

Memorandum

To: File Nos. SR-BOX-2013-09 and SR-BOX-2012-002
Date: 8/16/2013
Re: Graphical Representation of Data Provided in Connection with PIP Fee Pilot

Introduction

This Staff memorandum¹ includes a graphical representation of data provided to the Securities and Exchange Commission (the “Commission”) by the Boston Options Exchange Group, LLC and BOX Options Exchange LLC,² relating to fee changes effected on July 15, 2011 on certain transactions in the Exchange’s Price Improvement Period (“PIP”).³ The data provided by the Exchange is available on the Boston Options Exchange LLC website at <http://boxexchange.com/regulatory-circulars/pilot-reports>.

Background

On July 15, 2011, BX filed with the Commission a proposed rule change to amend the Fee Schedule of BOX Group LLC, to increase the credits and fees for certain transactions in the PIP.

Specifically, the proposed rule change: (1) increased both the credits and the fees for PIP transactions in classes that are not subject to the Penny Pilot (“Non-Penny classes”) from \$0.30 to \$0.75 per contract; and (2) increased both the credits and the fees for PIP transactions in Penny Pilot classes where the trade price is equal to or greater than \$3.00 per contract (other than in QQQQ, SPY, and IWM) from \$0.30 to \$0.75 per contract. The credits and the fees for PIP transactions in QQQQ, SPY, and IWM and in all other Penny Pilot classes where the trade price is less than \$3.00 per contract remained at \$0.30 per contract. The credits are paid by the Exchange on the agency order that is submitted to the PIP auction on behalf of a customer. The fees are

¹ This is a memorandum prepared by the Staff of the Division of Trading and Markets. The Commission has expressed no view regarding the analysis, findings, or conclusions herein.

² The Commission obtained BOX volume data from BOX’s website and OCC equity volume from the Options Clearing Corporation’s website.

³ The Boston Options Exchange options trading platform (“BOX”) of BOX Options Exchange Group, LLC (“BOX Group LLC”) was operating as a facility of Nasdaq OMX BX, Inc. (“BX”) when these fee changes were first implemented. On April 27, 2012, the Commission granted the registration of BOX Options Exchange LLC (“BOX SRO”) as a national securities exchange. See Securities Exchange Act Release No. 66871 (April 27, 2012), 77 FR 26323 (May 3, 2012) (File No. 10-206). Upon the commencement of operations of BOX SRO as a national securities exchange, BOX ceased to be the options trading facility of BX and became operated by BOX Market LLC as a facility of BOX SRO. Any references to “the Exchange” prior to May 14, 2012 refer to BX and any such references on or after May 14, 2012 refer to BOX SRO.

charged by the Exchange to the order that is executed against the agency order, whether such order is a paired order submitted by the BOX Options Participant that also submitted the agency order or an order submitted by another BOX Options Participant in response to the PIP auction. The proposed rule change was immediately effective upon filing with the Commission.

On September 13, 2011, the Commission instituted proceedings to evaluate the effect of the proposed rule change on competition among different types of market participants and on market quality, particularly with respect to the net fee differential that it would place on BOX Options Participants that respond to a PIP auction (“PIP Responders”) compared to a BOX Options Participant that initiated the PIP auction (“PIP Initiator”).⁴ Under the proposed rule change, the Exchange charges both the PIP Initiator and the PIP Responder the same fee for executing an order in the PIP. However, if the PIP Initiator also submits the agency order into the PIP, the PIP Initiator receives the rebate paid to the agency order that is auctioned in the PIP.

On September 20, 2011, BOX Group LLC filed a notice of intention to petition for review, which triggered an automatic stay of the suspension, so the modified PIP fee schedule was reinstated. One week later, on September 27, 2011, BOX Group LLC filed its petition to review the Division of Trading and Market’s action by delegated authority instituting proceedings to determine whether to approve or disapprove the filing. On October 19, 2011, the Commission denied BOX Group LLC’s petition, lifting the stay and designating a longer comment period for the proceedings. On January 30, 2012, the Exchange submitted Amendment No. 1, in which the Exchange proposed to put its fee change on a formal pilot and undertook to provide the Commission with data during the course of such pilot. The Commission approved the proposed rule change, and on February 1, 2012, the BOX PIP Fees went into effect on a one-year pilot.⁵

On May 10, 2012, BOX SRO submitted a proposed rule change (SR-BOX-2012-002) to adopt a fee schedule upon the commencement of operations of BOX SRO as a national securities exchange that incorporated the modified fees on a pilot basis expiring on February 28, 2013.⁶

On February 1, 2013, the pilot was extended until August 31, 2013.⁷

Data Related to Price Improvement produced by the PIP auctions

The following graphs based on data provided by BOX⁸ show the performance of PIP auctions between June 2011 and May 2013 using three different metrics: price improvement statistics, competition statistics, and retention rate statistics.⁹

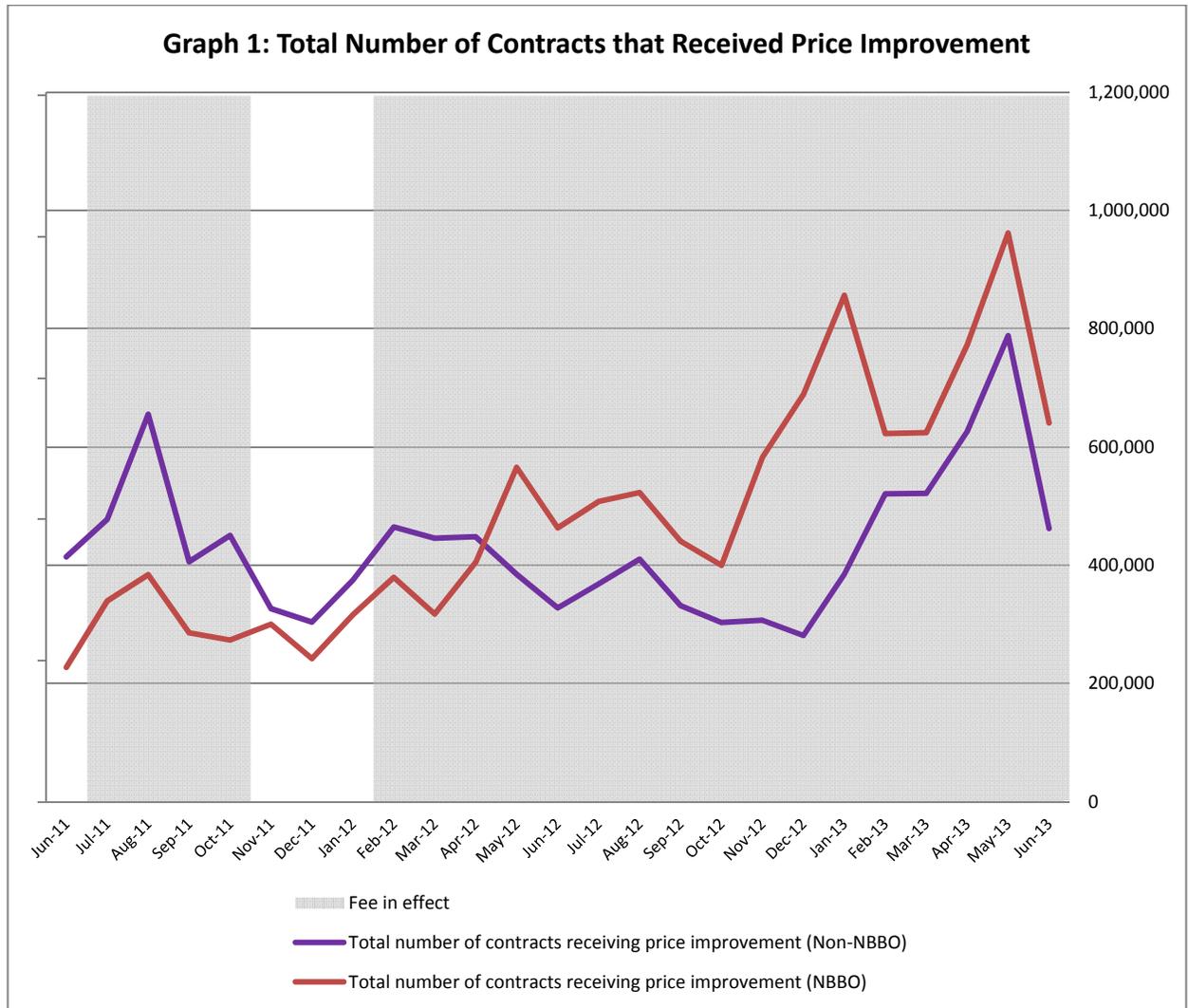
⁴ See Securities Exchange Commission Release No. 65330 (September 13, 2011), 76 FR 58065, 58066 (September 19, 2011) (SR-BX-2011-046) (Suspension of and Order Instituting Proceedings To Determine Whether To Approve or Disapprove a Proposed Rule Change To Amend the BOX Fee Schedule With Respect to Credits and Fees for Transactions in the BOX Price Improvement Period).

⁵ See Securities Exchange Act Release No. 66278 (January 30, 2012), 77 FR 5590 (February 3, 2012) (SR-BX-2011-046) (“Approval Order”).

⁶ See Securities Exchange Act Release No. 66979 (May 14, 2012), 77 FR 29740 (May 18, 2012) (SR-BOX-2012-002). See also *supra* note 1.

⁷ See Securities Exchange Act Release No. 69054 (March 7, 2013), 78 FR 16025 (March 13, 2013) (SR-BOX-2013-09).

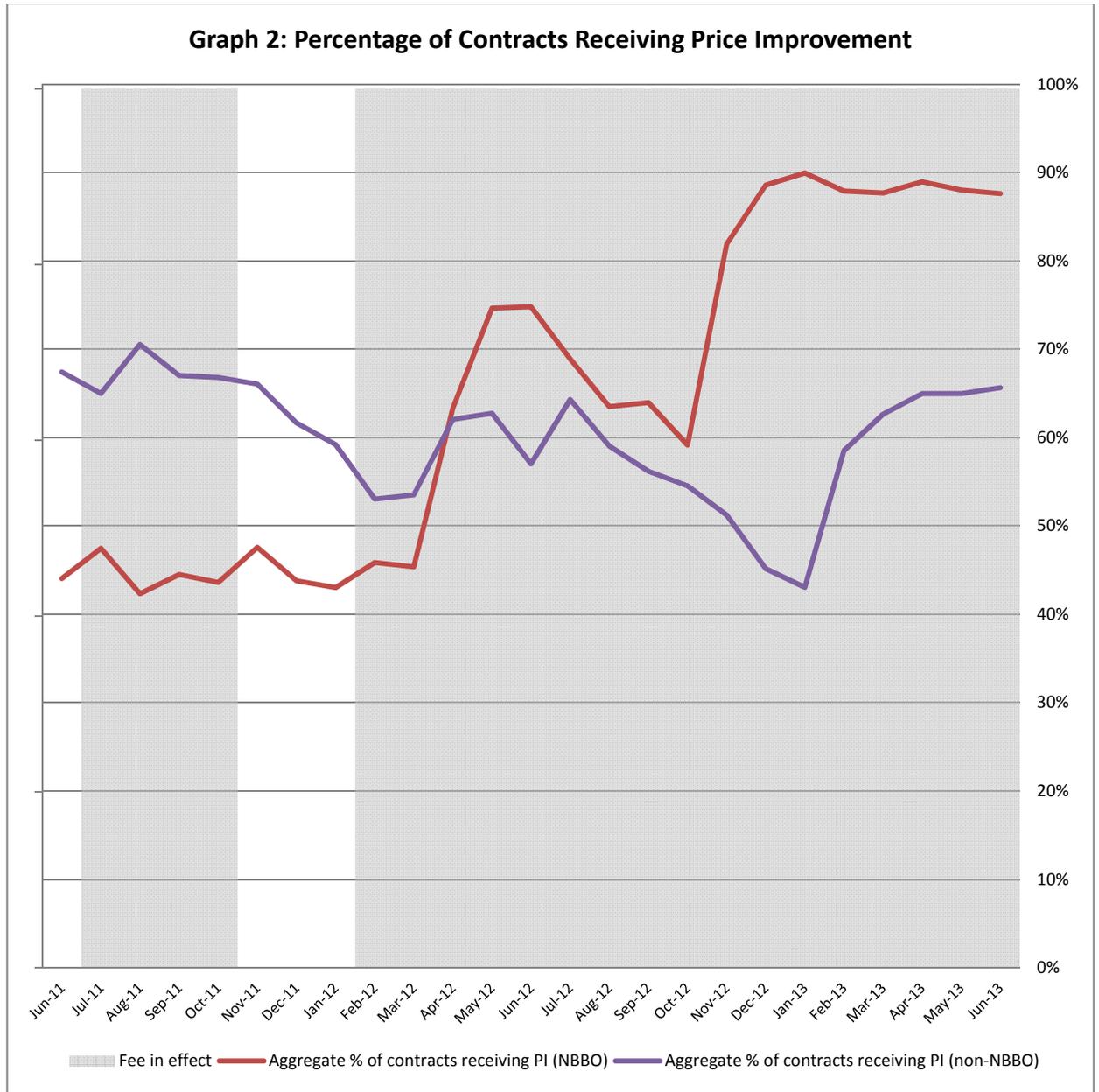
Graph 1 describes the time trend of the number of contracts receiving Price Improvement since the fee change was undertaken. The data are further divided in auctions that took place when BOX was at and outside the National Best Bid or Offer (NBBO) at the time of the auction was initiated.



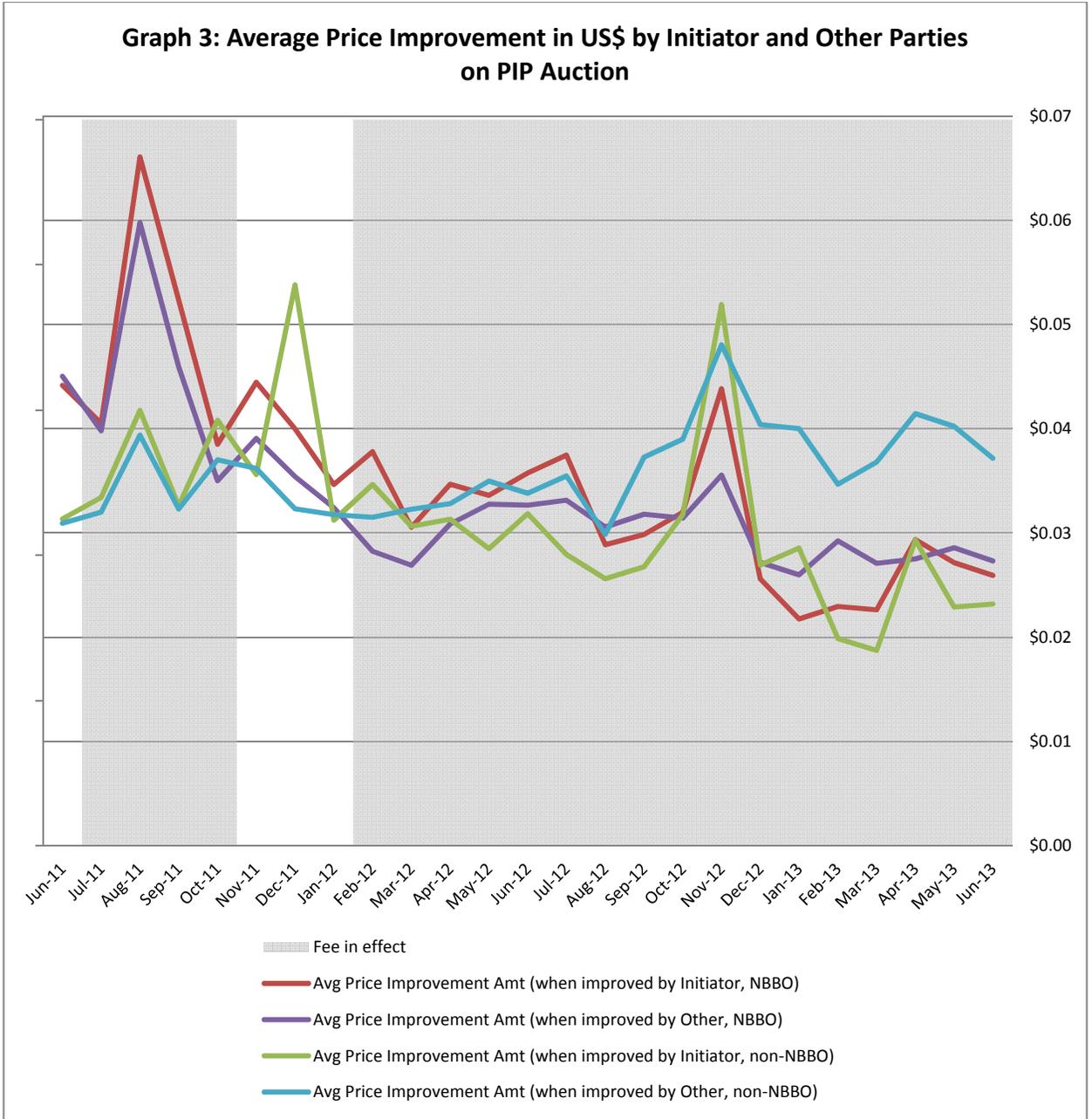
⁸ See *supra* note 2.

⁹ These graphical depictions of the data provided by the Boston Options Exchange Group, LLC, and BOX Options Exchange LLC were developed by Staff in the Division of Economic and Risk Analysis.

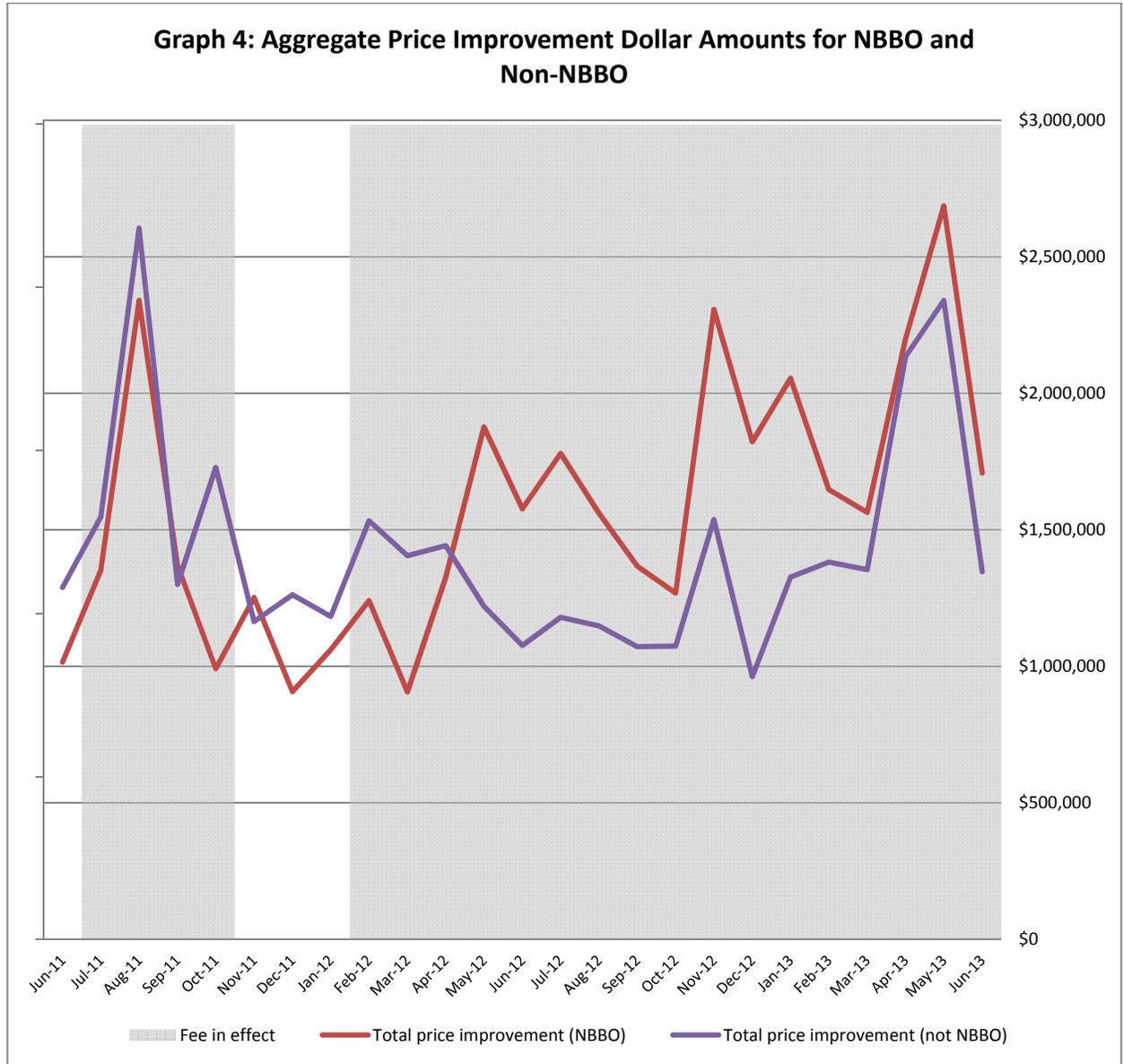
Graph 2 shows the percentage of contracts receiving Price Improvement over time. The data are further divided in auctions that took place when BOX was at and when BOX was outside the National Best Bid or Offer (NBBO) at the time the auction was initiated.



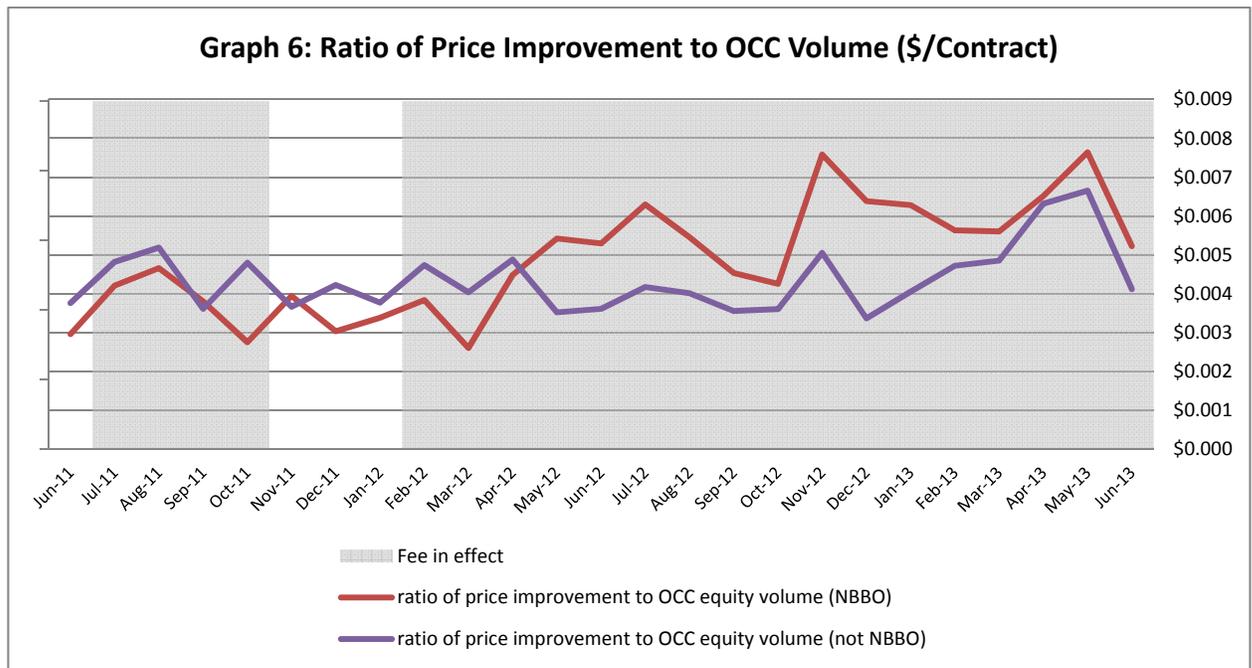
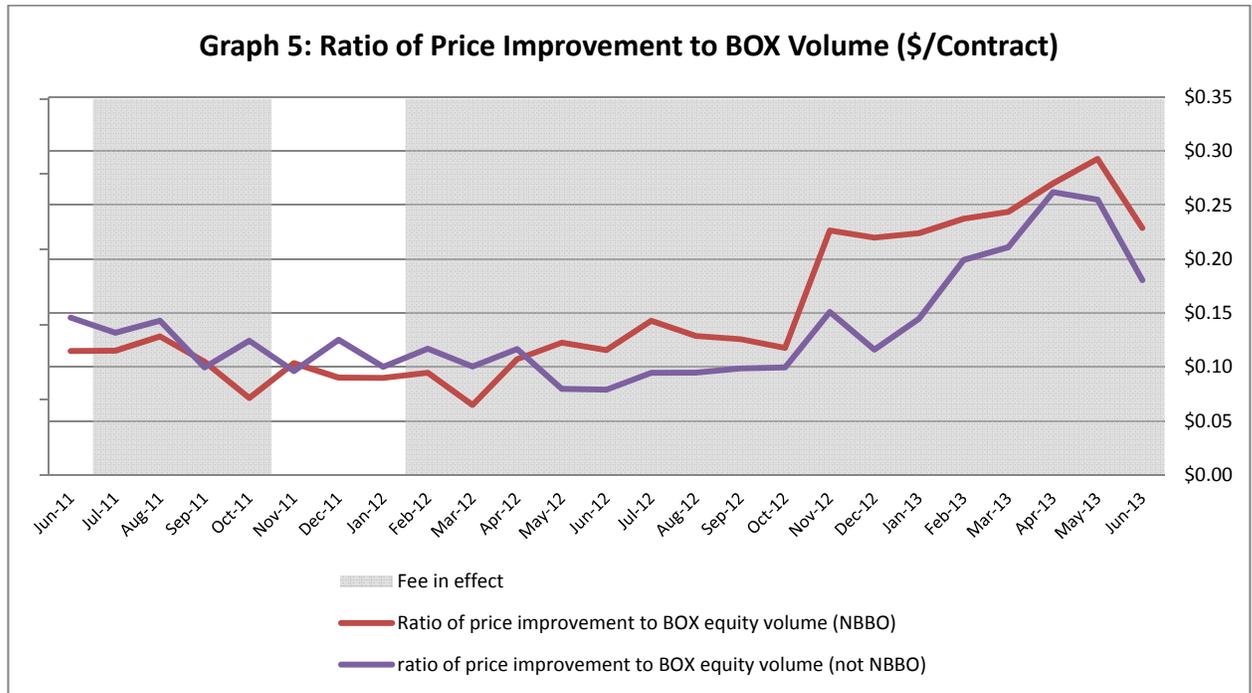
Graph 3 shows the average amount of Price Improvement per contract when the PIP order was improved by the PIP Initiator and PIP Responders, in auctions that took place when BOX was at and when BOX was outside of the NBBO at the time the auction was initiated.



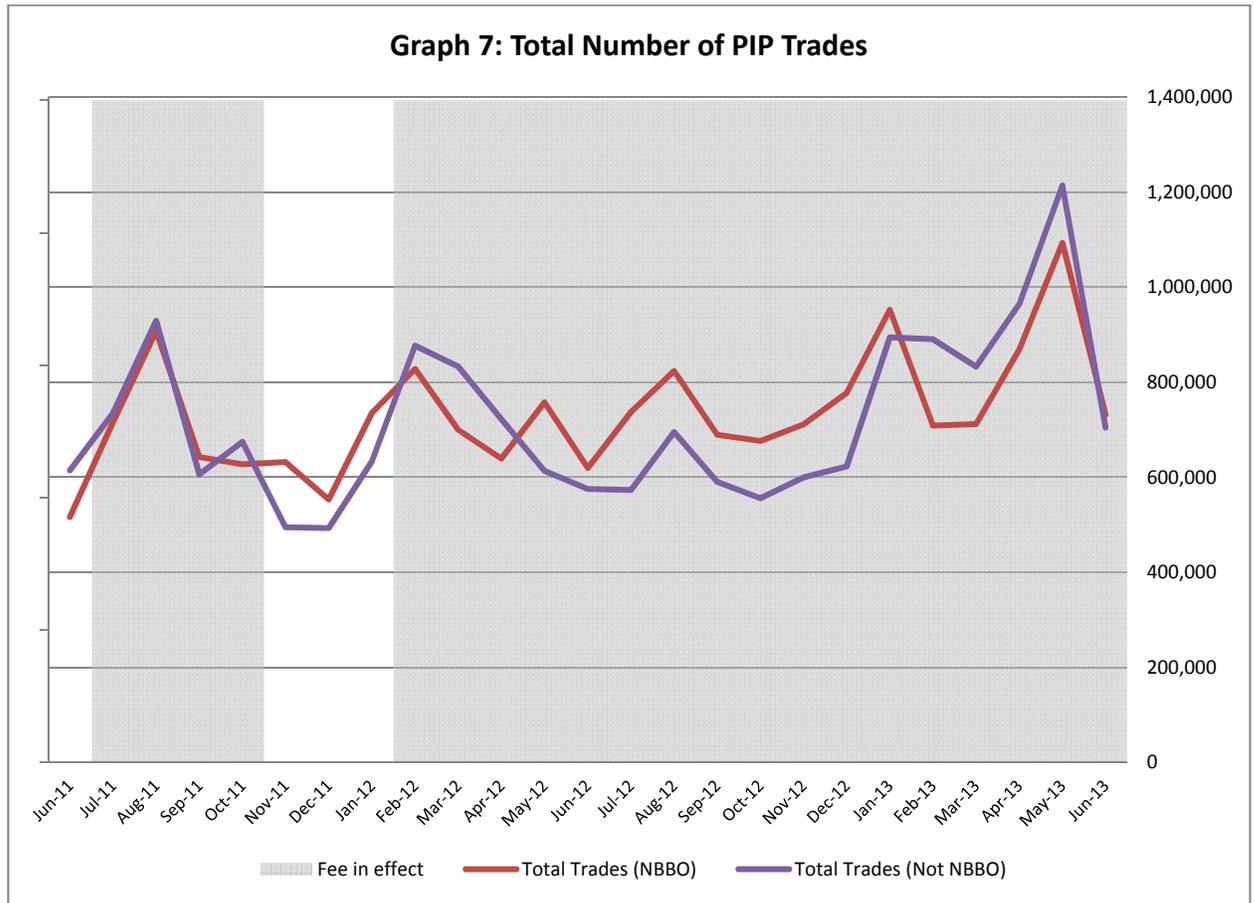
Graph 4 shows the total amount of Price Improvement achieved by the PIP auctions for auctions that took place when BOX was at the NBBO and when BOX was outside the NBBO at the time the auction was initiated. These two time series aggregate price improvement among all participants: initiators, responders, and directed non-affiliates.



Graphs 5 and 6 calculate a ratio of Price Improvement amount to options contract volume. **Graph 5** utilizes total BOX volume throughout each month since June 2011, whereas **Graph 6** uses total OCC equity option volume. This ratio is designed to determine the impact, if any, on changes in overall options market activity on the aggregate amount of Price Improvement provided by the PIP auctions.

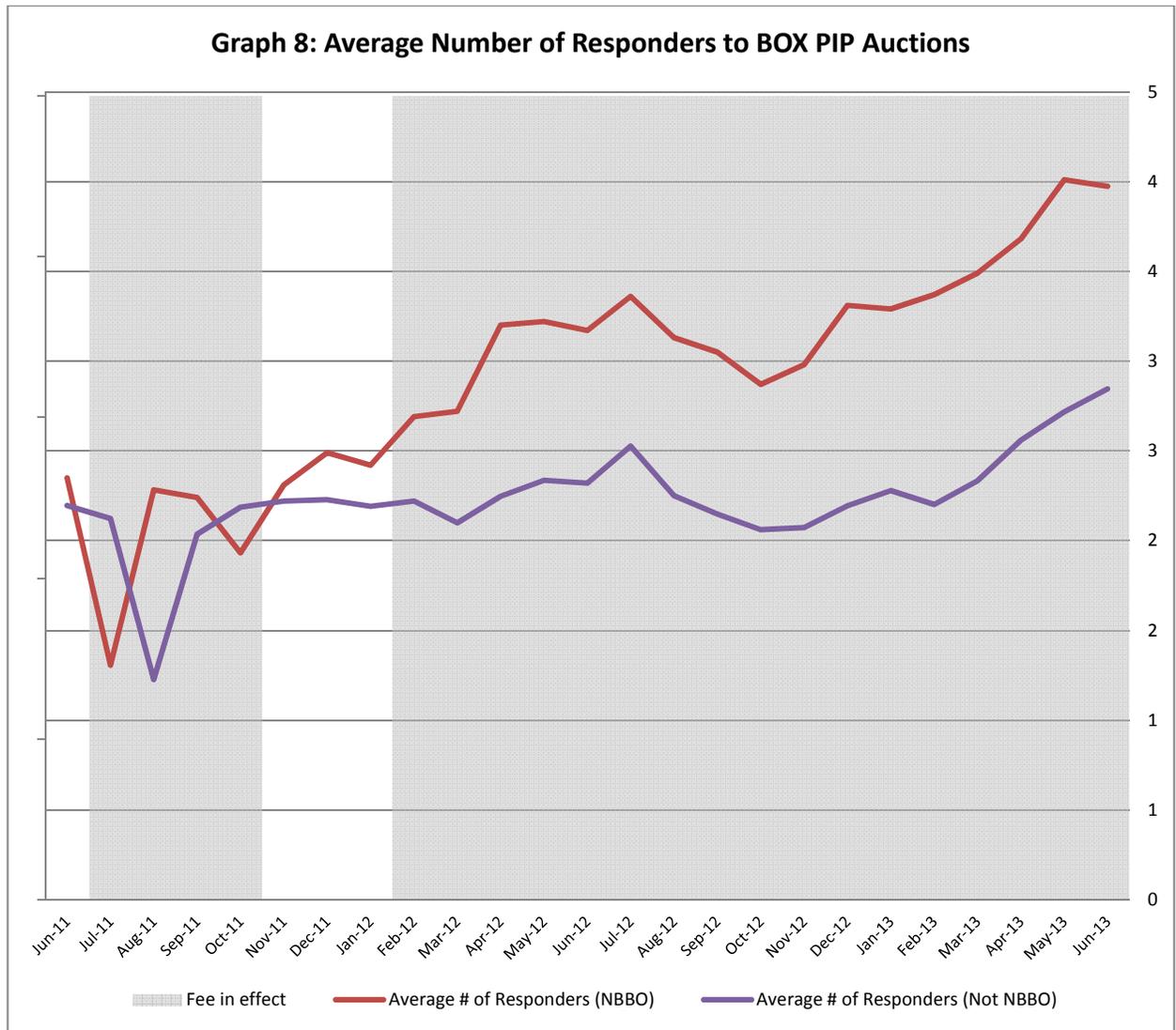


Graph 7 shows the total number of trades sent to PIP auctions.



Data Related to Competition in the PIP

Graph 8 shows the average number of participants in the PIP auctions, including initiator, for auctions that took place both when BOX was at the NBBO and when BOX was outside the NBBO at the time the auction was initiated.



Data Related to Retention Rate

Graph 9 shows the behavior of the retention rate since the summer of 2011. “Retention rate” is defined as the percentage of all contracts sent to the PIP that are executed by the PIP Initiator.

