CITADEL

November 17, 2011

By Electronic Mail

Elizabeth Murphy
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

Re: *Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change to Amend the BOX Fee Schedule with Respect to Credits and Fees for Transactions in the BOX Price Improvement Period; File No. SR-BX-2011-046*

Dear Ms. Murphy:

Citadel LLC ("**Citadel**") appreciates the opportunity to comment on the Securities and Exchange Commission (the "**Commission**") proceedings to determine whether to disapprove the above referenced Boston Options Exchange Group, LLC ("**BOX**") rule filing (the "**Rule Filing**").[1] As the most active listed options liquidity provider, Citadel is greatly interested in the options market's continued growth and high level of execution quality for investors.[2] The Rule Filing would drastically increase the cost of providing price improvement to customer orders in price improvement auctions. BOX's fee structure is damaging the quality of the listed options market and the Rule Filing would increase this damage.[3] The Commission should disapprove the Rule Filing because it fails to equitably allocate fees, unfairly discriminates, and is thus inconsistent with the requirements of the Securities Exchange Act of 1934 (the "**Exchange Act**").

I. The BOX Fee Structure Is Harming the Options Market

BOX has implemented a mosaic of fees for both its regular book and its price improvement period ("**PIP**") mechanism that is structured to allow firms with customer order

[1] Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend the BOX Fee Schedule, Exchange Act Rel. No. 64981 (July 28, 2011), 76 FR 46858 (Aug. 3, 2011) (the "**Rule Filing**")

[2] On an average day, Citadel accounts for approximately 8-9% of U.S. listed equity volume, and 25-30% of U.S. listed equity option volume. Citadel is also the most active responder to PIP auctions and is one of the most active BOX participants. Founded in 1990, the Citadel group of companies includes an asset management division that principally executes alternative investment strategies across multiple asset classes, and Citadel Securities, which includes an industry leading market making franchise and an institutional markets platform. Citadel operates in the world's major financial centers, including Chicago, New York, London, Hong Kong and San Francisco.

[3] Citadel's prior comment letter on the Rule Filing and prior related rule filings expressed similar concerns. *See* Comment Letter from John C. Nagel, Managing Director and General Counsel, Citadel Securities LLC, to Elizabeth Murphy, Secretary, Securities and Exchange Commission (Aug. 12, 2011), *available at* http://www.sec.gov/comments/sr-bx-2011-046/bx2011046-1.pdf (the "**August Letter**").

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flow to use the PIP as an internalization mechanism and circumvent liquidity providers quoting at the national best bid and offer ("**NBBO**"). BOX facilitates NBBO internalization in PIP by (i) charging competitive responders a penalty to provide more price improvement, and (ii) charging high fees that discourage liquidity providers from posting quotes at the NBBO on BOX.

A. The PIP Fee Structure is Discriminatory

As Citadel has previously described in its comments to the Commission, BOX has designed a fee structure for its PIP auctions to permit and encourage broker-dealers that receive retail order flow from other broker-dealers to internalize customer orders at the NBBO in PIP auctions. To promote the highest level of internalization, BOX has discouraged competition in its PIP auctions by implementing a fee structure that starkly favors the firms initiating the PIP auction over those firms seeking to competitively respond and provide additional price improvement.

First, BOX offers initiators a volume discount of up to $0.15 per contract on transaction fees, while responders are not eligible for such volume discounts. Second, BOX currently provides initiators with a $0.30 "liquidity" credit and charges responders a $0.30 fee, and in the Rule Filing, wishes to raise the fee and credit to $0.75 for non-Penny Pilot names and Penny Pilot names trading with a price greater than or equal to $3.00. As described in our August Letter and prior letters, when a participant internalizes a PIP order by initiating a PIP auction, the participant is able to net out the credit against the fee, while participants seeking to competitively respond to a PIP auction must pay the fee but do not receive an offsetting credit. At its highest level, BOX currently seeks to charge competitive responders $0.90 per contract more than initiators internalizing an order. By charging competitive responders so much more, BOX discourages their participation in PIP auctions, which allows PIP auction initiators to internalize more of their orders at a worse price for investors.[4]

Notwithstanding BOX's conclusory statements in the Rule Filing, this fee disparity is inconsistent with a reasonable allocation of fees as required by Section 6(a)(4) of the Exchange Act. Further, the fee structure violates Section 6(a)(4) and 6(a)(8) by discriminating between users of the exchange and imposing an undue burden on competition among market participants.

B. These Discriminatory Fees Are Eroding Price Improvement

While BOX claims that the purpose of the Rule Filing is to allow more orders to benefit from potential price improvement,[5] BOX's fee schedule has actually had the *opposite* effect and

[4] The proposed aggregate PIP responder fee of $1.00 per contract is more than three times as large as the Commission's proposed fee cap for accessing displayed options quotations. *See* Proposed Amendments to Rule 610 of Regulation NMS, Exchange Act Rel. No. 61902 (Apr. 14, 2010) (noting that displayed quotation access fees above $0.30 per contract could have a "distorting effect" on the market).

[5] *See* Rule Filing at 3.

led to less price improvement. As data Citadel provided in its August Letter showed, the effect of BOX's discriminatory fee structure has been reduced competition and worse prices for investors. The data below, which is updated through October 2011, shows a clear trend of BOX PIP auctions improving *fewer contracts*, and improving those fewer contracts by *lower amounts*.[6] As BOX has raised the level of discrimination in its PIP fee structure, the amount of competition in PIP auctions has decreased, resulting in a lower level of contracts being improved in PIP auctions, and less price improvement for those contracts improved.

Month (2011)	**Monthly Average PIP Price Improvement Per Contract**	**Monthly Average PIP Percentage of Contracts Improved**
February	$0.0102	52%
March	$0.0098	41%
April	$0.0092	39%
May	$0.0077	36%
June	$0.0063	32%
July	$0.0062	30%
August	$0.0089	35%
September	$0.0063	31%
October	$0.0057	29%

This impact can also be seen by comparing price improvement statistics on BOX with other exchanges that have far less discriminatory fee structures. BOX's increasingly discriminatory PIP fee structure has caused the BOX PIP to lag behind the levels of price improvement provided by other options exchanges. The tables and charts below compare the percentage of contracts that received price improvement, and the level of such improvement, on each options exchange price improvement mechanism. The results clearly show that the price improvement opportunities provided by the BOX PIP lag each of its competitors—increasingly so as market participants have responded to BOX's discriminatory PIP fee structure.[7]

[6] The month of August 2011 was an outlier, as discussed in Section II.A below.

[7] The BOX statistics are derived from PIP broadcast messages and OPRA data received by Citadel, and data published on the BOX website. *See* BOX – Boston Options Exchange, Volume Statistics, *available at* http://www.bostonoptions.com/volumes_en. The data shown for other exchanges was obtained directly from the relevant exchange. Citadel would welcome the adoption of rules that would mandate publication of listed options execution quality metrics. The publication of well-designed, standardized execution listed options quality metrics would better enable broker-dealers and investors to compare execution quality across different destinations, as Regulation NMS Rules 605 and 606 have done in the equity markets.

Cause:

Net Price Improvement Responder Fee Discrimination Penny Symbols/Penny Series						
	BOX	CBOE	ISE Make/ Take	ISE	PHLX	PHLX Make/Take
Initiator	$0.10	$0.05	$0.20	$0.20	$0.05	$0.05
Responder	$0.55	$0.26	$0.25	$0.26	$0.26	$0.33
Difference	$0.45	$0.21	$0.05	$0.06	$0.21	$0.28

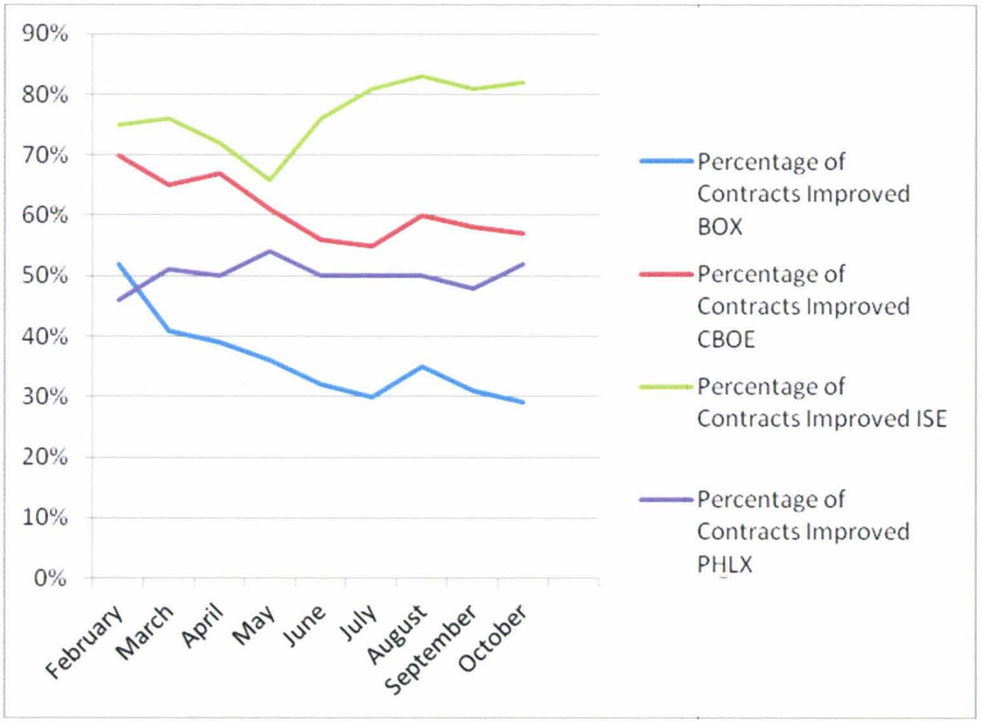
Net Price Improvement Responder Fee Discrimination Penny Symbols/Nickel Series[8]							
	BOX (Current)	BOX (Proposed)	CBOE	ISE Make/ Take	ISE	PHLX	PHLX Make/Take
Initiator	$0.10	$0.10	$0.05	$0.20	$0.20	$0.05	$0.05
Responder	$0.55	$1.00	$0.26	$0.25	$0.26	$0.26	$0.33
Difference	$0.45	$0.90	$0.21	$0.05	$0.06	$0.21	$0.28

Net Price Improvement Responder Fee Discrimination Nickel Symbols/Nickel Series							
	BOX (Current)	BOX (Proposed)	CBOE	ISE Make/ Take	ISE	PHLX	PHLX Make/Take
Initiator	$0.10	$0.10	$0.05	N/A	$0.20	$0.05	N/A
Responder	$0.55	$1.00	$0.66	N/A	$0.66	$0.71	N/A
Difference	$0.45	$0.90	$0.61	N/A	$0.46	$0.66	N/A

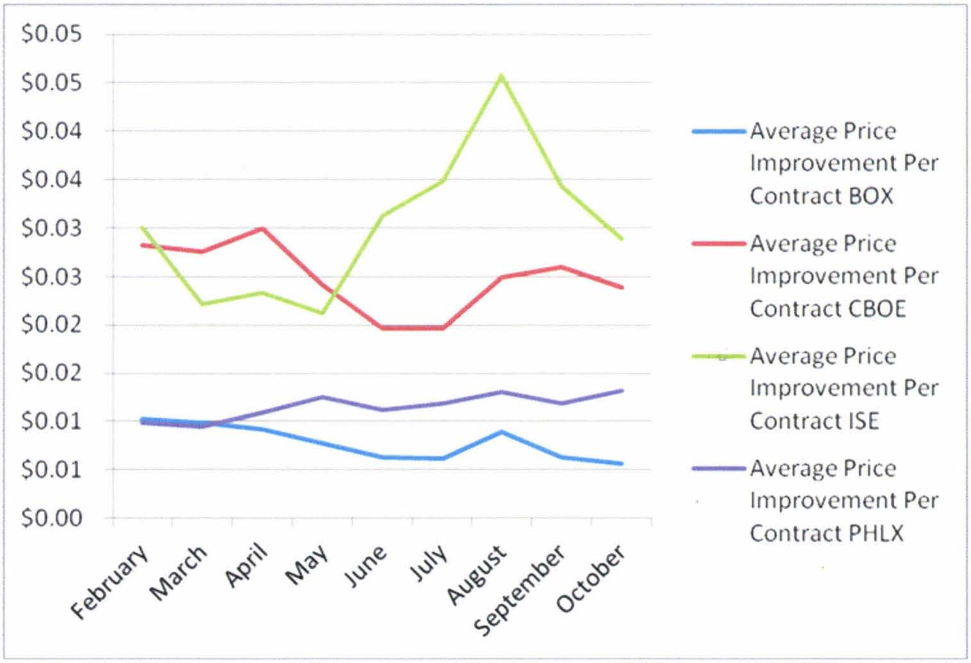
[8] For penny symbols in these charts, ISE and PHLX fees shown are both for non-make-take names and make-take names. These charts assume that the initiator qualified for the highest volume tier and lowest fee.

Effect:

Percentage of Contracts Improved				
Month (2011)	**BOX**	**CBOE**	**ISE**	**PHLX**
February	52%	70%	75%	46%
March	41%	65%	76%	51%
April	39%	67%	72%	50%
May	36%	61%	66%	54%
June	32%	56%	76%	50%
July	30%	55%	81%	50%
August	35%	60%	83%	50%
September	31%	58%	81%	48%
October	29%	57%	82%	52%
Average	36%	61%	77%	50%



Average Price Improvement Per Contract				
Month (2011)	**BOX**	**CBOE**	**ISE**	**PHLX**
February	$0.0102	$0.0282	$0.0301	$0.0098
March	$0.0098	$0.0276	$0.0221	$0.0095
April	$0.0092	$0.0300	$0.0233	$0.0109
May	$0.0077	$0.0241	$0.0212	$0.0125
June	$0.0063	$0.0196	$0.0313	$0.0112
July	$0.0062	$0.0197	$0.0348	$0.0119
August	$0.0089	$0.0249	$0.0458	$0.0130
September	$0.0063	$0.0260	$0.0343	$0.0118
October	$0.0057	$0.0239	$0.0289	$0.0132
Average	$0.0078	$0.0249	$0.0302	$0.0115



C. Other BOX Fees Encourage Internalization Through the PIP

The Commission specifically requested comment about the interaction of the proposed fee with other exchange fees.[9] Other BOX fees, in particular the fee to add liquidity to the BOX book, have increased quoted spreads on BOX and amplify the negative impact of the PIP fee

[9] *See* Suspension of and Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change to Amend the BOX Fee Schedule with Respect to Credits and Fees for Transactions in the BOX Price Improvement Period, at 12, Exchange Act Rel. No. 65330 (Sept. 13, 2011), 76 FR 58065 (Sept. 19, 2011) (the "**Suspension Order**").

structure.[10] Specifically, the fee to add liquidity to the BOX book ensures that the best bid or offer ("**BBO**") on the BOX is worse than the NBBO most of the time, thereby facilitating internalization at the NBBO through PIP auctions.

Unlike other exchanges with price improvement auctions, order flow providers on BOX that want to internalize customer order flow can more safely initiate price improvement auctions at the NBBO. If a PIP auction is initiated at the NBBO when there is already an existing quote in the BOX book at the NBBO, the resting NBBO quote on the BOX book will immediately execute against the PIP order, giving the NBBO quote on the book priority over the initiator.[11] The existence of outstanding quotes in the BOX book at the NBBO thus drastically impedes internalization by initiators. To address this, the BOX discourages liquidity providers from quoting at the NBBO on BOX by charging liquidity providers the highest fees of any exchange. The calculus is simple: the more BOX charges to provide liquidity, the less liquidity there will be on the BOX exchange.

This strategy has succeeded. As shown in the chart below, BOX's pricing structure has assured that it is displaying quotes at the NBBO in active symbols far less often than other exchanges. The chart compares for the months of September and October 2011 (i) the approximate percentage of time the BBO for 60 penny pilot symbols at each exchange was equal to the NBBO,[12] and (ii) the average total fee that exchange imposed on liquidity providers.[13]

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[10] *See* Boston Options Exchange Facility Fee Schedule, § 7(a). Citadel notes that BOX recently increased these fees even further as of September 1, 2011. *See* Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Amend the BOX Fee Schedule, Exchange Act Rel. No. 65293 (Sept. 8, 2011), 76 FR 56845 (Sept. 14, 2011).

[11] Note that PHLX and CBOE have more stringent requirements for price improvement auction start price than BOX. For orders less than 50 contracts, PHLX requires price improvement auctions to start at a price $0.01 better than the NBBO when the exchange BBO is equal to the NBBO. CBOE requires price improvement auctions to start $0.01 better than the NBBO regardless of the exchange BBO. *See* PHLX Rule 1080(n)(i); CBOE Rule 6.74A(a).

[12] These 60 symbols are symbols in the ISE and PHLX make-take pilots and we chose them because we believe they are a representative sample because they are actively traded on each exchange listed in the chart with a consistent maker/taker fee structure. The percentage of time the exchange had a quote at the NBBO is based on Citadel's records generated by comparing the BBO on each exchange to the NBBO reported by OPRA each time Citadel routed a customer order.

[13] Total fee includes (i) transaction fees and (ii) payment for order flow fees ("**PFOF**"), where applicable. Because those exchanges that charge a PFOF fee only apply the fee when certain types of orders are traded against, the total fee assumes (based on Citadel's experience) that a PFOF fee is imposed, on average, on 55% of executions. Therefore, for those exchanges that charge a PFOF fee, the total fee shown in the chart represents the average total fee a liquidity provider would expect to pay by adding 55% of the PFOF fee to the regular transaction fee. The total fee is given as a minimum and maximum because certain of the exchanges provide volume discounts. Citadel would expect, however, that all volume discount thresholds are generally met by major liquidity providers, making (...continued)

Exchange	NBBO % Sept.	NBBO % Oct.	Total Fee Min	Total Fee Max	55% PFOF Fee	Transaction Fee Min	Transaction Fee Max
BOX	18%	18%	(0.35)	(0.47)	N/A	(0.35)	(0.47)
CBOE	45%	44%	(0.15)	(0.34)	(0.25)	(0.01)	(0.20)
AMEX	53%	52%	(0.15)	(0.31)	(0.25)	(0.01)	(0.17)
C2	46%	49%	0.25	0.25	N/A	0.25	0.25
BATS	56%	64%	0.22	0.22	N/A	0.22	0.22
ISE	66%	66%	0.10	0.10	N/A	0.10	0.10
NOM	67%	71%	0.30	0.30	N/A	0.30	0.30
PHLX	74%	73%	0.23	0.23	N/A	0.23	0.23
ARCA	84%	84%	0.32	0.32	N/A	0.32	0.32

As the chart shows, BOX charges liquidity providers the highest fees of any exchange—66.67% higher than the next highest fee exchange. As a result, BOX had an NBBO quoting percentage of only 18%— less than half the next lowest exchange.

This result was no accident. BOX intentionally charges liquidity providers extremely high fees to minimize NBBO quoting, so that order flow providers can more easily internalize orders at the NBBO in PIP auctions. This is quite surprising coming from an exchange that for years has marketed itself as a champion of price improvement.

In fact, by discouraging quotes at the NBBO, BOX has made PIP a "go to" mechanism when the NBBO spread is small and price improvement and BOX's responder fees are a larger percentage of the spread, thus making price improvement more difficult to provide. Because BOX is least likely to be at the NBBO, firms can route their customer orders to the PIP and more likely internalize them at the NBBO, providing no price improvement. The chart below compares, for each options exchange price improvement mechanism, the percentage of volume at different NBBO spread levels during October 2011:[14]

(continued…)

the minimum total fee column the most relevant. Fees due from liquidity providers are shown in (parenthesis), while fees shown as positive numbers are effectively rebates.

[14] For example, this chart shows that during October 2011, approximately 34% of BOX PIP volume in occurred in contracts trading with a penny wide spread at the time of the PIP auction. In contrast, approximately 3% of ISE PIM volume occurred in contracts with a penny wide spread.

	NBBO Width				
Exchange	**0.01**	**0.02**	**0.03**	**0.04**	**0.05+**
BOX	34%	24%	10%	5%	27%
CBOE	28%	19%	9%	4%	40%
PHLX	16%	23%	13%	6%	42%
ISE	3%	11%	12%	9%	65%

The Commission should consider the Rule Filing in the context of BOX's other fees, including BOX's high liquidity provider fees. The BOX fee structure taken as a whole is clearly designed to make it easier for firms that receive customer order flow to internalize that flow at the NBBO through PIP auctions. BOX accomplishes this goal by raising costs on liquidity providers, which creates a less competitive market, and assures that BOX BBO is worse than the NBBO most of the time.

D. The Broader Options Market Will Suffer if the Rule Filing is Not Disapproved

The Commission specifically requested comment on the BOX PIP fee structure's impact on the broader market, execution quality, and any potential shift of order flow.[15] The BOX PIP fee structure harms the broader market, reduces execution quality, and may result in a shift of flow from venues providing better execution quality.

The BOX PIP is a source of dark liquidity, where market participants have the opportunity to internalize customer marketable orders at a price that they were not publicly quoting. While dark liquidity has an appropriate place in the options markets, the BOX fee structure discourages public quoting in the lit markets. Desirable orders that would otherwise have traded against publicly displayed quotes on another exchange will instead be routed to PIP and internalized at the NBBO in a dark venue. Over time, such a structure would harm the lit markets by reducing the number, size, and quality of quotes that are visible, which reduces transparency and competition.

Further, because PIP auctions facilitate a high level of internalization, market participants interested in internalizing customer order flow will direct that flow to BOX PIP auctions. Many of these customer orders will be successfully internalized at the NBBO, depriving these customers of a better opportunity to receive price improvement on another exchange.[16] Worse, if

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[15] *See* Suspension Order at 11-12.

[16] See the charts and tables in Section I.B comparing levels of actual price improvement provided across price improvement mechanisms on various exchanges.

the Rule Filing is approved and other exchanges feel the need to adopt similar fees, the opportunities for price improvement on other exchanges will be similarly reduced.[17]

II. BOX's Defenses of the PIP Fee Structure Are Disingenuous, Inaccurate, or Irrelevant

A. August 2011 Data Presented by BOX Was an Anomaly

BOX asserts that its Rule Filing increasing the PIP liquidity fee and credit did not have a negative impact on levels of price improvement, and actually caused a decrease in internalization and an increase in price improvement during the temporary period in which the Rule Filing was in effect. In particular, BOX noted that during the month of August 2011, during which the Rule Filing was automatically effective, (i) the "retention rate" (i.e., internalization) decreased to 36% from 38% in July 2011, and (ii) average price improvement per contract in PIP auctions increased to \$0.0087 from \$0.0067 in July 2011.[18]

Calling this data "unequivocal" evidence that the fee changes in the Rule Filing was immediately providing benefits to investors,[19] BOX ignored (i) the extreme spike in the level of market volatility and wider spreads that existed during August 2011,[20] and (ii) subsequent drop in price improvement on BOX along with subsiding volatility levels.[21]

The correlation between levels of volatility and opportunities for price improvement is both logical and easy to observe. The more volatile the market, the larger the NBBO spread, which results in more opportunities for price improvement. The following chart shows the correlation between the weekly change in estimated average market spreads and the weekly

[17] *See, e.g.*, International Securities Exchange, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Relating to Payment for Order Flow Fees, Exchange Act Rel. No. 63469 (Dec. 8, 2010) (expanding the application of a PFOF fee for "competitive reasons," noting that another exchange had previously done so).

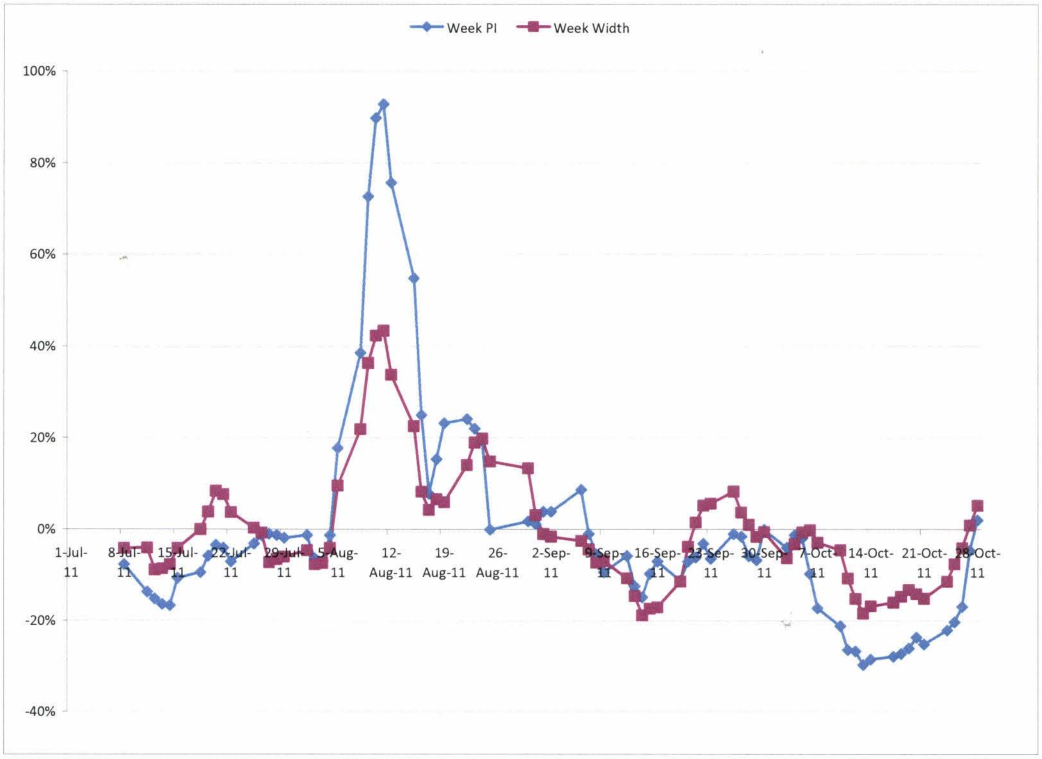
[18] *See* Comment Letter from Anthony D. McCormick, Chief Executive Officer, Boston Options Exchange Group, LLC, to Elizabeth Murphy, Secretary, Securities and Exchange Commission, at 1 (Sept. 9, 2011), *available at* http://www.sec.gov/comments/sr-bx-2011-046/bx2011046-4.pdf (the "**BOX Comment Letter**"); BOX Petition for Review of Action by Delegated Authority, *In re NASDAQ OMX BX, Inc.*, SR-BX-2011-046, at 6 (Sept. 27, 2011), *available at* http://www.sec.gov/rules/sro/bx/2011/34-65330-petitionforreview.pdf (the "**BOX Petition**").

[19] *Id.*

[20] The average VIX level was approximately 18 during the first seven months of 2011, and the average was 35 during August 2011.

[21] Notably, the BOX Petition included data for both August and the beginning of September, during which time the Rule Filing was in effect. *See* BOX Petition at 6. While the data BOX presented clearly showed the spike in August data reversing in September, BOX did not acknowledge or address this reversal in its narrative.

change in average amount of price improvement per contract in PIP auctions from July 1 through October 28, 2011.[22]



The correlation is clear and had nothing to do with the Rule Filing being immediately effective during August 2011. In fact, the level of price improvement on BOX quickly reverted to its downward trend after the short-lived August jump:[23]

[22] Each metric is measured as the percentage difference between the weekly average and the average for the entire period.

[23] The two charts that follow reflect the same data as provided in Section I.A above, but are repeated here for convenient reference.

Month (2011)	Monthly Average Price Improvement Per Contract in PIP Auctions	Monthly Average Percentage of Contracts Improved in PIP Auctions
February	$0.0102	52%
March	$0.0098	41%
April	$0.0092	39%
May	$0.0077	36%
June	$0.0063	32%
July	$0.0062	30%
August	***$0.0089***	***35%***
September	$0.0063	31%
October	$0.0057	29%

Price improvement mechanisms on other exchanges experienced similar temporary August spikes because of the increased volatility:

Average Price Improvement Per Contract				
Month (2011)	**BOX**	**CBOE**	**ISE**	**PHLX**
February	$0.0102	$0.0282	$0.0301	$0.0098
March	$0.0098	$0.0276	$0.0221	$0.0095
April	$0.0092	$0.0300	$0.0233	$0.0109
May	$0.0077	$0.0241	$0.0212	$0.0125
June	$0.0063	$0.0196	$0.0313	$0.0112
July	$0.0062	$0.0197	$0.0348	$0.0119
August	$0.0089	$0.0249	$0.0458	$0.0130
September	$0.0063	$0.0260	$0.0343	$0.0118
October	$0.0057	$0.0239	$0.0289	$0.0132
Average	$0.0102	$0.0282	$0.0301	$0.0098

Moreover, there is no evidence of any improvement in execution quality during the dates the Rule Filing was in effect. The Rule Filing was (i) immediately effective as of August 1, 2011, (ii) suspended as of September 14, 2011,[24] and (iii) temporarily reinstated as of September 21, 2011 through October 18, 2011, due to BOX's appeal of the Commission's action by delegated authority[25] and the Commission's denial of such appeal.[26] Comparing the average percentage of

[24] *See* Suspension Order; BOX Regulatory Circular 2011-10, Temporary Suspension of Rule filing SR-BX-2011-046, *available at* http://www.bostonoptions.com/f_circulars/BOXR_Circular_11-10_Temporary_suspension_of_fee_filing_2.pdf.

[25] *See* BOX Notice of Appeal, *In re NASDAQ OMX BX, Inc.*, SR-BX-2011-046 (Sept. 19, 2011), *available at* http://www.sec.gov/rules/sro/bx/2011/34-65330-noticeofappeal.pdf; BOX Regulatory Circular 2011-12, (…continued)

contracts improved in PIP auctions for those periods during which the Rule Filing was and was not in effect[27] shows that for series covered by the Rule Filing, any increase in price improvement in August was purely coincidental and not attributable to the Rule Filing being effective:[28]

Period	Rule Filing in Effect?	Monthly Average Price Improvement Per Contract in PIP Auctions	Monthly Average % of Contracts Improved in PIP Auctions
July 1 – July 31	No	$0.029	66%
Aug 1 – Aug 19	*Yes*	$0.040	69%
Aug 20 – Sep 13	*Yes*	$0.029	68%
Sep 14 – Sep 20	No	$0.031	68%
Sep 21 – Oct 18	*Yes*	$0.029	68%
Oct 19 – Oct 31	No	$0.033	71%

B. Payment for Order Flow ("PFOF") Arrangements are Materially Different than the Proposed Fee Structure

1. Exchanged-Operated PFOF Programs Have Much Lower Average Fees and Rebates

BOX argues that the PIP fee and credit structure is the "exact economic equivalent" of payment for order flow systems maintained by other options exchanges, and that a $0.75 fee is "in line" with the $0.65 PFOF fee charged by another exchange.[29] BOX's argument, however, ignores the fact that a PFOF fee is not charged on 100% of orders executed on the exchange,

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(continued…)

Reinstatement of Fee Schedule (Sept. 21, 2011), *available at* http://www.bostonoptions.com/f_circulars/BOXR_Circular_11-12_Reinstatement_of_Fee_Schedule.pdf.

[26] *See* Order Denying NASDAQ OMX BX, Inc.'s Petition for Review of Division of Trading and Markets Suspension of and Institution of Proceedings by Delegated Authority of SR-BX-2011-046, Exchange Act Rel. No. 65592 (Oct. 29, 2011), *available at* http://www.sec.gov/rules/sro/bx/2011/34-65592.pdf; BOX Regulatory Circular 2011-14, Temporary Suspension of Rule filing SR-BX-2011-046 (Oct. 20, 2011), *available at* http://www.bostonoptions.com/f_circulars/BOXR_Circular_11-14_Denial_of_Petition_for_Review_of_Suspension_of_fee_filing.pdf

[27] This data is derived from BOX PIP broadcast messages received by Citadel.

[28] The Commission should be cautious in relying on data for such short periods of time. In Citadel's experience, it takes more than a few weeks for many market participants react to fee changes.

[29] BOX Petition at 1, 3.

while the PIP "liquidity" fee is charged on 100% of PIP transactions, and is therefore much higher on average.

Exchange operated PFOF plans will typically charge a PFOF fee only when an order interacts with certain other order types. As noted above,[30] in Citadel's experience, on other exchanges, the PFOF fee is charged on approximately 55% of executions against Citadel's quotes. Therefore, the average expected PFOF fee to provide liquidity on an exchange with a $0.65 PFOF fee is approximately $0.36 (55% of the $0.65 PFOF). BOX's proposed $0.75 PIP liquidity fee is far out of line with these fees and effectively more than double an exchange with a $0.65 PFOF fee.

BOX also ignores the discriminatory application of the proposed $0.75 PIP fee and credit, which is more important than the magnitude of the fee. On BOX, the proposed fee schedule would charge a responder $0.90 more than an initiator. In contrast, PFOF fees on other exchanges apply to *all* liquidity providers on the exchange. This puts all liquidity providers on the exchange on equal footing.[31] The PIP fee, however, applies at a drastically different rate depending on whether the liquidity provider is also the initiator of the PIP auction (in which case it has a net liquidity fee of zero). Thus, unlike PFOF systems, the PIP fee structure singles out favored and disfavored liquidity providers for discriminatory treatment.[32]

Further, unlike the BOX PIP liquidity fee and credit, exchange-sponsored PFOF programs do not disrupt the lit markets. Market participants on exchanges with PFOF fees must still post quotes on the exchange in order to execute orders. The PIP fee structure, however, erodes market structure by permitting internalization at the NBBO without even requiring the internalizing market participants to display public quotes at the NBBO.

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[30] *See* note 13.

[31] We note that while a liquidity provider that is affiliated with an order flow provider may indirectly recoup a portion of exchange PFOF fees via PFOF program rebates, this portion is small because only a small percentage of a liquidity provider's quotes will interact with an affiliated order flow provider. The amount recouped will depend on the level of the firm's activity. We are the most active liquidity provider and one of the most active routers of customer order flow. In Penny Pilot names, our order flow provider is able to recoup approximately $0.02 per contract in PFOF program rebates for every contract of liquidity provided by our market maker. In non-Penny Pilot names, we recoup approximately $0.05 per contract. In contrast, when an order flow provider initiates a PIP auction, the order flow provider knows with 100% certainty that they will receive the entire rebate.

[32] We also note that BOX references to the specialist's role in exchange sponsored PFOF programs ignore the erosion of the specialist's control of PFOF fees. Today, the vast majority of listed options orders are preferenced, giving control over distribution of any resulting PFOF fees to the preferenced market maker, and not to the specialist.

2. Dealer-Operated PFOF is Irrelevant to this Disapproval Proceeding

BOX attempts to compare its PIP liquidity fee and credit scheme to the level and alleged discriminatory nature of payments that dealers make to other market participants for bringing order flow to the dealer.[33] BOX laments that the levels of such dealer payments are not subject to filing with the Commission and not a matter of public record, but in doing so points out the flaw in its own argument. Market participants and broker-dealers are not exchanges and are subject to different standards and have different responsibilities under the Exchange Act.

Simply put, unlike BOX, dealers are permitted to discriminate among clients in ways that exchanges may not, and broker-dealers are not required have rules governing their operations that are publicly filed and approved by the Commission. BOX assertions about the "going rate" among dealers for certain types of order flow[34] are thus irrelevant to whether an exchange charging such a fee would constitute (i) a reasonable allocation of fees among exchange users, (ii) an undue burden on competition and (iii) discrimination among users of the exchange, in violation of Section 6(b) of the Exchange Act.

C. BOX Arguments Against Considering the Net Impact of Fees and Credits are Contradicted by BOX's Own Practices and Market Data

In our August Letter and above, we show how the BOX PIP liquidity fee and credit structure is discriminatory because an initiator of a PIP auction that also responded to the auction could net out its $0.75 fee and $0.75 credit to a fee of zero, while another responder is subject to the entire fee.

1. BOX Argues Against Netting Fees and Credits, and Yet Nets on Its Own Invoices

BOX argued that Citadel presented "no evidence" that PIP fees and rebates are netted in practice, and argued this netting is "unlikely" because the credit is given to the "order flow side" of the participant, while the debit is charged to the "proprietary trading side" of the participant.[35] Claiming that these fees and credits are entirely separate and should not be considered on a net basis is disingenuous. On invoices that BOX sends to Citadel, *BOX itself nets the credit and fee* resulting in a single *net* amount due or payable.[36]

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[33] *See* BOX Petition at 3-4.

[34] *See id. at* 4.

[35] *See* BOX Petition at 5.

[36] Citadel would be pleased to share examples of such invoices with the Commission on a confidential basis.

2. The BOX Claim That Initiators are Mostly Market Makers is False

BOX further claimed that Citadel and other commenters were incorrect when asserting that initiating participants' ability to net PIP fees and credits created a competitive imbalance with responders because "[i]n reality, most PIP transactions are initiated by a market maker acting independently of a Participant acting as agent for a customer order."[37] Therefore, BOX explained, it "sees no basis for the criticism that the Initiating Participant can offset fees with credits."

BOX's claim regarding the type of participant initiating most PIP auctions is simply false, to an extreme degree. As a BOX participant, Citadel receives messages when PIP auctions are initiated. These messages identify the type of firm initiating the auction. As shown in the table below, reflecting Citadel's records of the type of participant initiating each PIP auction, the vast majority of PIP auctions are consistently initiated by Broker/Dealer participants, while Market Makers consistently initiate a small minority of PIP auctions.[38]

Month (2011)	Broker/Dealer	Market Maker	Away Affiliated Market Maker	Public Customer
June	78.3%	11.3%	10.2%	0.2%
July	70.1%	22.2%	7.5%	0.2%
August	74.5%	18.7%	6.6%	0.1%
September	74.9%	16.1%	8.9%	0.1%
October	79.3%	13.2%	7.3%	0.2%

These Broker/Dealer participants are able to both initiate and respond, and therefore net the fee and credit, to an extent that Market Maker participants cannot.

* * *

BOX claims that it can increase price improvement by drastically increasing the fees it charges liquidity providers to provide price improvement. The data above shows what logic dictates: drastically increasing the cost of providing price improvement has drastically reduced price improvement on BOX. As a result of its discriminatory PIP fees, BOX is now a price

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[37] *See* BOX Comment Letter at 1.

[38] The definition of each BOX origin code can be found in BOX Regulatory Circular 2007-02, *available at* http://www.bostonoptions.com/f_circulars/BOXR_Circular_07-02_New_Origin_Codes.pdf.

improvement laggard compared to other exchanges. BOX's implementation of the Rule Filing would only further destroy price improvement.

For the foregoing reasons, Citadel submits that the Rule Filing would harm the quality of the options markets, fail to equitably allocate fees, unfairly discriminate, and unduly burden competition. Citadel thus urges the Commission disapprove the Rule Filing because it is inconsistent with the statutory requirements set forth in Sections 6(b)(4), 6(b)(5) and 6(b)(8) of the Exchange Act.

If you have any questions, please do not hesitate to contact me at (312) 395-2100.

Sincerely,

John C. Nagel
Managing Director and General Counsel
Citadel Securities LLC