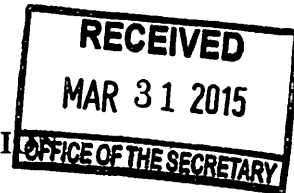


UNITED STATES OF AMERICA  
before the  
SECURITIES AND EXCHANGE COMMISSION



In The Matter of the Application of:

SECURITIES INDUSTRY AND FINANCIAL  
MARKETS ASSOCIATION

for Review of Actions Taken by  
Self-Regulatory Organizations.

Admin. Proc. File No. 3-15350

The Honorable Brenda P. Murray,  
Chief Administrative Law Judge

**PRE-HEARING BRIEF OF APPLICANT SECURITIES INDUSTRY  
AND FINANCIAL MARKETS ASSOCIATION**

REDACTED VERSION FOR  
PUBLIC FILING

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## INTRODUCTION

At issue in this proceeding are rule changes by NYSE Arca, Inc. (“NYSE Arca”) and NASDAQ Stock Market LLC (“Nasdaq”) (collectively, the “Exchanges”) that impose fees for access to their exclusive depth-of-book market data products. Under the rule changes, market participants—including members of the Securities Industry and Financial Markets Association (“SIFMA”)—must pay exorbitant fees in order to access the essential market data made available through these products. The rule changes must be set aside unless the Exchanges meet their burden of proving that the fees are constrained by “significant competitive forces” and are otherwise consistent with the Securities Exchange Act of 1934 (the “Exchange Act”), which requires that the Exchanges’ fees be, among other things, “fair and reasonable.” *See* 73 Fed. Reg. 74770, 74781 (Dec. 9, 2008) (“ArcaBook Order”); 15 U.S.C. §§ 78k-1(c)(1)(C), 78s(f); Order Establishing Procedures and Referring Applications for Review to Administrative Law Judge for Additional Proceedings, Release No. 34-72182, at 20 (May 16, 2014) (“May 16 Order”).

The Exchanges cannot meet their burden—and this will not be the first time they have failed to do so. In 2010, the D.C. Circuit set aside NYSE Arca’s fees because there was insufficient evidence that they were significantly constrained by competition. *NetCoalition v. SEC* (“*NetCoalition P*”), 615 F.3d 525, 537–44 (D.C. Cir. 2010). Although the Exchanges have retained new experts to espouse their views, their playbook has not changed: they are attempting to resuscitate the exact same theories the D.C. Circuit rejected as unsupported in *NetCoalition I*. But as SIFMA will show, the Exchanges’ expert reports do not cure the deficiencies the court identified. To the contrary, those reports only further confirm that the Exchanges’ fees are *not* constrained by significant competitive forces.

*First*, the Exchanges will not even attempt to show that their fees are reasonably related to the cost of collecting and distributing the data, even though the D.C. Circuit held such evidence is relevant to an analysis of competition. *Id.* at 537–38. As Nasdaq has repeatedly and publicly touted to investors, its profit margins on its depth-of-book data products [REDACTED]. And NYSE Arca has refused to produce any cost data at all. It claims none exists, even though it previously told the Commission that its fees “compare favorably” to the cost of producing the data. This evidentiary record alone will preclude a finding that competition significantly constrains the Exchanges’ fees. *See infra* § I.

*Second*, the availability of depth-of-book data from other exchanges does not significantly constrain the fees NYSE Arca and Nasdaq can charge for their own proprietary depth-of-book data products. These products—including NYSE Arca’s ArcaBook and Nasdaq’s TotalView—are not interchangeable, which is evident simply from looking at them. The D.C. Circuit previously rejected the Exchanges’ arguments to the contrary as unsubstantiated, *NetCoalition I*, 615 F.3d at 539–44, and the Exchanges have produced nothing new here to substantiate them. Indeed, none of their exhibits or their reports from three experts contains any of their depth-of-book data. It will be SIFMA’s expert that shows that to the Court. And the evidence the Exchanges will proffer shows they have imposed massive price increases without [REDACTED] subscribers switching to other products. *See infra* § II.A.

*Third*, competition among equity trading platforms for order flow does not constrain the pricing of market data. In fact, the Exchanges have responded to increased competition for order flow by *raising* the prices of their depth-of-book data products. *See infra* § II.B. Nor can the Exchanges justify their supracompetitive data fees by arguing they are offset by lower fees for

*other* services. The Exchange Act requires that the *data fees themselves* be fair and reasonable, to promote the widespread dissemination and availability of market data. *See infra* § II.C.

*Finally*, the rule changes should be set aside because they are inconsistent with the Exchange Act's core purpose of ensuring transparency and investor access to market data. By pricing many customers out of the market for their depth-of-book data products, the Exchanges have created a two-tiered system in which investors who can afford to do so are able to trade on better and faster information, at the expense of other investors. *See infra* § III.

## **BACKGROUND**

### **A. Statutory and Regulatory Background**

Market data—information on quotations in the form of limit orders and trades in each of the thousands of securities traded daily in U.S. securities markets—are the oxygen of the financial markets. Market data are “essential to investors and other market participants”: they “enabl[e] [investors] to make informed decisions when to buy and sell”; they “provid[e] the basis for investment and portfolio decisions”; and they “creat[e] confidence in the fairness and reliability of the markets.” *Concept Release Concerning Self-Regulation*, 69 Fed. Reg. 71256, 71271 (Dec. 8, 2004). Wide distribution of market data is essential to achieving price transparency, “a cornerstone of the U.S. national market system.” SEC, *Report of the Advisory Committee on Market Information: A Blueprint for Responsible Change* § II (Sept. 14, 2001).

Before the 1970s, no statute or rule required exchanges to distribute market data; instead, each exchange decided for itself “what information to disseminate, to whom to disseminate the information, and the amount of fees to charge.” *Regulation of Market Information Fees and Revenues*, 64 Fed. Reg. 70613, 70619 (Dec. 17, 1999). Under this system, market data were not widely available to investors, and “NYSE, which operated the largest market, severely restricted

public access to market information, particularly its quotations.” *Id.* As a result, insiders with access to data had a significant informational advantage over the investing public.

Congress responded in 1975 by amending the Exchange Act to expand the Commission’s authority to regulate the exchanges. As a result, today each exchange must provide so-called “core” market data—including (1) the price and size of the most recent trade of each security (last sale data) and (2) the current highest bid and lowest offer and their sizes (best bid and offer, or BBO) for each security—to central Securities Information Processors (“SIPs”), who consolidate the data, calculate the national best bid and offer (“NBBO”) for each security, and make the data available to the public. *See* 17 C.F.R. §§ 242.601, 242.602; Donefer ¶ 24. The exchanges do not themselves create these data; they simply aggregate the data that broker-dealers are required by law to report to them for free. *See* 17 C.F.R. §§ 242.601(b), 242.602(b).

Exchanges also sell market data directly to consumers through proprietary feeds, including the depth-of-book data products at issue here.<sup>1</sup> These products offer at least three features that are essential to many market participants’ trading strategies:

**Depth-of-Book Data.** Depth-of-book data show “the number of shares of a security available to trade at any given price point.” *NetCoalition I*, 615 F.3d at 529. Whereas the BBO data consolidated by the SIPs show only the best price available for a stock at a given time, an exchange’s depth-of-book data include *all* the pending limit orders on the exchange that have not yet been executed, including those with prices worse than the BBO. *Id.*; Donefer ¶ 26. For example, NYSE Arca’s ArcaBook product shows the full limit order book for all equities traded

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<sup>1</sup> For screenshots of the data investors can see through these products, see Appendix A to Professor Donefer’s expert report.



on NYSE Arca, and Nasdaq's TotalView product shows the full limit order book for all equities traded on Nasdaq.<sup>2</sup> Those order books are *not* the same.

**Speed.** The Exchanges' proprietary feeds provide their subscribers with complete order book information—including the BBO for each stock that is consolidated by the SIPs—significantly faster than the consolidated SIP feeds.<sup>3</sup> As a result, subscribers to these products can learn the exchanges' BBOs, calculate the NBBO, and even trade based on that information, before non-subscribers receiving only a SIP feed even receive the data. Donefer ¶¶ 35, 51–54.

**Order Imbalance Data.** The Exchanges' proprietary feeds also provide their subscribers with “order imbalance” information that is used to participate in the Exchanges' auctions held at the beginning and end of each trading day.<sup>4</sup> These auctions are used to match outstanding buy and sell orders; they account for a significant portion of daily trading volume and establish the open and close prices of each equity trading on that exchange. *Id.* ¶¶ 35, 55–58.

Critically, each exchange is the exclusive provider of its own depth-of-book and order imbalance data. An investor cannot obtain Nasdaq's depth-of-book data from any source but Nasdaq, or NYSE Arca's from any source but NYSE Arca, or their contracted distributors. *NetCoalition I*, 615 F.3d at 538; Donefer ¶¶ 26, 35. Likewise, each exchange's order imbalance information is unique, and for NYSE Arca and Nasdaq, respectively, ArcaBook and TotalView are the exclusive real-time data feed sources for order imbalance data. *Id.* There is no overlap between the data from different exchanges. The data contained in ArcaBook and the data

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<sup>2</sup> In addition, Nasdaq's Level 2 product provides the best-priced orders or quotes from each Nasdaq member, and its OpenView product offers depth-of-book data for non-Nasdaq listed securities traded on Nasdaq. See Nasdaq Rule 7023(a)(1), *available at* <http://nasdaq.cchwallstreet.com/>.

<sup>3</sup> Donefer ¶ 35; SIFMA Ex. 110 (ArcaBook Fact Sheet).

<sup>4</sup> Donefer ¶ 35; SIFMA Exs. 110 (ArcaBook Fact Sheet), 194 (Nasdaq market data presentation).

contained in TotalView are two entirely distinct sets of information. And without these data, investors can see only a small fraction of the trading interest for a security.

The Exchange Act and the Commission's regulations impose limits on the fees that exchanges may charge for market data, including the proprietary depth-of-book data products at issue in this proceeding. Among other things, because each exchange is an "exclusive processor" of its data, 15 U.S.C. § 78c(a)(22)(B), the fees it charges for market data must be "fair and reasonable" and "not unreasonably discriminatory," *id.* § 78k-1(c)(1)(C)–(D); *see* 17 C.F.R. § 242.603(a) (same). In the past, the exchanges' pricing was disciplined by the fact that they were member-owned, non-profit entities. Now that the exchanges are publicly traded, for-profit companies, there is no such check, and effective regulation by the Commission is essential to prevent the exchanges from exploiting their monopoly over market data.

#### **B. Factual and Procedural Background**

**Initial NYSE Arca Rule Change.** In May 2006, NYSE Arca filed a proposed rule change with the Commission seeking to impose fees for its ArcaBook depth-of-book data product, which it previously had made available for free. 71 Fed. Reg. 33496 (June 9, 2006). NYSE Arca proposed to impose a monthly direct access fee of \$750, additional monthly user fees of up to \$30 per professional subscriber and up to \$10 per non-professional subscriber, and a monthly non-professional fee cap of \$20,000. *Id.* at 33496–97. Under the law in effect at the time, the rule change could not take effect unless first approved by the Commission based on a finding that the fees were consistent with the Exchange Act. *NetCoalition I*, 615 F.3d at 531.

In an order dated December 9, 2008, the Commission approved NYSE Arca's proposed fees. ArcaBook Order, 73 Fed. Reg. 74770. Although NYSE Arca had failed to produce any evidence showing how the fees compared to the costs of making the data available, the Commission held that the fees nonetheless could be approved under a two-part "market-based

approach.” Under this approach, the Commission first asks “whether the exchange was subject to significant competitive forces in setting the terms of its ... fees.” *Id.* at 74781. If so, the Commission will approve the fees “unless it determines that there is a substantial countervailing basis to find that the terms” violate the Exchange Act or Commission rules. *Id.* The Commission approved NYSE Arca’s proposed fees, finding that (1) NYSE Arca was subject to significant competitive forces based on (a) its “need to attract order flow from market participants” and (b) the “availability to market participants of alternatives to purchasing” ArcaBook, *id.* at 74782; and (2) there was no countervailing basis to disapprove the proposal, *id.* at 74794.

*NetCoalition I.* On petition for review, the D.C. Circuit vacated the ArcaBook Order, holding that it “failed to ‘disclose a reasoned basis’ ... for concluding that NYSE Arca [was] subject to significant competitive forces in pricing ArcaBook.” *NetCoalition I*, 615 F.3d at 544. Although the D.C. Circuit held that the Exchange Act does not require cost-based ratemaking if effective competition exists, it explained that the cost of producing market data is relevant to whether competition constrains data fees because pricing that greatly exceeds costs “may be evidence of ‘monopoly,’ or ‘market,’ power.” *Id.* at 537. The court further held that the record did not support a finding that depth-of-book data prices are constrained by competition for order flow, *id.* at 539–41, or by the availability of alternatives for an exchange’s data, *id.* at 542–44.

Specifically, with respect to order-flow competition, the D.C. Circuit explained that NYSE Arca could not justify its fees based on its own “self-serving” statements, theoretical “conclusions” that were unsupported by actual “evidence,” or anecdotes that “show that depth-of-book market data is apparently important enough to at least some traders that it must be made available[, but] say nothing about whether an exchange like NYSE Arca is constrained to price its depth-of-book data competitively.” *Id.* at 541. With respect to the availability of alternatives,

the D.C. Circuit explained that “whether a market is competitive notwithstanding potential alternatives depends on factors such as the number of buyers who consider other products interchangeable and at what prices.” *Id.* at 542. The D.C. Circuit found insufficient evidence that ArcaBook subscribers would be willing to substitute any of the supposed alternatives identified by the Commission in sufficient numbers to constrain ArcaBook’s price. *Id.* at 542–44.

*NetCoalition II.* Undaunted by the court’s ruling, the Exchanges proceeded to file a series of proposed fee increases, two of which are at issue in this proceeding, each invoking the same purported economic justifications rejected in *NetCoalition I*.<sup>5</sup> The rule changes took effect upon filing pursuant to 15 U.S.C. § 78s(b)(3)(A), which had recently been amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act, to make exchange fee filings immediately effective, subject to suspension by the Commission under 15 U.S.C. § 78s(b)(3)(C).

One of these rule changes, filed by NYSE Arca, authorizes a set of fees substantively *identical* to those at issue in *NetCoalition I*, such that NYSE Arca continues to assess the *very same fees* that the D.C. Circuit rejected. Rel. No. 34-63291, File No. SR-NYSEArca-2010-97 (Nov. 9, 2010) (“NYSE Arca Rule Change”). The other rule change at issue, filed by Nasdaq, imposes access and distributor fees for its TotalView, OpenView, and Level 2 depth-of-book data products. Rel. No. 34-62907, File No. SR-NASDAQ-2010-110 (Sept. 14, 2010) (“Nasdaq Rule Change”). The fees authorized by these rule changes represent only a small fraction of the total fees the Exchanges charge for their depth-of-book products.<sup>6</sup> For large subscribers, the total annual fees paid for just one of these products can be [REDACTED]. Donefer ¶ 30.

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<sup>5</sup> Other fee rule changes filed after *NetCoalition I* have been challenged in related proceedings but are being held in abeyance pending resolution of this proceeding.

<sup>6</sup> For example, Nasdaq charges a host of additional fees set forth in an elaborate fee schedule. *See, e.g.*, Nasdaq Rules 7019, 7023, 7026. The fees at issue here, taken in isolation, do not actually enable subscribers to use the data; to do so, they must pay a number of other fees.

SIFMA petitioned the D.C. Circuit for review of the Commission’s refusal to suspend the rule changes. *NetCoalition v. SEC* (“*NetCoalition IP*”), 715 F.3d 342 (D.C. Cir. 2013). On April 30, 2013, the D.C. Circuit dismissed the petition on jurisdictional grounds, holding that the Commission’s suspension decision was unreviewable. *Id.* at 347. In reaching this conclusion, the D.C. Circuit expressly relied on assurances by the Commission that the rule changes could be challenged through an alternative pathway—namely, through an application under Section 19(d) of the Exchange Act, which allows persons aggrieved by an exchange’s action limiting access to its services to obtain review by the Commission. *Id.* at 353. The court also cautioned that the Dodd-Frank amendments did not render the decision in *NetCoalition I* “moot,” and that the *NetCoalition I* decision “remains a controlling statement of the law as to what sections 6 and 11A of the Exchange Act require of [the Exchanges’] fees.” *Id.* at 354.

**SIFMA’s Section 19(d) Applications.** Following the Commission’s guidance regarding the Section 19(d) process, SIFMA filed a series of applications requesting that the Commission set aside rule changes imposing fees for market data products that limit access by SIFMA’s members to market data in a manner inconsistent with the Exchange Act. SIFMA’s first two applications were filed on May 31, 2013, and were assigned Administrative Proceeding File Numbers 3-15350 and 3-15351. The application in the 3-15350 proceeding challenged the NYSE Arca Rule Change, and the application in the 3-15351 proceeding challenged nearly two dozen additional rule changes, including the Nasdaq Rule Change.

On May 16, 2014, the Commission issued an order in which it, *inter alia*, (1) rejected various threshold arguments by the Exchanges that their fee rule changes were not subject to challenge under Section 19(d); (2) severed the Nasdaq Rule Change from the 3-15351 proceeding and consolidated it into the 3-15350 proceeding; and (3) referred the 3-15350

proceeding to the Chief ALJ for development of the record and an initial decision on SIFMA's standing and the merits. The Commission directed the Chief ALJ to "hold a hearing addressing whether the challenged rules should be vacated under the statutory standard set forth in Exchange Act Section 19(f)—as informed by the two-part test set out in our 2008 ArcaBook Approval Order [and] the D.C. Circuit's decision in *NetCoalition I*." May 16 Order at 20.<sup>7</sup> The Commission clarified that "the burden [is] on [each Exchange] to establish, among other things, that its challenged rule is 'consistent with the purposes of' the Exchange Act." *Id.* at 15 n.88.

On October 20, 2014, the Chief ALJ held that SIFMA has standing to challenge the rule changes in this proceeding and set the matter for a hearing on the merits. Order on the Issues of Jurisdiction and Scheduling, Rel. No. 1921, Admin. Proc. File No. 3-15350 (Oct. 20, 2014).

### **ARGUMENT**

The Exchanges attempt to justify their supracompetitive data fees based on the same theories rejected as unsubstantiated in *NetCoalition I*. Those theories—repackaged in the guise of expert testimony without concrete or reliable economic or factual support—fare no better here. Far from supplying the evidence found wanting in *NetCoalition I*, the hearing record will confirm the fundamental issue identified by the D.C. Circuit: significant competitive forces do *not* constrain the fees the Exchanges charge for their proprietary depth-of-book data products.

#### **I. THE FEES SHOULD BE SET ASIDE BECAUSE THE EXCHANGES CANNOT SHOW THEY BEAR A REASONABLE RELATIONSHIP TO COST.**

At the threshold, the Exchanges cannot establish that their depth-of-book data fees are subject to significant competitive forces because they have not identified any evidence to demonstrate that the fees bear a reasonable relationship to the costs of collecting and distributing

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<sup>7</sup> Section 19(f) requires the Exchanges, among other things, to show that their rule changes are "consistent with the purposes of [the Exchange Act]." 15 U.S.C. § 78s(f).

the data or provided any reason to ignore evidence that they enjoy very high profit margins on their data products. As the D.C. Circuit held in *NetCoalition I*, the cost of producing and disseminating the data is relevant to whether competition constrains the Exchanges' fees. See 615 F.3d at 537 ("Although we uphold the SEC's market-based approach against the petitioners' cost-based challenges, we do not mean to say that a cost analysis is irrelevant."). That is because "in a competitive market, the price of a product is supposed to approach its marginal cost," and "the costs of collecting and distributing market data can indicate whether an exchange is taking 'excessive profits' or subsidizing its service with another source of revenue." *Id.* As a leading antitrust treatise explains, "the substantial market power that concerns antitrust law arises when a [firm] can profitably set prices well above its costs" for a sustained period of time. Phillip E. Areeda and Herbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application* ¶ 501 (Sept. 2014 Update) ("Areeda & Hovenkamp"). Cost, therefore, is a relevant component of any analysis of whether significant competitive forces constrain the Exchanges' depth-of-book data fees.

1. The Exchanges, however, have failed to produce *any* evidence that their depth-of-book data fees are reasonably related to cost. In fact, Nasdaq's data show the opposite: its data products are [REDACTED]. From 2009 through 2014, Nasdaq's profits for [REDACTED] [REDACTED].<sup>8</sup> Evans ¶ 78. Indeed, Nasdaq itself has characterized its Information Services segment, which primarily consists of its market data products, as "HIGH MARGIN,"<sup>9</sup> and told investors that this

<sup>8</sup> SIFMA Ex. 142 ([REDACTED]).

<sup>9</sup> SIFMA Ex. 317 (Nasdaq, Investor Presentation slide 7 (Dec. 2014), available at <http://ir.nasdaqomx.com/events.cfm>.)

segment is its “largest operating profit contributor” and that it enjoys “relatively strong pricing power” over its proprietary data products.<sup>10</sup> Nasdaq’s [REDACTED] and its executives’ view that it has strong pricing power are direct evidence that Nasdaq is exercising significant market power over its depth-of-book data products. *Id.*

NYSE Arca, for its part, has produced no data showing the relationship between its fees and the costs of making the data available, claiming it has no such data,<sup>11</sup> despite its previous representation to the Commission that its ““market data revenues compare favorably to the markets’ cost of producing the data.”” *NetCoalition I*, 615 F.3d at 538. Indeed, in response to questions from the court at the oral argument in *NetCoalition I*, counsel for the Commission assured the court that “whatever [NYSE Arca’s] increase[d] discrete cost is they know that.” In these circumstances, the Chief ALJ can reasonably infer that NYSE Arca has not offered any cost data because its profit margins are [REDACTED].<sup>12</sup> Regardless, NYSE Arca’s failure to produce any cost data precludes a finding that it was constrained by significant competitive forces in setting its data fees. *See Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (agencies must “examine the relevant data” and base decisions ““on a consideration of the relevant factors””). As the Chief ALJ previously explained, NYSE Arca cannot carry its burden if it “left a very strong element out of its proof.” Transcript of Admin. Proc. Pre-Hearing Conference at 47, *In re Application of Sec. Indus. & Fin. Mkts. Ass’n*, File No.

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<sup>10</sup> SIFMA Ex. 319 (comments of Lee Shavel, Nasdaq CFO, at Credit Suisse 16th Annual Financial Services Forum 3 (Feb. 10, 2015), available at <http://ir.nasdaqomx.com/events.cfm>.)

<sup>11</sup> SIFMA Ex. 137 (email from NYSE Arca counsel stating that NYSE Arca does not maintain any documents showing “the extent to which prices enable us to recover costs of providing in depth-of-book data products” because ““that isn’t something that NYSE Arca tracks””).

<sup>12</sup> Given that NYSE Arca gave its data away for free through 2008, it is unlikely that its data costs come anywhere close to the substantial revenues it generates through the fees at issue. From 2010 through 2013, NYSE Arca generated [REDACTED]. Donefer ¶ 33; SIFMA Exs. 112–115 (NYSE Arca financial statements).



3-16263 (Dec. 18, 2014); *see id.* (“If ... they should have produced costs and they failed to do so, and that’s a major deficiency... then that’s fine ... That’s their choice.”).

2. The Exchanges’ economists make no attempt to justify the Exchanges’ fees in relation to the costs of producing and distributing the data. Instead, they argue that cost is irrelevant. Ordover ¶¶ 51–59; Hendershott & Nevo ¶¶ 42, 93–94. Their arguments are incorrect. Indeed, as the economists acknowledge, Ordover ¶ 51; Hendershott & Nevo ¶ 93, their position is flatly inconsistent with the holding in *NetCoalition I* that the Exchanges’ costs and profit margins *are* relevant to whether competition constrains their data fees. *See* 615 F.3d at 537–39.

It is also wrong as a matter of basic economics. Evans ¶¶ 12, 77–79; Areeda & Hovenkamp ¶¶ 501, 504. Contrary to the Exchanges’ claims, marginal cost is not irrelevant simply because exchanges have high infrastructure costs and low short-run variable costs. This just means that marginal cost must be defined over a longer run that allows the exchange to earn a competitive return on its investments in infrastructure. *See* Areeda & Hovenkamp ¶ 501 (in a competitive market, “price falls to the point just equal to long-run marginal cost of production (including a rate of return on capital just large enough to attract the necessary capital investment)”); *id.* ¶ 504 (“[t]he choice of ‘run’ determines which costs are marginal”). Thus, a more relevant definition of marginal cost here would include the opportunity cost of capital associated with the Exchanges’ investments in their data collection and distribution infrastructure. Evans ¶ 77 n.90. But NYSE Arca has produced no evidence of how its infrastructure costs compare to its data revenues, and Nasdaq has produced evidence showing that it earns [REDACTED].

Nor does it matter whether market data have some costs in common with other parts of the Exchanges’ businesses. Ordover ¶¶ 55–59. Cost allocation is not impracticable; otherwise

Nasdaq could not allocate certain costs to its market data business segment in its SEC filings and would not be able publicly to tout to its investors that its market data segment is “HIGH MARGIN.”<sup>13</sup> Moreover, there is no sound reason why *any* common costs should be allocated to market data, which are created as a byproduct of trading. Evans ¶ 79. The Exchanges’ real argument is that, because they are multi-product firms, they should be permitted to use supracompetitive market data revenues to cross-subsidize their other services so long as they are not earning a supracompetitive return overall. But that is both wrong and irrelevant because the Exchange Act requires the price of *the data themselves* to be competitively constrained. *See infra* § II.C. To determine whether the Exchanges’ depth-of-book data fees are competitively constrained, and to determine whether data revenues are being used to cross-subsidize other exchange services, it is necessary to examine cost data. Evans ¶ 12.

Because the Exchanges have failed to show that their depth-of-book data fees are reasonably related to the costs of producing and distributing the data, their rule changes should be set aside on that ground alone, and the Chief ALJ need proceed no further.

## **II. THE EXCHANGES’ DEPTH-OF-BOOK DATA FEES ARE NOT CONSTRAINED BY SIGNIFICANT COMPETITIVE FORCES.**

Even if it were possible for the Exchanges to justify their prices without reference to cost, none of their alternative “evidence” can overcome the simple reality, repeatedly touted to investors by Nasdaq’s own leadership: that the Exchanges “enjoy relatively strong pricing power”<sup>14</sup> because the market data business does not “experienc[e] pricing pressure.”<sup>15</sup> The

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<sup>13</sup> *See supra*, nn.8–9.

<sup>14</sup> SIFMA Ex. 298 (statement of Nasdaq CFO Lee Shavel, Barclays 2013 Global Financial Services Conference Transcript 10 (Sept. 10, 2013)).

<sup>15</sup> SIFMA Ex. 283 (statement of Nasdaq CEO Bob Greifeld, Nasdaq Third Quarter 2011 Results Earnings Transcript 19).

evidence will show that Nasdaq's leadership was not misleading the investing public when it made these and other similar statements, because the Exchanges' depth-of-book data fees are not, in fact, constrained by significant competitive forces.

**A. The Exchanges' Data Fees Are Not Constrained By Substitute Products.**

In *NetCoalition I*, the Exchanges pointed to several supposed "substitutes" for depth-of-book data, which they claimed constrained their depth-of-book data fees: (1) core data; (2) depth-of-book data from other exchanges; (3) "pinging" orders; and (4) the threat of independent distribution of data by securities firms and data vendors. *See* 615 F.3d at 542. The D.C. Circuit rejected each of these arguments, holding that "the SEC had insufficient evidence before it to conclude that a trader interested in depth-of-book data would substitute any of the four alternatives (or simply do without) instead of paying a supracompetitive price." *Id.* at 544.

The Exchanges, through their economists, now try to rehabilitate the theory that the availability of alternatives significantly constrains the Exchanges' depth-of-book data fees. Hendershott & Nevo § VI.C; Ordovery § IV. By conspicuous omission, they have abandoned core data, "pinging," and potential collaborative ventures as alternatives. They still argue, however, that the Exchanges are "disciplined" in their pricing by the availability of depth-of-book data products from other exchanges. *Id.* But none of their "evidence" shows that substitutes exist for NYSE Arca's or Nasdaq's exclusive depth-of-book data products or otherwise overcomes the deficiencies identified by the D.C. Circuit in *NetCoalition I*. Remarkably, NYSE Arca's experts *concede* that their analysis is inconsistent with the D.C. Circuit's conclusion that each exchange's depth-of-book data are unique. Hendershott & Nevo ¶ 92 n.110.

As the D.C. Circuit explained, substitution is evaluated using the SSNIP ("small but significant non-transitory increase in price") test, which asks whether a firm could profitably impose a small but significant price increase, generally assumed to be 5%. *See* 615 F.3d at 542–

43; FTC, *Horizontal Merger Guidelines* 8–13 (Aug. 19, 2010). “The inquiry into whether a market for a product is competitive, therefore, focuses on the customer and, in particular, his price sensitivity—in economic terms, the product’s ‘elasticity of demand.’” 615 F.3d at 542. Under this test, a finding of substitutability must be substantiated by evidence that customers treat the products as interchangeable, such that they would substitute one product for the other in response to an increase in the price of one of the products. *Id.* at 542–43.

The Exchanges still have not produced this or any other evidence of substitutability. To the contrary, their submissions confirm that there are no substitutes for their depth-of-book data products that prevent the Exchanges from raising their prices above competitive levels.

1. The evidence submitted by the Exchanges shows that customers have not found substitutes to which they could turn in response to significant price increases. According to data presented by Professors Hendershott and Nevo, when NYSE Arca imposed a massive ArcaBook fee increase in 2009—increasing its device fee for professionals from \$0 to \$30, for non-professionals from \$0 to \$10, and its access fee from \$0 to \$750—the number of professional subscribers dropped ██████████. Hendershott & Nevo ¶ 74; Evans ¶ 39. These data show that ██████████ ██████████ ArcaBook subscribers *could not* find an adequate substitute for ArcaBook in the face of a massive price increase, far greater than the 5%–10% increase ordinarily used to assess market power. Evans ¶ 39. Indeed, NYSE Arca’s economists concede as much when they acknowledge that the reaction to this price increase reflects “inelastic” demand. *Id.*; Hendershott & Nevo ¶ 74.<sup>16</sup> Likewise, when Nasdaq evaluated the impact of its price increases for the five years prior to 2012, it concluded that customer attrition for its flagship depth-of-book data

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<sup>16</sup> In 2014, NYSE Arca imposed yet another massive price increase on its customers—raising its professional subscriber fee by 25% and its access fee by nearly 175%. NYSE Arca has not revealed how customers reacted to that huge increase. But it is highly unlikely that it would impose such a large increase unless it believed it could yet again do so profitably.

product, TotalView, was ██████████<sup>17</sup> These facts alone preclude any finding that the Exchanges' depth-of-book data fees are significantly constrained by substitutes.

Moreover, the evidence will show that both the Exchanges and their customers view the depth-of-book data products as *non-interchangeable*. As Nasdaq's CFO recently emphasized, Nasdaq has "distinct and crucial data about Nasdaq marketplaces that is *not interchangeable with other exchanges' market data*."<sup>18</sup> Or, as he put it on another occasion, "because the data is unique to NASDAQ in our markets, it's *highly differentiated* from competitor offerings and we enjoy relatively strong pricing power."<sup>19</sup> Nasdaq's own economist confirms this by presenting data showing that, on an annual basis, at least ██████████ of subscribers to Nasdaq's depth-of-book data products also subscribe to ArcaBook. Ordover ¶ 30. This shows that ██████████ subscribers do not substitute one product for another, but instead purchase *both*. Donefer ¶ 71.

Several factors make the products non-interchangeable. *First*, each exchange's order book is entirely unique. *Id.* ¶ 72. At any given time, a market participant cannot expect that the limit orders reflected in one exchange's depth-of-book data will be representative of the orders reflected in another exchange's depth-of-book data. *Id.* As Professor Donefer has shown, even if shares of a given stock are traded on multiple exchanges, the concentration of available liquidity may fluctuate significantly from one exchange to another over the course of even a single day.<sup>20</sup>

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<sup>17</sup> SIFMA Ex. 132 (Nasdaq presentation regarding market data pricing); Evans ¶ 48.

<sup>18</sup> SIFMA Ex. 302 (Nasdaq OMX Investor Program Transcript at 4 (Dec. 3, 2013)) (emphasis added).

<sup>19</sup> SIFMA Ex. 298 (Barclays Global Financial Services Conference Transcript at 2 (Sept. 10, 2013)) (emphasis added).

<sup>20</sup> Moreover, as the Exchanges' economists concede, trading for some equities—particularly mid- and small-cap stocks that are an important part of many investors' trading strategies—may be concentrated on a single exchange (typically, the listing exchange), such that an investor who stopped buying that exchange's depth-of-book data product would lose significant visibility. Ordover ¶ 41 ("certain stocks tend to be more heavily traded on a particular exchange");

*Id.* ¶¶ 39–43, 47–49. Many market participants—particularly those needing to trade large blocks of shares that may require accessing liquidity from multiple exchanges—cannot afford to do so without visibility into the liquidity available on the major national exchanges. *Id.* ¶ 72.

*Second*, many market participants trade using complex algorithms that rely for their accuracy on being able to model the supply-demand curve based on data from multiple major exchanges. *Id.* ¶ 73. Nasdaq and NYSE Arca are two of the three largest markets for trading equities in the United States. Ordover Fig. 1. Without access to data from both of these Exchanges, the trading and routing decisions based on these algorithms would be based on materially incomplete information. Donefer ¶ 73. This could result not only in a worse price on the trade, but also in additional fees and lost rebates. *Id.* ¶ 74.

*Third*, ArcaBook and TotalView are the only sources of real-time order imbalance information that is necessary to trade intelligently in NYSE Arca’s and Nasdaq’s respective daily auctions. *Id.* ¶ 75. Because those auctions set the opening and closing price of a stock and constitute a substantial portion of daily liquidity, a market participant that declined to purchase the Exchanges’ depth-of-book data products would miss valuable trading opportunities. *Id.*

For these reasons, it is necessary for many market participants to buy the depth-of-book data products from *each* of the major exchanges, making the depth-of-book data products from different exchanges complements, not substitutes. These market participants cannot forego subscribing to the depth-of-book data product from a major exchange like NYSE Arca or Nasdaq

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Hendershott & Nevo ¶ 61(c); Donefer ¶¶ 48, 77. NYSE Arca’s economists argue that trading for most stocks is not concentrated, but their conclusion is based on *monthly averages* and thus says nothing about the needs of investors who must respond to significant real-time fluctuations in liquidity from one exchange to another. Hendershott & Nevo ¶¶ 55–64; Donefer ¶ 49; Evans ¶ 72. And, even as to monthly averages, the analysis offered by NYSE Arca’s economists suffers from serious methodological flaws that cause it to significantly understate the number of stocks for which overall trading is concentrated on a single exchange. Evans ¶ 72 n.83.

without putting themselves at “a significant competitive disadvantage.” *Id.* ¶ 66. Broker-dealers who compete on the basis of their investment strategies and results rely on depth-of-book data to model supply and demand and to strategize when, where, and in what quantity to trade. *Id.* ¶¶ 60, 66–67. If they stopped subscribing to a major exchange’s depth-of-book data product, their trade execution would suffer and their clients—who closely monitor execution quality—would find another broker. *Id.* Short-term traders also require depth-of-book data from all of the major exchanges, and particularly the speed at which those data are delivered through the exchanges’ direct feeds, to execute their automated trading strategies. *Id.* ¶¶ 61, 68. For these market participants, it is simply “not a commercially viable option” to treat the Exchanges’ depth-of-book data products as substitutes. *Id.* ¶ 66.<sup>21</sup>

2. The Exchanges’ economists purport to provide new evidence of substitutability, but their “evidence” is anecdotal, insubstantial, and unpersuasive. None of it makes the showing required by *NetCoalition I*—that the Exchanges cannot profitably impose a small but significant price increase. 615 F.3d at 542–43. In fact, the Exchanges’ data show exactly the opposite.

*First*, Professor Ordovery’s assertion that the proliferation of new trading venues makes the major exchanges’ data less important, Ordovery ¶ 85, is simply incorrect. The exchanges still are responsible for a majority of trading, and it remains essential for many market participants to have a complete picture of the liquidity available on those venues. Donefer ¶ 76.

*Second*, the Exchanges’ economists claim that depth-of-book data are “correlated” across exchanges. Hendershott & Nevo ¶ 92. By this they mean that prices from one exchange may

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<sup>21</sup> Thus, the Exchanges’ analogy to Coke and Pepsi is far off point. For a more helpful analogy, suppose that Westlaw and Lexis each provided only a subset of judicial decisions, with Westlaw providing decisions issued on odd days of the month and Lexis, even days. These two products would contain distinct sets of information. To properly serve their clients, responsible lawyers would have no realistic choice but to subscribe to both. The same is true here.

reflect those on another. But this does not establish interchangeability. Because prices and liquidity fluctuate across the exchanges during the course of the day, Donefer ¶¶ 40–50, any correlation would be “of no practical help for someone who wants to trade a particular stock at a particular price at a particular time and wants to find the best prices available.” Evans ¶ 30 n.32.

*Third*, the Exchanges’ evidence purporting to show that some firms subscribe to only one depth-of-book data product, or have at some point canceled their subscriptions, does not show that the products are substitutes. Ordover ¶ 28; Hendershott & Nevo ¶¶ 77, 81–87. As an initial matter, the analyses suffer from numerous methodological flaws that make them wholly unreliable. Evans ¶ 51 n.58; Donefer ¶¶ 78–79. Moreover, even if the evidence were reliable, it would say nothing about whether a customer would be willing to substitute NYSE Arca’s data for Nasdaq’s data in response to a small but significant increase in the price of Nasdaq’s data (or vice versa)—the showing the D.C. Circuit called for in *NetCoalition I*. Evans ¶ 51.

*Fourth*, Professor Ordover’s analysis of Nasdaq’s depth-of-book customers lost or gained on a yearly basis, Ordover ¶¶ 26–29, provides no evidence that customers view other depth-of-book products as substitutes. As Professor Evans describes in detail, the analysis is unreliable because (1) it erroneously counts customers as losses whenever they begin purchasing data through a distributor; (2) it does not control for the impact of the Great Recession, which likely caused industry-wide losses in subscribers; (3) it does not even analyze whether the lost customers switched to another depth-of-book data product; and (4) it does not address the financial significance of the customers Nasdaq lost. Evans ¶¶ 40–49. It thus provides no evidence that the Exchanges’ prices are constrained by the availability of substitutes.

*Fifth*, the only evidence of actual switching that the Exchanges offer indicates that any switching is negligible. Professor Ordover presents a list of [REDACTED] customers—[REDACTED]



██████████—that he claims switched between Nasdaq and NYSE Arca between 2006 and 2014. Ordover ¶ 23. Even if the list were accurate, it is fewer than ██████████. Such “switching” would be only a drop in the bucket of Nasdaq’s total depth-of-book data sales and would not constrain its pricing. Evans ¶ 46. Professor Ordover also presents two anecdotes that he claims show that “traders’ ability to switch among depth-of-book data suppliers has exerted downward pressure on NASDAQ’s prices.” Ordover ¶ 23. But, as Professor Evans explains, both anecdotes are consistent with Nasdaq exercising significant market power. Evans ¶ 52.

*Finally*, Professor Ordover purports to show that the Exchanges compete for data subscribers based on price, Ordover ¶ 17, but the evidence he cites shows nothing of the sort. He suggests that Nasdaq’s adoption of a fee cap in 2010 demonstrates that the Exchange is constrained by subscribers’ price sensitivity, but the use of fee caps is equally consistent with monopoly pricing, and Nasdaq’s decision in 2012 to *more than double* the cap indicates a lack of constraint. Evans ¶ 74. He also cites promotional materials from BATS/Direct Edge that describe its depth-of-book data products as significantly cheaper than the Exchanges’ depth-of-book data products, but this just confirms that depth-of-book data from other exchanges do not constrain the Exchanges’ pricing. *Id.* ¶¶ 75–76. As Professor Evans explains, “[i]f depth-of-book data products from different exchanges were close substitutes, we would expect to see consumers purchasing only from the lowest-priced provider.” *Id.* ¶ 52 n.62. Yet ██████████ customers bought the Exchanges’ depth-of-book data products even when the BATS/Direct Edge depth-of-book data were available for free. Here again, the Exchanges’ own evidence confirms the lack of any competitive constraint on their depth-of-book data pricing.

#### **B. The Exchanges’ Data Fees Are Not Constrained By Order-Flow Competition.**

The Exchanges also cannot sustain their fees based on their theoretical argument, rejected for lack of support in *NetCoalition I*, that competition for order flow constrains the Exchanges’

depth-of-book data fees. *See* 615 F.3d at 541 (noting “the lack of support in the record” for this assertion). This reasoning remains flawed and this Court—like the D.C. Circuit—should reject it: the fact that exchanges compete for order flow does not demonstrate the separate proposition that depth-of-book data prices are competitively constrained. The argument also is at odds with the facts, which show the Exchanges imposing significant market data price increases even in the face of increased competition for order flow.

1. In *NetCoalition I*, the D.C. Circuit found no evidence that “the connection works both ways.” *Id.* at 539. The evidence available now confirms that it does not. There is no dispute that the Exchanges compete against each other and other trading platforms for trade execution. But this competition does not impose any meaningful constraint on the price of depth-of-book data. The Exchanges’ own submissions reveal that while competition for order flow intensified from January 2006 to December 2014, during the same time the Exchanges’ repeatedly *raised* the prices for their depth-of-book data products. Evans ¶¶ 58–59. This *positive correlation* between order-flow competition and the price of depth-of-book data products directly refutes the Exchanges’ claim that order-flow competition *constrains* their data prices. It instead indicates that while competition for order flow may lead the Exchanges to set competitive fees for trade execution,<sup>22</sup> the Exchanges are making up profits through supracompetitive fees on the data products over which they hold significant market power. *Id.* ¶¶ 11–12, 25–26.

Multiple factors prevent order-flow competition from significantly constraining the Exchanges’ depth-of-book data fees. As an initial matter, data prices do not affect decisions to send orders to a particular exchange because orders are placed on a transaction-specific, security-

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<sup>22</sup> For example, the Exchanges’ “maker-taker” model includes the payment of significant rebates to market participants who provide liquidity (*i.e.*, who post limit orders on the exchange), which eats away significantly at net profits from trade execution. Donefer ¶¶ 59–60.

specific basis, whereas data fees are paid in monthly subscriptions, typically based on a fixed monthly fee per device or subscriber. *Donefer* ¶¶ 8–15, 21, 26–34. As a result, data fees are a fixed or sunk cost already incurred prior to the point of trade. Order-routing decisions instead are based on the availability of liquidity, transaction fees (including rebates), execution speed, and other factors unrelated to the price of the data. An increase or decrease in the monthly subscription fee for data does not change a trader’s marginal cost or incentive to buy or sell a particular security on a particular exchange at a particular time.

Moreover, many of the subscribers to the Exchanges’ depth-of-book data products have little practical ability to shift their order flow in response to data fee increases, such as by canceling their subscriptions to one of the Exchanges’ depth-of-book data products and routing their orders elsewhere. For many subscribers, this response is simply not feasible because it would significantly diminish the quality of their trade execution (*i.e.*, the percentage of orders that clear, and at what prices). *Id.* ¶¶ 59–70. This is so for several reasons.

*First*, as explained above, for certain large categories of market participants, access to the complete limit order books of multiple exchanges is essential. For example, institutional investors (such as pension funds, mutual funds, and endowments) and their broker-dealers often place orders “large enough that there are not sufficient shares available at the current NBBO to execute the complete trade, in which case information about the depth of book is necessary to understand what shares are available and at what prices,” and to formulate and execute strategies for completing these large trades. *Id.* ¶ 60. Depth-of-book information also is necessary for short-term traders whose strategies are predicated on having all relevant information available. *Id.* ¶ 61. The need for this information has only increased in recent years as a result of decimalized trading; with a separate price point at every cent, the percentage of liquidity available at the

NBBO has declined relative to the liquidity available at prices just a penny or two away that are visible only through the Exchanges' depth-of-book data. *Id.* ¶ 46.<sup>23</sup>

*Second*, many of the same investors trade primarily through automated “smart order routers” that place orders using advanced algorithms before a human being could even see the data. *Id.* ¶ 64. As NYSE Arca’s own economist has explained, speed is of the essence to these investors; an investor placing automated trades based on a slower data feed than its competitors would be at a significant competitive disadvantage because often “the shown best price [is] no longer available at the moment an order reaches the market.”<sup>24</sup> Because the data products at issue offer the Exchanges’ order books, including top-of-book information, at speeds faster than the SIP feeds, a trader who uses automated systems would be at a significant competitive disadvantage if it decided to forego access to these products. *Id.* ¶ 64.

*Third*, ArcaBook and TotalView, as the exclusive sources of real-time order imbalance data, are essential to any market participant that makes participation in the daily auctions part of its trading strategy. These investors cannot realistically participate in these auctions without access to the data, nor can they realistically decide simply to stop participating in the auctions.

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<sup>23</sup> For retail investors, who do not themselves direct their orders, the link between order flow and data prices is nonexistent. NYSE Arca’s economists are incorrect that “depth-of-book data are not necessary” for retail investors because “96.7% of trades . . . occur at or within the NBBO.” Hendershott & Nevo ¶ 29. Although Commission regulations ensure that most orders will be *executed* at or within the NBBO, 17 C.F.R. § 242.611, the NBBO at the time of execution frequently will be different from the NBBO at the time the order is placed. For example, a study showed that over one-third of all retail orders required more shares than were available at the NBBO when submitted, meaning that depth-of-book data would be necessary to have visibility into the complete price of the trade. Donefer ¶ 63. The percentage certainly is much higher for large orders placed on behalf of institutional investors. *Id.*

<sup>24</sup> SIFMA Ex. 210 (S. Ding, J. Hanna & T. Hendershott, THE FINANCIAL REVIEW, *How Slow is the NBBO? A Comparison with Direct Exchange Feeds*, Vol. 49, 315 (2014) (“Hendershott Speed Study”), available at <http://faculty.haas.berkeley.edu/hender/NBBO.pdf>).

*Id.* ¶¶ 55–58, 65, 77. The auctions are an important source of liquidity and are an integral part of the investment strategies for institutional investors and short-term traders alike. *Id.*

For market participants that rely on these features, it simply is not feasible to stop purchasing the Exchanges' depth-of-book data products and shift their order flow elsewhere. Doing so would risk the quality of their trade execution; indeed, Nasdaq itself advertises that “[w]ithout the full picture of the market, you can’t make the best trades.”<sup>25</sup> Suffering this decline in trade quality is not a viable option. *Id.* ¶¶ 66–70. Broker-dealers owe their customers a duty of best execution under the federal securities laws and other sources,<sup>26</sup> and many of their customers—particularly institutional investors—use sophisticated techniques to monitor the quality of trade execution, and will move their business elsewhere if the quality falters. *Id.* ¶¶ 67, 69. In addition, traders and investors acting on their own behalf would upend their entire business models if they stopped buying the data from a major exchange, or pulled orders, for a sustained period of time. *Id.* ¶ 69. As a result, these market participants cannot exert significant leverage on data prices through their order-routing decisions. *Id.* ¶ 70.

2. The Exchanges have provided no new or substantial evidence that competition for order flow significantly constrains the fees they can charge for their depth-of-book data products.

*First*, NYSE Arca’s economists have presented a regression analysis that they claim demonstrates that when NYSE Arca imposed ArcaBook fees for the first time in January 2009, its market share of order flow declined in the following months. Hendershott & Nevo ¶¶ 66–70. Their analysis, however, suffers from fatal defects that make it wholly unreliable. Indeed, NYSE

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<sup>25</sup> SIFMA Ex. 200 (Video, *TotalView: Stock Market Data With 20x Liquidity of Level 2*, available at <http://www.nasdaqomx.com/transactions/marketdata/u.s.products/nasdaq-totalview>).

<sup>26</sup> The duty of best execution “requires that a broker-dealer seek to obtain for its customer orders the most favorable terms reasonably available under the circumstances.” *Newton v. Merrill, Lynch, Pierce, Fenner & Smith, Inc.*, 135 F.3d 266, 270 (3d Cir. 1998) (en banc).

Arca's market share may not actually have declined at all. Much or all of the "decline" that NYSE Arca's economists report results from their failure to control adequately for a change during the relevant time period in how one of NYSE Arca's competitors (BATS) reported its own trading activity. Evans ¶ 61. Moreover, their analysis failed to control for other possible causes, such as competition from alternative trading venues (which increased during the same time period). *Id.* ¶ 62. As a result, the analysis provides no support for the conclusion that NYSE Arca's data fees affected its order flow in any way, let alone that competition for order flow significantly constrains NYSE Arca's depth-of-book data prices.

*Second*, NYSE Arca's economists concede that ArcaBook is priced at a point where demand is inelastic—*i.e.*, where price increases will have little impact on demand—but argue that this somehow shows that NYSE Arca *lacks* significant market power. Hendershott & Nevo ¶¶ 71–75. In fact, basic economic theory holds that the opposite is true. Evans ¶¶ 63–65.

*Finally*, Professor Ordover cites [REDACTED] anecdotes, Ordover ¶¶ 36–38, but none of them shows that order-flow competition significantly constrains Nasdaq's pricing of its depth-of-book data products. Evans ¶¶ 66–71. That [REDACTED] customers—[REDACTED]—complained about prices or threatened to move orders elsewhere says nothing about whether the data fees are constrained; even a monopolist who raises prices can expect to lose *some* customers. *Id.* ¶ 67 & n.75. If anything, Nasdaq's ability to identify only [REDACTED] customers who threatened to move orders indicates that such threats are, in fact, rare. If the market were competitive, these sorts of negotiations would be constant. Moreover, the anecdotes Professor Ordover describes show [REDACTED]  
[REDACTED]  
[REDACTED]. *Id.* ¶¶ 69–71.

### C. The Exchanges' Data Fees Are Not Constrained By "Platform Competition."

In an offshoot of their order-flow argument, the Exchanges argue that market data and trade executions are "joint products" with "joint costs," and that their depth-of-book data prices should be deemed "fair and reasonable" so long as the Exchanges' "aggregate return" from the entire platform is competitively constrained. Ordover ¶¶ 5, 58; Hendershott & Nevo ¶¶ 37–42, 55–64. Under this "platform competition" theory, an exchange could price its data fees higher and execution fees lower, or vice versa, but would allegedly be constrained by competitive forces from pricing those fees in the aggregate above the total price charged by other exchanges and trading venues. The Exchanges have not shown that their "total return" is constrained by competition, and their platform competition theory is fundamentally flawed.

*First*, the argument is inconsistent with the Exchange Act, which requires that the *data prices themselves* be "fair and reasonable." 15 U.S.C. § 78k-1(c)(1)(C) (requiring exclusive processors to provide *market data* "on fair and reasonable terms"). The Exchanges are arguing that they may set depth-of-book data prices that exceed competitive levels so long as they charge less for other services. But allowing the Exchanges to immunize supracompetitive data fees from review by wrapping them together with fees for other services would nullify the "fair and reasonable" requirement in the Exchange Act and undermine Congress's purpose to ensure that market data are widely disseminated. *See* Evans ¶¶ 14–18 (discussing the sound economic policies supporting Congress's decision to regulate market data prices in order to promote widespread dissemination of market data and thereby achieve price transparency).<sup>27</sup>

*Second*, the Exchanges offer no evidence that market data prices have been constrained by platform competition. The evidence will be to the contrary. While market share for order flow

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<sup>27</sup> For firms that act as intermediaries but do not trade, such as Google and Yahoo!, the price of market data stands entirely on its own, and lower trade execution fees provide no benefit.

is “volatile” and has changed “substantially” over time due to competition, Ordover ¶¶ 40–41; Hendershott & Nevo ¶¶ 50–52, 55, the Exchanges identify no such volatility in the market for depth-of-book data. If market data were bought and sold jointly with order execution services, one would expect to see switches in order flow accompanied by corresponding switches in depth-of-book data purchases. The lack of evidence that this happens—either in the short term or over longer periods of time, *cf.* Ordover ¶ 40—demonstrates that these two products are not jointly bought and sold, undercutting the entire premise of the platform competition theory.

*Third*, as with the order-flow competition theory, the platform competition theory wrongly assumes that traders can readily switch orders to another “platform” in response to an increase in the price of market data, and thereby lower their overall trading costs. But directing orders to a different platform does not save the trader the costs of purchasing market data from the first platform if he or she needs to obtain that platform’s market data to optimize trading profits. And for those investors who purchase only market data from a platform and no other services, there is no aggregate cost of using an exchange, just the cost of the data they purchase. Their only choice is to pay the increased data prices or stop buying the data entirely.

### **III. THE EXCHANGES’ FEES ARE INCONSISTENT WITH THE EXCHANGE ACT’S CORE PURPOSE OF PROMOTING PRICE TRANSPARENCY AND INVESTOR ACCESS TO INFORMATION.**

Even if the Exchanges could show they were subject to significant competitive forces, their fees still should be set aside because “there is a substantial countervailing basis” to find that they are inconsistent with the Exchange Act. ArcaBook Order, 73 Fed. Reg. at 74781. By making depth-of-book data cost-prohibitive for most retail investors, the Exchanges’ fees undermine the Act’s core purpose of price transparency for *all* market participants. *See* 15 U.S.C. § 78k-1(a)(1)(C)(iii) (instructing the Commission to ensure “the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities”); S.



Rep. No. 94-75, at 3 (1975) (one of the “basic goals of the Exchange Act” is “to assure that dealing in securities is fair and without undue preferences or advantages among investors”).

As the Commission has recognized, “[a]ssuring the wide availability of quotation and trade information is a primary objective of the national market system,” 73 Fed. Reg. at 74795; “broad access to real-time market information should be an affordable option for most retail investors, as it long has been for professional investors,” 64 Fed. Reg. at 70614; and thus “[o]ne of the most important functions that the Commission can perform for retail investors is to ensure that they have access to the information they need to protect and further their own interests,” *id.* Yet the Exchanges’ fees make it prohibitively expensive for many investors, especially retail investors, to access depth-of-book data.<sup>28</sup> To have visibility into the market on par with institutional investors and other professional traders, or even to have the same visibility that used to exist at the NBBO, investors would need to subscribe to depth-of-book data from several exchanges.<sup>29</sup> This is not economical for retail investors who may only place a few dozen trades each year. Donefer ¶ 62. The result is a two-tiered system in which those market participants who can afford to pay the Exchanges’ fees have access to complete order books at lightning speed, and those who cannot must make do with the top-of-book data made available at slower speeds through the SIPs. Under the Exchange Act, however, transparency is not a luxury good.

The Exchanges contend that retail investors do not need depth-of-book data because most orders are executed at prices equal to or better than the NBBO. Hendershott & Nevo ¶ 29. But the percentage of orders that ultimately execute at the NBBO when they clear is not a relevant statistic for evaluating the importance of depth-of-book data. Donefer ¶ 63. Even if most orders

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<sup>28</sup> See SIFMA Ex. 16 at 4–5; SIFMA Ex. 21 at 4–5; SIFMA Ex. 22 at 9; SIFMA Ex. 25 at 13–15; SIFMA Ex. 33 at 11–12.

<sup>29</sup> See SIFMA Ex. 21 at 4; SIFMA Ex. 22 at Appendix A; SIFMA Ex. 34 at 12.

are *executed* at the NBBO, the order size often is larger than the number of shares available at the NBBO *at the time the order is placed*. *Id.* Indeed, according to one study, over one-third of retail orders required more shares than were available at the NBBO when submitted.<sup>30</sup> Thus, retail investors need data beyond the NBBO to know the prices at which a significant percentage of their orders will be executed. Depth-of-book data also are important in deciding whether and when to trade, at what price, and what type of order to use. *Id.* ¶ 62.

As a result, without access to depth-of-book data, investors are at a material informational disadvantage compared to those who can afford to buy the data. This two-tiered market for data conflicts with the transparency and investor-protection goals of the Exchange Act and provides a “substantial countervailing basis” to disapprove the Exchanges’ fees.

### CONCLUSION

It has been five years since the D.C. Circuit rejected the Exchanges’ contentions that competition significantly constrains their depth-of-book data fees. But the relevant facts have not changed. The Exchanges will try to tell one story in the courtroom—that cost is irrelevant, that there are substitutes for their depth-of-book data products, and their pricing is constrained by competition. But what they have said outside the courtroom—in their advertising, to investors, and in their own SEC filings—is to the contrary. The Exchanges cannot carry their burden of showing that they were subject to significant competitive forces in setting their depth-of-book data fees, and their rule changes must be set aside as inconsistent with the Exchange Act.

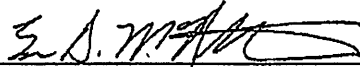
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<sup>30</sup> See SIFMA Ex. 35 at Appendix pp. 20, 47.

Dated: March 27, 2015

Respectfully submitted,

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**UNITED STATES OF AMERICA**  
**before the**  
**SECURITIES AND EXCHANGE COMMISSION**

In The Matter of the Application of:

SECURITIES INDUSTRY AND FINANCIAL  
MARKETS ASSOCIATION

for Review of Actions Taken by  
Self-Regulatory Organizations.

Admin. Proc. File No. 3-15350

The Honorable Brenda P. Murray,  
Chief Administrative Law Judge

**CERTIFICATE OF SERVICE**

I hereby certify that on March 30, 2015, I caused a redacted, public copy of the foregoing Pre-Hearing Brief of Applicant Securities Industry and Financial Markets Association to be served on the parties listed below via FedEx:

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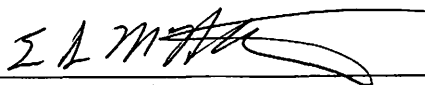
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