# Bank Capital Regulations Are Adversely Impacting The Listed Options Market

**Regulatory capital rules governing banking organizations are inadvertently dampening liquidity in the options market because they do not take into account the risk-reducing characteristics of options and instead impose unnecessarily inflated capital requirements for options positions that can be riskless or risk-reducing. A simple solution is available.**

## Issue: Regulatory Capital Rules Governing Banking Organizations

The Basel Committee on Banking Supervision (Basel Committee) consists of senior representatives of bank supervisory authorities and central banks from many of the major financial jurisdictions, including the U.S. The Basel Committee adopted a framework to reduce systemic market risk by requiring banks to increase capital and/or decrease leverage for certain risk exposures (Basel III). The Office of the Comptroller of the Currency and Board of Governors of the Federal Reserve System have adopted rules in order to implement various aspects of Basel III in the U.S., including the manner in which Risk-Weighted Assets (RWA) are calculated. Unfortunately, current requirements obligate large U.S. bank holding companies to calculate their RWA using a standardized approach known as the Current Exposure Method (CEM). Under CEM, options risk is measured by notional amount, and the actual risk of exposure to options positions is ignored. For example, CEM fails to recognize that options that are far out-of-the money will have a very low delta value (i.e., the options' value is less sensitive to changes in the value of the underlying security or index), and the capital charge should be less than an in-the-money option. CEM also fails to properly allow offsetting risks to be netted (i.e., offsetting of positions) when calculating capital charges.

The Basel Committee agreed to replace CEM by January 2017 with a more risk-sensitive method known as the Standardized Approach for measuring Counterparty Credit Risk exposures (SA-CCR). However, the Board of Governors of the Federal Reserve has not yet implemented SA-CCR, and the transition is not imminent. The effect is that CEM grossly overstates a bank's actual economic exposure to listed options positions, which requires banking organizations to hold capital that is disproportionate to the actual risks posed by the option positions, including via a bank-owned clearing firm's listed options business. This problem is especially acute in high notional value products like Cboe Options' S&P 500 Index options. We note that in its October 2017 report on capital markets the U.S. Department of Treasury recommended the implementation of SA-CCR, as well as a risk-adjusted approach for valuing options, such as weighting options by their delta.

## Regulatory Capital Rules Unintentionally Harm the Listed Options Market

CEM is not properly calibrated because it is not sufficiently risk-sensitive. CEM fails to account for the delta of options and fails to fully recognize the offsetting of positions with opposite economic exposure (i.e., long positions and short positions). CEM grossly overstates a bank's actual economic exposure to listed options and therefore requires banking organizations to hold capital that is disproportionate to the actual risks posed by a bank-owned clearing firm's listed options business. Thus, CEM constrains the ability of options market-makers to accumulate positions (even offsetting positions), which hinders their ability to provide liquidity. We believe that because options market-makers are responsible for nearly all liquidity in the options industry, the knock-on effects of reduced liquidity are increased costs to investors, an increased possibility of market dislocation during volatile environments, and bias against centrally-cleared products that limit systemic risk.

## Bank-Owned Clearing Firms Clear the Majority of Market-Maker Transactions

All listed options transactions in the U.S. are cleared at the Options Clearing Corporation (OCC). The OCC is comprised of clearing members that effectively guarantee the performance of the parties to an options transaction. Options market-makers on exchanges like Cboe Options clear their trades through OCC clearing members. A majority of these clearing members are subsidiaries of bank-holding companies that are now subject to options-insensitive capital requirements that govern the method by which banking organizations calculate capital charges and affect the amount of capital the banking organizations must maintain.

## Market-Makers are Critical to the Options Market

In the listed options market, liquidity is supplied by professional market-makers. Most investor orders are executed against market-maker quotations. Due in part to the dispersion of trading interest across hundreds of options series in a single options class, the majority of individual options series would have no posted liquidity if options market-makers were not present. In short, market-maker liquidity is critical to vibrant options markets, which is why the impact of detrimental bank capital regulations on market-maker liquidity is so concerning to Cboe.

## Options are Important Risk Mitigation Tools

Options are first and foremost incredibly useful and powerful risk mitigation tools that can help protect an investor's financial portfolio. From buying puts to hedge the downside risk of owning a stock to writing covered calls to collect income and cap potential losses, listed options strategies are protective tools employed by institutions, pension funds, and individual investors. Importantly, options positions can offset one-another and curtail risk. More options positions should not necessarily equate to higher capital requirements because options used in combination often reduce risk and should thereby reduce a capital requirement, not increase it.

## We Need a Solution

Cboe supports the Treasury's recommendation that regulators appropriately tailor and target capital requirements. Cboe specifically supports Treasury's recommendation that banking regulators implement:

- A risk-adjusted approach for valuing options for purposes of the capital rules to better reflect the exposure, such as potentially weighting options by their delta.
- An adjusted SA-CCR calculation that provides an offset for initial margin and recognition of appropriate netting sets and hedged positions.

Cboe stands ready to work with interested parties on a meaningful solution, which could include:

- Interpretive relief from the Board of Governors of the Federal Reserve that will allow bank-owned clearing members to apply a more risk-sensitive methodology to listed options.
- Adoption of SA-CCR: Although the members of the Basel Committee, including the U.S., agreed to adopt the more risk-sensitive RWA calculation method known as SA-CCR by January 2017, the United States has not yet implemented SA-CCR and is not close to implementing SA-CCR.
- Legislation that properly identifies the risk profile of listed options.

*Cboe Global Markets, Inc. (Cboe) is one of the world's largest exchange holding companies and is a leader in providing global investors cutting-edge trading and investment solutions. Cboe has a strong history in product innovation, indexing expertise, options, and volatility. Cboe operates four U.S. options exchanges (Cboe Options, C2 Options, BZX Options, and EDGX Options), four U.S. equities exchanges (BYX Equities, BZX Equities, EDGX Equities, and EDGA Equities), the largest pan-European stock exchange (Cboe Europe Equities), a futures exchange (CFE), a foreign exchange-trading platform (Cboe FX), and the leader in options education (Cboe Options Institute).*