
Susquehanna...IMC... Wolverine...Spot Trading...Integral Derivatives

August 5, 2016

Via Electronic Submission and Mail

Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, NE, Washington, DC 20549-1090

Re: AMEX Options Fee Filing - 34-78029/SR-NYSEMKT 2016-45

Dear Mr. Fields:

The options market maker (“MM”) Firms signed to this letter appreciate the opportunity to submit comments in connection with the order to institute proceedings (“the Order”) by the Securities and Exchange Commission (“SEC” or “Commission”) on whether to “approve or disapprove” the above-referenced rule filing.

The NYSE MKT (“AMEX”) proposes fees, rebates and credits (“Proposal”) in relation to its auction cross mechanism (“CUBE”) that would:

- (i) *increase* so-called “break-up” fees on responding interest that replaces the interest of the Initiating Participant (“IP”);
- (ii) *increase* rebates to IPs for CUBE trades under its ACE program;
- (iii) *increase* “break-up credits” to IPs for contracts they initiate on CUBE but not facilitate due to competing liquidity from auction cross responders (“Responders”) that break-up the cross.

As over 90% of Responder break-up interest originates from options MMs, and over 90% of displayed options liquidity is supplied by options MMs, disenfranchising options MMs in auctions not only reduces competition in the respective auctions it paves a path to diminished liquidity from options MMs in general across all markets¹.

¹The MM Firms signed to this letter constitute a significant portion of the displayed quoting in listed options and, therefore, are well situated to see clearly to what extent a fee impacts quote competition.

Order handling firms are seeking to initiate more auction crosses. In the past year alone, auction executions in options have increased by over 20%². It is now the case that most auction crosses impose oversized break-up fees on Responders and pay oversized credits to IPs. Each such occurrence raises the concern that disenfranchised MMs will have less reason to quote aggressively, which means quotes become wider. To the extent that this occurs, the break-up fees, rebates and credits proposed by AMEX would add to the development of a more anti-competitive trade structure that unjustly harms investors. We recommend that the Proposal be disapproved in its entirety and that the SEC conduct a comprehensive review of all option exchange auction fees, rebates and credits. We recommend the review be conducted from both a reasonableness standard – for individual levels of break-up fees, credits and rebates – and from an anti-competitive level in regards to fee differentials between net rebates paid to IPs and break-up fees paid by Responders (“fee differentials”).

Execution Quality and Price Improvement

The promise of a crossing auction is price improvement for the customer. But an improvement over the disseminated quote may not qualify as true improvement. For example, while the AMEX and CBOE currently require that auctions begin at a price that improves the NBBO, other auctions require that the price need only match the NBBO or improve the BBO of the executing exchange to the NBBO price. In these cases, the customer will often only receive a fill at the NBBO price.

Likewise, current execution quality may be more illusory than real when the execution price does not compare well on a relative-value basis to prices obtained in similar option series under similar circumstances in the past – even when the current auction execution price improves the NBBO. This can occur if the disseminated quote for such options, on a relative basis, has widened over time and the customer’s order is executed in an auction at a price less favorable to what it could have received if the NBBO quote had not become relatively wider. Consequently, wider quotes lead to auction pricing that may produce more “NBBO price improved” executions but, at the same time, deprive customers of execution quality benchmarked against more informed relative-values. For example, an execution price may appear favorable on an effective-spread basis, but the effective-spread calculation may be diminished as an indicator of execution quality because of relatively wider quotes³.

² A review of option volume from July 2015 to July 2016 reflects that total auction volume, as a percentage of total option volume for all exchanges, increased from 11.8% to 14.3%.

³ The effective-spread is a measurement of the distance between the execution price and the mid-point of the disseminated quote. Order handling firms have become increasingly focused on execution quality as measured from effective spreads, which can then be divided by the NBBO spread to calculate the effective-quote. Wider quotes can give the misleading appearance of a favorable effective-spread calculation because it expands the distance of the execution price to the NBBO quote.

Therefore, when oversized fees are added to normal MM costs, wider quotes may develop and execution prices may actually be further from fair value than would have been the case with tighter quotes. For this reason, the reality of improving execution quality can be obscured and the perception amplified when selectively applied liquidity costs cause wider quotes. The vicious circle in this case is that when wider quotes cause the perception of improved execution quality without the reality of real improvement, it can lead to more auction trades and higher fees that further disenfranchise MMs and in turn lead to even wider quotes.

Thus, tight and liquid disseminated quotes are the key to real execution quality. Break-up fees, break-up credits, allocation guarantees, auto-match functionality and the ability to initiate an auction at the BBO (rather than NBBO) are all liquidity costs that lead to wider NBBO quotes. As such, our request for the Commission to conduct a comprehensive review of price improvement mechanisms is necessary to restore the competitive balance and facilitate real execution quality improvement opportunities.

Large Fee-Differentials are Anti-Competitive & will exacerbate a race to the bottom

In the Order, the SEC did an admirable job of listing concerns and questioning the AMEX's contention that the Proposal is "pro-competition". We firmly believe the answer to the question on competition is that the Proposal would stifle competition on the AMEX and will, if the auction were to attract appreciable volume, diminish competition across all markets.

The AMEX asserted in its filing that the fees are reasonable, equitable and not unfairly discriminatory because "they apply equally to all ATP Holders that choose to participate in the CUBE, and access to the Exchange is offered on terms that are not unfairly discriminatory". The AMEX seems to be saying that because Responders are provided access to the CUBE system it does not matter if the fee differential that applies for actually participating in CUBE is so punitive that Responders cannot compete on price at anywhere near equal terms with IPs. At the same time, however, the AMEX's subsequent response letter to the Order⁴ included earlier references it made on the subject that painted a less-glowing picture of auctions. In that response letter, the AMEX recalled statements (from that previous letter to the Commission⁵) that auctions used to facilitate internalizations undermine national market system goals, a broker's best execution obligations, and lead to wider quotes. While the AMEX's dour predictions focused on auctions that did not require an initiation price better than the NBBO, it nonetheless reinforced the point that selectively making it more expensive for MMs to compete for customer orders will lead to wider quotes.

⁴ Letter of July 8, 2016, from AMEX to SEC in response to the Order

⁵ Letter of Feb 14, 2003, from AMEX to SEC in response to BOX proposal on auction crosses

We appreciate the AMEX's transparency on this point and, in response, assert that the Proposal would selectively make it much harder for MMs to participate, and would indeed lead to wider quotes. Moreover, since the vast majority of auction competitive responses are made by MMs, we believe the proposal is unjust, prejudicial and unfairly discriminatory particularly against MMs – especially when viewed from a fee differential point of view.

As noted in the Order, the CUBE fee differential between Responders and IPs can be \$0.83 per executed contract for Penny classes, and \$1.18 per contract for Non-Penny classes, which is calculated by comparing the break-up fee paid *by* Responders to the net rebate (IP fee minus rebate) paid *to* IPs. These fee differential rates would be significantly higher than any other option auction. If they became the new norm it would bring devastating changes to the options market.

The AMEX also increased the per-contract break-up credit payable to an IP when it does not execute all of the agency order it brings to a CUBE Auction (due to a Responder breaking-up the cross) from \$0.05 to \$0.35 in Penny classes, and from \$0.05 to \$0.70 in Non-Penny classes. The break-up credit is a consolation prize to IPs for being broken-up on crosses that they preferred to facilitate as principal. It is meant to encourage IPs to send crosses at prices the IP prefers, as the risk of being broken-up is less when a consolation credit comes with the break-up. Consequently, while not a direct factor in determining the fee differential, the credit is nonetheless a meaningful factor to IPs when deciding whether to use the CUBE for a cross. This credit incentive is also unreasonable, inequitable and discriminatory because it discourages competition on a selective basis and harms investors.

While the CUBE fees reflected in the Proposal would place the CUBE as the most punitive crossing auction for responding MMs, we believe that other options exchanges have already shown a willingness to adopt higher break-up fees, credits and rebates if presented the opportunity. We expect other markets would respond to these CUBE changes, if approved, by raising their blocking fees as well in order to compete with CUBE. This would begin a new race to the bottom that would worsen the negative competitive effects on customers and competitors in the manners mentioned above.

The chart below reflects current auction fees at other exchanges along with proposed and current fees at AMEX.

Transaction Fees for a Home Market Maker trading with a Public Customer

Auction Mechanism	Category	Responder Fee	IP Fee	IP Rebate	Differential	IP Credit
AMEX CUBE <i>Proposed</i>	Penny	0.70	0.05	(0.18)	0.83	(0.35)
AMEX CUBE <i>Proposed</i>	NonPenny	1.05	0.05	(0.18)	1.18	(0.70)
AMEX CUBE <i>Current</i>	Penny	0.50	0.05	(0.12)	0.57	(0.30)
AMEX CUBE <i>Current</i>	NonPenny	1.05	0.05	(0.12)	1.12	(0.70)
AMEX CUBE <i>Prior</i>	Penny	0.12	0.05	(0.05)	0.12	(0.05)
AMEX CUBE <i>Prior</i>	NonPenny	0.12	0.05	(0.05)	0.12	(0.05)
CBOE AIM	Penny	0.28 to 0.48	0.05	0.00	Up to 0.43	(0.25)
CBOE AIM	NonPenny	0.73 to 0.93	0.05	0.00	Up to 0.88	(0.70)
PHLX PIXL	Penny	0.50	0.05 or 0.07	0.00	0.45 or 0.43	(0.25)
PHLX PIXL	NonPenny	1.10	0.05 or 0.07	0.00	1.05 or 1.03	(0.70)
PHLX PIXL	SPY	0.42	0.05 or 0.07	0.00	0.37 or 0.35	(0.38)
MIAX PRIME	Penny	0.50	0.05	0.00	0.45	(0.25)
MIAX PRIME	NonPenny	0.99	0.05	0.00	0.94	(0.60)
ISE PIM	Penny	0.48	0.03	0.00	0.45	(0.35)
ISE PIM	NonPenny	0.91	0.03	0.00	0.88	(0.15)
Gemini PIM	Penny	0.49	0.05	0.00	0.44	0.00
Gemini PIM	NonPenny	0.89	0.05	0.00	0.84	0.00
BOX PIP	Penny	0.50	0.02 to 0.25	0.00 to (0.12)	Up to 0.60	(0.38)
BOX PIP	NonPenny	1.15	0.02 to 0.25	0.00 to (0.12)	Up to 1.25	(0.77)

Responder Fee = the “break-up” fee paid by auction Responders

IP Fee = Initiating order fee for orders contra to a customer auction order placed as a cross

IP Rebate = IP Rebate for crossed contracts

Differential = Difference between the net payments to the IPs and break-up fees charged to auction responders for contracts traded with the customer side.

IP Credit = Breakup credit. Payable for each contract in an order paired with an auction order that does not trade with the auction order because it is replaced in the auction.

Large Fee-Differentials will result in wider quotes everywhere

While the AMEX stated in its filing that attracting more volume and liquidity to the CUBE would benefit all market participants, it inferred in the above-referenced letters to the Commission that using a large fee differential to broadly block MMs from participating in auctions with customer orders will cause MMs to widen their quotes. This would, of course, cause MMs to more accurately reflect the risk-reward

of market making under such conditions. In light of this, the effects of this Proposal are contrary to the best interests of the options market and, in a conflicting twist of fate, would put a structure in place at a registered exchange that would harm all market participants except for those who use such fee differentials to beneficially trade at anti-competitive prices and those who collect transaction revenue on such trades. Ultimately, however, even these market participants would suffer the consequences of a far less liquid market if this Proposal is approved – especially if other exchange auctions adopt similar fee structures.

The success of the options market, from a quote quality point of view, is predicated on highly competitive MMs being incentivized to make tight and liquid quotes. As previously noted, MMs have historically provided over 90% of the displayed liquidity in the options market. When assessing how tight and deep to make their quotes, MMs usually contemplate the amount of non-professional customer order flow with which they expect to interact. They quote more aggressively when they have the reasonable expectation that they will be able to compete fairly for participation in less risky trades – and of course retail customer orders are usually viewed as less risky. The ability to compete fairly also translates into more chances for MMs to acquire risk-reducing natural hedges and off-sets. These opportunities, in turn, serve in symbiotic fashion to generate tighter and more liquid quotes from the MMs. If high fee differentials lead to fewer opportunities to compete for customer order flow, the risk-reward balance will shift away from the normal quoting process. In short, MMs will be less willing to risk tight and liquid quotes to attract customer order flow if they expect that much of the sought-after order flow will be sent to auctions with high fee differentials for clean crossing and, therefore, largely out of their reach. Wider quotes follow in due course after highly competitive MMs are effectively blocked (by the high fees) from trading with customers.

Thus, high differential fees would not only diminish price improvement on the exchanges where they are deployed, they would also cause the NBBO itself to become wider. Oversized fees would increasingly lead to appreciable amounts of clean-cross order flow being directed to exchanges that make themselves less price competitive. Higher fee differentials and credits would lead to broader market harm, after disenfranchised MMs are forced to balance the costs of operating with diminished rewards for their risk, which they would do in several cost-cutting ways but most notably through wider quotes⁶.

Given the above, crossing auctions with oversized break-up fees disturb the current risk-reward structure for MMs by causing them to quote wider and with less liquidity. Even at current levels these fees contribute heavily to determinations by

⁶ In his paper, “Entry, Exit, Market Makers, and the Bid-Ask Spread,” published by the *Review of Financial Studies* in 1997, Sunil Wahal finds that the large scale exit of dealers from the Nasdaq National Market is associated with substantial increases in quoted end-of-day spreads.

MM Firms to cease market making in certain options and exchanges. The quoting problems presented by over-sized break-up fees are exacerbated by the fact that there are now 14 registered options exchanges quoting over 700,000 option series. This has made it nearly impossible for even the most liquid MMs to be in all places quoting at the same time. Consequently, IPs intent on finding markets to execute clean crosses in auctions can shop around for that opportunity more easily now more than ever. Approving the AMEX Proposal with its over-sized fees would make that shopping far easier going forward.

The AMEX asserts that adopting the Proposal would attract order flow that would create a more liquid market, which would then attract more MMs. We expect, however, that if this were to develop it would be quickly followed by the scenario where extra MM participation on its market would cause its clean-cross rates to go down by some degree. When this happens, other markets with less liquidity will then attract that clean-cross order flow, which will start the same cycle all over at that other market. In the end, the race to the bottom for adopting ever-higher fee diffs, as mentioned above, would come hand-in-hand with the erosion of quote quality in options. This erosion will eventually drift into the equity and futures markets, as tight pricing in those products often reflect the tightness of the options used as hedges.

Large Break-Up Fees are expenses that are incorporated into quoting models

As described above, oversized fee differentials lead to wider quotes. The impact caused by high break-up fees would be measurable because break-up are most often treated as expenses and expenses are most often added to quote valuations. Although assessed as pennies-per-contract, MMs include them in their quote formation by calculating values to a fraction of a penny and then rounding the value to the next incremental value away from calculated fair value (e.g., up a penny for offers and down a penny for bids in penny classes). Thus, a new net MM fee of \$0.70 would likely cause MMs to quote a full penny away from the otherwise calculated value approximately 70% of the time. As most MM executions in penny classes occur at prices reflecting only a few pennies of “edge” value, a fee that causes them to alter their interest by one penny 70% of the time will very often determine whether a customer receives an execution at a better or worse trading increment. When this happens, of course, these penny differences translate into multiple dollar differences per order that would have otherwise gone to the respective customers.

In the past, exchanges strove to keep MM fees reasonable, because helping MMs display tight quotes also helped to attract customer order flow. As MMs have been the primary liquidity providers in options, exchanges previously held the view that discouraging them from competing in their market would be antithetical to the success

of that marketplace – until now. Now, oversized break-up fees that block MM participation in auctions are pursued actively and are normally adopted effective-upon-filing. If all 14 options exchanges adopted auctions, they could raise their fees in quick fashion and add tremendously to the MMs dilemma of needing to be in all places at the same time to provide the liquidity they have to offer.

The Commission is right to question high differential fees

Given the above, the Commission is right to be concerned that high fee differentials and break-up credits, at the proposed levels, raise serious anti-competitive concerns. The Commission may wish to pay heed to the fact that MM Firms signed to this letter very often place crosses or participate as customer-facilitators on crosses in crossing auctions. Therefore, when we say that the new CUBE fees raise business and competitive concerns for the industry that outweigh the value of our participation on the protected side of the crossing auction, it is a good indication that the fees are indeed excessive.

The Commission is correct to be concerned that the Proposal is inconsistent with the requirements of the '34 Act requiring that:

- (i) exchange fees be reasonable and equitably allocated;
- (ii) be designed to perfect the mechanism of a free and open market and the national market system,
- (iii) protect investors and the public interest,
- (iv) not be unfairly discriminatory, or
- (v) not impose an unnecessary or inappropriate burden on competition.

The Proposal falls short on all counts in regard to the above. The Commission was right to raise questions on whether the Proposal would in fact provide the additional trading opportunities for non-IPs and other market quality benefits suggested by the Exchange. As we have already explained, market participants in general will suffer if this Proposal is approved.

Likewise, the Commission was right to point out that the AMEX's justification does not address the fact that the new fees would substantially exacerbate the differences in the fees assessed by the Exchange on IPs and non-IP, and that these facts raise issues as to whether the Proposal is equitable and not unfairly discriminatory among AMEX members. We believe the Proposal again falls short on these points as well, particularly in the way the fees significantly favor IPs over MMs to the point where they diminish the important job MMs do in maintaining quotes. The related question is why the auction markets feel justified to maintain break-up fees for non-Penny options at appreciably higher levels than Penny options. The

Commission should note that the non-Penny auctions trade in penny increments, which means maintaining a difference between the two is without justification.

The Commission was correct to question the AMEX's assertion that the Proposal would be pro-competitive by incenting IPs to bring customer orders to the AMEX, provide more trading opportunities, and improve market quality, all within the competitive environment in which the AMEX does business. As we explained above, the Proposal is anti-competitive in the way it discourages MMs from offering price improvement and would eventually hurt quote quality on the AMEX and other exchanges.

In response to the questions from the Order regarding the impact the proposed fee changes would have on MMs, customers, price improvement levels and displayed quotes – our explanations herein indicate the belief that none of the impacts will be favorable to the marketplace. Our recommendation for a broad review includes that consideration be given to caps on fee differentials and break-up credits. It was asked in the Order whether such a cap should be set at specific amounts (for example, not to exceed half the minimum trading increment in the case of Penny series). We believe that the Commission should for now set much lower level caps than mentioned in the Order and be prepared to modify the caps after the Commission completes its review of the auctions at all exchanges.

In conclusion, the proposed fees, rebates and credits are not in the public interest. Together, they constitute a structure that is both discriminatory and anti-competitive towards MMs and other non-IP accounts wishing to compete in the CUBE auction. If high fee differentials are left to grow and expand across exchanges it will certainly decrease execution quality significantly for customers and will harm competition by unfairly favoring internalizers over competitive MMs. We believe it is already the case that corrective steps need be taken to safeguard the high level of competitiveness that has served the options market for over 40 years very well.

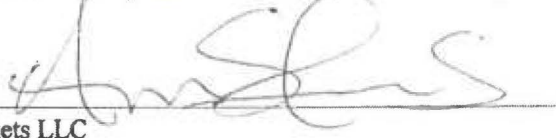
Should you have any questions regarding the contents of this letter, please feel free to contact any of the signatories below. Again, thank you for this opportunity to respond.

Sincerely

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