SECURITIES AND EXCHANGE COMMISSION (Release No. 34-90409; File No. SR-NYSEArca-2020-95)

November 12, 2020

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Amending the Fees for NYSE Arca BBO and NYSE Arca Trades by Modifying the Application of the Access Fee and Amending the Fees for NYSE Arca Trades by Adopting a Waiver Applicable to the Redistribution Fee

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on November 2, 2020, NYSE Arca, Inc. ("NYSE Arca" or the "Exchange") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. <u>Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change</u>

The Exchange proposes to (1) amend the fees for NYSE Arca BBO and NYSE Arca Trades by modifying the application of the Access Fee; and (2) amend the fees for NYSE Arca Trades by adopting a waiver applicable to the Redistribution Fee. The Exchange proposes to implement the proposed fee changes on January 1, 2021. The proposed rule change is available on the Exchange's website at www.nyse.com, at the principal office of the Exchange, and at the Commission's Public Reference Room.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

II. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change</u>

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of, and basis for, the proposed rule change and discussed any comments it received on the proposed rule change. The text of those statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant parts of such statements.

A. <u>Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis</u> for, the Proposed Rule Change

1. <u>Purpose</u>

The Exchange proposes to decrease the fees for certain NYSE Arca market data products, as set forth on the NYSE Arca Proprietary Market Data Fee Schedule ("Fee Schedule"). These fee decreases, taken together with similar fee decreases filed by the Exchange's affiliated exchanges, New York Stock Exchange LLC ("NYSE") and NYSE American LLC ("NYSE American"), will reduce the fees associated with the NYSE BQT proprietary data product, which competes directly with similar products offered by both the Nasdaq and Cboe families of U.S. equity exchanges. Collectively, the proposed fee decreases are intended to respond to the competition posed by similar products offered by the other exchange groups.

Specifically, the Exchange proposes to (1) reduce the Access Fees by more than 93% for Redistributors⁴ of NYSE Arca BBO and NYSE Arca Trades that subscribe to only such data feeds and do not subscribe to any other market data product listed on the Fee Schedule, and use

³ See SR-NYSE-2020-91 and SR-NYSEAmer-2020-79.

A Redistributor is a vendor or any other person that provides a NYSE data product to a data recipient or to any system that a data recipient uses, irrespective of the means of transmission or access.

such market data products for external distribution only; and (2) waive the Redistribution Fee for Redistributors that are eligible for the Per User Access Fee if the Redistributor provides NYSE Arca Trades externally to at least one data feed recipient and reports such recipient to the Exchange. All of the proposed changes would decrease fees for market data on the Exchange.

The Exchange proposes to implement these proposed fee changes on January 1, 2021.

Background

The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. In Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues, and also recognized that current regulation of the market system "has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies."⁵

While Regulation NMS has enhanced competition, it has also fostered a "fragmented" market structure where trading in a single stock can occur across multiple trading centers. When multiple trading centers compete for order flow in the same stock, the Commission has recognized that "such competition can lead to the fragmentation of order flow in that stock." Indeed, equity trading is currently dispersed across 16 exchanges, numerous alternative trading systems, and broker-dealer internalizers and wholesalers, all competing for order flow. Based

3

See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37495, 37499
 (June 29, 2005) (S7-10-04) (Final Rule) ("Regulation NMS Adopting Release").

See Securities Exchange Act Release No. 61358, 75 3594, 3597 (January 21, 2010) (File No. S7-02-10) (Concept Release on Equity Market Structure).

⁷ <u>See</u> Cboe Global Markets, U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/. <u>See generally https://www.sec.gov/fast-answers/divisionsmarketregmrexchangesshtml.html.</u>

See FINRA ATS Transparency Data, <u>available at</u>

on publicly-available information, no single exchange currently has more than 18% market share (whether including or excluding auction volume).⁹

With the NYSE BQT market data product, NYSE Arca and its affiliates compete head to head with the Nasdaq Basic¹⁰ and Cboe One Feed¹¹ market data products. Similar to those market data products, NYSE BQT, which was established in 2014,¹² consists of certain elements from the NYSE Arca BBO and NYSE Arca Trades market data products as well as from market data products from the Exchange's affiliates, NYSE, NYSE American, NYSE Chicago, Inc. ("NYSE Chicago"),¹³ and NYSE National, Inc. ("NYSE National").¹⁴ Similar to both Nasdaq

https://otctransparency.finra.org/otctransparency/AtsIssueData. A list of alternative trading systems registered with the Commission is *available at* https://www.sec.gov/foia/docs/atslist.htm.

See Cboe Global Markets U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/.

As described on the Nasdaq website, available here:

http://www.nasdaqtrader.com/Trader.aspx?id=nasdaqbasic, Nasdaq Basic is a "low cost alternative" that provides "Best Bid and Offer and Last Sale information for all U.S. exchange-listed securities based on liquidity within the Nasdaq market center, as well as trades reported to the FINRA Trade Reporting Facility ("TRF")."

As described on the Cboe website, available here:

https://markets.cboe.com/us/equities/market_data_services/cboe_one/, the Cboe One Feed is a "market data product that provides cost-effective, high-quality reference quotes and trade data for market participants looking for comprehensive, real-time market data" and provides a "unified view of the market from all four Cboe equity exchanges: BZX Exchange, BYX Exchange, EDGX Exchange, and EDGA Exchange."

See Securities Exchange Act Release Nos. 72750 (August 4, 2014), 79 FR 46494 (August 8, 2014) (notice - NYSE BQT); and 73553 (November 6, 2014), 79 FR 67491 (November 13, 2014) (approval order - NYSE BQT) (SR-NYSE-2014-40) ("NYSE BQT Filing").

In 2019, NYSE BQT was amended to include NYSE Chicago BBO and NYSE Chicago Trades. See Securities Exchange Act Release No. 87511 (November 12, 2019), 84 FR 63689 (November 18, 2019) (SR-NYSE-2019-60).

In 2018, NYSE BQT was amended to include NYSE National BBO and NYSE National Trades. See Securities Exchange Act Release No. 83359 (June 1, 2018), 83 FR 26507 (June 7, 2018) (SR-NYSE-2018-22).

Basic and the Cboe One Feed, NYSE BQT provides investors with a unified view of comprehensive last sale and BBO data in all Tape A, B, and C securities that trade on the Exchange, NYSE, NYSE American, NYSE Chicago, and NYSE National. Also similar to Nasdaq Basic and the Cboe One Feed, NYSE BQT is not intended to be used for purposes of making order-routing or trading decisions, but rather provides indicative prices for Tape A, B, and C securities.¹⁵

Currently, to subscribe to NYSE BQT, subscribers are charged an access fee of \$250 per month. Additionally, subscribers must also subscribe to, and pay applicable fees for NYSE Arca BBO, NYSE Arca Trades, NYSE BBO, NYSE Trades, NYSE American BBO, NYSE American BBO, NYSE American Trades, NYSE Chicago BBO, NYSE Chicago Trades, NYSE National BBO, and NYSE National Trades. Thus, an NYSE BQT subscriber currently pays the \$250 access fee for NYSE BQT, plus a \$1,500 access fee for each of NYSE BBO and NYSE Trades, Plus a \$750 access fee for each of NYSE American BBO and NYSE American Trades, Plus a \$750 access fee for each of NYSE Arca BBO and NYSE Arca trades, for a total of \$6,250 (\$250 + \$3,000 + \$1,500 + \$1,500). In addition, an NYSE BQT subscriber would need to pay for the

¹⁵ <u>See NYSE BQT Filing, supra</u> note 13.

See NYSE Proprietary Market Data Fees, available here: https://www.nyse.com/publicdocs/nyse/data/NYSE_Market_Data_Fee_Schedule.pdf.

See id.

See Fee Schedule, available here:
https://www.nyse.com/publicdocs/nyse/data/NYSE American Equities Market Data F ee Schedule.pdf.

See NYSE Arca Equities Proprietary Market Data Fees, available here: https://www.nyse.com/publicdocs/nyse/data/NYSE Arca Equities Fee Schedule.pdf.

There are currently no fees charged for the NYSE Chicago BBO, NYSE Chicago Trades, NYSE National BBO, or NYSE National Trades market data products.

applicable Professional or Non-Professional User Fees for the underlying market data products, as applicable.²¹

Because NYSE BQT is priced based on the fees associated with the underlying ten market data feeds, the Exchange and its affiliates propose to compete with the Nasdaq Basic and Cboe One Feed by reducing fees for the underlying market data products that comprise NYSE BQT. Together with NYSE and NYSE American, the Exchange similarly proposes to compete for subscribers to NYSE BQT by designing its fee decreases to be attractive to Redistributors that intend to subscribe to and externally redistribute only NYSE BQT. The Exchange understands that data recipients that are interested in subscribing to NYSE BQT obtain their data from Redistributors that do not currently subscribe to either the NYSE BQT data feed or any other market data product listed on the Fee Schedule. Because such Redistributors do not subscribe to NYSE BQT, the prospective data recipients that are the customers of such Redistributors are unable to subscribe to NYSE BQT. The proposed fee changes are designed to provide a financial incentive for such Redistributors to subscribe to NYSE BQT so that their

The Exchange is not proposing any changes to the User Fees. Currently, the Professional User Fees for each of NYSE BBO and NYSE Trades is \$4 per month, and the Non-Professional User Fees for each of NYSE BBO and NYSE Trades is \$0.20 per month.

See NYSE Proprietary Market Data Fees, available here:

https://www.nyse.com/publicdocs/nyse/data/NYSE Market Data Fee Schedule.pdf.

The Professional User Fees for each of NYSE American BBO and NYSE American Trades is \$4 per month, and the Non-Professional User Fees for each of NYSE American BBO and NYSE American Trades is \$0.25 per month. See NYSE American Price List, available here:

https://www.nyse.com/publicdocs/nyse/data/NYSE American Equities Market Data F

https://www.nyse.com/publicdocs/nyse/data/NYSE American Equities Market Data F ee Schedule.pdf. The Professional User Fees for each of NYSE Arca BBO and NYSE Arca Trades is \$4 per month, and the Non-Professional User Fees for each of NYSE Arca BBO and NYSE Arca Trades is \$0.25 per month. See NYSE Arca Price List, available here:

https://www.nyse.com/publicdocs/nyse/data/NYSE Arca Equities Proprietary Data Fe e Schedule.pdf.

customers, which have expressed an interest in subscribing to NYSE BQT, would be able to access the product via such Redistributors.

Access Fee - NYSE Arca BBO and NYSE Arca Trades

NYSE Arca BBO is a NYSE Arca-only market data product that allows a vendor to redistribute on a real-time basis the same best-bid-and-offer information that NYSE Arca reports under the Consolidated Quotation Plan ("CQ Plan") for inclusion in the CQ Plan's consolidated quotation information data stream ("NYSE Arca BBO Information"). NYSE Arca BBO Information includes the best bids and offers for all securities that are traded on the Exchange and for which NYSE Arca reports quotes under the CQ Plan. NYSE Arca BBO is available over a single data feed, regardless of the markets on which the securities are listed. NYSE Arca BBO is made available to its subscribers no earlier than the information it contains is made available to the processor under the CQ Plan.

NYSE Arca Trades is a NYSE Arca-only market data product that allows a vendor to redistribute on a real-time basis the same last sale information that NYSE Arca reports to the Consolidated Tape Association ("CTA") for inclusion in the CTA's consolidated data stream and certain other related data elements ("NYSE Arca Last Sale Information").²³ NYSE Arca Last Sale Information includes last sale information for all securities that are traded on the Exchange.

See Securities Exchange Act Release Nos. 61937 (April 16, 2010), 75 FR 21378 (April 23, 2010) (SR-NYSEArca-2010-23) (notice – NYSE Arca BBO); and 62188 (May 27, 2010), 75 FR 31484 (June 3, 2010) (SR-NYSEArca-2010-23) (approval order – NYSE Arca BBO).

See Securities Exchange Act Release Nos. 59308 (January 28, 2009), 74 FR 5955 (February 3, 2009) (SR-NYSEArca-2009-05) (notice - NYSE Arca Trades); 59598 (March 18, 2009), 74 FR 12919 (March 25, 2009) (SR-NYSEArca-2009-05) (approval order - NYSE Arca Trades).

NYSE Area Trades is made available to its subscribers at the same time as the information it contains is made available to the processor under the CTA Plan.

Currently, subscribers of each of the NYSE Arca BBO and NYSE Arca Trades products that receive a data feed pay an Access Fee of \$750 per month. In February 2020, the Exchange added the Per User Access Fee, which is a reduced Access Fee of \$100 per month currently available only for subscribers of NYSE Arca BBO and NYSE Arca Trades that receive those products in a display-only format, including for internal use for Professional Users and external distribution to both Professional and Non-Professional Users.²⁴

The Exchange now proposes that Redistributors of NYSE Arca BBO and NYSE Arca
Trades data feeds that do not subscribe to any other market data product listed on the Fee
Schedule, and use such market data products for external distribution only, would also be eligible
for the reduced Per User Access Fee. A Redistributor that receives a data feed of NYSE Arca
BBO and NYSE Arca Trades and uses the market data products for any other purpose (such as
internal use) or that subscribes to any other products listed on the Fee Schedule would continue
to pay the \$1,500 per month General Access Fee. As currently set forth in footnote 3 to the Fee
Schedule, a subscriber would be charged only one access fee for each of the NYSE Arca BBO
and NYSE Arca Trades products, depending on the use of that product.

To effect this change, the Exchange proposes to modify footnote 3 to the Fee Schedule as follows (proposed text underlined, proposed deletions bracketed):

_

A Per User Access Fee currently applies for subscribers of NYSE Arca BBO and NYSE Arca Trades that receive a data feed and use those market data products in a display-only format. See Fee Schedule. See also Securities Exchange Act Release No. 87795 (December 18, 2019), 84 FR 71043 (December 26, 2019) (SR-NYSEArca-2019-88) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change, as Modified by Partial Amendment No. 1, To Amend the Fees for NYSE Arca BBO and NYSE Arca Trades) ("BQT Fee Reduction Filing").

The Per User Access Fee is charged to: (i) [A] a subscriber that receives a data feed and uses the market data product only for Professional Users and Non-Professional Users in a display-only format, including for internal use and external redistribution in a display-only format, [will be charged the Per User Access Fee] and (ii) a Redistributor that subscribes only to the NYSE Arca BBO and NYSE Arca Trades data feeds, and does not subscribe to any other Products listed on this Fee Schedule, and uses these market data products for external distribution only. A subscriber that receives a data feed and uses the market data product for any other purpose, including if combined with Per User use, will be charged the General Access Fee. A subscriber will be charged only one access fee for each of the NYSE Arca BBO and NYSE Arca Trades products, depending on the use of that product.

The proposed rule change would result in lower fees for Redistributors of each of the NYSE Arca BBO and NYSE Arca Trades products that receive NYSE Arca BBO and NYSE Arca Trades data feeds and do not subscribe to any other market data product listed on the Fee Schedule, and use such market data products for external distribution only.²⁵ The Exchange believes that the proposed fee reduction in NYSE Arca BBO and NYSE Arca Trades would provide an incentive for such Redistributors to subscribe to the NYSE BQT data feeds so that such product would be available to their customers, which have expressed an interest in subscribing to NYSE BQT.

⁻

The Per User Access Fee is 93% lower than the General Access Fee. Together with the corresponding proposed rule changes by NYSE and NYSE American to similarly reduce the access fees to their BBO and Trades products for Redistributors, such Redistributors would be eligible for significantly lower access fees for NYSE BQT, from \$6,250 per month to \$850 per month (\$250 + \$200 + \$200 + \$200), a reduction of more than 86%.

The proposed rule change is intended to encourage greater use of NYSE BQT by making it more affordable for Redistributors that have customers interested in subscribing to NYSE BQT but that do not currently subscribe to NYSE Arca BBO or NYSE Arca Trades or any other products listed on the Fee Schedule. The proposed fee reduction would allow the Exchange to compete more effectively with Nasdaq Basic and Cboe One Feed by expanding the number of Redistributors that would subscribe to NYSE BQT, and therefore make the product available to data subscribers interested in NYSE BQT.

Redistribution Fee - NYSE Arca Trades

The Exchange currently charges a Redistribution Fee of \$750 per month for NYSE Arca Trades. A Redistributor is required to report to the Exchange each month the number of Professional and Non-Professional Users and data feed recipients that receive NYSE Arca Trades.

The Exchange proposes to waive the Redistribution Fee for a Redistributor that is eligible for the Per User Access Fee if the Redistributor provides NYSE Arca Trades externally to at least one data feed recipient and reports such data feed recipient or recipients to the Exchange. For example, a Redistributor that subscribes to the NYSE Arca BBO and NYSE Arca Trades data feeds and does not subscribe to any other product listed on the Fee Schedule would have the Redistribution Fee waived for the month if such Redistributor provides NYSE Arca BBO and NYSE Arca Trades externally to at least one data feed recipient and reports such data feed recipient to the Exchange.

By targeting this proposed fee waiver to Redistributors that provide external distribution of NYSE Arca Trades, the Exchange believes that this would provide an incentive for Redistributors to make the NYSE BQT market data product available to its customers.

Specifically, if a data recipient is interested in subscribing to NYSE BQT and relies on a Redistributor to obtain market data products from the Exchange, that data recipient would need its Redistributor to redistribute NYSE BQT. Currently, Redistributors that redistribute some NYSE Arca market data products do not necessarily also make NYSE BQT available. The Exchange believes that this proposed fee waiver for Redistributors of NYSE Arca Trades would provide an incentive for Redistributors to make NYSE BQT available to their customers, which will increase the availability of NYSE BQT to a larger potential population of data recipients.²⁶

Applicability of Proposed Rule Change

As noted above, the proposed rule change is designed to further reduce the overall cost of NYSE BQT by reducing specified fees applicable to the underlying market data products that comprise NYSE BQT. Prior to the BQT Fee Reduction Filing, the Exchange had only one subscriber to NYSE BQT. Today, the Exchange has seven subscribers, three of whom became customers as a direct result of the BQT Fee Reduction Filing and currently pay the reduced Per User Access Fee. The Exchange believes that the proposed rule changes would provide a further incentive for Redistributors to subscribe to NYSE BQT for purposes of providing external distribution of NYSE BQT to potential data recipients interested in the product.

Because the proposed rule change is targeted to potential Redistributors of NYSE BQT that do not currently subscribe to any NYSE Arca market data products, the proposed changes to the availability of the NYSE Arca BBO and NYSE Arca Trades Per User Access Fees, together with the proposed changes on NYSE and NYSE American, are narrowly tailored with that purpose in mind. Accordingly, these proposed fee changes are not designed for Redistributors that are existing customers of NYSE Arca market data products or that engage in internal use of

11

NYSE Arca does not charge a Redistribution Fee for NYSE Arca BBO.

NYSE BQT. This proposed rule change would not result in any changes to the market data fees for NYSE Arca BBO and NYSE Arca Trades for such data subscribers.

The Exchange believes that there are at least three potential Redistributors that would meet the qualifications to be eligible for these proposed fee changes. The Exchange further believes that this proposed rule change has the potential to attract these three Redistributors as new Redistributors for NYSE BQT, as well as new NYSE BQT subscribers that would be subscribing to NYSE Arca BBO and NYSE Arca Trades for the first time.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,²⁷ in general, and Sections 6(b)(4) and 6(b)(5) of the Act,²⁸ in particular, in that it provides an equitable allocation of reasonable fees among users and recipients of the data and is not designed to permit unfair discrimination among customers, issuers, and brokers.

The Proposed Rule Change Is Reasonable

In adopting Regulation NMS, the Commission granted SROs and broker-dealers increased authority and flexibility to offer new and unique market data to the public. The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. Specifically, in Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues, and also recognized that current regulation of the market system "has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies."²⁹

²⁸ 15 U.S.C. 78f(b)(4), (5).

²⁷ 15 U.S.C. 78f(b).

See Regulation NMS Adopting Release, 70 FR 37495, at 37499.

With respect to market data, the decision of the United States Court of Appeals for the District of Columbia Circuit in NetCoalition v. SEC upheld the Commission's reliance on the existence of competitive market mechanisms to evaluate the reasonableness and fairness of fees for proprietary market data:

In fact, the legislative history indicates that the Congress intended that the market system "evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed" and that the SEC wield its regulatory power "in those situations where competition may not be sufficient," such as in the creation of a "consolidated transactional reporting system."30

The court agreed with the Commission's conclusion that "Congress intended that 'competitive forces should dictate the services and practices that constitute the U.S. national market system for trading equity securities."³¹

More recently, the Commission confirmed that it applies a "market-based" test in its assessment of market data fees, and that under that test:

the Commission considers whether the exchange was subject to significant competitive forces in setting the terms of its proposal for [market data], including the level of any fees. If an exchange meets this burden, the Commission will find that its fee rule is consistent with the Act unless there is a substantial countervailing basis to find that the terms of the rule violate the Act or the rules thereunder.³²

³⁰ NetCoalition v. SEC, 615 F.3d 525, 535 (D.C. Cir. 2010) ("NetCoalition I") (quoting H.R. Rep. No. 94–229 at 92 (1975), as reprinted in 1975 U.S.C.C.A.N. 323).

³¹

Id. at 535. 32

See Securities Exchange Act Release No. 34-90217 (October 16, 2020), 85 FR 67392 (October 22, 2020) (SR-NYSENAT-2020-05) ("National IF Approval Order") (internal quotation marks omitted), quoting Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770, 74781 (December 9, 2008) ("2008 ArcaBook

1. The Proposed Fees Are Constrained by Significant Competitive Forces

a. Exchange Market Data Is Sold in a Competitive Market

In 2018, Charles M. Jones, the Robert W. Lear of Professor of Finance and Economics of the Columbia University School of Business, conducted an analysis of the market for equity market data in the United States. He canvassed the demand for both consolidated and exchange proprietary market data products and the uses to which those products were put by market participants, and reported his conclusions in a paper annexed hereto.³³ Among other things, Professor Jones concluded that:

- "The market [for exchange market data] is characterized by robust competition: exchanges compete with each other in selling proprietary market data products. They also compete with consolidated data feeds and with data provided by alternative trading systems ('ATSs'). Barriers to entry are very low, so existing exchanges must also take into account competition from new entrants, who generally try to build market share by offering their proprietary market data products for free for some period of time."³⁴
- "Although there are regulatory requirements for some market participants to use consolidated data products, there is no requirement for market participants to purchase any proprietary market data product for regulatory purposes." 35

Approval Order").

See Exhibit 3A, Charles M. Jones, <u>Understanding the Market for U.S. Equity Market Data</u>, August 31, 2018 (hereinafter "Jones Paper").

Jones Paper at 2.

³⁵ Id.

- There are a variety of data products, and consumers of equity market data choose among them based on their needs. Like most producers, exchanges offer a variety of market data products at different price levels. Advanced proprietary market data products provide greater value to those who subscribe. As in any other market, each potential subscriber takes the features and prices of available products into account in choosing what market data products to buy based on its business model."
- "Exchange equity market data fees are a small cost for the industry overall: the data demonstrates that total exchange market data revenues are orders of magnitude smaller than (i) broker-dealer commissions, (ii) investment bank earnings from equity trading, and (iii) revenues earned by third-party vendors."³⁷
- "For proprietary exchange data feeds, the main question is whether there is a competitive market for proprietary market data. More than 40 active exchanges and alternative trading systems compete vigorously in both the market for order flow and in the market for market data. The two are closely linked: an exchange needs to consider the negative impact on its order flow if it raises the price of its market data. Furthermore, new entrants have been frequent over the past 10 years or so, and these venues often give market data

³⁶ <u>Id.</u>

³⁷ <u>Id.</u>

away for free, serving as a check on pricing by more established exchanges. These are all the standard hallmarks of a competitive market."³⁸

Professor Jones' conclusions are consistent with the demonstration of the competitive constraints on the pricing of market data demonstrated by analysis of exchanges as platforms for market data and trading services, as shown below.³⁹

b. **Exchanges that Offer Market Data and Trading Services Function as Two-Sided Platforms**

An exchange may demonstrate that its fees are constrained by competitive forces by showing that platform competition applies.

As the United States Supreme Court recognized in Ohio v. American Express, platforms are firms that act as intermediaries between two or more sets of agents, and typically the choices made on one side of the platform affect the results on the other side of the platform via externalities, or "indirect network effects." Externalities are linkages between the different "sides" of a platform such that one cannot understand pricing and competition for goods or services on one side of the platform in isolation; one must also account for the influence of the other side. As the Supreme Court explained:

To ensure sufficient participation, two-sided platforms must be sensitive to the prices that they charge each side. . . . Raising the price on side A risks losing participation on that

³⁸ Id. at 39-40.

³⁹ More recently, Professors Jonathan Brogaard and James Brugler also looked at the market for proprietary market data products and confirmed that it is competitive. The authors document that introducing fees for market data leads to lower market share, and identify informed traders as the most affected trader categories after fees are introduced. See Jonathan Brogaard and James Brugler, Competition and Exchange Data Fees, October 2, 2020, attached as Exhibit 3B.

⁴⁰ Ohio v. American Express, 138 S. Ct. 2274, 2280-81 (2018).

side, which decreases the value of the platform to side B. If the participants on side B leave due to this loss in value, then the platform has even less value to side A—risking a feedback loop of declining demand. . . . Two-sided platforms therefore must take these indirect network effects into account before making a change in price on either side. 41

The Exchange and its affiliated exchanges have long maintained that they function as platforms between consumers of market data and consumers of trading services. Proving the existence of linkages between the two sides of this platform requires an in-depth economic analysis of both public data and confidential Exchange data about particular customers' trading activities and market data purchases. Exchanges, however, are prohibited from sharing details about these specific customer activities and purchases. For example, pursuant to Exchange Rule 7.41-E, transactions executed on the Exchange are processed anonymously.

The Exchange and its affiliated exchanges retained a third party expert, Marc Rysman, Professor of Economics Boston University, to analyze how platform economics applies to stock exchanges' sale of market data products and trading services, and to explain how this affects the assessment of competitive forces affecting the exchanges' data fees. Professor Rysman was able to analyze exchange data that is not otherwise publicly available in a manner that is consistent with the exchanges' confidentiality obligations to customers. As shown in his paper, Professor Rysman surveyed the existing economic literature analyzing stock exchanges as platforms between market data and trading activities, and explained the types of linkages between market data access and trading activities that must be present for an exchange to function as a platform. In addition, Professor Rysman undertook an empirical analysis of

^{41 &}lt;u>Id.</u> at 2281.

See Exhibit 3C, Marc Rysman, Stock Exchanges as Platforms for Data and Trading,
 December 2, 2019 (hereinafter "Rysman Paper"), ¶ 7.

customers' trading activities within the NYSE group of exchanges in reaction to NYSE's introduction in 2015 of the NYSE Integrated Feed, a full order-by-order depth of book data product.⁴³

Professor Rysman's analysis of this confidential firm-level data shows that firms that purchased the NYSE Integrated Feed market data product after its introduction were more likely to route orders to NYSE as opposed to one of the other NYSE-affiliated exchanges, such as NYSE Arca or NYSE American.⁴⁴ Moreover, Professor Rysman shows that the same is true for firms that did <u>not</u> subscribe to the NYSE Integrated Feed: the introduction of the NYSE Integrated Feed led to more trading on NYSE (as opposed to other NYSE-affiliated exchanges) by firms that did <u>not</u> subscribe to the NYSE Integrated Feed.⁴⁵ This is the sort of externality that is a key characteristic of a platform market.⁴⁶

From this empirical evidence, Professor Rysman concludes:

• "[D]ata is more valuable when it reflects more trading activity and more liquidity-providing orders. These linkages alone are enough to make platform economics necessary for understanding the pricing of market data."⁴⁷

See Securities Exchange Act Release Nos. 74128 (January 23, 2015), 80 FR 4951 (January 29, 2015) (SR-NYSE-2015-03) (Notice of filing and immediate effectiveness of proposed rule change to establish NYSE Integrated Feed) and 76485 (November 20, 2015), 80 FR 74158 (November 27, 2015) (SR-NYSE-2015-57) (Notice of filing and immediate effectiveness of proposed rule change to establish fees for the NYSE Integrated Feed).

⁴⁴ Rysman Paper ¶¶ 79-89.

^{45 &}lt;u>Id.</u> ¶¶ 90-91.

^{46 &}lt;u>Id.</u> ¶ 90.

⁴⁷ Id. ¶ 95.

- "[L]inkages running in the opposite direction, from data to trading, are also very likely to exist. This is because market data from an exchange reduces uncertainty about the likelihood, price, or timing of execution for an order on that exchange. This reduction in uncertainty makes trading on that exchange more attractive for traders that subscribe to that exchange's market data. Increased trading by data subscribers, in turn, makes trading on the exchange in question more attractive for traders that do not subscribe to the exchange's market data."⁴⁸
- The "mechanisms by which market data makes trading on an exchange more attractive for subscribers to market data . . . apply to a wide assortment of market data products, including BBO, order book, and full order-by-order depth of book data products at all exchanges."
- "[E]mpirical evidence confirms that stock exchanges are platforms for data and trading."⁵⁰
- "The platform nature of stock exchanges means that data fees cannot be analyzed in isolation, without accounting for the competitive dynamics in trading services."⁵¹
- "Competition is properly understood as being between platforms (i.e., stock exchanges) that balance the needs of consumers of data and traders." 52

^{48 &}lt;u>Id.</u> ¶ 96.

⁴⁹ <u>Id.</u>

^{50 &}lt;u>Id.</u> ¶ 97.

⁵¹ <u>Id.</u> ¶ 98.

⁵² Id.

- "Data fees, data use, trading fees, and order flow are all interrelated."53
- "Competition for order flow can discipline the pricing of market data, and viceversa."⁵⁴
- "As with platforms generally, overall competition between exchanges will limit their overall profitability, not margins on any particular side of the platform." 55

c. Exchange Market Data Fees Are Constrained by the Availability of Substitute Platforms

Professor Rysman's conclusions that exchanges function as platforms for market data and transaction services mean that exchanges do not set fees for market data products without considering, and being constrained by, the effect the fees will have on the order-flow side of the platform. And as the D.C. Circuit recognized in NetCoalition I, "[n]o one disputes that competition for order flow is fierce." The court further noted that "no exchange possesses a monopoly, regulatory or otherwise, in the execution of order flow from broker dealers," and that an exchange "must compete vigorously for order flow to maintain its share of trading volume." The state of trading volume." The professor of the platforms are considered as a platform of the platform

As noted above, while Regulation NMS has enhanced competition, it has also fostered a "fragmented" market structure where trading in a single stock can occur across multiple trading centers. When multiple trading centers compete for order flow in the same stock, the Commission has recognized that "such competition can lead to the fragmentation of order flow

20

^{53 &}lt;u>Id.</u>

⁵⁴ Id.

^{55 &}lt;u>Id.</u> ¶ 100.

NetCoalition I, 615 F.3d at 544 (internal quotation omitted).

^{57 &}lt;u>Id.</u>

in that stock."⁵⁸ The Commission's Division of Trading and Markets has also recognized that with so many "operating equities exchanges and dozens of ATSs, there is vigorous price competition among the U.S. equity markets and, as a result, [transaction] fees are tailored and frequently modified to attract particular types of order flow, some of which is highly fluid and price sensitive."⁵⁹ Indeed, today, equity trading is currently dispersed across 16 exchanges, ⁶⁰ numerous alternative trading systems, ⁶¹ broker-dealer internalizers and wholesalers, all competing for order flow. Based on publicly-available information, no single exchange currently has more than 18% market share. ⁶²

Further, low barriers to entry mean that new exchanges may, and do, rapidly and inexpensively enter the market and offer additional substitute platforms to compete with the Exchange.⁶³ For example, in 2020 alone, three new exchanges have entered the market: Long Term Stock Exchange (LTSE), which began operations as an exchange on August 28, 2020;⁶⁴

See Securities Exchange Act Release No. 61358, 75 3594, 3597 (January 21, 2010) (File No. S7-02-10) (Concept Release on Equity Market Structure).

Commission Division of Trading and Markets, Memorandum to EMSAC, dated October 20, 2015, available here: https://www.sec.gov/spotlight/emsac/memo-maker-taker-fees-on-equities-exchanges.pdf.

See Cboe Global Markets, U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/. See generally https://www.sec.gov/fast-answers/divisionsmarketregmrexchangesshtml.html.

See FINRA ATS Transparency Data, available at https://otctransparency.finra.org/otctransparency/AtsIssueData. A list of alternative trading systems registered with the Commission is available at https://www.sec.gov/foia/docs/atslist.htm.

^{62 &}lt;u>See</u> Cboe Global Markets U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/.

See Jones Paper at 10-11.

See LTSE Market Announcement: MA-2020-020, dated August 14, 2020, announcing LTSE production securities phase-in planned for August 28, available here: https://assets.ctfassets.net/cchj2z2dcfyd/rnGvgggJUplaIk6N1xNA7/41926d3925a177d6455868090c46aeda/MA-2020-020 Production Securities Launching August 28 -

Members Exchange (MEMX), which began operations as an exchange on September 29, 2020; ⁶⁵ and Miami International Holdings (MIAX), which began operations of its first equities exchange on September 29, 2020. ⁶⁶

These low barriers enable existing exchange customers to disintermediate and start their own exchanges if they think the prices charged for exchange proprietary market data products are too high. This is precisely the rationale behind the creation of MEMX, which was formed by some of the largest and most well capitalized financial firms that are also Exchange customers (including Bank of America, BlackRock, Charles Schwab, Citadel, Citi, E*Trade, Fidelity, Goldman Sachs, J.P. Morgan, Jane Street, Morgan Stanley, TD Ameritrade, and others).⁶⁷

For example, one of MEMX's founding principles is that exchange proprietary market data prices are too high, and that MEMX will benefit its members by offering "[1]ower pricing on market data." Nor is this a new phenomenon: exchange customers formed BATS to compete with incumbent exchanges and once registered as an exchange in 2008, BATS did not initially charge for market data. The BATS venture was a financial success for its founders, first through recouping their investment in its initial public offering and then in the subsequent sale of

<u>Google Docs.pdf</u> and LTSE Market Announcement: MA-2020-025, available here: https://assets.ctfassets.net/cchj2z2dcfyd/52nIKwAuOraU1agaNY5j80/0d27ab0eb9b540c67a5e9f831f23f0ac/MA-2020-025.pdf.

As of October 29, 2020, MEMX is trading all NMS symbols but has not yet enabled NMS routing. See https://info.memxtrading.com/trader-alert-20-10-memx-trading-symbols-update/.

See MIAX Pearl Press release, dated September 29, 2020, available here: https://www.miaxoptions.com/sites/default/files/alert-files/MIAX Press Release 09292020.pdf.

MEMX Home Page ("Founded by members and investors, MEMX aims to drive simplicity, efficiency, and competition in equity markets."), available at https://memx.com/.

MEMX home page, available at https://memx.com/.

BATS to Cboe, which now charges for market data from those exchanges. Notably, MEMX has some of the same founding broker-dealer customers, leading some to dub MEMX "BATS 2.0."⁶⁹

The fact that this cycle is viable and repeatable by entities that both trade on and compete with existing exchanges confirms that barriers to entry are low and that these markets are competitive and contestable.⁷⁰ And low barriers to entry act as a market check on high prices.⁷¹

Given Professor Rysman's conclusion that exchanges are platforms for market data and trading, this fierce competition for order flow on the trading side of the platform acts to constrain, or "discipline," the pricing of market data on the other side of the platform.⁷² And due to the ready availability of substitutes and the low cost to move order flow to those substitute trading venues, an exchange setting market data fees that are not at competitive levels would

See "MEMX turns up the heat on US stock exchanges," Financial Times, January 9, 2019, available at https://www.ft.com/content/4908c8b0-1418-11e9-a581-4ff78404524e; see also "US equities exchanges: If you can't beat them, join them," Euromoney, February 13, 2019, available at https://www.euromoney.com/article/b1d3tfby4p3y4v/us-equities-exchanges-if-you-cant-beat-them-join-them.

United States v. SunGard Data Sys., 172 F. Supp. 2d 172, 186 (D.D.C. 2001) (recognizing that "[a]s a matter of law, courts have generally recognized that when a customer can replace the services of an external product with an internally-created system, this captive output (i.e. the self-production of all or part of the relevant product) should be included in the same market."). In <u>SunGard</u>, the court rejected the Antitrust Division's attempt to block SunGuard's acquisition of the disaster recovery assets of Comdisco on the basis that the acquisition would "substantially lessen competition in the market for shared hotsite disaster recovery services," when the evidence showed that "internal hotsites" created by customers competed with the "external shared hotsite business" engaged in by the merging parties. <u>Id.</u> at 173-74, 187.

United States v. Baker Hughes, 908 F.2d 981, 987 (1990) ("In the absence of significant barriers [to entry], a company probably cannot maintain supracompetitive pricing for any length of time."); see also David S. Evans and Richard Schmalensee, Markets with Two-Sided Platforms, in 1 ISSUES IN COMPETITION LAW AND POLICY 667, 685 (ABA Section of Antitrust Law 2008) (noting that exchange mergers in 2005 and 2006 were approved by competition authorities in part in reliance on planned and likely entry of other firms).

⁷² Rysman Paper ¶ 98.

expect to quickly lose business to alternative platforms with more attractive pricing.⁷³ Although the various exchanges may differ in their strategies for pricing their market data products and their transaction fees for trades—with some offering market data for free along with higher trading costs, and others charging more for market data and comparatively less for trading—the fact that exchanges are platforms ensures that no exchange makes pricing decisions for one side of its platform without considering, and being constrained by, the effects that price will have on the other side of the platform.⁷⁴

In sum, the fierce competition for order flow thus constrains any exchange from pricing its market data at a supracompetitive price, and constrains the Exchange in setting its fees at issue here.

The proposed fees are therefore reasonable because in setting them, the Exchange is constrained by the availability of numerous substitute platforms offering market data products and trading. Such substitutes need not be identical, but only substantially similar to the product at hand.

More specifically, in reducing specified fees for the NYSE Arca BBO and NYSE Arca Trades market data products, the Exchange is constrained by the fact that, if its pricing across the platform is unattractive to customers, customers have their pick of an increasing number of alternative platforms to use instead of the Exchange. The Exchange believes that it has

See Jones Paper at 11.

In the context of the fee proposal that led to the National IF Approval Order, <u>supra</u> note 33, one commenter contended that trading was not a platform with exchange proprietary market data, and that the exchanges' proprietary market data products were instead "complements" for which exchanges could charge supracompetitive prices. Professor Rysman debunked these contentions in an additional paper, attached here. <u>See Marc Rysman, Complements, Competition, and Exchange Proprietary Data Products</u>, August 13, 2020, attached as Exhibit 3D.

considered all relevant factors and has not considered irrelevant factors in order to establish reasonable fees. The existence of numerous alternative platforms to the Exchange's platform ensures that the Exchange cannot set unreasonable market data fees without suffering the negative effects of that decision in the fiercely competitive market for trading order flow.

d. The Availability of Substitute Market Data Products Constrains Fees for NYSE Arca BBO, NYSE Arca Trades, and NYSE BQT

Even putting aside the facts that exchanges are platforms and that pricing decisions on the two sides of the platform are intertwined, the Exchange is constrained in setting the proposed market data fees by the availability of numerous substitute market data products. The Commission has been clear that substitute products need not be identical, but only substantially similar to the product at hand.⁷⁵

The NYSE BQT market data product is subject to significant competitive forces that constrain its pricing. Specifically, as described above, NYSE BQT competes head-to-head with the Nasdaq Basic product and the Cboe One Feed. These products each serve as reasonable substitutes for one another as they are each designed to provide investors with a unified view of real-time quotes and last-sale prices in all Tape A, B, and C securities. Each product provides subscribers with consolidated top-of-book quotes and trades from multiple U.S. equities markets. In the case of NYSE BQT, this product provides top-of-book quotes and trades data from five

For example, in the National IF Approval Order, the Commission recognized that for some customers, the best bid and offer information from consolidated data feeds may function as a substitute for the NYSE National Integrated Feed product, which contains order by order information. See National IF Approval Order, supra note 33, at 67397 [release p. 21] ("[I]nformation provided by NYSE National demonstrates that a number of executing broker-dealers do not subscribe to the NYSE National Integrated Feed and executing broker-dealers can otherwise obtain NYSE National best bid and offer information from the consolidated data feeds." (internal quotations omitted)).

NYSE-affiliated U.S. equities exchanges, which together account for approximately 22% of consolidated U.S. equities trading volume as of September 2020.⁷⁶ Cboe One Feed similarly provides top-of-book quotes and trades data from Cboe's four U.S. equities exchanges. NYSE BQT, Nasdaq Basic, and Cboe One Feed are all intended to provide indicative pricing and are not intended to be used for order routing or trading decisions.

In addition to competing with proprietary data products from Nasdaq and Cboe, NYSE BQT also competes with the consolidated data feed. However, the Exchange does not claim that NYSE BQT is a substitute for consolidated data with respect to requirements under the Vendor Display Rule, which is Regulation NMS Rule 603(c).

The fact that this filing is proposing reductions in certain fees and fee waivers is itself confirmation of the inherently competitive nature of the market for the sale of proprietary market data. For example, in August 2019, Cboe filed proposed rule changes to reduce certain of its Cboe One Feed fees and noted that it attracted two additional customers because of the reduced fees.⁷⁷ More recently, Nasdaq filed a proposed rule change to lower the enterprise license fee for

See Cboe Global Markets U.S. Equities Market Volume Summary, available at https://markets.cboe.com/us/equities/market_share/market/2019-10-31/.

⁷⁷ See Securities Exchange Act Release Nos.86667 (August 14, 2019) (SR-CboeBZX-2019-069); 86670 (August 14, 2019) (SR-CboeBYX-2019-012); 86676 (August 14, 2019) (SR-CboeEDGA-2019-013); and 86678 (August 14, 2019) (SR-CboeEDGX-2019-048) (Notices of filing and Immediate effectiveness of proposed rule change to reduce fees for the Cboe One Feed) (collectively "Cboe One Fee Filings"). The Cboe One Fee Filings were in effect from August 1, 2019 until September 30, 2019, when the Commission suspended them and instituted proceedings to determine whether to approve or disapprove those proposals. See, e.g., Securities Exchange Act Release No. 87164 (September 30, 2019), 84 FR 53208 (October 4, 2019) (SR-CboeBZX-2019-069). On October 1, 2019, the Cboe equities exchanges refiled the Cboe One Fee Filings on the basis that they had new customers subscribe as a result of the Cboe One Fee Filings, and therefore its fee proposal had increased competition for top-of-book market data. See Securities Exchange Act Release Nos. 87312 (October 15, 2019), 84 FR 56235 (October 21, 2019) (SR-CboeBZX-2019-086); 87305 (October 14, 2019), 84 FR 56210 (October 21, 2019) (SR-CboeBYX-2019-015); 87295 (October 11, 2019), 84 FR 55624 (October

broker-dealers distributing Nasdaq Basic to internal Professional subscribers and the enterprise license fee for broker-dealers distributing Nasdaq Last Sale to Professional subscribers.⁷⁸

The Exchange notes that NYSE Arca BBO, NYSE Arca Trades, and NYSE BQT are entirely optional. The Exchange is not required to make the proprietary data products that are

^{17, 2019) (}SR-CboeEDGX-2019-059); and 87294 (October 11, 2019), 84 FR 55638 (October 17, 2019) (SR-CboeEDGA-2019-015) (Notices of filing and immediate effectiveness of proposed rule changes to re-file the Small Retail Broker Distribution Program) ("Cboe One Fee Re-Filings"). On November 26, 2019, the Commission suspended the Cboe One Fee Re-Filings and instituted proceedings to determine whether to approve or disapprove those proposals. See, e.g., Securities Exchange Act Release No. 87629 (November 26, 2019), 84 FR 66245 (December 3, 2019) (SR-CboeBZX-2019-086). On November 27, 2019, the Cboe equities exchanges refiled the Cboe One Fee Filings with one revision to the requirements for participating in the Small Retail Broker Distribution Program and additional information about the basis for the proposed fee changes. See Securities Exchange Act Release Nos. 87712 (December 10, 2019), 84 FR 68508 (December 16, 2019) (SR-CboeBZX-2019-101); 88713 (December 10, 2019), 84 FR 68530 (December 16, 2019) (SR-CboeBYX-2019-023); 87709 (December 10, 2019), 84 FR 68523 (December 16, 2019) (SR-CboeEDGA-2019-021); and 87711 (December 10, 2019), 84 FR 68501 (December 16, 2019) (SR-Cboe-EDGX-2019-071) (Notices of filing and immediate effectiveness of proposed rule changes to introduce a Small Retail Broker Distribution Program) ("Cboe One Third Fee Re-Filings"). On February 4, 2020, the Cboe equities exchanges withdrew the Cboe One Third Fee Re-Filings and, on the same date, refiled the Cboe One Fee Filings. See Securities Exchange Act Release Nos. 88221 (February 14, 2020), 85 FR 9904 (February 20, 2020) (SR-CboeBYX-2020-007); 88218 (February 14, 2020), 85 FR 9827 (February 20, 2020) (SR-CboeBZX-2020-014); 88220 (February 14, 2020), 85 FR 9912 (February 20, 2020) (SR-CboeEDGA-2020-004); and 88219 (February 14, 2020), 85 FR 9872 (February 20, 2020) (SR-CboeEDGX-2020-008) (Notices of filing and immediate effectiveness of proposed rule changes to introduce a Small Retail Broker Distribution Program) ("Cboe One Fourth Fee Re-Filings"). On April 15, 2020, the Cboe equities exchanges withdrew the Cboe One Fee Filings and the Cboe One Fee Re-Filings. Pursuant to the Cboe One Fourth Fee Re-Filings, the Small Retail Broker Distribution Program is currently in effect at the Cboe equities exchanges.

See Securities Exchange Act Release No. 90177 (October 14, 2020), 85 FR 66620 (October 20, 2020) (SR-NASDAQ-2020-065) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Lower the Enterprise License Fee for Broker-Dealers Distributing Nasdaq Basic to Internal Professional Subscribers as Set Forth in the Equity 7 Pricing Schedule, Section 147, and the Enterprise License Fee for Broker-Dealers Distributing Nasdaq Last Sale to Professional Subscribers at Equity 7, Section 139).

the subject of this proposed rule change available or to offer any specific pricing alternatives to any customers, nor is any firm or investor required to purchase the Exchange's data products. Unlike some other data products (*e.g.*, the consolidated quotation and last-sale information feeds) that firms are required to purchase in order to fulfil regulatory obligations, ⁷⁹ a customer's decision whether to purchase any of the Exchange's proprietary market data feeds is entirely discretionary. Most firms that choose to subscribe to proprietary market data feeds from the Exchange and its affiliates do so for the primary goals of using them to increase their revenues, reduce their expenses, and in some instances compete directly with the Exchange's trading services. Such firms are able to determine for themselves whether or not the products in question or any other similar products are attractively priced. If market data feeds from the Exchange and its affiliates do not provide sufficient value to firms based on the uses those firms may have for it, such firms may simply choose to conduct their business operations in ways that do not use the products.⁸⁰

In addition, in the case of products that are also redistributed through market data vendors, such as Bloomberg and Refinitiv, the vendors themselves provide additional price discipline for proprietary data products because they control the primary means of access to certain end users. These vendors impose price discipline based upon their business models. For example, vendors that assess a surcharge on data they sell are able to refuse to offer proprietary

The Exchange notes that broker-dealers are not required to purchase proprietary market data to comply with their best execution obligations. See In the Matter of the Application of Securities Industry and Financial Markets Association for Review of Actions Taken by Self-Regulatory Organizations, Release Nos. 34-72182; AP-3-15350; AP-3-15351 (May 16, 2014). Similarly, there is no requirement in Regulation NMS or any other rule that proprietary data be utilized for order routing decisions, and some broker-dealers and ATSs have chosen not to do so.

See generally Jones Paper at 8, 10-11.

products that their end users do not or will not purchase in sufficient numbers. This competitive constraint is precisely what is driving the proposed fee changes here, which are designed to attract new market data vendors, and through them new subscribers, to the NYSE BQT product. Currently, only four vendors subscribe to NYSE BQT, and each vendor has limited redistribution of NYSE BQT. No other vendors currently subscribe to NYSE BQT and likely will not unless their customers request it, and customers will not elect to pay the proposed fees unless such product can provide value by sufficiently increasing revenues or reducing costs in the customer's business in a manner that will offset the fees. All of these factors operate as constraints on pricing proprietary data products.

Because of the availability of substitutes, an exchange that overprices its market data products stands a high risk that users may substitute another source of market data information for its own. Those competitive pressures imposed by available alternatives are evident in the Exchange's proposed pricing.

In setting the proposed fees, the Exchange considered the competitiveness of the market for proprietary data and all of the implications of that competition. The Exchange believes that it has considered all relevant factors and has not considered irrelevant factors in order to establish reasonable fees. The existence of numerous alternatives to the Exchange's platform and, more specifically, alternatives to the market data products, including proprietary data from other sources, ensures that the Exchange cannot set unreasonable fees when vendors and subscribers can elect these alternatives or choose not to purchase a specific proprietary data product if the attendant fees are not justified by the returns that any particular vendor or data recipient would achieve through the purchase.

2. The Proposed Fees Are Reasonable

The specific fees that the Exchange proposes for NYSE Arca BBO and NYSE Arca Trades are reasonable, for the following additional reasons.

Overall. This proposed fee change is a result of the competitive environment, as the Exchange seeks to decrease certain of its fees to attract Redistributors that do not currently subscribe to the NYSE BQT market data product. The Exchange is proposing the fee reductions at issue to make the Exchange's fees more competitive for a specific segment of market participants, thereby increasing the availability of the Exchange's data products, and expanding the options available to firms making data purchasing decisions based on their business needs. The Exchange believes that this is consistent with the principles contained in Regulation NMS to "promote the wide availability of market data and to allocate revenues to SROs that produce the most useful data for investors."

Access Fee. By making the reduced Per User Access Fee available to Redistributors that subscribe only to the NYSE Arca BBO and NYSE Arca Trades data feeds and NYSE BQT and do not have any internal use of such products, and do not subscribe to any other products listed on the Fee Schedule, the Exchange believes that more Redistributors may choose to subscribe to these products, thereby expanding the distribution of this market data for the benefit of investors that participate in the national market system and increasing competition generally. The Exchange also believes that offering the Per User Access Fee to these Redistributors would expand the availability of NYSE BQT to potential data recipients that are interested in subscribing to NYSE BQT but do not have access to a Redistributor who subscribes to the data feeds.

30

⁸¹ See Regulation NMS Adopting Release, 70 FR 37495, at 37503.

The Exchange determined to make the reduced Per User Access Fee available to these Redistributors because it constitutes a substantial reduction of the current fee, with the intended purpose of increasing use of NYSE BQT by Redistributors that do not currently subscribe to any NYSE Arca market data products. NYSE BQT has been in place since 2014 but has a very small number of subscribers. The Exchange believes that in order to compete with other indicative pricing products such as Nasdaq Basic and Cboe One Feed, it needs to provide a meaningful financial incentive for more Redistributors to choose to subscribe to NYSE BQT so that they can make it available to their customers. Accordingly, the proposed reduction to the access fees for NYSE Arca BBO and NYSE Arca Trades, together with the proposed reduction to the access fees for NYSE BBO, NYSE Trades, NYSE American BBO, and NYSE American Trades, is reasonable because the reductions will make NYSE BQT a more attractive offering for Redistributors that do not currently subscriber to any NYSE Arca market data products and make it more competitive with Nasdaq Basic and Cboe One Feed. For example, the External Distribution Fee for Cboe One Feed is currently \$5,000 (which is the sum of the External Distribution fees for the four exchange data products that are included in Cboe One Feed) plus a Data Consolidation Fee of \$1,000, for a total of \$6,000. Evidence of the competition among exchange groups for these products has previously been demonstrated via fee changes. For example, following the introduction of the Cboe One Feed, Nasdaq responded by reducing its fees for the Nasdaq Basic product.⁸² With the proposed changes by the Exchange, NYSE, and

-

See e.g., Securities Exchange Act Release No. 83751 (July 31, 2018), 83 FR 38428 (August 6, 2018) (SR-NASDAQ-2018-058) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Lower Fees and Administrative Costs for Distributors of Nasdaq Basic, Nasdaq Last Sale, NLS Plus and the Nasdaq Depth-of-Book Products Through a Consolidated Enterprise License). Nasdaq filed the proposed fee change to lower the Enterprise Fee for Nasdaq Basic and other market data products in response to the Enterprise Fee for the Cboe One Feed adopted by Cboe family of

NYSE American, the Exchange is similarly seeking to compete by decreasing the total access fees for NYSE BQT from \$6,250 to \$850 for Redistributors that do not currently subscribe to any NYSE Arca market data products and have customers that are interested in subscribing to NYSE BQT but cannot do so until their Redistributor also subscribes. This proposed rule change therefore demonstrates the existence of an effective, competitive market because this proposal resulted from a need to generate innovative approaches in response to competition from other exchanges that offer market data for a specific segment of market participants.

Redistribution Fees. Similarly, the proposed waiver of the NYSE Arca Trades

Redistribution Fee is reasonable because it is designed to provide an incentive for Redistributors to make NYSE BQT available so that data recipients can subscribe to NYSE BQT. The Exchange further believes that the proposed waiver of the NYSE Arca Trades Redistribution Fee is reasonable because it is designed to compete with market data products offered by the Cboe family of equity exchanges. 83

For all of the foregoing reasons, the Exchange believes that the proposed fees are reasonable.

The Proposed Fees Are Equitably Allocated

The Exchange believes the proposed fees for NYSE Arca BBO and NYSE Arca Trades are allocated fairly and equitably among the various categories of users of the feed, and any differences among categories of users are justified.

exchanges.

See, e.g., BZX Price List - U.S. Equities available at http://www.nasdaqtrader.com/Trader.aspx?id=DPUSdata#db. BZX charges \$500 per month for internal distribution, of BZX Last Sale. BZX also charges \$500 per month for internal distribution, and \$2,500 per month for external distribution, of BZX Top. See Cboe BZX U.S. Equities Exchange Fee Schedule at http://markets.cboe.com/us/equities/membership/fee_schedule/bzx/.

Overall. As noted above, this proposed fee change is a result of the competitive environment for market data products that provide indicative pricing information across a family of exchanges. To respond to this competitive environment, the Exchange seeks to amend its fees to access NYSE Arca BBO and NYSE Arca Trades for Redistributors that would be subscribing only to the NYSE Arca BBO and NYSE Arca Trades data feeds and would use these market data products for external distribution only, which the Exchange hopes will attract new Redistributor subscribers for the NYSE BQT market data product so that the product can be made available to prospective market data recipients. The Exchange is proposing the fee reductions to make the Exchange's fees more competitive for a specific segment of market participants, thereby increasing the availability of the Exchange's data products, expanding the options available to firms making data purchasing decisions based on their business needs, and generally increasing competition.

Access Fee. The Exchange believes that making the Per User Access Fee available to Redistributors that would be subscribing only to the NYSE Arca BBO and NYSE Arca Trades data feeds and would use these market data products for external distribution only is equitable as it would apply equally to all data recipients that choose to subscribe to NYSE Arca BBO or NYSE Arca Trades for external distribution only and who do not subscribe to any other products listed on the Fee Schedule. Because NYSE Arca BBO and NYSE Arca Trades are optional products, any data recipient could choose to subscribe only to NYSE Arca BBO or NYSE Arca Trades to distribute externally and be eligible for the proposed reduced fee. The Exchange does not believe that it is inequitable that this proposed fee reduction would be available only to data recipients that subscribe only to NYSE Arca BBO or NYSE Arca Trades and only for external distribution. Internal use of data represents a different set of use cases than a Redistributor that is

engaged only in external distribution of data. For example, non-display data can be used by data recipients for a wide variety of profit-generating purposes, including proprietary and agency trading and smart order routing, as well as by data recipients that operate order matching and execution platforms that compete directly with the Exchange for order flow. The data also can be used for a variety of non-trading purposes that indirectly support trading, such as risk management and compliance. Although some of these non-trading uses do not directly generate revenues, they can nonetheless substantially reduce the recipient's costs by automating such functions so that they can be carried out in a more efficient and accurate manner and reduce errors and labor costs, thereby benefiting end users. The Exchange believes that charging a different access fee for a Redistributor that is engaged solely in external distribution of only the NYSE Arca BBO and NYSE Arca Trades products is equitable because it would make NYSE BQT available to more data recipients that are customers of such Redistributors and who would not otherwise be able to access NYSE BQT if their Redistributor did not subscribe to and redistribute NYSE BOT.

Redistribution Fees. The Exchange believes the proposed change to provide a waiver of the Redistribution Fee to a Redistributor that would be eligible for the Per User Access Fee because it only externally redistributes NYSE Arca Trades to at least one data feed recipient is equitably allocated. The proposed change would apply equally to all Redistributors that are eligible for the Per User Access Fee and choose to externally redistribute the NYSE Arca Trades product, and would serve as an incentive for Redistributors to make NYSE Arca Trades more broadly available for use by both Professional and Non-Professional Users. This, in turn, could provide an incentive for Redistributors that do not currently subscribe to any NYSE Arca market data products to subscribe to NYSE BQT and make it available to their customers.

For all of the foregoing reasons, the Exchange believes that the proposed fees for the NYSE Arca market data products are equitably allocated.

The Proposed Fees Are Not Unfairly Discriminatory

The Exchange believes the proposed fees are not unfairly discriminatory because any differences in the application of the fees are based on meaningful distinctions between customers, and those meaningful distinctions are not unfairly discriminatory between customers.

Overall. As noted above, this proposed fee change is a result of the competitive environment for market data products that provide indicative pricing information across a family of exchanges. To respond to this competitive environment, the Exchange seeks to amend its fees to provide a financial incentive for Redistributors that do not currently subscribe to any NYSE Arca market data products that decide to subscribe to NYSE BQT, which the Exchange hopes will attract more subscribers for the NYSE BQT market data product. The Exchange is proposing the fee reductions to make the Exchange's fees more competitive for a specific segment of market participants, thereby increasing the availability of the Exchange's data products, expanding the options available to firms making data purchasing decisions based on their business needs, and generally increasing competition.

Access Fee. The Exchange believes that making the Per User Access Fee available to Redistributors that would be subscribing only to the NYSE Arca BBO and NYSE Arca Trades data feeds and would use these market data products for external distribution only is not unfairly discriminatory as it would apply equally to all Redistributors that choose to subscribe to NYSE Arca BBO or NYSE Arca Trades for external distribution only and who do not subscribe to any other products listed on the Fee Schedule. Because NYSE Arca BBO and NYSE Arca Trades are optional products, any data recipient could choose to subscribe only to NYSE Arca BBO or

NYSE Arca Trades to distribute externally and be eligible for the proposed reduced fee. The Exchange does not believe that it is unfairly discriminatory that this proposed fee reduction would be available only to data recipients that subscribe only to NYSE Arca BBO or NYSE Arca Trades and only for external distribution. Internal use of data represents a different set of use cases than a Redistributor that is engaged only in external distribution of data. For example, non-display data can be used by data recipients for a wide variety of profit-generating purposes, including proprietary and agency trading and smart order routing, as well as by data recipients that operate order matching and execution platforms that compete directly with the Exchange for order flow. The data also can be used for a variety of non-trading purposes that indirectly support trading, such as risk management and compliance. While some of these non-trading uses do not directly generate revenues, they can nonetheless substantially reduce the recipient's costs by automating such functions so that they can be carried out in a more efficient and accurate manner and reduce errors and labor costs, thereby benefiting end users. The Exchange therefore believes that there is a meaningful distinction between internal use and redistribution of market data and that charging a different access fee to a Redistributor that is engaged solely in external distribution of only the NYSE Arca BBO and NYSE Arca Trades products is not unfairly discriminatory because it would make NYSE BQT available to more data recipients that are customers of such Redistributors and who would not otherwise be able to access NYSE BQT if their Redistributor did not subscribe to and redistribute NYSE BQT.

Moreover, the Exchange does not believe that it is unfairly discriminatory to offer the Per User Access Fee only to those Redistributors that would subscribe only to the NYSE Arca BBO and NYSE Arca Trades data feeds and no other products on the Fee Schedule, and only for external distribution. The Exchange does not currently have any Redistributors that fit this

description. This proposed rule change is designed to provide an incentive for Redistributors that do not currently subscribe to NYSE BQT or any other products listed on the Fee Schedule, but have customers that are interested in subscribing to NYSE BQT, to subscribe to the NYSE Arca BBO and NYSE Arca Trades data feeds so that they can make NYSE BQT available to their customers. This fee incentive is not necessary for Redistributors that currently subscribe to the NYSE Arca BBO and NYSE Arca Trades data feeds because such Redistributors could already subscribe to NYSE BQT, but have chosen not to, and a reduction in their existing access fees would likely not result in such Redistributors choosing to subscribe to NYSE BQT.

Redistribution Fees. The Exchange believes the proposed change to provide a waiver of the Redistribution Fee to a Redistributor that would be eligible for the Per User Access Fee because it only externally redistributes NYSE Arca Trades to at least one data recipient is not unfairly discriminatory. The proposed waiver would apply equally to all Redistributors that are eligible for the Per User Access Fee and choose to externally redistribute the NYSE Arca Trades product, and would serve as an incentive for Redistributors that do not currently subscribe to any NYSE Arca market data products to subscribe to NYSE Arca Trades and then make NYSE BQT available to their customers.

For all of the foregoing reasons, the Exchange believes that the proposed fees are not unfairly discriminatory.

B. <u>Self-Regulatory Organization's Statement on Burden on Competition</u>

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Indeed, as demonstrated above, the Exchange believes the proposed rule changes are procompetitive.

Intramarket Competition. The Exchange believes that the proposed fees do not put any market participants at a relative disadvantage compared to other market participants. As noted above, the proposed fee schedule would apply to all subscribers of NYSE Arca market data products, and customers may not only choose whether to subscribe to the products at all, but also may tailor their subscriptions to include only the products and uses that they deem suitable for their business needs. The Exchange also believes that the proposed fees neither favor nor penalize one or more categories of market participants in a manner that would impose an undue market on competition. As shown above, to the extent that particular proposed fees apply to only a subset of subscribers, those distinctions are not unfairly discriminatory and do unfairly burden one set of customers over another.

Intermarket Competition. The Exchange believes that the proposed fees do not impose a burden on competition on other exchanges that is not necessary or appropriate; indeed, the Exchange believes the proposed fee changes would have the effect of increasing competition. As demonstrated above and in Professor Rysman's attached paper, exchanges are platforms for market data and trading. In setting the proposed fees, the Exchange is constrained by the availability of substitute platforms also offering market data products and trading, and low barriers to entry mean new exchange platforms are frequently introduced. The fact that exchanges are platforms ensures that no exchange can make pricing decisions for one side of its platform without considering, and being constrained by, the effects that price will have on the other side of the platform. In setting fees at issue here, the Exchange is constrained by the fact that, if its pricing across the platform is unattractive to customers, customers will have its pick of an increasing number of alternative platforms to use instead of the Exchange. Given this intense

competition between platforms, no one exchange's market data fees can impose an unnecessary burden on competition, and the Exchange's proposed fees do not do so here.

In addition, the Exchange believes that the proposed fees do not impose a burden on competition or on other exchanges that is not necessary or appropriate because of the availability of numerous substitute market data products. Specifically, as described above, NYSE BQT competes head-to-head with the Nasdaq Basic product and the Cboe One Feed. These products each serve as reasonable substitutes for one another as they are each designed to provide investors with a unified view of real-time quotes and last-sale prices in all Tape A, B, and C securities. Each product provides subscribers with consolidated top-of-book quotes and trades from multiple U.S. equities markets. NYSE BQT provides top-of-book quotes and trades data from five NYSE-affiliated U.S. equities exchanges, while Cboe One Feed similarly provides topof-book quotes and trades data from Cboe's four U.S. equities exchanges. NYSE BQT, Nasdaq Basic, and Cboe One Feed are all intended to provide indicative pricing and therefore, are reasonable substitutes for one another. Additionally, market data vendors are also able to offer close substitutes to NYSE BQT. Because market data users can find suitable substitute feeds, an exchange that overprices its market data products stands a high risk that users may substitute another source of market data information for its own. These competitive pressures ensure that no one exchange's market data fees can impose an unnecessary burden on competition, and the Exchange's proposed fees do not do so here.

C. <u>Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others</u>

No written comments were solicited or received with respect to the proposed rule change.

III. <u>Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action</u> The foregoing rule change is effective upon filing pursuant to Section 19(b)(3)(A)⁸⁴ of

the Act and subparagraph (f)(2) of Rule 19b-4⁸⁵ thereunder, because it establishes a due, fee, or other charge imposed by the Exchange.

At any time within 60 days of the filing of such proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings under Section 19(b)(2)(B)⁸⁶ of the Act to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change 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
- Send an e-mail to <u>rule-comments@sec.gov</u>. Please include File Number SR-NYSEArca-2020-95 on the subject line.

⁸⁴ 15 U.S.C. 78s(b)(3)(A).

⁸⁵ 17 CFR 240.19b-4(f)(2).

⁸⁶ 15 U.S.C. 78s(b)(2)(B).

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-NYSEArca-2020-95. 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 the filing also will 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-NYSEArca-2020-95, and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority. 87

J. Matthew DeLesDernier Assistant Secretary

42

⁸⁷ 17 CFR 200.30-3(a)(12).