SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-86194; File No. SR-BX-2019-011)

June 25, 2019

Self-Regulatory Organizations; Nasdaq BX, Inc.; Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1, to Make Permanent the Pilot Program for the Exchange’s Retail Price Improvement Program, Rule 4780, Which is Set to Expire on June 30, 2019, Notice of Filing of Amendment No. 1, and Order Granting Limited Exemption Pursuant to Rule 612(c) of Regulation NMS

I. Introduction

On April 26, 2019, Nasdaq BX, Inc. (“Exchange”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”) and Rule 19b-4 thereunder, a proposed rule change to make permanent Exchange Rule 4780, governing the Exchange’s Retail Price Improvement Program (“Program”). The proposed rule change was published for comment in the Federal Register on May 15, 2019. The Commission has not received any comment letters regarding the proposed rule change. On June 21, 2019, the Exchange filed Amendment No. 1 to the proposed rule change. In connection with the proposed rule change, as modified by Amendment No. 1, the Exchange requests exemptive relief from Rule 612 of Regulation NMS, which, among other things, prohibits a

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5 Amendment No. 1, which is discussed further below, is a partial amendment in which the Exchange adds further analysis to support its conclusion that the Program did not have a negative impact on market quality. Amendment No. 1 may be found at https://www.sec.gov/comments/sr-bx-2019-011/srbx2019011-5723206-186048.pdf.
6 17 CFR 242.612(c).
national securities exchange from accepting or ranking orders priced greater than $1.00 per share in an increment smaller than $0.01 ("Sub-Penny Rule"). The Commission is issuing this order approving the proposed rule change, as modified by Amendment No. 1, on an accelerated basis, soliciting comments on Amendment No. 1 from interested persons, and issuing an order granting to the Exchange limited exemptive relief pursuant to Rule 612(c) of Regulation NMS.

II. Description of the Proposed Rule Change, as Modified by Amendment No. 1

The Exchange proposes to make the Program permanent. In the Notice and Amendment No. 1, the Exchange set forth and discussed its analysis of the Program and basis for proposing permanent approval.

Overview of the Program

The stated purpose of the Program is to attract retail order flow to the Exchange with the potential of such order flow receiving price improvement. All Regulation NMS securities traded on the Exchange are eligible for the RPI Program. The Program is limited to trades occurring at prices equal to or greater than $1.00 per share.

Exchange Rule 4780 sets forth the rules governing the Program. Exchange Rule 4780(a) contains the defined terms for the Program. It defines a “Retail Member Organization” (or “RMO”) as a Member (or a division thereof) that has been approved by the Exchange to submit Retail Orders. Under Exchange Rule 4780(b)(1), to qualify as an RMO, a Member of the Exchange must conduct a retail business or route retail orders on behalf of another broker-dealer. Exchange Rule 4780(b)(2) sets forth the process for a Member to apply to become an RMO.

See note 12 infra.

See Notice, supra note 4, at 21868.

See Exchange Rule 4780(h).
which includes an attestation from the Member that substantially all orders that it submits as Retail Orders will qualify as such. Exchange Rule 4780(c) sets forth when and how the Exchange would remove a Member’s RMO Status (i.e., disqualification), and Exchange Rule 4780(d) sets forth the process for a Member to appeal a disapproval of its RMO application or an RMO disqualification under Exchange Rule 4780(c).

Exchange Rule 4780(a) references the Exchange’s order type rules under Exchange Rule 4702 to define the terms “Retail Order”\(^{10}\) and “Retail Price Improvement Order” (“RPI Order” or collectively, “RPI Interest”).\(^ {11}\) Both Retail Orders and RPI Orders are non-display orders. A Retail Order must be submitted by an RMO, and an RPI Order must provide price improvement of at least $0.001 to Retail Orders. RPI Orders may only execute against Retail Orders, and an RPI Order may only execute against a Retail Order if it provides price improvement of at least $0.001 better than the national best bid or offer (NBBO).\(^ {12}\)

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\(^{10}\) Under Exchange Rule 4702(b)(6), a “Retail Order” is defined as an order type with a non-display order attribute submitted to the Exchange by an RMO. A Retail Order must be an agency Order, or riskless principal Order that satisfies the criteria of FINRA Rule 5320.03. The Retail Order must reflect trading interest of a natural person with no change made to the terms of the underlying order of the natural person with respect to price (except in the case of a market order that is changed to a marketable limit order) or side of market and that does not originate from a trading algorithm or any other computerized methodology.

\(^{11}\) Under Exchange Rule 4702(b)(5), an RPI Order is defined as an order type with a non-display attribute that is held on the Exchange Book in order to provide liquidity at a price at least $0.001 better than the NBBO through a special execution process described in Rule 4780. A Retail Price Improving Order may be entered in price increments of $0.001.

\(^{12}\) In the RPI Approval Order, the Commission also granted the Exchange’s request for exemptive relief from the Sub-Penny Rule. See RPI Approval Order, supra note 3, at 72053. In conjunction with this proposal to make the Program Permanent, the Exchange has submitted a separate written request for exemptive relief from the Sub-Penny Rule. See Letter from Jeffrey S. Davis, Vice President and Deputy General Counsel, Exchange, to Eduardo A. Aleman, Deputy Secretary, Commission dated April 26, 2019.
Under Exchange Rule 4780(e), BX disseminates an identifier when RPI interest priced at least $0.001 better than the Exchange’s Protected Bid or Protected Offer for a particular security is available in the System (“Retail Liquidity Identifier”). The Retail Liquidity Identifier is disseminated through consolidated data streams (i.e., pursuant to the Consolidated Tape Association Plan/Consolidated Quotation System, or CTA/CQS, for Tape A and Tape B securities, and The Nasdaq Stock Market, LLC (“Nasdaq”) UTP Plan for Tape C securities) as well as through proprietary Exchange data feeds. The Retail Liquidity Identifier reflects the symbol and the side (buy or sell) of the RPI interest, but does not include the price or size of the RPI interest.

Under Exchange Rule 4780(f), an RMO can designate how a Retail Order interacts with available contra-side interest as provided in the order type Exchange Rule 4702. Under Exchange Rule 4702(b)(6), Retail Orders can be designated as either Type-1 or Type-2. A Type 1-designated Retail Order will attempt to execute against RPI Orders and any other orders on the Exchange Book with a price that is (i) equal to or better than the price of the Type-1 Retail Order and (ii) at least $0.001 better than the NBBO. A Type-1 Retail Order is not routable and will thereafter be cancelled. A Type 2-designated Retail Order will first attempt to execute against RPI Orders and any other orders on the Exchange Book with a price that is (i) equal to or better than the price of the Type-2 Retail Order and (ii) at least $0.001 better than the NBBO and will then attempt to execute against any other order on the Exchange Book with a price that is equal to or better than the price of the Type-2 Retail Order, unless such executions would trade through a Protected Quotation. A Type-2 Retail Order may be designated as routable.

Exchange Rule 4780(g) sets forth the priority and order allocation rules for how RPI Orders are ranked against both RPI and non-RPI orders when the Exchange receives a contra-
side Retail Order. Competing RPI Orders in the same security are ranked and allocated according to price then time of entry into the Exchange’s System, and. Executions occur in price/time priority in accordance with Exchange Rule 4757. When an RPI executes against a Retail Order, any remaining unexecuted RPI interest will be available to interact with other incoming Retail Orders if such interest is at an eligible price, but any remaining unexecuted portion of the Retail Order will cancel or execute in accordance with its Retail Order designation under Exchange Rule 4780(f).

Exchange Rule 4780(h) currently provides that the program is a pilot set to expire the earlier of approval of this proposal or June 30, 2019. The Exchange proposes to eliminate this provision of the rule and make the Program permanent based on its analysis of the Program.

Analysis of the Program

As more fully set forth in the Notice, the Exchange submitted data and analysis to support its proposal for making the Program permanent. The Exchange stated that the Program provided $4.3 million in price improvement to retail investors between December 1, 2014 (the start of the program) and May 2018. The Exchange also asserted that the segmentation of retail order flow on BX increased competition for retail order flow, which in turn increased retail order flow to BX and creates additional price improvement opportunities for retail investors. Furthermore, the Exchange concluded that it found no data or that it received no customer

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13 See Notice, supra note 4, at 21872-21888.
14 See id. at 21872.
15 See id. at 21887.
feedback indicating a negative impact of the Program on overall market quality or for retail investors.\textsuperscript{16}

In addition, the Exchange undertook a difference-in-difference (“DID”) analysis to analyze the Program’s impact on the broader market.\textsuperscript{17} The Exchange noted that the Program was not initially designed to produce a DID analysis because all stocks traded on BX were eligible to receive price improvement under the Program from the start.\textsuperscript{18} To account for this, the Exchange identified stocks with relatively high levels of participation in the Program for use as the “treatment” group, and used stocks with low participation in the Program as the “control” group.\textsuperscript{19} The Exchange sought to enhance the validity of the DID analysis by otherwise making the treatment group and the control group as similar as possible. The Exchange divided the analysis into two parts: active securities and less active securities. The active securities consist of stocks with consolidated average daily volume (“CADV”) of 500,000 shares or more. The less active securities consist of stocks with CADV of between 50,000 and 500,000 shares.\textsuperscript{20} Within each subgroup, the Exchange conducted what it describes as a “matched pair” process to identify a smaller set of treatment and control groups that are as similar as possible across three

\textsuperscript{16} See id. at 21875.

\textsuperscript{17} A DID statistical technique allows studying the differential effect of a treatment on data measured between a treatment group and a control group. The two groups are measured during two or more different time periods, usually a period before “treatment” and at least one time period after “treatment,” that is, a time period after which the treatment group is impacted but the control group is not. For each group, the difference between a measure in the pre-treatment and the treatment period is computed. Those differences for a measure for the two groups are then compared to each other by taking the difference between them.

\textsuperscript{18} See Notice, supra note 4, at 21876.

\textsuperscript{19} See id. at 21876 – 21879 for a full description of the Exchange’s methodology.

\textsuperscript{20} See id.
market quality statistics: (i) consolidated average daily share volume; (ii) average price; and (iii) average time-weighted quoted NBBO in dollars and basis points (bps).\footnote{See id.} To conduct the analysis of the Program’s effect on overall market quality, the Exchange compared those statistics during a pre-treatment period (September 2014 to November 2014) against those statistics during calendar year 2015 and calendar years 2017-18, obtaining a set of four DID regression analyses.\footnote{See id., at 21878-21886 (Regression Results, Analysis Sample Table, and Tables 1A-4B).} The Exchange did not see sufficient consistency across the four DID regressions to conclude that the introduction of the Program caused spreads to widen.\footnote{Id., at 21879.}

Based on results for each sample group in the Exchange’s regression analysis, the Exchange concluded that the overall results were not statistically significant to support a conclusion that the introduction of the Program caused spreads to widen.\footnote{See id.} The Exchange’s regressions suggested some increases in spreads of the treatment stocks between the pretreatment period and the post treatment periods.\footnote{See id., at 21878.} In Amendment No. 1, however, the Exchange provided more depth to its regression analysis by noting that a single treatment stock’s bps spread increased twelvefold while its price dropped by 25% during the treatment period.\footnote{See Amendment No. 1.} The Exchange represented that when this stock and its matched-sample control were removed from the treatment group, the difference in spreads demonstrated by the regression analysis is not statistically significant and demonstrated how sensitive the data sample is to a single outlier data
Based on a lack of consistent statistical evidence of any impact and the small size of the Program, the Exchange concluded that the Program did not have a negative impact on market quality.

III. Discussion and Commission Findings

After careful review, the Commission finds that the Exchange’s proposal, as modified by Amendment No. 1, to make permanent the Program, Exchange Rule 4780, is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange. In particular, the Commission finds that the proposed rule change, as modified by Amendment No. 1, is consistent with Sections 6(b)(5) and 6(b)(8) of the Act. Section 6(b)(5) of the Act requires that the rules of a national securities exchange be designed, among other things, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, to protect investors and the public interest, and not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers. Section 6(b)(8) of the Act

27 In addition, in Amendment No. 1, the Exchange noted that one of the analyses indicated increases in dollar quoted and effective spreads of about 1½ cents that were statistically significant (as compared to relative (bps) spreads increases that did not meet the standards of statistical significance). Noting that an increase in dollar spreads without an increase in bps spreads implies a general increase in the average price level of the sample stocks during the post period, the Exchange concluded that the increase in dollar spreads may be attributed to a factor unrelated to Program participation.

28 See id.

29 In approving this proposed rule change, as modified by Amendment No. 1, the Commission has considered the proposed rule’s impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).


requires that the rules of a national securities exchange not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

The Commission approved the Program on a pilot basis to allow the Exchange and market participants to gain valuable practical experience with the Program during the pilot period, and to allow the Commission to determine whether modifications to the Program were necessary or appropriate prior to any Commission decision to approve or disapprove the Program on a permanent basis. The Program’s pilot period was originally scheduled to end on December 1, 2015, and the Exchange filed to extend the operation of the pilot on several occasions. The pilot is now set to expire on June 30, 2019, and the Exchange proposes to make the Program permanent.

As set forth in the RPI Approval Order, the Exchange agreed to provide the Commission with a significant amount of data to assist the Commission’s evaluation of the Program prior to any permanent approval of the Program. Specifically, the Exchange represented that it would “produce data throughout the pilot, which will include statistics about participation, the frequency and level of price improvement provided by the Program, and any effects on the broader market structure.” The Commission expected the Exchange to monitor the scope and

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33 See RPI Approval Order, supra note 3, at 72053.

34 See id.
operation of the Program and study the data produced during that time with respect to such issues.\textsuperscript{35}

After careful consideration, the Commission believes that the Exchange’s Program data and analysis about price improvement for retail investors and the DID analysis, as supplemented by Amendment No. 1, support the Exchange’s conclusion that the Program provides meaningful price improvement to retail investors on a regulated exchange venue and has not demonstrably caused harm to the broader market. As noted above, the Exchange demonstrated that during the operation of the Program, retail orders received price improvement on the Exchange. Furthermore, in undertaking the DID analysis, the Exchange concluded that the spreads on the Exchange did not widen to the detriment of the broader market.\textsuperscript{36} Based on the foregoing, and after careful consideration of the Exchange’s analysis of the data generated by the Program, the Commission finds that the proposed rule change, as modified by Amendment No. 1, is consistent with the requirements of the Act.

IV. Solicitation of Comments on Amendment No. 1

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether Amendment No. 1 is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission’s Internet comment form (http://www.sec.gov/rules/sro.shtml); or

\textsuperscript{35} See id.

\textsuperscript{36} The Commission notes that it recently approved on a permanent basis another exchange’s substantially similar retail price improvement program based on a similar type of DID analysis. See Securities Exchange Act Release No. 85160 (February 15, 2019), 84 FR 5754 (February 22, 2019) (SR-NYSE-2018-28) (approving the New York Stock Exchange’s Retail Liquidity Program on a permanent basis and granting a limited exemption to the Sub-Penny Rule).
• Send an e-mail to rule-comments@sec.gov. Please include File Number SR-BX-2019-011 on the subject line.

Paper comments:

• Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-BX-2019-011. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission’s Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of this filing will also be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-BX-2019-011 and should be submitted on or before [insert date 21 days from publication in the Federal Register].
V. Accelerated Approval of Proposed Rule Change, as Modified by Amendment No. 1

The Commission finds good cause to approve the proposed rule change, as modified by Amendment No. 1, prior to the 30th day after the date of publication of notice of Amendment No. 1 in the Federal Register. Amendment No. 1 supplements the proposal by providing additional analysis of Exchange’s Program data to support its conclusion that there was no harm to the overall market structure. Specifically, in Amendment No. 1, the Exchange supplements text in the original notice to further explain its regression analysis results for the DID. In the Notice, the Exchange noted that the regression analysis demonstrated that there were some increase in spreads of the treatment stocks, but the Exchange concluded, among other things, that the results were neither statistically significant or consistent enough across the sample groups to conclude that the introduction of the Program caused spreads to widen. In Amendment No. 1, the Exchange provided a more in-depth analysis by noting that a single treatment stock’s bps spread increased twelvelfold while its price dropped by 25% during the treatment period. The Exchange represented that when this stock and its matched-sample control were removed from the treatment group, difference in spreads demonstrated by the regression analysis is not statistically significant. Amendment No. 1 does not contain any proposed revisions to the Program itself or its rule text.

The Exchange’s DID analysis, as supplemented by Amendment No. 1, assisted the Commission in evaluating the Program’s impact and in determining that permanent approval of the Program, Exchange Rule 4780. The Commission finds that Amendment No. 1 is reasonably designed to perfect the mechanism of a free and open market and the national market system, protect investors and the public interest, and not be unfairly discriminatory, or impose an unnecessary or inappropriate burden on competition. Accordingly, pursuant to Section 19(b)(2)
of the Act, the Commission finds good cause to approve the proposed rule change, as modified by Amendment No. 1, on an accelerated basis.

VI. Limited Exemption from the Sub-Penny Rule

Pursuant to its authority under Rule 612(c) of Regulation NMS, the Commission hereby grants the Exchange a limited exemption from the Sub-Penny Rule to operate the Program. For the reasons discussed below, the Commission determines that such action is necessary or appropriate in the public interest, and is consistent with the protection of investors.

When the Commission adopted the Sub-Penny Rule in 2005, the Commission identified a variety of problems caused by sub-pennies that the Sub-Penny Rule was designed to address:

- If investors’ limit orders lose execution priority for a nominal amount, investors may over time decline to use them, thus depriving the markets of liquidity.
- When market participants can gain execution priority for a nominal amount, important customer protection rules such as exchange priority rules and the Manning Rule could be undermined.
- Flickering quotations that can result from widespread sub-penny pricing could make it more difficult for broker-dealers to satisfy their best execution obligations and other regulatory responsibilities.
- Widespread sub-penny quoting could decrease market depth and lead to higher transaction costs.
- Decreasing depth at the inside could cause institutions to rely more on execution

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38 17 CFR 242.612(c).
39 See Financial Industry Regulatory Authority Rule 5320 (Prohibition Against Trading Ahead of Customer Orders).
alternatives away from the exchanges, potentially increasing fragmentation in the securities markets.\textsuperscript{40}

The Commission believes that the limited exemption granted today should continue to promote competition between exchanges and OTC market makers in a manner that is reasonably designed to minimize the problems that the Commission identified when adopting the Sub-Penny Rule. Under the Program, sub-penny prices will not be disseminated through the consolidated quotation data stream, which should avoid quote flickering and its reduced depth at the inside quotation.

Furthermore, the Commission does not believe that granting this limited exemption and approving the proposal would reduce incentives for market participants to display limit orders. As noted in the RPI Approval Order, market participants that displayed limit orders at the time were not able to interact with marketable retail order flow because that order flow was almost entirely routed to internalizing OTC market makers that offered sub-penny executions,\textsuperscript{41} and, as noted by the Exchange, the Program has attracted a small volume from the OTC market makers.\textsuperscript{42} As a result, enabling the Exchange to continue to compete for retail order flow through the Program should not materially detract from the current incentives to display limit orders, while potentially resulting in greater order interaction and price improvement for marketable retail orders on a public national securities exchange. To the extent that the Program may raise Manning and best execution issues for broker-dealers, these issues are already presented by the existing practices of OTC market makers.

\textsuperscript{40} See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

\textsuperscript{41} See RPI Approval Order, supra note 3, at 72053.

\textsuperscript{42} See Notice, supra note 4, at 21872-86.
This permanent and limited exemption from the Sub-Penny Rule is limited solely to the operation of the Program by the Exchange. This exemption does not extend beyond the scope of Exchange Rule 4780. In addition, this exemption is conditioned on the Exchange continuing to conduct the Program, in accordance with Exchange Rule 4780 and any other Exchange Rules referenced therein, and substantially as described in the Exchange’s request for exemptive relief and the proposed rule change, as modified by Amendment No. 1. Any changes in Exchange Rule 4780 may cause the Commission to reconsider this exemption.

43 See supra Section III.
VII. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Act, that the proposed rule change (SR-BX-2019-011), as modified by Amendment No. 1, be, and it hereby is, APPROVED on an accelerated basis.

IT IS FURTHER ORDERED that, pursuant to Rule 612(c) under Regulation NMS, that the Exchange shall be exempt from Rule 612(a) of Regulation NMS with respect to the operation of the Program as set forth in Exchange Rule 4780 as described herein.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.

Eduardo A. Aleman
Deputy Secretary

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