses. There are no unrealized gains and losses to sub-optimally value. In contrast, high minimum margins do nothing to counteract the disposition effect. While high minimum margins suppress trading and reduce the opportunity to take positions, they do not influence the incentives that cause the disposition effect in the first place. In fact, in some cases, without variation pay/collect, the disposition effect could be magnified by daily margin payments. When the underlying for a short put options position changes in value, margin payments will move in the opposite direction of the unrealized gain loss. If the underlying falls, generating an unrealized loss for the option participant, the participant also receives a small realized gain from the reduced margin required for the position. This reduces the cost for the participant of leaving the position open, incentivizing them to ride their losses. Similarly, if the underlying rises, generating an unrealized gain for the market participant, they also have a small realized loss from the increased margin requirement. This incentivizes the participant to liquidate their position prematurely. Though short call options positions would have the opposite effect, even if the maintenance margin payments on short options reduce the disposition effect, they necessarily do so to lesser extent than variation pay/collect as not all of the gain/loss is realized in options. With respect to the disposition effect, the variation pay/collect scheme of futures is superior to the high minimums in options.

A related factor that can cause investors to experience low returns is overconfidence bias.⁸⁹ The theory of overconfidence bias predicts that investors have an inflated view of their trading abilities and the information they possess and that this leads them to trade too frequently and take unnecessary risks.⁹⁰ Variation pay/collect can undermine the overconfidence bias by forcing investors to realize their gains

⁸⁶ Shefrin, Hersh and Statman, Meir. "The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence". *The Journal of Finance*. Volume 40, No. 3. (July 1985). Pg 777-790. <https://www.jstor.org/stable/2327802> See also Odean, Terrance. "Are Investors Reluctant to Realize their losses?". *The Journal of Finance*. Vol. 53, No. 5. (October 1998). 1775-1798.

⁸⁷ See Odean, Terrance. "Do Investors Trade Too Much?". *The American Economic Review*. Vol. 89 No. 5. (December 1999). 1279-1298; 1294-1296. Also see Barber, Brad M., and Odean, Terrance. "Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors". *The Journal of Finance*. Vol. 40, No. 2. (April 2000). 773-806; 804. Both studies are cited in Footnote 146 of the proposing release.

⁸⁸ Barberis, Nicholas and Xiong, Wei. "What Drives the Disposition Effect? An Analysis of a Long-Standing Preference Based Explanation". *The Journal of Finance*. Volume 64, No. 2. (April 2009). 751-784.

⁸⁹ Agrawal, Khushbu. "A Conceptual Framework of Behavioral Biases in Finance". *IUP Journal of Behavioral Finance*. (March 2012). 7-18. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2152805 This article discusses several biases in financial markets.

⁹⁰ Ibid Odean, 1999 and Barber and Odean 2000.

and losses. Not only does this cause them to re-evaluate their trading strategies, but it also causes them to be more cautious when entering positions because any losses will have to be paid immediately. Variation pay/collect forces investors to constantly look at the performance of all their positions, making it less likely that they will only consider their winning trades. At the very least, the prospect of immediately paying losses will weigh against overconfidence bias.

A high minimum margin is unlikely to have much effect on the overconfidence bias. It does not functionally interact with the assumptions that cause traders to believe themselves better traders than they are. It could be argued that high minimum margins increase costs to traders, depressing trading volume and limiting the potential for leverage,⁹¹ capping potential losses for overconfident traders. However, it should be noted that these things will impact all investors, not just those that are taking risky positions that are overconfident. This is especially important in a marketplace like SSFs where market participants have low profit margins. Additionally, risk-based margins inherent in a margin scheme with variation pay/collect do a better job at limiting leverage for overconfident participants as the riskier the asset, the higher the margin level, and thus the lower the possible leverage. Furthermore, the most overconfident investors are unlikely to be impacted by a high minimum margin as the costs of additional margin will be unlikely to dissuade those investors from taking an ill-advised position. Investors who believe that an equity will rise the most will be willing to pay the most to gain exposure to that equity. A margin scheme characterized by variation pay/collect will likely perform better than one characterized by high minimums at limiting losses due to overconfidence as variation pay/collect forces investors to confront their overconfidence.

⁹¹ Heimer, Rawley Z. "Should Retail Investors' Leverage be Limited?". National Bureau of Economic Research Working Paper. (December 2017). This paper recommends a leverage constraint as a means of controlling overconfident investors in ForEx markets. Note that while margin can serve as a type of leverage constraint, it is not the type of leverage constraint evaluated in this study.

Appendix B: Statistics

Figure 1: Percentage of OneChicago SSF Delivered Each Month*

Month	2015	2016	2017	2018	2019
January	83.21%	73.24%	80.33%	80.68%	63.40%
February	102.80%	73.29%	74.47%	64.14%	56.61%
March	87.86%	94.83%	85.13%	80.10%	51.83%
April	81.93%	70.28%	67.79%	87.51%	52.17%
May	110.15%	90.02%	61.07%	68.52%	52.07%
June	81.81%	75.12%	50.91%	62.53%	52.15%
July	64.55%	71.09%	66.30%	58.11%	65.86%
August	66.56%	84.23%	59.94%	53.10%	-
September	83.77%	66.12%	62.41%	56.10%	-
October	86.00%	71.21%	73.49%	62.91%	-
November	75.07%	80.67%	86.77%	67.15%	-
December	65.77%	147.64%	76.21%	56.13%	-
Total	82.46%	83.14%	70.40%	66.42%	56.30%

*Delivery percentage is calculated by taking the ratio of open interest in the expiring month's contracts on the first of the month to the number of contracts delivered that month.

Figure 2: Margin Levels for Dow Components⁹² at Eurex and OneChicago

Symbol	Underlying Name	Eurex Margin ⁹³	Current OneChicago Margin ⁹⁴	Proposed OneChicago Margin ⁹⁵	Diff vs. Current ⁹⁶	Diff vs. Proposed
MMM	3M Co	13.62%	20%	15%	\$1,145.53	\$248.43
AXP	American Express Co	14.63%	20%	15%	\$686.70	\$46.95
AAPL	Apple Inc	11.48%	20%	15%	\$1,778.66	\$735.31
BA	Boeing Co	12.55%	20%	15%	\$2,693.92	\$886.77
CAT	Caterpillar Inc	12.52%	20%	15%	\$986.86	\$327.31
CVX	Chevron Corp	9.30%	20%	15%	\$1,354.38	\$721.68
CSCO	Cisco Systems Inc	9.96%	20%	15%	\$574.84	\$288.69
KO	Coca-Cola Co	7.92%	20%	15%	\$649.81	\$380.91
DIS	Walt Disney Co	9.89%	20%	15%	\$1,428.25	\$721.80
XOM	Exxon Mobil Corp	8.13%	20%	15%	\$894.64	\$517.84
GS	Goldman Sachs Group Inc	13.68%	20%	15%	\$1,402.88	\$292.73
HD	Home Depot Inc	9.13%	20%	15%	\$2,333.01	\$1,259.46
IBM	IBM Corporation	8.55%	20%	15%	\$1,718.35	\$968.20
INTC	Intel Corp	12.93%	20%	15%	\$374.26	\$109.66
JNJ	Johnson & Johnson	10.20%	20%	15%	\$1,272.20	\$623.30
JPM	JPMorgan Chase & Co	14.71%	20%	15%	\$618.09	\$33.94
MCD	McDonald's Corp	8.56%	20%	15%	\$2,434.89	\$1,370.99
MRK	Merck & Co Inc	12.12%	20%	15%	\$644.13	\$235.38
MSFT	Microsoft Corp	9.05%	20%	15%	\$1,540.31	\$836.71
NKE	Nike Inc	9.98%	20%	15%	\$868.81	\$435.31
PFE	Pfizer Inc	9.12%	20%	15%	\$465.06	\$250.61
PG	Procter & Gamble Co	6.64%	20%	15%	\$1,503.87	\$940.87
TRV	Travelers Companies Inc	8.95%	20%	15%	\$1,645.25	\$901.00
UTX	United Technologies Corp	10.29%	20%	15%	\$1,303.48	\$632.23
UNH	UnitedHealth Group Inc	12.27%	20%	15%	\$1,942.18	\$686.53
VZ	Verizon Communications Inc	8.24%	20%	15%	\$657.98	\$378.13
V	Visa Inc	9.34%	20%	15%	\$1,719.19	\$912.69
WMT	Walmart Inc	7.54%	20%	15%	\$1,395.49	\$835.49

⁹² Dow Chemical, Inc. and Walgreens Boots Alliance, Inc. are not included as Eurex does not list SSFs on those underlying stocks.

⁹³ Margins rates collected from <https://www.eurexchange.com/exchange-en/market-data/clearing-data/risk-parameters> on July 25, 2019.

⁹⁴ See the margin rates for underlying equities published for OneChicago products on OCC's website. <https://www.theocc.com/risk-management/ofra/>

⁹⁵ To determine the margin level for OneChicago products under the proposal, OneChicago compared the STANS margin level for each equity, based on data provided by OCC, to the minimum amount of 15% and chose the higher amount. All of these products have STANS levels lower than 15%.

⁹⁶ Difference for Current and Proposed fields show the additional cash per (100 share) contract that is required to trade in the U.S. vs overseas. Prices are based on July 24, 2019 closing prices.

Figure 3: CME Equity Index Futures and OneChicago SSF margin rates

CME Index Future	Margin⁹⁷	OneChicago SSF	Margin Current	Margin Proposed
E-mini S&P 500 Futures	4.17%	SPDR S&P 500 ETF SSF	20%	15%
E-mini Dow (\$5) Futures	4.04%	SPDR DJIA EFT	20%	15%
E-mini Nasdaq 100 Futures	4.73%	Invesco QQQ Trust Series 1	20%	15%
E-mini Russell 1000 Index Futures	3.82%	iShares Russell 1000 ETF	20%	15%
E-mini SP 500 Consumer Staples Sector Index Futures	2.75%	Consumer Staples Select Sector SPDR	20%	15%
E-mini SP 500 Communication Services Sector Index Futures	4.84%	Communication Services Select Sector SPDR	20%	15%
E-mini SP 500 Energy Sector Index Futures	5.01%	Energy Select Sector SPDR	20%	15%
E-mini SP 500 Financial Sector Index Futures	4.11%	Financial Select Sector SPDR	20%	15%
E-mini SP 500 Consumer Discretionary Sector Index Futures	4.00%	Consumer Discretionary Select Sector SPDR	20%	15%
E-mini SP 500 Healthcare Sector Index Futures	3.78%	Healthcare Select Sector SPDR	20%	15%
E-mini SP 500 Materials Sector Index Futures	4.06%	Materials Select Sector SPDR	20%	15%
E-mini SP 500 Industrial Sector Index Futures	4.11%	Industrial Select Sector SPDR	20%	15%
E-mini SP 500 Technology Sector Index Futures	4.56%	Technology Select Sector SPDR	20%	15%
E-mini SP 500 Utilities Sector Index Futures	3.23%	Utilities Select Sector SPDR	20%	15%

⁹⁷ Margin for most futures products (including CME index futures) is reported in terms of dollar value. Price was converted to a percentage using the closing price on July 24, 2019.

Figure 4: Risk Based Margins on Popular Underlying Equities at OneChicago⁹⁸

Symbol	Underlying Name	Current Margin	Proposed Margin	Risk-Based Margin ⁹⁹
F	Ford Motor Company	20%	15%	8.9%
ABEV	Ambev S.A.	20%	15%	8.6%
VALE	Vale S.A.	20%	15%	12.2%
GDX	VanExch Vectors Gold Miners ETF	20%	15%	10.4%
CHK	Chesapeake Energy Company	23.8%	23.8%	23.8%
ITUB	Itau Unibanco Holding S.A.	20%	15%	9.9%
PBR	Petroleo Brasileiro S.A.	20%	15%	14.2%
GGB	Gerdau S.A.	20%	15%	10.6%
BBD	Banco Bradesco S.A.	20%	15%	10.4%
CX	CEMEX, S.A.B. de C.V.	20%	15%	13%
ORCL	Oracle Corporation	20%	15%	7.4%
OIH	VanEck Vectors oil Services ETF	20%	15%	10.3%
TEVA	Teva Pharmaceutical Industries Limited	20%	20%	20%
XOP	SPDR S&P Oil & Gas Exploration & Production ETF	20%	15%	10.7%
IYR	iShares U.S. Real Estate ETF	20%	15%	5.9%
GDXJ	VanExk Vectors Junior Gold Miners ETF	20%	15%	12.5%
SMH	VanEck Vectors Semiconductor ETF	20%	15%	6.7%
EXC	Exelon Corporation	20%	15%	5.5%
MDLZ	Mondelez International, Inc.	20%	15%	5.7%
SWN	Southwestern Energy Company	20%	17.7%	17.7%

⁹⁸ The symbols selected are the symbols with the largest volume (in number of futures contracts) at OneChicago in the period of August 1, 2018 – July 31, 2019. To avoid redundancy, Dow Components listed in Figure 1 were excluded from this table. These symbols are PFE, VZ, MSFT, and JNJ. Together the symbols in Figure 4 comprise 24% of the volume at OneChicago over the past 12 months.

⁹⁹ Risk-based margin is the clearinghouse level margin provided by OCC to OneChicago.

Figure 5: Amount of Margin Collected for Under Different Margin Schemes†

Date	Current 20% Minimum	Proposed 15% Minimum	Reduction Under Proposal*	Risk-Based Margin	Reduction under risk- based**	Reduction from proposal***
2018-09-01	\$626,090,896	\$472,626,794	-24.51%	\$254,448,698	-59.36%	-46.16%
2018-10-01	\$695,198,500	\$524,078,379	-24.61%	\$279,227,037	-59.83%	-46.72%
2018-11-01	\$515,178,027	\$388,224,643	-24.64%	\$204,214,935	-60.36%	-47.40%
2018-12-03	\$422,073,221	\$317,291,840	-24.83%	\$163,281,045	-61.31%	-48.54%
2019-01-02	\$339,909,507	\$255,667,538	-24.78%	\$130,747,915	-61.53%	-48.86%
2019-02-01	\$320,130,394	\$241,167,333	-24.67%	\$122,543,486	-61.72%	-49.19%
2019-03-01	\$461,578,445	\$347,392,424	-24.74%	\$173,619,210	-62.39%	-50.02%
2019-04-01	\$582,367,136	\$438,472,224	-24.71%	\$223,741,244	-61.58%	-48.97%
2019-05-01	\$591,397,246	\$446,661,156	-24.47%	\$233,392,070	-60.54%	-47.75%
2019-06-03	\$537,215,868	\$404,551,226	-24.69%	\$210,041,861	-60.90%	-48.08%
2019-07-01	\$655,198,394	\$493,937,468	-24.61%	\$260,613,462	-60.22%	-47.24%
2019-08-01	\$725,200,930	\$546,053,518	-24.70%	\$296,330,944	-59.14%	-45.73%
Average	\$539,294,880	\$406,343,712	-24.65%	\$212,683,492	-60.56%	-47.66%

† Calculated using 1) Open interest, 2) daily settlement prices, and 3) OCC provided margin rates.

*Represents the reduction in margin under the proposal as compared to the current level.

**Represents the reduction in margin under risk-based margining as compared to the current level.

***Represents the reduction in margin under risk-based margining as compared to the proposal

Appendix C: Customer Letter

To whom it may concern

Société Générale has been a market participant in Single Stock Futures (SSF) trading for over 5 years and, in the past, has invested time and effort in the growth of the product. While the introduction of Initial Margin on OTC products could have led to a desired growth in SSF trading, the uncompetitive Initial Margin feature of SSF has led to a reduction of volume instead, including at Société Générale. Overall we did observe an increase in the use of listed (index) derivatives by financial institutions after the introduction of IM on OTC derivatives.

As SSF are often used as a financing mechanism, the current IM prohibits the product to grow as the cost of IM is too high. We have observed end users actively looking for alternatives, which they have found at exchanges abroad (Eurex). In order for SSF to grow and efficiently facilitate the migration from OTC to listed derivatives, the initial margin should be aligned with other products and be allowed to be subject to risk based margin.

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Appendix D – Risk Based Margining is Consistent with Securities Act of 1934

A. Congressional Intent

To properly understand the language in the '34 Act, it is important to first look at the Congressional record related to the margin provision in order to discern Congressional intent. The language surrounding margin was debated extensively through the legislative process¹⁰⁰. Through this process, three primary legislative goals became clear. First, Congress intended to prevent the market for security futures from being ceded to overseas competitors.¹⁰¹ At the time of the CFMA, markets such as EUREX and LIFFE were beginning to list SSFs on U.S. listed equities. Congress wanted to ensure that U.S. exchanges had the potential to compete with these product offerings in overseas markets. Second, Congress wanted to ensure regulatory harmonization between options and SSFs.¹⁰² There was concern, especially from options industry participants that SSFs would directly compete with options and Congress wanted to make sure that participants did not migrate between futures and options for regulatory reasons. Third, and related to both previous points, Congress wanted to avoid regulatory arbitrage.¹⁰³ Bill sponsors made a

¹⁰⁰See Senate Hearing 106-922. "S. 2697 – The Commodity Futures Modernization Act of 2000". Joint Hearing Before the Committee on Agriculture, Nutrition, and Forestry United States Senate and the Committee on Banking, Housing, and Urban Affairs". June 21, 2000. See Also House Hearing No. 106-54. "Hearing Before the Subcommittee on Risk Management, Research and Specialty Crops of the Committee on Agriculture House of Representatives." June 14, 2000. See also House Hearing No. 106-67. "HR 4541 – The Commodity Futures Modernization Act". Hearing Before the Committee on Banking and Financial Services U.S. House of Representatives. July 19, 2000. See also House Hearing No. 106-123. "The Commodity Futures Modernization Act of 2000". Hearing Before the Subcommittee on Finance and hazardous Materials of the Committee on Commerce House of Representatives. July 12, 2000.

¹⁰¹ See Congressional Record, Volume 146, No. 155, 12489. Rep. Thomas Ewing. December 15, 2000. <https://www.congress.gov/crec/2000/12/15/CREC-2000-12-15-pt2-PgH12442-3.pdf> "By breaking down the Shad-Johnson barrier, the bill will foster a healthy competitive environment for futures on single stock and narrow-based futures indices, risk-management instruments that heretofore have been prohibited by an outdated U.S. Law. Because foreign competitors have already focused considerable resources to attract these markets to their shores, I would urge all agencies involved in administering the new framework for single stock futures to act as expeditiously as possible to ensure that our markets in single stock futures and narrow-based futures indices are able to meet this competition promptly and not suffer from regulatory arbitrage with overseas markets." See also Ibid, Senate Hearing 106-922. Sen. Richard Lugar. "The goal of the legislation is to ensure that the United States remains a global leader in the derivatives marketplace. Already the United States has lost much of its leadership role in the exchange-traded futures markets in Europe and the over-the-counter market may not be far behind. Congress has a good opportunity at this point to reverse this tide by enacting sound legislation this year." See also Ibid, House Hearing No. 106-123. Rep. Mike Oxley. "...failure to reach agreement now between the SEC and the CFTC is simply not an option. We have waited 18 years for the temporary ban to be lifted on a potentially useful financial product. If we wait any longer, the activity will move offshore, and I am confident agreement can be reached."

¹⁰² See Ibid, Congressional Record, Volume 146, No. 155, 12497. Rep. John Dingell. "the bill requires that margin treatment of stock futures must be consistent with the margin treatment for comparable exchange-traded options. This ensures that margin levels will not be set dangerously low and that stock futures will not have an unfair competitive advantage vis-a-vis stock options." See also Ibid, Senate Hearing 106-922. Sen. Richard Lugar. "Our bill would also provide for joint jurisdiction with each agency maintaining its core authorities over the trading of single-stock users. The legislation would further require that margin levels on these products be harmonized with the options market."

¹⁰³ Ibid, Senate Hearing 106-922. Sen Chuck Schumer. "The SEC has always been charged with protecting investors and providing full and fair disclosure of corporate market information and preventing fraud and manipulation. The CFTC regulates commercial and professional hedging and speculation in an institutional framework. CFTC cannot regulate insider trading. Margin requirements are different. I hate to see investors shopping as to which instrument to

point to emphasize that they wanted market forces and not margin levels to determine winners and losers. Margin needed to be set at a level that prevented it from impacting a market participant's decision on what products to trade.

Unfortunately, regulation of SSFs has failed to meet these goals. While the percentages of equity options initial margin and SSF initial margin have been equal, the margins have not been harmonized and are not consistent. SSFs have variation pay/collect while options do not, which makes a strict comparison of initial margin percentages inappropriate. Business has not migrated between options and SSFs, as the products are not comparable. However, the high margins in SSF markets have prevented OTC derivatives from migrating to centrally cleared exchange-traded marketplaces, effectively picking winners and losers in the marketplace. Setting the level of SSF margin at the exact percentage of equity option margin does not achieve the legislative goals of Congress. This lends itself against an interpretation of the '34 Act that requires the percentages to be identical.

It should also be noted that during the discussions on comparability to options, it was repeatedly noted that margins consistent with options were not the same as margins equal in percentage to options. As stated by then Fed Chairman Greenspan in written testimony, "for purposes of preserving financial integrity and preventing systemic risk, margin levels on futures and options should be considered consistent, even if they are not identical, if they provide similar levels of protection against defaults."¹⁰⁴ Furthermore, the concept of consistent margins not equaling exact percentages was one that had been recognized for some time before the CFMA was introduced. As noted by Patrick Parkinson, then Associate Director of the Division of Research and Statistics at the Federal Reserve, this principle was drawn from the President's Working Group ("PWG") first report in 1988.¹⁰⁵ The PWG 1988 report was authored by the then Chairmen of the CFTC, SEC, and Federal Reserve as well as by the then Undersecretary for Finance at the Department of the Treasury. In Appendix B, the report concludes, "... 'harmonious' or 'consistent' margins across cash and futures markets do not imply equal margins across cash and futures markets."¹⁰⁶ The language of margin levels needing to be "harmonious" and "consistent" is repeated frequently throughout the record of the CFMA debate. The language of margins being "consistent" with options was enshrined in the statute itself. It is hard to look at the discussion of what it meant for margins to be consistent and the PWG statements of what it means for margins to be consistent and not think that the '34 Act is intentionally using the term with the meaning implied by the PWG.

A discussion of Congressional intent would not be complete without a discussion of Dodd-Frank as that bill undid many of the CFMA's provisions. Of particular note are Dodd-Frank's prescriptions concerning central clearing. The centerpiece of Dodd-Frank Title VII is the central clearing mandate which requires the Commissions consider categories of swaps and security-based swaps to determine if they should be cleared and mandates universal clearing for those categories.¹⁰⁷ The clearing mandate was adopted in

use or to buy for that reason. So neither regulation nor the lack of it should pick winners and losers among products or exchanges and fair competition should."

¹⁰⁴ Ibid, Senate Hearing 106-922. Appendix A, Chairman Alan Greenspan Written Testimony. Pg. 71

¹⁰⁵ Ibid House Hearing No. 106-54. Associate Director Patrick Parkinson. Pg 27. "Yes, I think that they [futures margin and options margin] are capable of being harmonized in the sense that we laid out in the testimony. In fact, these are issues that have debated before. The language that is in our testimony really is drawn from the President's Working Group's first report back in 1988, when there was a very intense focus on the consistency of margins between cash markets, futures, and index options. I think there was an understanding reached at that time how to think about these issues. The key thing is that similar methodologies be adopted."

¹⁰⁶ President's Working Group. "Interim Report of the Working Group on Financial Markets." May 1988. Appendix B

¹⁰⁷ 7 USC 2(h) and 15 USC 78c-3

response to the financial crisis where credit exposure in the OTC derivatives market “created the dangerous interconnections that spread and amplified risk across the entire financial system.”¹⁰⁸ Both the CFTC¹⁰⁹ and the SEC¹¹⁰ recognized the central clearing mandate as central to the reforms to derivatives markets in Dodd-Frank. Dodd-Frank also required selected swaps and security-based swaps to be exchange-traded¹¹¹ (or traded on a swap or security-based swap execution facility) in order to promote price transparency.¹¹² Dodd-Frank also gives authority to the Commissions to set higher margin requirements for swaps and security-based swaps¹¹³ in order to discourage risky behavior.¹¹⁴ These provisions provide a clear mandate to the Commissions to incentivize central clearing.¹¹⁵

Given the clear Congressional preference for the Commissions to incentivize central clearing wherever possible, the SFP margin requirement in the ’34 Act should not be interpreted in such a way that disincentivizes central clearing. It should be clear by now that SSFs serve as a perfect economic substitute for many of the security-based swaps considered in Dodd-Frank. Margin levels for SSFs that are effectively higher than the margins for economically equivalent uncleared OTC security-based swaps unequivocally encourage participants to remain in uncleared OTC markets. An interpretation for the margin requirement in the ’34 Act which requires higher margins for cleared products is not consistent with Dodd-Frank.

B. Statutory Language

The statutory construction of Section 7(b)(2)(B)(iii)¹¹⁶ allows for a risk-based margins. There are two terms that bear close examination: “consistent” and “comparable”. As has been previously explained, the term “consistent” means that the protection against default should be equivalent when used with respect to the level of margin. However, its usage in Section 7(b)(2)(B)(iii)(I) (“Subclause I”) implies that it is

¹⁰⁸ Senate Report 111-176. Pg 31.

¹⁰⁹ 77 FR 74285 “Title VII of the Dodd-Frank Act establishes a comprehensive new regulatory framework for swaps, and the requirement that swaps be cleared by DCOs is one of the cornerstones of that reform.”

¹¹⁰ 77 FR 41603 “Clearing of swaps and security-based swaps was at the heart of Congressional reform of the derivatives market in Title VII.”

¹¹¹ 7 USC 2(h)(8) and 15 USC 78c-3(h)

¹¹² Former CFTC Chairman Brooksley Born, Joint Economic Committee testimony, December 2, 2009.

<https://www.govinfo.gov/content/pkg/CHRG-111shrg55899/html/CHRG-111shrg55899.htm>

“While central clearing would mitigate counterparty risk, central clearing alone is not enough. Exchange trading is also essential in order to provide price discovery, transparency, and meaningful regulatory oversight of trading and intermediaries.”

¹¹³ 7 U.S.C. 2(h)(4)(B)(iii) (2012); 15 U.S.C. 78c-3(d)(2)(C)

¹¹⁴ Senate Report 111-176. Pg 34. “OTC (contracts not cleared centrally) should still be subject to reporting, capital, and margin requirements so that regulators have the tools to monitor and discourage potentially risky activities.”

¹¹⁵ Feder, Daniel. “To clear or not to clear: how SEC implementation of Dodd-Frank Undermines Title VII’s mandatory clearing requirement”. Columbia Business Law Review. Vol 1, No. 252, 252-304, 270-271.

“the statutory structure reflects the Senate’s policy preference for mandatory central clearing. Title VII’s primary means of regulation – the mandatory clearing determinations and the two procedures set out for reviewing product types (by submission process and commission-initiated review) – ensure that the Financial Regulators will consider all derivative products for mandatory clearing. The fallback regulatory options of increased margin and capital requirements are included to address the risk presented by products that are not suitable for central clearing, but the increased costs also intend to prod the market toward standardization and clearing where possible.

¹¹⁶ “(iii) to require that –

(I) the margin requirements for a security future product be consistent with the margin requirements for comparable option contracts traded on any exchange registered pursuant to section 78f(a) of this title; and

(II) Initial and maintenance margin levels for a security future product not be lower than the lowest level of margin, exclusive of premium, required for any comparable option contract traded on any exchange registered pursuant to section 78f(a) of this title, other than an option on a security future;”

speaking about more than just the level of initial and maintenance margin. The word “consistent” is reused in the same fashion in Section 7(b)(2)(B)(iv) where the statute states that “margin requirements (other than levels of margin), including the type, form, and use of collateral for security futures products, are and remain consistent with the requirements established by the Board, pursuant to subparagraphs (A) and (B) of paragraph (1).” This provision is referencing Regulation T requirements. What this demonstrates is that when Subclause I references “margin requirements” it is not just referring to the level of margin, but all aspects of the margin requirement. However, all aspects of the margin requirements surrounding security futures are not the same as options because options do not have variation pay/collect margin.

There are two additional factors which indicate that variation margin was supposed to be considered when Subclause I calls for margin requirements to be consistent. First, the definition of margin. Margin was defined in the CFMA as “the term ‘margin’, when used with respect to a security futures product, means the amount, type, and form of collateral required to secure any extension or maintenance of credit, or the amount, type, and form of collateral required as a performance bond related to the purchase, sale, or carrying of a security futures product.”¹¹⁷ Variation pay/collect is collateral required as a performance bond related to the carrying of a SSF position, so it falls under this definition. Therefore, when Subclause I refers to “margin requirements”, included in that umbrella are the requirements surrounding variation pay/collect. Second, Section 7(b)(2)(B)(iii)(II)’s (“Subclause II”) use of “initial and maintenance margin” implies that variation margin is included in other references to “margin”. Because Subclause II specifically enumerates two types of margin whereas the other subclauses do not, it implies that there is an additional type of margin not mentioned in Subclause II. If initial margin and maintenance margin were the only types of margin considered by the statute, the phrase “initial and maintenance” would be superfluous language. Outside of initial margin and maintenance margin, the only other type of margin is variation margin. Subclause I can only be read to include variation margin as part of what the Commissions are required to make consistent between SFPs and options.

Given the preceding, there are two reasonable ways in which to interpret Subclause I’s statement that margin requirements be consistent between SFPs and options. Either Subclause I is indicating that with respect to the level of margin, that variation margin should be taken into account or Subclause I is indicating that all aspects of margin, including variation margin, should be similar between SFPs and options. Given either reading, it does not make sense to interpret Subclause II as requiring initial margin between SFPs and options to have the same percentage. If Subclause I directs the Commissions to take variation pay/collect into account when calculating the appropriate level of margin, Subclause II cannot mean that the Commissions should only focus on the percentages of initial and maintenance margin. On the other hand, if Subclause I means that variation margin must be consistent between SFPs and options, it would require the Commission to institute variation margin in options markets. Under this interpretation, Subclause II would only make sense when Subclause I was true. This reading of the ‘34 Act would only require the percentages to be equivalent, if margins were administered and collected in the same way.¹¹⁸ It is not appropriate to set the margins at the same percentage level if they are not administered and collected in the same way.

One cannot even read Subclause II as modifying Subclause I to explain that setting initial margin at the same percentage level makes them consistent. As previously shown, Subclause I requires that variation margin be considered when making margins consistent between futures and options. Subclause II would then state that when making margins consistent between futures and options, variation pay/collect should

¹¹⁷ 15 USC 78c(a)(57)(A)

¹¹⁸Notwithstanding the differences in risk profiles between the contracts.

not be considered. This is an inconsistent reading. The only way this reading would make sense is if it was read as all aspects of variation margin must be similar between futures and options, but that it need not be considered when setting the initial margin level. However, this reading would require the SEC to require variation pay/collect in options markets.¹¹⁹

The best way to read Subclause II is not that the percentages of the margins must be equal, but that the level of protection it provides to the marketplace is not lower in SSFs than in options. The Commissions already seem to recognize that the statute does not call for equal percentages.¹²⁰ Instead, the level of initial and maintenance margin should be considered not lower than comparable options when it provides a level of protection against default that is not lower than comparable options.¹²¹ This reading would support the Commissions considering variation margin when looking at the appropriate level of initial margin. The Commission could then make a determination that a 15% margin rate on an option position provides similar protection as an SSF position using a risk-based margin methodology with variation pay/collect. Technically, the 1988 PWG report already made this determination.¹²² Alternatively, the Commissions could read Subclause I and Subclause II as internally contradictory statements and determine that the statute is vague and poorly constructed. In this case, the Commissions would de-emphasize the specific wording of this section and instead focus on the Congressional intent to not pick winners and losers and then interpret Subclause I and II in a way which supports those goals. This is a path that leads to risk-based margins for SSFs.

The other important term in Subclause I and Subclause II is “comparable”. SFP margins only need be no lower than options margins if the option and the SFP are comparable. This requirement justifies risk-based margins. There are no options contracts comparable to dividend-adjusted SSFs.¹²³ As has been previously explained in detail, options have dividend risk, pin risk, and assignment risk. None of these risks are present in a dividend-adjusted SSF. The delta value on an option can never equal exactly one (though it can get close) and can change due to moves in the underlying. The delta value on a SSF is always one. An option requires a transfer of funds, in the form of a premium payment, at the time of purchase, where there is no such payment of the futures price until the expiration date. These differences are significant enough that they prevent the products from being traded interchangeably. Products which are not interchangeable should not be considered comparable.

The Commissions point to the combination of a long (short) call and a short (long) put as an option strategy comparable to an SSF. As has already been described, this portfolio does not have the same risks as an SSF. Furthermore, even if it did, the Commissions could not use this portfolio to compare with SSFs. Subsection II requires that margin levels for SFPs be no lower than the lowest level of margin “required for any comparable option contract”.¹²⁴ A combination of a long call and short put with the same strike price is not an option contract. It is an options position consisting of two different option

¹¹⁹ One could also argue that it requires removing variation pay/collect in SFP markets but this would remove the most important tool futures markets have for preventing default risk which would be inconsistent with Section 7(b)(2)(B)(i)-(ii) which require that margins preserve the financial integrity of markets trading SFPs and prevent systemic risk. It is OneChicago’s belief that the Commissions cannot meet these requirements without variation margin.

¹²⁰ 84 FR 36434, 36439. “Congress did not instruct the Commissions to set the margin requirements for security futures at the exact level as the margin requirements for exchange-traded options.”

¹²¹ Ibid, Senate Hearing 106-922. Appendix A, Chairman Alan Greenspan Written Testimony. Pg. 71

¹²² Ibid, PWG 1988. Appendix B

¹²³ The Commissions could determine that dividend adjusted single stock futures are not comparable to option contracts but that other SFPs which are not dividend adjusted (and thus not delta one) are comparable to options.

¹²⁴ 15 USC 78g(c)(2)(B)(iii)(II)

contracts. There is nothing in the language of the '34 Act to suggest that SFPs should be compared to a combination of options.

The other category of options pointed out by the Commission as comparable to the SSFs is deep-in-the-money options. As has been previously shown, these options are not comparable to SSFs. Even if the Commissions (incorrectly) insist on calling deep-in-the-money options comparable to SSFs, margins could still be set at risk-based levels. Although the Commissions has used short options to calculate the margin for comparable options, the Commissions could compare SSFs to long options. From a risk perspective, the delta exposure of a deep-in-the-money long call and a deep-in-the-money short put are identical. Long options are margined at 0%. To justify using short options as the appropriate comparison, the Commissions need to explain why short options are comparable to SSFs whereas long options are not. Otherwise “the lowest level of margin, exclusive of premium, required for any comparable option contract”¹²⁵ is 0%. The CFTC has already claimed that long call options and long put options which are deep-in-the-money are comparable to SSFs.¹²⁶ The only way to argue that a deep-in-the-money long option is not comparable to a SSF would be to use the arguments that make all options, not just long options, incomparable,¹²⁷ as we have been demonstrating throughout the course of this letter. Whether there are no comparable products because options are not interchangeable with SSFs or the lowest level of margin on “comparable” options is 0%, the Commissions would be justified using risk-based margins.

The way the Commissions have interpreted Section 7(c)(2)(B) has harmed the financial system. SSF markets have been unable to grow and securities finance participants have been incentivized to remain in OTC markets. But fortunately, the Commissions' interpretation of this statute is not the only one, or even the best one. Alternatively, the Commissions can recognize that the concern at the time of the CFMA, that options and SSFs would trade interchangeably, was unfounded as options and SSFs are not comparable products. Section 7(c)(2)(B)(iii) was written into the Exchange Act in case the products proved comparable; because they have proven to not be comparable, it no longer needs to bind upon financial markets. Accordingly, the Commissions could evolve their understanding of the '34 Act to recognize this by allowing margins to be set according to risk. Risk-based margins would preserve the financial integrity of the market and prevent systemic risk while maintaining a level of protection against default consistent with options contracts. Risk-based margins for SSFs are consistent and comparable with margins for options, fulfilling the requirements of the '34 Act.

¹²⁵ 15 USC 78g(c)(2)(B)(iii)(II)

¹²⁶ 83 FR 36799, 36802 at Footnote 33; 36803 at Footnote 43.

¹²⁷ The Commissions could argue that they should discount long options because it is not Congressional intent that SSFs be compared to a 0% margin. However, the language in the statute is clear, SSFs should be compared to the lowest level of margin among comparable products, not the highest level of margin. If the Commissions rely on this argument, they will be discounting the statutory language in favor of Congressional intent. This makes it all but impossible for the Commissions to discount the Congressional intent related to regulatory arbitrage and consideration of variation margin. The Commissions cannot both discount Congressional intent in favor of statutory language when talking about “consistent” and then discount statutory language in favor of Congressional intent when talking about “comparable”. Again, all of this is even assuming that the Commissions don't take the most logical interpretation. Congress feared that options and SSFs were comparable and so put a protection in the law to prevent arbitrage between the products that applied should the products turn out to be interchangeable. Experience has demonstrated that they are not comparable products and as such, this section should no longer hold weight.

Appendix E – Risk Based Margin for STARS is Consistent with the Securities Act of 1934

The analysis presented in Appendix E demonstrates that establishing risk-based margins for SSFs is consistent with the '34 Act. That analysis would also justify risk-based margins for STARS. However, there are independent reasons that risk-based margins for STARS are consistent with the '34 Act.

First, STARS transactions are not comparable with any option contract. This goes beyond the inherent differences between options and futures that have already been described several times. There are no options that trade as a spread on a segregated platform. There are options that trade as spreads, but in no circumstances are there options which trade as spreads that cannot be adjusted by individual option contracts and that can only be unwound via a reversing spread that requires an exercise. STARS consist of a spread with two different legs, but the transaction is designed so that it cannot be offset by non-STARS transactions. There is nothing like this in the options market

Furthermore, options cannot replicate the mechanics of a STARS transaction, and the mechanics of a STARS transaction are fundamentally what makes it work. Market participants need a vehicle that facilitates the transfer of assets from one party to the other party and then after a pre-determined period of time, guarantees transfer of those assets back with equivalent distributions. An option cannot do this. In a STARS transaction, the transfers are mandated by SSF contracts and then handled through auspices of the settlement cycle. The front leg initiates a transfer, and the back leg guarantees its return. An option cannot do this. No combination of options can do this. It is difficult to even imagine a method of attempting to replicate this mechanism through options. If the fundamental characteristic of a transaction, the characteristic that causes participants to trade it, cannot be replicated, the products cannot be considered comparable. STARS transactions are not comparable to options.

STARS transactions exactly replicate an equity repo or a stock loan in an exchange-traded fashion. They can only be used for transfer transactions. Risk-based margins would accurately cover the risks in these products. There are no comparable options to STARS, STARS can bring significant benefits to the marketplace but will be unable to do so without being treated in an equivalent manner with comparable products. This can only be achieved through a risk-based margin.