April 27, 2020 OneChicago Comment Letter Summary

Our April 27, 2020 comment letter approached option/SSF comparability from two perspectives. First, from a purely statistical review of five different aspects of the trading activity in options and futures. Secondly, from reviewing profit/loss graphs of single stock futures and various options products and strategies which the Commissions have highlighted as comparable to single stock futures.

Statistical Analyses

Statistical Analysis 1 – CBOE S&P 500 Options and CME E-mini S&P 500 futures

The first analysis compared the ratio of volume in the CBOE S&P 500 Options ("SPX") and in the CME E-mini S&P 500 futures ("E-mini") between 2007 and 2019. During this time period, sometimes SPX margins were higher than E-mini margins; other times, they were lower. If the products were comparable, regulatory arbitrage would cause business to flow from the higher margin product to the lower margin product. The analysis found no evidence that margin changes impacted the ratio of SPX volume to E-mini volume, thus no evidence that the markets found the product comparable.

Statistical Analysis 2 – OneChicago STARS transactions

OneChicago STARS transactions are financing transactions comparable to stock loan, equity repo and naturals. Financing transactions are conducted for balance sheet and cash management purposes, not to increase or decrease delta exposure. As such, they are different from other transactions that provide delta exposure. An analysis of all STARS transactions in 2018 and 2019 showed that in all cases the position that was originally established was not adjusted by a standard buy/sell trade that would increase or decrease delta. This clearly separates STARS from options positions that are generally managed throughout their life which supports the Commissions finding that options and STARS are not comparable.

Statistical Analysis 3 – Trade Sizes and Delivery Rates

The Exchange compared trade size (number of contacts and notional value) between options and OneChicago SSFs. On average, an SSF trade was for 15 times more contracts (140 vs. 8) and for 300 times more notional value (780k vs. 2.6k). Further, 5 times more SSF contracts went through delivery compared to option exercises (70% vs. 13%). On the delivery basis alone, it is clear the markets view and use the products differently.

Statistical Analysis 4 – Sensitivity to Stock Prices

The Exchange analyzed option and SSF sensitivity to changes in stock prices as stock price is a pricing input to both instruments. The expectation is that SSF trading should be less impacted by stock price change due to the financing nature of SSFs. While the analysis found there was statistical difference in how options and SSFs participation varied based on stock price changes, we found the results to be ambiguous.

Statistical Analysis 5 – SSF and Option Open Interest

The last analysis compared changes in open interest in options and SSFs. If the products are comparable, changes in open interest would be correlated. The results show no correlation between changes in open interest in options and SSFs.

Risk and Profit/Loss Graphs

The Commissions have highlighted short options and synthetic long/short stock strategies as being comparable to SSFs. Therefore, we examined the risk and the profit/loss for these against their purported

comparable SSF. Profit and loss graphs clearly depict that the short options holder and SSF participant results diverge as the position accumulates gains. Premium sellers would not trade SSFs as they cannot generate income in the same way. Option buyers would not trade SSFs as they exceed their risk tolerance levels.

While the synthetic stock positions created using options have similar profit/loss graphs as SSFs; they have three risks that are not present in SSFs – dividend risk, pin risk, and assignment risk. The current market break is an example of dividend risk, more than 200 companies have cancelled, suspended, or lowered their dividend. Holders of options on these companies have been impacted by these unexpected dividend changes – participants with corresponding OneChicago SSFs on these companies have not been impacted. Consequently, customer's end experience will be different based on how these risks present and are managed.

Summary

These analyses support OneChicago's assertion that the markets use these products differently and are not comparable products. Comparable products would have statistical similarities which we have found none. If two products have different risk profiles, trade in different patterns, are traded for different purposes, and are not used interchangeably, then there is no possibility for regulatory arbitrage and the products should not be considered comparable. Customer would be generally be indifferent between comparable products as their risks and returns would be comparable, there is no evidence that customers are indifferent between options and single stock futures.