

September 21, 2018

**VIA EMAIL**

Brent J. Fields, Secretary  
U.S. Securities and Exchange Commission  
100 F. Street, N.E.  
Washington, D.C. 20549-1090

Re: Re-Approval of the OCC Capital Plan (File No. SR-OCC-2015-02)

Dear Mr. Fields,

In connection with the above-referenced proceeding, the Options Clearing Corporation (“OCC”) respectfully submits the attached Market Note from Russell Rhoads, CFA, of the TABB Group, entitled “OCC’s Capital Plan: The Value of a Bird in the Hand,” which was published on September 20, 2018 (“TABB Report”).

The TABB Group is an international research and consulting firm focused on capital markets. Based on the “healthy record on file at the SEC,” Mr. Rhoads reviewed the Capital Plan and analyzed the economic impacts to the industry if the Capital Plan were rescinded. Following that review, the TABB Report explains:

The benefits of OCC’s Capital Plan have proven to be valuable to exchanges, clearing firms and all market participants. The Capital Plan strengthens OCC’s capital base from a business perspective. This plan also enables OCC to meet the heightened capital requirements that are critical to SIFMUs such as OCC, and better positions the clearinghouse to meet international requirements. This plan resulted in market participants not being subjected to punitive capital charges. The initial objections to the Capital Plan have been shown to be unfounded, as the industry continues to thrive.

TABB Report at 5. In contrast, if the Capital Plan were rejected, the TABB Report concludes that “the alternative solution would require raising the required equity through a substantial \$0.04 incremental hike in trading fees. *Id.* at 1. This “may have a ripple effect throughout the U.S.

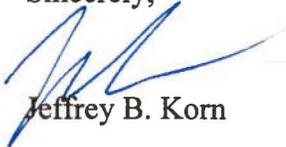
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options market, resulting in lower volumes and wider bid/offer spreads, which could have a negative impact on market liquidity,” especially to the detriment of “smaller, less sophisticated market participants.” *Id.* at 5.

OCC respectfully submits that the TABB Report further supports the conclusion that the Capital Plan is consistent with the requirements of the Exchange Act and should be reapproved.

Sincerely,



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Jeffrey B. Korn

Encl.

# OCC's Capital Plan: The Value of a Bird in the Hand

## Introduction

There is a unique and precedent-setting decision before the U.S. Securities and Exchange Commission (SEC) that will have significant implications for the exchange-listed options industry. An already-approved and implemented Capital Plan for ensuring that the Options Clearing Corporation (OCC) complies with rigorous post-crisis capital requirements was remanded to the SEC by the U.S. Court of Appeals for the D.C. Circuit. The SEC may reapprove the Capital Plan for the fourth time (yes, for the fourth time), or it may disapprove the plan.

The circumstances that have led an agency to have to rule four times on the same matter and the consequences of that decision will have a direct and important implication not only for OCC, but for the broader industry as well. The required capital is significant, and the sources to raise it are few, given legal and regulatory constraints. There is a healthy record on file at the SEC that allows us to take a look at this interesting case. While the legal issues are fascinating, our focus is on the economic impacts to the industry and to the markets if the plan is rescinded.

## Background

On the heels of the global market turbulence in 2008, eight entities were designated as Systemically Important Financial Market Utilities ("SIFMU"), which were determined to be critical to the smooth functioning of the financial markets in the United States. OCC was one of these entities. The Treasury Department determined that a failure of OCC, as a SIFMU, could threaten the stability of the financial system of the United States. As a SIFMU and Covered Clearing Agency, OCC must comply with heightened regulatory obligations. This has required OCC to enhance its resiliency to systemic risk and strengthen its capital structure to ensure loss absorption and recovery capabilities.

Since its inception, OCC has always been organized as a Delaware corporation and at no time operated as a not-for-profit entity. OCC historically refunded all fees collected in excess of expenses to clearing members. This action left virtually no resources for necessary capital improvement and also resulted in OCC being viewed as a low-cost clearing service provider. Money that should have been invested in improving and maintaining a clearing system, a

## Key Points

- In response to the financial crisis, OCC was designated a Systemically Important Financial Market Utility.
- OCC was woefully undercapitalized relative to the financial requirements associated with this designation.
- After thorough due diligence OCC adopted a capitalization plan that raised necessary equity capital plus future contingent capital from exchanges.
- The exchanges that participated in this capital raise are entitled to after-tax dividends from OCC operations.
- This annual dividend is paid after 50% of profits are returned to clearing members in the form of a fee rebate.
- This plan is in effect and is undergoing a fourth regulatory review despite serving the industry quite well for three years.
- If the plan is rescinded, the alternative solution would require raising the required equity through a substantial \$0.04 incremental hike in trading fees.

risk management system, systems and operational resiliency, and technological infrastructure was instead rebated to clearing members. To remedy this situation, an innovative plan was approved by a super majority of OCC's Board of Directors and put in place in 2015 to raise the needed funds while minimizing increases in fees to industry participants.

## OCC

OCC is rooted in the CBOE Clearing Corporation, which was founded in 1973 when CBOE became the first exchange to offer listed options trading in the US. Several other exchanges followed the CBOE's lead in offering listed option trading. In 1975 OCC was approved as the central clearing corporation for exchange-listed options. Over time, OCC has expanded its role and now provides central clearing and settlement for security futures, futures, options on futures, and OTC options, as well as securities lending transactions.

## OCC and the Great Financial Crisis

Beginning in 2007 and lasting into early 2009, the world experienced unprecedented financial uncertainty during what has been labeled “The Great Financial Crisis” (GFC). Many large financial entities came under pressure, some requiring government assistance to remain viable, and a few even ceased to survive the market turmoil. OCC did a stellar job weathering this storm, functioning as a clearinghouse for equity derivatives and some futures markets. Derivatives contributed to the GFC; however, these contracts were not cleared or monitored by a central clearinghouse, which means they were subject to counterparty risk. Theoretically, counterparty risk is greatly reduced when trading on a listed exchange with a central clearinghouse. The resilience of OCC during this period of stress in the financial markets proved this to be true in practice.

When the financial world experiences turbulence, the follow-up action is usually an increase in regulatory scrutiny. Make no mistake: OCC supported the enhanced regulatory requirements imposed on central counterparties in conjunction with OTC regulatory reform. This includes requirements that expanded its compliance obligations, increased the amount of day-to-day oversight and scrutiny by policymakers, and raised the cost of doing business in the exchange-listed options markets.

One result of the GFC was that several entities were declared to be systemically important financial entities. This resulted in OCC being designated a SIMFU by the Financial Stability Oversight Council. This designation did not have anything to do with the performance of the OCC during the financial crisis. It was just an acknowledgement of the importance of the OCC to the financial system in the United States.

## Financial Strength of OCC

OCC currently has an AA+/Stable credit rating from Standard & Poor's that was reaffirmed as recently as August 2018. Standard & Poor's issues ratings on more than 9,000 entities, and only 1% of those have a rating of AA+ or better. As of the end of 2017, OCC had more than \$247 million in capital on hand. Each year OCC is in a position to refund fees to clearing members. In 2017 more than \$78.7 million was returned to clearing members in the form of a fee rebate.

## OCC Capital Plan

After OCC was designated a SIMFU, the SEC published and subsequently adopted Covered Clearing Agency Standards that, among other things, required appropriate capitalization to ensure that central counterparties (CCP)

such as OCC would be able to fulfill their roles within the financial system. As a SIMFU OCC is required to have enough capital, funded by equity, to withstand operational, business, including pension and other, risks. As a result, OCC needed to develop an equity-funded plan that raises capital to ensure that OCC can fulfill its role as a CCP amid shocks to the financial markets and other business risks. Specifically, OCC needs to be able to continue to perform its essential role in exchange-listed options and all other markets for which it clears trades. The subsequently proposed and approved plan (Capital Plan), which was approved by OCC's Board of Directors – which consists of independent directors, clearing firms and stockholder exchanges – sufficiently covers all these criteria. Also, it should be noted that clearing member firms significantly outnumber stockholder exchanges on the OCC Board of Directors.

In 2012 the equity capital of OCC was at \$25 million. This represented enough capital to maintain business operations for only six weeks and was not considered sufficient to wind down operations. A review of the then-proposed Covered Clearing standards, as well as international guidance and business judgment, all indicated that OCC's level of equity capital was insufficient.

Starting in 2012, when OCC was designated a SIFMU, it began to devote considerable additional resources toward enhancing its resiliency, capacity, security, and integrity necessary to meet heightened compliance requirements. Unlike other CCPs, OCC started from a much worse position because it had been operating as a low-cost provider that refunded all its earnings to its members and had not invested in its infrastructure and control functions.

Even before the Capital Plan was implemented, OCC's operating expenses increased by 43%, from \$152 million in 2012 to \$218 million in 2015. In the two years since, OCC's operating expenses have risen by an additional 37% due to the enactment of Regulation Systems Compliance and Integrity (Reg SCI) and the finalization of rules governing Covered Clearing Agencies. The SEC adopted Reg SCI in November 2014 to strengthen the technology infrastructure of the U.S. securities markets. Specifically, the rules are designed to reduce the occurrence of systems issues, improve resiliency when systems problems do occur, and enhance the SEC's oversight and enforcement of securities market technology infrastructure. As a result, since its designation as a SIFMU, OCC's staff increased overall by more than 130%, and most of those increases came in crucial areas for a SIFMU. Specific areas requiring additional personnel include compliance, legal, enterprise risk management, financial risk management, internal audit, security services and information technology. These

investments all cost money that must come from OCC's only real source of income: clearing fees.

OCC's management accordingly devotes a considerable amount of time projecting how much OCC needs to spend to fund its operations and pay for its ongoing improvement efforts. It then calculates how much it needs to charge to obtain the resources to pay for its expenses while maintaining the 25% Business Risk Buffer that is required under its Capital Plan. OCC's budget is then presented to the Board of Directors for approval.

In late 2014 OCC proposed a plan to strengthen the capital base along with bringing the company into compliance with regulations that applied to OCC as a designated SIFMU. The adopted plan proposed raising \$150 million in funds from OCC's existing stockholders, which at the time were: Chicago Board Options Exchange, Inc.; International Securities Exchange, LLC; NASDAQ OMX PHLX LLC; NYSE MKT LLC; and NYSE Arca, Inc. (Stockholder Exchanges).

Through various business combinations, the Stockholder Exchanges are now owned by three parent firms. The Intercontinental Exchange (NYSE MKT LLC and NYSE Arca) and Nasdaq, Inc. (International Securities Exchange, LLC, NASDAQ OMX PHLX LLC), both have a 40% interest in the plan, while Cboe Global Markets holds the remaining 20%.

In March 2015 the SEC approved the Capital Plan, which would raise the equity capitalization of OCC to \$247 million. The shareholder exchanges contributed a total of \$150 million in equity capital to OCC and entered into agreements to provide OCC with a Replenishment Capital Commitment of up to an additional \$200 million. This was a major capital investment and commitment by the Stockholder Exchanges, resulting in \$150 million (and potentially \$350 million) being tied up indefinitely on OCC's balance sheet. The \$150 million in capital contributed by the Stockholder Exchanges was combined with OCC's 2014 retained earnings of \$72 million to reach the target capital level of \$247 million. The \$247 million target capital level was based on a comprehensive analysis by Oliver Wyman and data about comparable CCPs provided by Barclays. By any measure OCC's 2012 level of capitalization of \$25 million was woefully deficient.

A part of the Capital Plan that has not received much attention is the shareholders' obligation for a Replenishment Capital Commitment. This stipulation in the Capital Plan requires the Stockholder Exchanges to invest up to an additional \$200 million if OCC's equity falls below targeted levels. With its replenishment rights OCC effectively has a call option to request \$200 million from the Stockholder

Exchanges. It is worth noting that if OCC requests additional funds from the Stockholder Exchanges, this would likely be as the result of an operational loss at OCC or a period of industry stress. Basically, OCC would request capital at a time when a typical investor would not wish to make additional equity investments. OCC's request of additional equity from the Stockholder Exchanges also would come at a time when these entities would be experiencing weakness in their listed options business or dealing with a broader disruption of financial markets.

In return for the contribution of \$150 million and taking on the obligation to contribute up to \$200 million upon request, the Stockholder Exchanges receive an annual dividend. The annual dividend is determined in the following manner: Each year 50% of OCC's pre-tax earnings will be returned to clearing members as a refund on fees paid. The remaining funds, net of taxes, are paid to the Stockholder Exchanges as an annual dividend. Since the Stockholder Exchanges receive an after-tax distribution and the clearing members receive a refund before taxes, the clearing members will always receive a fee refund that is greater than the dividends paid to the Stockholder Exchanges. This occurs despite the clearing members having made no contribution to OCC's Capital Plan.

A final point about the dividend paid to Shareholder Exchanges: The dollar amount of the dividend is very low relative to the annual revenues for each parent company. Exhibit 1 shows the respective 2017 dividend paid to each Shareholder Exchange relative to overall firm revenues. Note that these figures fall between 0.22% and 0.33%.

The Capital Plan has been in place since 2015 but is currently undergoing a fourth review by the SEC. Previously, the SEC approved OCC's Capital Plan on three occasions. First, on Feb. 25, 2015, the SEC issued a notice of no objection to the plan; then, on March 6, 2015, SEC staff approved the plan pursuant to delegated authority; and finally, on Feb. 11, 2016, the Commission approved the plan pursuant to de novo review.

**Exhibit 1**  
**2017 Shareholder Dividends as a Percent of Revenues**

Corporate Entity	2017 Revenue	2017 Dividend	Dividend % of Revenue
Cboe Global Markets	2,229	6.5	0.29%
NASDAQ OMX	3,965	13.0	0.33%
Intercontinental Exchange (NYSE)	5,834	13.0	0.22%

Source: TABB Group Estimates, OCC, Corporate Annual Reports

The U.S. exchange-listed options industry has experienced solid volume over the period since the Capital Plan was

implemented and is on track for a 20% volume increase in 2018. Over the three years since the Capital Plan was implemented, \$78 million has been paid to the Stockholder Exchanges in the form of dividends, while clearing members have received \$235 million in clearing fee refunds.

**Alternative Plan**

After extensive research by outside consultants, OCC's Board of Directors was presented with two alternatives to raise the needed equity. The alternatives recognized the governance rights of OCC's shareholders within OCC's bylaws. The final two choices were the plan that was adopted (Capital Plan) and an alternative plan. The alternative to the Capital Plan, or Fee Plan, would have been funded by increasing customer fees and retaining after-tax earnings. This plan had many deficiencies when compared to the adopted plan.

One deficiency is that using an increase in fees may result in diminished industry volumes. Another is that using retained earnings is tax-inefficient when compared to the adopted plan. OCC's earnings are subject to federal and state taxes, so OCC would need to have accumulated significantly higher levels of revenue on a pre-tax basis to achieve its target capital level. Also, under the Fee Plan, the fees paid by market participants would accrue to the benefit of the Shareholder Exchanges, as they would become retained earnings. Finally, OCC would need to raise more than the \$150 million contributed by the Stockholder Exchanges to ensure that it had a plan for recapitalization.

Regulations require OCC have a viable plan to raise additional capital if needed. The Shareholder Exchange's replenishment obligations satisfy that requirement. Without replenishment from its shareholders, OCC will need a viable plan to raise additional capital. OCC is a private company, with bylaws the prevent shareholder dilution, so issuing equity is not a choice. The materials OCC has filed with the SEC reflect that if OCC is required to use fees to raise capital that it would seek to prefund the Replenishment Capital (\$200 million) and that would need to be raised through higher clearing fees as well.

When the OCC Board of Directors chose the Capital Plan, it stated that the plan, "would not increase upfront costs to clearing members and would also raise capital within the timeline OCC anticipated it would have to comply with the SEC's new regulation." The OCC Board of Directors felt the Capital Plan was clearly the better alternative to the Fee Plan.

**Objections to the Plan**

There are multiple immediate negative consequences if OCC's Capital Plan is rescinded by the SEC. The

Stockholder Exchanges would need to be repaid their respective contributions to the plan. Further, OCC would lose its right to the replenishment funds. As a result, OCC would not have the needed liquid net assets funded by equity to cover the mandated six months of operating expenses. Also, there would be no plan in place to replace the lost capital and, most important, OCC would not have the necessary capital to weather any unforeseen operational, business, or pension risks.

If the Capital Plan is rescinded by the SEC, the result is that OCC will need to look for alternative sources of funding to achieve the level of operating capital that has been mandated by regulators. The only apparent scenario would involve OCC charging higher fees. This was the alternative presented to the OCC Board of Directors when the Capital Plan was approved initially.

TABB Group has forecasted the potential fee impact should OCC need to pursue this route (*Exhibit 2*). To do that we first estimated how much capital OCC would need to replace based upon information that it has submitted to the SEC. We estimate that as of September 2018, and including the \$150 million of Shareholder Exchange capital, that OCC has roughly \$300 million in liquid net assets funded by equity. If OCC then returns \$150 million in equity investment to its shareholders, its liquid net assets funded by equity would fall to \$150 million. OCC's target capital is \$247 million, and it has replenishment rights from its shareholders of the lesser of six months of operating expenses or \$200 million that it would need to be replaced if the Capital Plan is overturned. As a result, OCC's capital need would be \$447 million versus its projected level of \$150 million or the need to accumulate an additional \$396 million on a pre-tax basis, assuming a 25% effective tax rate after the tax changes effective this year.

**Exhibit 2**  
**Estimated Impact If Capital Plan is Rescinded**

Available Capital	\$ Amount (M)
Estimated liquid net assets funded by equity	\$300
Capital Returned	(\$150)
Projected liquid net assets funded by equity	\$150
<b>Capital Requirement</b>	
Target Capital	\$247
Replenishment	200
Total Requirement	<b>\$447</b>
<b>Need</b>	
Amount OCC needs to replace	\$297
OCC effective tax rate	25%
Pre-tax capital need	\$396

Source: TABB Group Estimates

Of course, the question of how high OCC fees need to go would be a function of what volumes are expected and how long OCC has to raise the money. Assuming no impact of increased fees on volume, we can start with the 2018 year-to-date average daily volume across options and futures of 20.3 million contracts, or an annual volume of 5.1 billion contracts; or 10.2 billion contract sides, which is consistent with how OCC charges fees.

These amounts are incremental, or over and above OCC's existing fee. As a result, based on OCC's current fee of 5 cents, the fee would increase to 9 cents in order to raise the needed capital in 12 months.

Unfortunately, OCC's fee schedule has a nuance, by providing a cap of \$55 per trade, which complicates the model of the impact. The presence of the fee cap would tend to result in an underestimation of the level of fees necessary. We would further assume that, if the capital plan were overturned by the SEC, there would no longer be refunds or dividends on a go-forward basis. Thus, OCC's "base clearing fee rate might change as a result of the 25% business risk buffer being available to support OCC's accumulation of capital." Additionally, OCC's management has stated publicly and shared with its Operations Roundtable that it needs to replace its clearing and risk management system, Encore, which was put into place in the early 2000s. Presumably, the expenses for conducting needed internal investment will also increase fees.

was also approved three separate times by the SEC. Whenever there is a change to the status quo, such as the implementation of the Capital Plan, there are concerns as to the possible impact of those changes.

The benefits of OCC's Capital Plan have proven to be valuable to exchanges, clearing firms and all market participants. The Capital Plan strengthens OCC's capital base from a business perspective. This plan also enables OCC to meet the heightened capital requirements that are critical to SIFMUs such as OCC, and better positions the clearinghouse to meet international requirements. This plan resulted in market participants not being subjected to punitive capital charges. The initial objections to the Capital Plan have been shown to be unfounded, as the industry continues to thrive.

The whole listed option space has benefitted from the Capital Plan, as OCC is now able to withstand any unforeseen shocks to the financial system. If the Capital Plan is rescinded, the impact of OCC needing to raise fees to replace the capital and replenishment commitment has the potential to have a detrimental impact to all market participants.



**Exhibit 3**  
**Estimated Increase in Fees to Raise Needed Equity**

Action to Raise \$396 Million	in 12 Months	in 18 Months
Monthly Fee Increase	\$33 Million	\$22 Million
Volume at 20.3 M Avg Daily Volume	812 Million	812 Million
Incremental Fee	0.041	0.027

Source: TABB Group Estimates

Of course, an increase in fees in the magnitude that this suggests may have a ripple effect throughout the U.S. options market, resulting in lower volumes and wider bid/offer spreads, which could have a negative impact on market liquidity. The resulting diminishment of market quality would have a more dramatic impact on smaller, less sophisticated market participants.

**Conclusion**

OCC implemented the Capital Plan in response to regulatory changes that recognized the clearinghouse as a systemically important entity within the U.S. financial system. After weighing several alternatives, OCC's Board of Directors adopted and implemented the Capital Plan, which has been in place for more than three years. This plan

**About TABB Group**

TABB Group is the international research and consulting firm focused exclusively on capital markets, founded on the interview-based research methodology developed by Larry Tabb. Since 2003, TABB Group has been helping business leaders gain a truer understanding of financial markets issues to develop actionable roadmaps and approaches to future growth. By accurately assessing their customer base, competition, and key market opportunities, TABB Group works with senior industry leaders to make critical decisions about their businesses. For more information, visit [www.tabbgroup.com](http://www.tabbgroup.com).