UNITED STATES OF AMERICA
before the
SECURITIES AND EXCHANGE COMMISSION

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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

THE SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION'S REPLY BRIEF

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INTRODUCTION

As SIFMA showed in its opening brief, the evidence adduced at the hearing not only failed to cure the deficiencies in the theories of "competition" that the D.C. Circuit rejected for lack of support in *NetCoalition v. SEC*, 615 F.3d 525 (D.C. Cir. 2010). It overwhelmingly confirmed what the Exchanges' own officers have told the investing public—that the Exchanges have significant "pricing power" over their depth-of-book data products. Tr. 1384–88.

To deflect attention from these glaring problems, the Exchanges argue that the Commission must defer to the Chief ALJ's factual findings. Nasdaq Br. 9. But that is wrong: the Commission has plenary power to review an ALJ's decision based "on an independent review of the record." *In re Clawson*, SEC Release No. 48143, at *1 (July 9, 2003); *see Raymond J. Lucia Cos. v. SEC*, 832 F.3d 277, 289 (D.C. Cir. 2016) ("an agency reviewing an ALJ decision is not in a position analogous to a court of appeals reviewing a case tried to a district court"); *Tilton v. SEC*, 824 F.3d 276, 278–79 (2d Cir. 2016) ("de novo review" of "ALJ's initial decision"). In any event, the issues in this matter largely turn not on disputed facts, but on the economic implications of undisputed facts. And the Chief ALJ has no relative expertise in antitrust economics or competition policy to which the Commission should defer.

Nor can the Exchanges excuse their own failure of proof by faulting SIFMA's evidence. The Exchanges have the burden of proof in this proceeding, which concerns the reasonableness of *their* fees, and the vast majority of the relevant evidence is in *their* exclusive possession. Moreover, SIFMA presented substantial affirmative and rebuttal evidence: it presented expert testimony from two distinguished experts in the securities markets and antitrust economics; it offered hundreds of exhibits that were admitted into the record, including documents that it fought to obtain from the Exchanges over their objection; and it vigorously cross-examined the Exchanges' fact and expert witnesses, extracting key concessions.

In the end, the Exchanges have no answer to the undisputed fact that the vast majority of their depth-of-book data customers, accounting for the overwhelming majority of their depth-of-book data revenue, do *not* treat different depth-of-book products as substitutes. Nor can traders compel the Exchanges to price depth-of-book data competitively through their order-routing. Far from being subject to significant competitive constraints, the Exchanges possess significant market power. The Commission thus cannot rely on the market to ensure that the Exchanges' fees are "fair and reasonable" under the Exchange Act, and the fees must be set aside.

ARGUMENT

I. The Availability Of Alternatives Does Not Significantly Constrain The Exchanges' Depth-Of-Book Data Fees.

The *NetCoalition I* court called for evidence showing how customers would "react to a change in price." 615 F.3d at 542–43. Only the Exchanges—not SIFMA or its members—have the comprehensive data needed to answer that question. Tr. 1284–85. Yet neither the Exchanges nor their economists even analyzed those data, or offered any response to SIFMA's showing that the vast majority of customers do *not* switch or stop buying in response to large price increases. Instead, the Exchanges try to dismiss this undisputed evidence of inelastic demand—the most probative evidence of market power in the record—as "much ado about nothing." NYSE Br. 19. That is because the evidence destroys their case, and they have no persuasive answer to it.

A. The demand for the Exchanges' depth-of-book data is highly inelastic.

1. When NYSE Arca imposed a major price increase in January 2009, it lost almost none of its subscribers—even though BATS's "competing" depth-of-book data remained free. None of the Exchanges' arguments undermines this clear evidence of significant market power.

Remarkably, NYSE Arca persists in claiming its customer loss was "significant," Br. 6, 20–21, 23 n.34, even after it was pointed out in open court that this was misleading, Tr. 1288–91.

NYSE Arca cites an exhibit it submitted to the Commission with its proposed rule change showing that the number of accounts declined by 23% (from 220 to 170), NYSE-1, Ex. 3B, in contrast to the 5% actual account loss (from 3,787 to 3,594) reported by its experts in this proceeding, Hendershott & Nevo ¶ 74. The 23% figure is irrelevant, as it reflects only the tiny fraction of customers who took the data feed directly from NYSE Arca and excludes the vast majority of customers who took ArcaBook through a redistributor.[1] Tr. 1247–51, 1288–91. The figures NYSE Arca reported to the Commission thus paint a false picture by suggesting NYSE Arca lost a much greater number and percentage of its customers than it did.

Nor can the significance of the price increase be dismissed because the fees were less than the cost of "cable television." NYSE Br. 21. In percentage terms, the price increase was enormous. Tr. 1244 ("if the Wall Street Journal went from $1 to $10, that would be an enormous price increase"). And because most firms have many users, the total fees paid by a single institution are usually a large multiple of the fees. SIFMA-380 (showing total fees paid by a representative broker-dealer). In any event, that a product is relatively inexpensive does not mean the seller lacks market power. *See FTC v. Staples, Inc.*, 970 F. Supp. 1066, 1073 (D.D.C. 1997) (seller had market power over $1–$2 items such as pens and post-it notes).

NYSE Arca further tries to evade the import of its insignificant customer attrition by arguing that customers incurred infrastructure costs to take the data feed after the fees were proposed. Br. 22. No evidence supports this claim. *See* Tr. 155. NYSE Arca cites only its counsel's questions, which are not evidence. It also ignores that the vast majority of customers

[1] Brooks testified that NYSE Arca receives the same amount of revenue whether a subscriber takes the data directly or through a redistributor. Tr. 119 ("Whether they take a data feed directly from the exchange or whether they take the data feed from Bloomberg, they pay the same amount for the exchange."); Tr. 38 ("no data recipient is going to circumvent the fees by not getting the data directly").

who maintained their accounts despite the massive price increase were indirect subscribers who did not need to incur any infrastructure costs. Tr. 155, 1291–92. Furthermore, even if some customers did incur such costs, high switching costs would only increase NYSE Arca's market power. *See Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 476 (1992); Tr. 1288. And if "customers can use this infrastructure … to use other exchanges' depth-of-book products," then it is unclear why NYSE Arca thinks these costs are relevant. Br. 22 n.33.

Contrary to the Exchanges' claims, moreover, Dr. Evans certainly did not "conced[e]" that his conclusions were "not appropriate" because the prior price of zero may not have been the competitive price.[2] NYSE Br. 21; Nasdaq Br. 18. He expressly *rejected* that contention—without contradiction from the Exchanges' economists. Tr. 1150–51, 1217–19. Nor did Dr. Evans claim that NYSE Arca has market power simply because the competitive rate "might be higher than the regulated rate." *Mobil Pipe Line Co. v. FERC*, 676 F.3d 1098, 1103–04 (D.C. Cir. 2012). Rather, he explained that the insignificant customer attrition in response to such a large price increase showed that the vast majority of customers did not treat other depth-of-book products—including one that remained free—as substitutes for ArcaBook. Tr. 1286–87.

Moreover, if NYSE Arca believed the 2009 increase was somehow inappropriate for assessing substitution, it was free to present data showing how customers responded to its more recent price increases, such as its 2014 price increase that more than doubled its access fee (from $750 to $2000) and raised its professional fee by 33% (from $30 to $40). Evans ¶ 59. Because those data are in NYSE Arca's exclusive control, the Commission can and should infer that they are unfavorable to NYSE Arca. *See Huthnance v. D.C.*, 722 F.3d 371, 378 (D.C. Cir. 2013).

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[2] Contrary to NYSE Arca's claim, Br. 21 n.32, nothing required NYSE Arca to provide ArcaBook for free before the Commission approved its fees.

2. Nasdaq likewise has no persuasive response to the insignificant customer attrition resulting from its major 2012 nondisplay fee hike. Nasdaq *concedes* the relevant point—that the customers targeted for the fee increase could not respond by dropping Nasdaq's data or switching to another product. Br. 18–19. Nasdaq contends they could have decreased usage, but it cites no data showing it lost significant revenue from any customers who did so. *Id.* at 14. Nasdaq cites only one example of a customer that decreased usage, *id.*, and it is inappropriate to "focus on one particular customer" as opposed to customers overall, Tr. 1207.

Nasdaq also errs in suggesting it lost significant revenue from customers who left "as a result of this price change." Br. 19–20. The revenue-loss calculations included customers who left for *any* reason in 2012, not just those (if any) who left because of the price increase; and the customers who left may have simply switched to taking Nasdaq's data through a redistributor, exited the industry, or stopped subscribing for other reasons unrelated to price. SIFMA Br. 8 n.5, 17 n.12; Tr. 1292–93. Thus, Dr. Evans's 3.1% revenue-loss figure *overstates* the revenue lost as a result of the price increase. And the two-year 10% figure Nasdaq cites (combining the 6.6% 2012 loss and the 3.1% 2013 loss), Br. 20, misreads the calculations. The 6.6% figure represents customers who subscribed in 2011 but not 2012, and thus does not capture losses resulting from the 2012 price increase. Evans Ex. 3; Tr. 1297. The fact remains that Nasdaq experienced insignificant customer attrition in response to a major price increase for nondisplay usage—even though NYSE Arca did not charge separately for nondisplay usage at the time. Tr. 36, 128.

3. This evidence establishes—as the Exchanges' experts conceded, Tr. 310, 753—that the demand for the Exchanges' depth-of-book data is highly inelastic, *i.e.*, that few "consumers will respond to an increase in the price of one good by substituting or switching to another." *Mobil*, 676 F.3d at 1102. The Exchanges' efforts to obfuscate this dispositive fact are unavailing.

NYSE Arca is simply wrong that "a company with market power would never price in the inelastic portion of the demand curve." Br. 20. NYSE Arca's own economist showed that a firm selling complementary products might price in the inelastic portion of the demand curve. NYSE-86. That is true even if the firm has significant market power over one or both of the products. Tr. 1315–16; *see* Tr. 360 (Dr. Nevo conceding that the chart in NYSE-86, which is a standard illustration of a monopolist's demand curve, says nothing about the competitive price). For that reason, Dr. Nevo himself claimed only that his "inelastic demand" theory showed that NYSE Arca was pricing ArcaBook so as to maximize profits from multiple products (trading and market data)—not that this meant ArcaBook itself was priced competitively (as the Exchange Act requires). Hendershott & Nevo ¶ 75; Tr. 310–15, 360.

Nor is there any merit to Nasdaq's claim that "the great bulk of customers (or potential customers)" have a "high degree of price elasticity." Br. 20. This assertion is refuted by NYSE Arca's 2009 price increase—presumably most of the market participants who were interested in ArcaBook at the time subscribed to it when it was free, and almost none of them left after NYSE Arca's massive price increase. And Nasdaq's 2012 fee increase shows that very few (if any) customers accounting for significant revenue—which is ultimately what matters to firms, Tr. 752, 1294–96—have a "high degree of price elasticity." *See* Tr. 1139 (different depth-of-book products are "not substitutes" "for the customers that comprise significant revenues").

At bottom, the Exchanges' assertion that relatively few market participants need depth-of-book data is just a repackaging of their argument that there are relatively few buyers at current prices.[3] *See* SIFMA Br. 13. As the *NetCoalition I* court made clear, this *supports* rather than

[3] Contrary to Nasdaq's claim, Professor Donefer did not "conced[e] that depth-of-book data from all exchanges are necessary only for approximately 100 firms that pursue computer-based trading strategies." Br. 11. Professor Donefer agreed that depth-of-book data are essential to the 5,000

refutes the existence of market power. 615 F.3d at 543. A firm with market power "chooses not to serve customers that place a low value on its product in order to raise its prices and earn much greater profits from customers that place a high value on its product." Evans ¶ 36; *see id.* ¶ 10; Tr. 1071. The Exchanges presented no evidence that their prices are significantly constrained by any efforts to sell their depth-of-book data to market participants "who either do not need any depth-of-book data or require only a limited subset of the available data." Nasdaq Br. 9.

B. Different depth-of-book products are not substitutes for each other.

The highly inelastic demand for depth-of-book data means that different depth-of-book data products are not good substitutes for each other—at least for the vast majority of customers who account for the overwhelming majority of the Exchanges' revenue. The Exchanges' evidence does not even address this issue, let alone establish substitution.

1. NYSE Arca's evidence that most securities trade on multiple exchanges, Br. 29–31, does not show that traders can and do treat different depth-of-book products as substitutes. Each exchange's data for a particular security are unique; orders placed on an exchange for that security appear only in that exchange's order book. Donefer ¶ 72. To have the fullest possible view of the market for a security—the number of shares available to be bought and sold at specific price points—traders need depth-of-book data from each exchange with significant trading in that security. Otherwise the "trader's picture of the supply-demand curve would be incomplete, and therefore inaccurate, which would result in sub-optimal trading and routing

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"machine subscribers" identified in NQ-DEMO-16. But he expressly *disagreed* that the data are not essential to other users represented in the demonstrative. Tr. 1013 ("It's on those levels above there that we have some difference of opinion."). As Professor Donefer explained, some of the 30,000 TotalView professional subscribers, the 85,000 Nasdaq depth subscribers, and even the 350,000 SIP or Basic subscribers undoubtedly find the data essential, "depend[ing] on the user and what they're doing and what their strategy is." Tr. 1010–12; *see also* Donefer ¶ 60 (depth-of-book data are essential to "institutional investors such as pension funds, mutual funds, insurance companies, and large charitable and educational endowments").

decisions." *Id.* ¶ 73; *see also* Hendershott & Nevo ¶ 27. Furthermore, because trading volume shifts among exchanges not only from day to day, but from moment to moment, average *monthly* concentration figures are "not a useful measure for evaluating traders' needs, which are based on executing trades in real time."[4] Donefer ¶ 49; *see also* Evans ¶ 72 & n.84. Thus, that trading in many securities may be dispersed across several exchanges does not make those exchanges' depth-of-book data products interchangeable.[5]

Moreover, NYSE Arca's HHI statistics understate the degree of concentration. It is undisputed that trading for some securities is concentrated on a single exchange, SIFMA Br. 15, a point to which the Exchanges have no response. And the HHI calculations are undermined by serious methodological flaws. Evans ¶ 72 n.83. Contrary to NYSE Arca's claim, Dr. Evans did "expla[in] why non-exchange venues should be excluded from calculations of concentration in trading," Br. 30 n.45—because the issue is traders' need for depth-of-book data, and "depth-of-book data are generally not available" from non-exchange venues. Evans ¶ 72 n.83. If significant trading in a security occurs on an exchange, a trader who needs maximum visibility into the market for that security needs the depth-of-book data from that exchange. That some trading may also occur on venues that do not provide pre-trade data does not change that. Donefer ¶ 76.

For the same reasons, the theoretical claim that "when changes occur in one limit order book they are likely to occur in other exchanges' limit order books," NYSE Br. 30–31; Nasdaq Br. 15, says nothing about whether traders in the real world can and do substitute one exchange's

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[4] NYSE Arca's response that depth-of-book data are sold in monthly subscriptions, Br. 30, only exacerbates this problem. Traders must subscribe to the data for the upcoming month without knowing which exchanges will have available liquidity at the best prices when they need to place large trades for a particular security.

[5] Professor Donefer did not need to be an "antitrust expert," NYSE Br. 29, to see that NYSE Arca's HHI figures do not bear on the relevant issue, which is whether exchanges' depth-of-book data products are substitutes for each other, not whether the market for trading is concentrated. And Dr. Evans, who *is* an "antitrust expert," agreed with Professor Donefer. Evans ¶ 72.

depth-of-book data for another's, Tr. 1057–58; Evans ¶ 30 n.32. NYSE Arca claims that SIFMA has "confus[ed]" depth-of-book and top-of-book data, Br. 31, but it is NYSE Arca who is confused: when traders need to execute trades that exceed the number of shares available at the NBBO, they need to know both the quantity and the price information reflected in depth-of-book data to make informed trading decisions. And NYSE Arca concedes there is no evidence of price correlation across different exchanges' depth-of-book data. Tr. 176.[6]

None of this evidence remotely establishes that customers treat different exchanges' depth-of-book products as "interchangeable." NYSE Br. 33. The Exchanges cite one customer who *said* that in an unsuccessful effort to negotiate a lower fee. *Id.* (quoting NQ-508); Nasdaq Br. 23 (citing NQ-508 as a purported example of "real-world evidence of traders who treat these products as substitutes"). But they ignore what that customer *did* when Nasdaq not only refused to lower its fees, but raised them by 50%—it continued subscribing. Tr. 654–55, 760–64.

2. The Exchanges fare no better with their evidence of purported "switching." Neither Exchange's economist even analyzed switching—under any understanding of the term—*in response to price changes*. That alone renders their evidence irrelevant. SIFMA Br. 19.

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[6] NYSE Arca also is wrong that depth-of-book data are "not relevant to best execution obligations." Br. 31. FINRA recently made clear that firms using depth-of-book data for proprietary trading are "expected to also be using these data feeds to determine the best market under prevailing market conditions when handling customer orders to meet its best execution obligations." Regulatory Notice 15-46, at 13 n.12 (Nov. 2015); *see also* SIFMA-371 at 2, 17 (FINRA's head of market regulation stating that if a member is "not looking at depth-of-book type activity at other markets before [it] fill[s] a customer['s order], that's another area where we're going to start to focus" in assessing best execution). And although the Commission stated *eight years ago* that broker-dealers do not have a general duty to buy depth-of-book data, *see* NYSE Br. 31, "the scope of the duty of best execution has evolved over time with changes in technology and transformation of the structure of financial markets," *Newton v. Merrill, Lynch, Pierce, Fenner & Smith, Inc.*, 135 F.3d 266, 271 (3d Cir. 1998) (en banc). In addition, the Commission is not the only arbiter of best-execution duties, which also arise from state agency law. *See id.* at 270; Tr. 985–86. Accordingly, broker-dealers may understandably feel they face significant regulatory risk if they do not buy depth-of-book data. Tr. 1054–55.

Nor did SIFMA "rel[y] on a too-narrow definition of 'switching.'" NYSE Br. 31. The data on customer attrition in response to NYSE Arca's 2009 price increase and Nasdaq's 2012 price increase captured not only customers who switched to another product but also those who simply dropped the product. Likewise, NYSE Arca's miniscule 2% professional subscriber loss in response to its massive 2009 price increase captured any firms that "reduc[ed] their intensity of usage" by reducing the number of individuals with access to the data. NYSE Br. 32. And, as noted, *supra* at 5, although the relevant revenue data are in its exclusive control, Nasdaq made no effort to show it lost significant revenue from customers who reduced the number of servers using the data but did not "cut off data services" altogether after Nasdaq's major 2012 nondisplay fee increase.[7] Nasdaq Br. 24 n.9. The Commission can thus infer that the data are unfavorable to Nasdaq's position. *See Huthnance*, 722 F.3d at 378.

Moreover, NYSE Arca distorts the record beyond recognition in claiming that "Brooks provided numerous examples of customers who dropped ArcaBook in response to price increases and of customers who substituted one exchange's depth-of-book products for those of another exchange." Br. 8 (citing Tr. 67–80, 90). Brooks identified no customers—*none*—that switched between depth-of-book products. Tr. 137–38. And apart from the trivial losses from its 2009 price increase, Brooks cited only *one* customer that dropped a NYSE Arca depth-of-book product in response to a price increase. Tr. 72–73. When asked how many customers dropped NYSE Arca's data in response to its many post-2009 price increases, Brooks could name only a single customer—Bluefin—that he had never even heard of before it left. Tr. 92–93, 112, 135.

[7] Professor Ordover asserted that three customers—a redistributor and two retail brokers—reduced their subscriber counts between 2006 and 2013. Ordover ¶ 27. But "[h]e present[ed] no evidence that the changes in the number of subscribers for these firms was related to changes in competitive constraints that NASDAQ faces in selling its depth-of-book data. He [did] not address, for example, the extent to which the changes in subscribers were attributable to the financial crisis in 2007–2008." Evans ¶ 43 n.49.

Nor does Professor Ordover's "churn analysis" (or the handful of examples cited by Albers) "demonstrate that a large percentage of customers shift in and out of Nasdaq's depth-of-book customer base each year," let alone that they "have the ability to switch to an alternative product in the event of an unreasonable price increase." Nasdaq Br. 24. Because of limitations in Professor Ordover's data, he concededly could not determine whether the customers he counted as "losses" had dropped Nasdaq's data or simply switched to taking Nasdaq's data through a redistributor.[8] SIFMA Br. 17. He did not know whether those customers, if they actually stopped subscribing, did so for reasons unrelated to price or simply exited the industry. *Id.* at 17 n.12. And he did not dispute that those customers accounted for an insignificant portion of Nasdaq's depth-of-book data revenue—even though he conceded that revenue is the appropriate metric for assessing substitution. Tr. 752, 771–72, 1292–99; Evans ¶ 47 & Ex. 3.[9]

3. Contrary to NYSE Arca's claim, SIFMA did "address NYSE Arca's data examining the purchasing patterns across NYSE and Nasdaq depth-of-book products." NYSE Br. 33; *see* SIFMA Br. 18–19. As SIFMA explained, the Exchanges' own data show that the vast majority of depth-of-book data customers buy multiple exchanges' data, Tr. 336, 781, which is inconsistent with the theory that the products are interchangeable, Donefer ¶ 71; Tr. 1253–55. And the mere fact that some customers "purchase only a limited subset of the available data," Nasdaq Br. 12, says nothing about the relevant question—whether those customers are willing to

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[8] Nasdaq's suggestion that customers would not switch to taking the data through a redistributor, Br. 24, is belied by the only record evidence concerning the proportion of customers who take depth-of-book data directly from the exchange versus through a redistributor: out of the 3,594 accounts that remained with NYSE Arca after the 2009 ArcaBook price increase, 95% took the data through a redistributor. *See supra* at 3.

[9] All the same limitations apply to the "churn" data in NQ-511. Tr. 772. And, contrary to Nasdaq's claim that its evidence consists only of "ordinary course" documents, NQ-511 was created for submission to the Commission during the pendency of litigation over Nasdaq's fees. Tr. 625–28. Indeed, litigation over the Exchanges' fees has been ongoing since 2009.

substitute one exchange's data for another's in response to a change in their relative price. Evans ¶¶ 50–51; Tr. 1253–55, 1304–09. The Exchanges have no response to these points.

4. The Exchanges also have no meaningful response to SIFMA's refutation of their claim that they lack market power simply because they take customer attrition into account when setting prices. SIFMA Br. 20. Nasdaq merely recites its evidence, Br. 16, without responding to SIFMA's showing that this same evidence is fully consistent with the behavior of a firm possessing significant market power. And NYSE Arca complains that SIFMA cites "stock language" from cases "discuss[ing] some fundamental principles about how a monopolist may price" that "might be found in any antitrust textbook." Br. 34 & n.52. But NYSE Arca cites *no* authority contradicting the "fundamental principl[e]" that substitution is assessed by observing how customers respond to price changes, not by asking whether the seller accounts for customer attrition in setting its profit-maximizing price. Even monopolists do that. Tr. 1210–11.

Likewise, Nasdaq is wrong that "[i]f demand for market-data products were truly highly inelastic, then [the Exchanges] would have the opportunity to raise prices substantially." Br. 20. This ignores the evidence that the Exchanges *have* raised their prices substantially. SIFMA Br. 20–21. More importantly, it begs the question. If, as the record shows, the Exchanges' prices are *already* infected by significant market power, they would not necessarily rise even further. "[T]he demand curve constrains the behavior of all sellers, even monopolists." *Advo, Inc. v. Phila. Newspapers, Inc.*, 51 F.3d 1191, 1203 (3d Cir. 1995).

Moreover, in touting that it has not raised certain fees, Nasdaq ignores that those fees are much higher than its supposed competitors' fees. Nasdaq's $70 professional user fee is almost *double* NYSE Arca's $40 fee and more than *four-and-half times* larger than BATS's $15 fee. Donefer Ex. 2. Such dramatic price disparities are inconsistent with the claim that the products are substitutes. SIFMA Br. 11. If the products were interchangeable, as the Exchanges claim, there would be no reason for so many customers to pay Nasdaq's fees rather than switching to one of its lower-priced "competitors," Tr. 1261, much less to buy both products, SIFMA Br. 19.

5. Their own analysis having fallen short, the Exchanges seek to piggyback on unadjudicated allegations made by the Justice Department in a complaint and a press release. Nasdaq Br. 40; NYSE Br. 27. These allegations are not "evidence" of anything. None of the economists in this case examined the Department's underlying analysis, which is confidential. Tr. 748–49. There is thus no way to know whether the Department examined the same evidence presented in this proceeding. Tr. 1310. Moreover, that the Department seeks to block a merger because it will diminish competition does not mean that existing prices are constrained to the competitive level. Tr. 1310–11. This case must be decided based on the facts before the Commission, not the unproven allegations of another agency.

II. Order-Flow Competition Does Not Significantly Constrain The Exchanges' Fees.

Because there are no substitutes for the Exchanges' depth-of-book data products—which Nasdaq *concedes* is true for at least 100 of its most significant customers, Br. 25, representing a substantial percentage of the nation's investors—the Exchanges are forced to retreat to their alternative theory that competition in the separate market for order flow somehow prevents them from exercising significant market power over the price of their depth-of-book data. But that theory fares no better than their disproven substitution theory.

A. Order-flow competition does not prevent the exchanges from exercising significant market power over their depth-of-book data prices.

1. The Exchanges' order-flow theory fails at the outset because they have no response to SIFMA's showing—and their own experts' concessions—that competition for order flow at most constrains their *overall* return for their "total platform," and does not independently constrain the price of *depth-of-book data* on its own. SIFMA Br. 30. As Professor Ordover candidly explained, under the Exchanges' "total platform" theory of competition, there are "a number of possible pricing strategies," including "setting *relatively high prices for market information* and relatively low prices for accessing posted liquidity." NYSE-1 at 153 (emphasis added); *see also* Tr. 802 (Ordover conceding that "[f]rom [his] perspective what matters is the aggregate return").

Professor Ordover argued "there is no economic basis for regulating maximum prices for one of the joint products in industries in which suppliers face competitive constraints across the range of their offerings." NYSE-1 at 153. But even if that were true (it is not), here there is a *legal* basis for regulating the price of depth-of-book data on its own—Congress's mandate in the Exchange Act that *market-data fees* must be "fair and reasonable" in order to protect investors and ensure that market data are widely disseminated. 15 U.S.C. § 78k-1(c)(l)(C); *see* Evans ¶¶ 14–18 (discussing the sound economic policies supporting Congress's decision to regulate market-data prices to promote widespread dissemination of market data and price transparency). The Exchanges' argument that they may set supracompetitive depth-of-book data fees so long as they charge less for other services would nullify the Exchange Act's requirement that market-data fees themselves be "fair and reasonable."[10] This alone requires rejection of the Exchanges' order-flow theory—and the Exchanges have no answer.

Moreover, the Exchanges did not show that competition significantly constrains their overall return. SIFMA Br. 36–37; Evans ¶ 26. They presented only conclusory assertions from their economists that were not backed up by any data or evidence. *See* Ordover ¶ 59; Hendershott & Nevo ¶ 55. At most, the Exchanges showed that depth-of-book data prices have a mathematical relationship to the demand for order flow because the products are complements.

[10] For those market participants 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.

Evans ¶¶ 11 n.10, 57. But this mathematical "constraint" does not preclude significant market power; it is a profit-maximizing constraint faced by any firm selling complementary products, even if the firm has significant market power over one or both of the products. *Id.*; Tr. 1315–16.

2. Consistent with the Exchanges' economists' own theory of competition, Dr. Evans presented uncontradicted testimony that intense competition for order flow creates an incentive for exchanges to charge high market-data prices and low trading prices. SIFMA Br. 28–30. Because competition for order flow reduces the profit margins on trading, "an exchange that has market power over its depth-of-book data product [might] choose to sacrifice some order flow in order to charge higher prices for [market] data," because the increased profits on higher-margin market data more than offset the lost profits on lower-margin trading. Tr. 1318–19.

Contrary to NYSE Arca's contention, this unrebutted point does not depend on a "theoretical economic model of 'multi-*sided* competition.'" NYSE Br. 19 (emphasis added). Dr. Evans's economic analysis related to multi-*product* firms and did not depend on "there being different actors on different sides" of the platform, with "one group 'cross-subsidizing' the other."[11] *Id.* Nor is cross-subsidization "an oxymoron." *Id.* It simply means that high market-data prices may enable exchanges to charge lower trading fees—which, not incidentally, gives exchanges an advantage over the alternative trading systems with which they compete for order flow, but which do not sell depth-of-book data. And the fact that "as an exchange loses market share of order flow, depth-of-book data becomes less valuable," NYSE Br. 19, only makes it all the more striking that the Exchanges have significantly increased their market-data prices over

[11] Dr. Evans observed that exchanges, in addition to being multi-product firms, are also multi-sided platforms because they "act as intermediaries between … liquidity providers and liquidity takers." Evans ¶ 22. But his analysis of the pricing relationship between market data and trading did not depend on this point. *See* Tr. 1316–20; Evans ¶¶ 21, 24, 26, 57; SIFMA-385.

the last decade even while their market share in trading has sharply declined over that same period as order-flow competition has intensified. SIFMA Br. 30–31.

Nasdaq tries to deny this reality, arguing that "the inflation-adjusted price for its market-data products has actually *decreased* over time." Br. 32. But the facts speak for themselves. In particular, the Exchanges' nondisplay fees—paid primarily by the very "sophisticated" firms that purportedly have leverage due to the volume of order flow they control—have skyrocketed over the last decade. Nasdaq went from not charging separately for nondisplay usage and capping a firm's fees at $30,000, to charging a separate nondisplay fee in addition to the professional user fee and more than doubling the cap to $75,000. Donefer Ex. 3. And NYSE Arca went from charging nothing, to including nondisplay usage in its $30 professional user fee, to charging an additional $5,000 monthly nondisplay fee. *Id.* These facts belie the assertion that major firms' "leverage" over order flow constrains market-data prices. These recent fees, in fact, devastate the Exchanges' order-flow theory because they single out the very firms that supposedly can resist price increases. *See* Nasdaq Br. 25; SIFMA Br. 22. The Exchanges do not cite a single example in which a firm used its "leverage" to obtain a significant reduction in depth-of-book data fees.

B. Traders' limited ability to shift order flow does not significantly constrain depth-of-book data pricing.

1. Because the Exchanges' need to attract order flow does not prevent them from exercising significant market power over their depth-of-book data fees, their theory that large customers can "punish" them for high data fees by shifting order flow is irrelevant.[12] There is no evidence or reason to believe that the threat of lost order flow prevents the Exchanges from

[12] For the same reasons, the alternative theory that NYSE Arca posits in its brief—that if a trader stops buying an exchange's data in response to a price increase, the trader will be less likely to route orders to the exchange, Br. 7—is irrelevant. It is also unsupported by any evidence. The vast majority of the Exchanges' subscribers—and particularly those who account for significant order flow—do *not* stop buying the data in response to price increases.

charging supracompetitive depth-of-book data prices. Rather, the Exchanges are willing to sacrifice lower-margin order flow in order to charge more for their higher-margin depth-of-book data. That is why Nasdaq did not budge when [redacted] shifted order flow. And that is why, even if NYSE Arca's discredited regression (which NYSE Arca has abandoned) were accepted as establishing a causal relationship between the ArcaBook fee increase and the decline in NYSE Arca's trading volume, it would not "suppor[t] the Chief ALJ's findings." Nasdaq Br. 29 n.11. It would only show that NYSE Arca was willing to sacrifice order flow to charge more for ArcaBook. Evans ¶ 60. The Exchanges' conclusion (that their depth-of-book data fees are competitively constrained) simply does not follow from their premise (that traders can and do freely shift order flow in response to market-data fees). Their theory fails for this reason alone.

But the theory's premise is also flawed. The Exchanges argue that order flow is "exceptionally 'portable' across exchanges," Nasdaq Br. 25, but that is a straw man. Of course order flow is "portable" in the sense that traders can and do route orders *based on which venue offers the best trading opportunities at the lowest cost for executing the order*. Tr. 1170. But that is not the issue. The question is whether traders can and do shift order flow *based on an exchange's market-data fees*. As to that question, the Exchanges (like the Chief ALJ) ignore SIFMA's showing that best-execution obligations and commercial realities significantly limit traders' ability to shift order flow based on market-data fees. SIFMA Br. 22–23. And they cite no evidence (because there is none) that their depth-of-book data fees (as opposed to their transaction fees and rebates) significantly affect their order flow. Their *only* attempt to offer "statistical evidence to support the link between order-flow competition and market-data fees," Nasdaq Br. 29, failed to show any "causative relationship" between depth-of-book data fees and order flow, Initial Decision 39 (recognizing "limited" import of regression).

2. Instead, the Exchanges rest their order-flow theory almost entirely on the [redacted] anecdote, which *confirms* rather than refutes that traders have limited ability to shift order flow based on market-data fees. SIFMA Br. 25. As Nasdaq recognized, firms that trade in large volume cannot sustainably abandon a major exchange without "shooting themselves in the foot," Tr. 645, and potentially violating their best-execution obligations to their customers, Tr. 641. The reason is simple: abandoning a major exchange means forgoing valuable trading opportunities. Tr. 1039, 1202. This creates a classic collective-action problem. If any one firm unilaterally abandoned a major exchange to protest market-data fees, it would be disadvantaged vis-à-vis its competitors. Donefer ¶¶ 69–70; Tr. 931–32, 947–48, 1039–40, 1049–50. For the protest to be effective, multiple firms would have to agree to abandon the exchange, but that could amount to an illegal group boycott. *See NYNEX Corp v. Discon, Inc.*, 525 U.S. 128, 135 (1998).

The [redacted] anecdote proves the point. [redacted] "was only able to pull [order flow] for a short period of time" because "it was just costing [[redacted]] too much." Tr. 1192–93; *see* Tr. 795 (Ordover: "it was a temporary diversion of order flow"). The only contrary "evidence" is NQ-619, which Nasdaq improperly sprang on the last day of the hearing. SIFMA Br. 26–27. Nasdaq's contention that the need for the exhibit arose only after Dr. Evans's testimony, Br. 27 n.20, is absurd. In his report, which was served on the Exchanges more than a month before the hearing, Dr. Evans criticized Professor Ordover's reliance on the [redacted] anecdote because he "present[ed] no evidence that there was any significant and long-lasting diversion of order flow." Evans ¶ 69. If Nasdaq had bona fide evidence of a "significant and long-lasting diversion of order flow," it had every reason to marshal that evidence before the hearing. And it was obligated to disclose the exhibit and produce the underlying data so SIFMA could rebut it. Considering the exhibit despite Nasdaq's failure to do so would reward sandbagging.

In any event, the exhibit cannot shoulder the weight the Exchanges place on it. Contrary to Nasdaq's claim, Br. 32, the exhibit does not show it is sustainable for a large trader to divert order flow away from a major exchange based on market-data fees. Nasdaq assumes without any support that the apparent long-term decline in [redacted] volume was attributable to the data-fee increase. But correlation is not causation, and Nasdaq does not even attempt to account for other factors that much more plausibly explain the data in NQ-619. SIFMA Br. 27. Nor was SIFMA "free to call a [redacted] witness" to explain the exhibit. Nasdaq Br. 33. In the first place, SIFMA has no legal control over its members to compel their employees to testify. In the second place, Nasdaq sprang the exhibit in its rebuttal case without prior notice on the last day of the hearing, hours before the record closed. SIFMA had no opportunity to call a witness to respond.

3. The Exchanges' other anecdotes likewise do not show that traders can and do shift order flow in response to market-data fees, or that threats to do so have put significant or sustained downward pressure on the Exchange's depth-of-book data fees:

- Jump Trading's complaint about a "non-data-product service," Nasdaq Br. 28, is irrelevant: Nasdaq did not reduce the fee, and Jump Trading did not divert order flow. Moreover, in 2010, Jump Trading "threatened to move their order flow away unless [Nasdaq] reduce[d] their market data fees." SIFMA-125 at 627. But Nasdaq not only declined to reduce Jump Trading's market-data fees—less than two years later, it significantly *increased* them, causing Jump Trading to complain again, Tr. 594, but not to follow through on its threat to move order flow.

- Hudson River's complaining, Nasdaq says, Br. 28, resulted in a fee cap, but it is unclear what fees were capped, *see* Tr. 529–33, 648–49. If it was the tiny BX exchange's market-data fees, the anecdote is irrelevant to fees of a major exchange. Evans ¶ 71. If it was the $30,000 fee cap for TotalView in 2010, it was quickly superseded by the $75,000 cap implemented as part of the 2012 fee increase. Despite its attempt to negotiate, today Hudson River pays the $75,000 maximum. Tr. 1348.

- Pico Trading and Lime Brokerage warned NYSE Arca that their customers might shift order flow if NYSE Arca raised its prices. Tr. 73–75. But these warnings did not prevent NYSE Arca from imposing the 2015 fee increase that prompted the complaints, and there is no evidence that order flow was diverted as a result. *See id.*

- [redacted] was not persuaded by Nasdaq's $325,000 fee cap to route orders to Nasdaq, so Nasdaq quickly raised the cap to $500,000. SIFMA Br. 27 n.21, 32.

The only thing these anecdotes reveal is that "consult[ing] with … customers" and "taking … threats seriously," Nasdaq Br. 2, 33, do not amount to a significant competitive constraint on depth-of-book data fees. SIFMA agrees that "real-world market behavior" is what matters, *id.* at 30—and that is precisely the problem with the Exchanges' reliance on alleged "threats" that are rarely if ever carried out and are ineffectual when they are. Actions speak louder than words, and the Exchanges' real-world actions contradict their litigation theory and their "self-serving" "anecdotes." *NetCoalition I*, 615 F.3d at 541. In 2010, for example, Nasdaq's internal documents noted that "[high frequency trading] firms constantly complain about the high price of NASDAQ OMX market data since we have been able to extract higher fees from these clients than our competitors." SIFMA-125 at 627. Yet despite these constant complaints and supposed threats to divert order flow, less than two years later Nasdaq implemented its major 2012 fee increase targeting precisely these firms, and only *one* customer ([redacted]) diverted order flow, temporarily, in a futile effort to resist.

III. Other Evidence Confirms The Lack Of Significant Competitive Constraints.

The Exchanges' depth-of-book data business is characterized by low costs, extraordinarily high margins, limited marketing or innovation, and high barriers to entry. Each employs a strategy of "harvesting" supracompetitive profits from customers who have little or no ability to exert competitive pressure on the Exchanges' depth-of-book data fees.

1. The Exchanges do not dispute that Nasdaq consistently achieves depth-of-book margins above 70%, that executives tell investors these "high" margins result from "strong pricing power," or that "NYSE Arca enjoys similar profit margins." SIFMA Br. 33–34. They try to run away from this damning record of low costs and high margins by contending it is "not necessary" or "relevant," Nasdaq Br. 36, 37, has "little probative value," *id.* at 38, yields "meaningless" data, *id.* at 39, and is not even "evidence of market power," NYSE Br. 35.

This position flatly contradicts the D.C. Circuit's holding in *NetCoalition I* that cost and margin data are relevant: "we do not mean to say that a cost analysis is irrelevant," 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.'" 615 F.3d at 537. "Even NYSE Arca's proposal," the court recognized, "acknowledges that costs are relevant." *Id.* at 538.

The D.C. Circuit's emphasis on costs and margins cannot be tossed aside as a mere "textbook" model of an ideal market. *Contra* Nasdaq Br. 37; NYSE Br. 36. Rather, the court cited several precedents in which it used costs to assess "monopoly power" and "just and reasonable rates." 615 F.3d at 537–38. And, contrary to the Exchanges' misleading partial quotations of the transcript, Dr. Evans did not dismiss marginal cost as irrelevant. He testified that the textbook model is "close" to real-world analysis of market power, Tr. 1092, 1172–73; that price-cost margins should be considered alongside other evidence of market power, Tr. 1070, 1132–33, 1174, 1328–29; and that the Exchanges' extraordinarily high margins provide further confirmation that they have significant market power, Evans ¶ 78.

The Exchanges further obscure the facts by describing their own profit-margin data as a "meaningless" "measurement of accounting profits (not economic profits), which are not evidence of market power." Nasdaq Br. 39; NYSE Br. 35. This is not how Nasdaq describes those margins to investors; it attributes the high profits to the absence of "pricing pressure," SIFMA-283 at 19, not to its accounting decisions. For its part, NYSE Arca has not produced any cost or margin data, stating only that its trading revenue dwarfs its market-data revenue. Br. 3–4,

20. Setting aside that NYSE Arca's revenue figures are highly misleading,[13] it is the *profit* margin, not total revenue, that matters under *NetCoalition* and basic economic theory.

Nor do asserted "fixed and common costs" of supplying market data render cost data "meaningless" or the margins "superficia[l]." Nasdaq Br. 38–40; NYSE Br. 8, 36. The only fixed costs of producing market data are minimal aggregation costs. SIFMA Br. 34. The fixed costs of operating a *trading* platform cannot justify high *market-data* fees. The Exchanges have no response to SIFMA's showing that the Exchange Act does not permit them to recover trading costs as part of "fair and reasonable" market-data fees. SIFMA Br. 36. Nor do they respond to SIFMA's point that, even if trading costs were properly shared with the data business, there is no evidence that the Exchanges' joint returns bear a reasonable relationship to their purported joint costs. *Id.* at 36–37; *see Morgan v. Ponder*, 892 F.3d 1355, 1362 n.17 (8th Cir. 1989).

The Exchanges make no effort to show they are constrained to price their depth-of-book data in relation to their production costs (or to their supposed competitors' prices), as suppliers in a competitive market would be compelled to do. *See NetCoalition I*, 615 F.3d at 537 (a seller in a competitive market "makes only a normal return on its investment"). Instead, they concede that they price their depth-of-book data products based on their perceived "value" to customers. Nasdaq Br. 16, 21, 38; NYSE Br. 8, 36; Tr. 44, 65, 535, 585, 669. Nasdaq's "harvest strategy" "increas[es] price where [it] felt people weren't paying commensurate with the value they were getting out of the data." Tr. 585–87; NQ-526. When Nasdaq identifies a use that its customers are making of the data, it creates an additional fee to charge for that use. Tr. 589, 594. Nasdaq does not provide any additional content with these higher or new fees; it simply identifies value

[13] NYSE Arca's revenue figures misleadingly include revenue from NYSE Euronext's foreign exchanges and from derivatives trading, and fail to exclude transaction rebates and other expenses. Donefer ¶ 33 n.11; Tr. 245–52.

derived by customers, and then increases its pricing to capture as much of that value as possible. Tr. 593–94, 604; NQ-527. NYSE Arca's pricing approach is no different. Tr. 43–44, 65. This "value-based methodology" is how a company with market power sets prices. SIFMA Br. 12–13.

Unable to substantiate their fees based on any reasonable measure of cost, the Exchanges resort to irrelevant attacks on hypothetical cost-based regulation. Nasdaq Br. 36, 40; NYSE Br. 36. These concerns are beside the point: the question is whether the Exchanges' fees are subject to significant competitive constraints. If they are not—and the record overwhelmingly shows they are not—then the fees cannot be sustained under the "market-based" approach, regardless of what alternative framework the Commission may adopt to ensure the fees comply with the Exchange Act. The D.C. Circuit rejected these same arguments in *NetCoalition I*: "the SEC seemed to suggest that it might allow NYSE Arca's fees to be set by competition simply because of the difficulty of cost-calculating," 615 F.3d at 538, but "an agency may not shirk a statutory responsibility because it may be difficult," *id.* at 539. Market-based pricing cannot stand based on nonexistent competitive forces. *Id.* at 538 (quoting the Commission's observation in the ArcaBook order that "it obviously would be inappropriate for the Commission to rely on non-existent competitive forces as a basis for approving an exchange proposal").[14]

2. The Exchanges contend that "extensive marketing efforts" are "'absolutely necessary' to the success of [their] data business," and prove that they operate in a "highly competitive market." Nasdaq Br. 17. To the contrary, the minimal evidence of marketing confirms the absence of competition. NYSE Arca's market-data head conceded its "customer base is not volatile." Tr. 150. Brooks could not even *name* the depth-of-book products offered by BATS—

[14] The Commission's 2002 approval order, Nasdaq Br. 36, is irrelevant; it was entered before the Exchanges' demutualization unleashed their motive to maximize profits. *See* Donefer ¶¶ 18–19; Tr. 83–85; SIFMA-57 at 3; 64 Fed. Reg. 70613, 70629 (Dec. 17, 1999).

one of NYSE Arca's two purported competitors. Tr. 63–64. And ArcaBook's stale marketing materials were last updated in 2006, when it was free. Tr. 125–28. Likewise, Nasdaq's marketing material for TotalView has not changed for at least six years. Tr. 623–24. Its limited marketing force, Tr. 409, 587, 660, reflects the undisputed fact that roughly 100 of its largest customers, responsible for the vast majority of its depth-of-book data revenues, have no choice but to purchase its depth-of-book data, Tr. 400, 478, 1347; SIFMA-133 at 11, 14.

The record also belies Nasdaq's claim that "significant [product] enhancements and improvements" reflect competitive constraints. Br. 17. Albers could not identify any significant product innovations, apart from improved speed, since 2004. Tr. 620–23. He insisted there were "too many to name," Tr. 488, but described only one: customer choice of telecommunications providers—which does not change the market-data product itself at all. Tr. 622–23. Professor Ordover's report likewise described no innovations, Ordover ¶ 16, a subject he admitted "not investigating" "that deeply," Tr. 706. In any event, innovation "doesn't get at the issue of … significant competitive forces," Tr. 1117–18, because "even firms with monopoly power have incentives to innovate in order to increase demand and profits," Evans ¶ 52 & n.63; Tr. 689; *United States v. Microsoft Corp.*, 84 F. Supp. 2d 9, 26 (D.D.C. 1999).

3. Nasdaq asserts, without support, that a "lack of significant barriers to entry … [for] new data products" constrains market-data pricing. Br. 17. But this concerns trade execution, not depth-of-book data. Despite the entry of many new trading venues over the past decade, only one new provider of depth-of-book data has emerged (BATS). With only three providers of market data, the market remains quite concentrated. Tr. 1087. Even the Justice Department concluded that barriers to entry in real-time proprietary data are "formidable." NQ-611 ¶ 36.

Barriers for alternative trading systems (ATSs), moreover, are irrelevant for two reasons. ATSs do not provide depth-of-book data; the whole point of a "dark pool" is that its orders are hidden. Tr. 480. And even if they could potentially offer data in the future, Nasdaq Br. 17, "the SEC's duty is to ensure that fees are 'fair and reasonable'—not to predict that, with the entry of a competitor, they might someday get there," *NetCoalition I*, 615 F.3d at 543.

Finally, that some SIFMA members' ATSs compete for order flow says nothing about depth-of-book data market power. Tr. 1312. Indeed, the Exchanges' control over the price of their competitors' input is a further reason to scrutinize their fees. Nor does it matter that SIFMA members—whose fees are actually constrained by competition—generate profit by redistributing data, adding value to the data, or utilizing the data in their own businesses.[15] *Id.* These facts are irrelevant to whether the Exchanges have significant market power over depth-of-book data.

IV. The Exchanges' Fees Are Inconsistent With The Exchange Act's Purposes.

The Exchanges' fees undermine the Exchange Act's purpose of ensuring wide availability of market data in order to promote the fairness, efficiency, and transparency of financial markets. This is a substantial countervailing basis to disapprove the fees.

Both Exchanges contend that retail investors do not need or use depth-of-book data, but the Exchanges' own marketing materials tell a different story.[16] SIFMA Br. 39. So do the words of the Exchange Act and the Commission. The Act does not distinguish between institutional and

[15] NYSE Arca's assertion that "SIFMA members make billions of dollars in profit by reselling market data," Br. 8, is inaccurate and inexplicable, *see* Tr. 61–63; *cf.* Tr. 120 (Bloomberg charges $1 compared to NYSE Arca's $40).

[16] The Exchanges essentially abandon the Chief ALJ's erroneous assertion that because most trades execute at the NBBO, investors do not need depth-of-book data. The Exchanges do not dispute that trading *strategies* turn on depth-of-book data even when the execution price does not. SIFMA Br. 39. Nasdaq concedes that "depth-of-book data may sometimes be helpful when making trading decisions." Br. 42.

retail investors in requiring the Commission to ensure "the availability to … investors of information with respect to quotations for and transactions in securities." 15 U.S.C. § 78k-1(a)(1)(C)(iii). And the Commission has stated that "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. 70613, 70614 (Dec. 17, 1999). That is not true today. "To have visibility into the same level of liquidity that used to exist at the NBBO, a retail investor today would need to subscribe to the depth-of-book data products from several major exchanges," which—at a cost of several hundred dollars per year—is "not economical for retail traders who may only place a few dozen trades each year." Donefer ¶ 62; *see also* SIFMA-16 at 4–5; SIFMA-21 at 4–5; SIFMA-22 at 9, App. A; SIFMA-25 at 13–15; SIFMA-34 at 12.

Moreover, the notion that fees paid by professional traders would not ultimately be borne by their investor-customers makes no economic sense. Nasdaq Br. 42; NYSE Br. 38. In response to Professor Donefer's testimony that "lowering the cost to the institutions will lower the costs of trading and will increase the returns of the investments to all of the people who put their money in to live on when they retire or send their kids to school or whatever they're saving for," Tr. 1001, the Exchanges point to no countervailing evidence or reason why higher trading costs for professionals would (counterintuitively) *not* diminish investor returns or access.

Nor can the Exchanges identify any countervailing basis to approve their fees in the absence of significant competitive constraints. The Exchanges claim that lowering depth-of-book data fees would force them to increase their transaction fees and thereby drive trading to "unlit" venues. NYSE Br. 38–39; Nasdaq Br. 43–44. But they produced no evidence to support this theory, which is in tension with their principal argument that lower depth-of-book fees *increase* order flow. In fact, this theory is simply an offshoot of their unproven assertion that their overall return from trade executions and depth-of-book data is competitively constrained. The Exchanges produced no evidence that lowering their depth-of-book data fees would require them to increase trading fees to maintain a competitive rate of return, as opposed to simply eliminating the supracompetitive return they are currently earning from the data.

V. There Is No Basis For Any Adverse Inference Against SIFMA.

Throughout their briefs, the Exchanges complain that SIFMA presented "no evidence." That, of course, is wrong. SIFMA presented testimony from two distinguished experts in the securities markets and antitrust economics; it produced more than 300 exhibits; it fought, over the Exchanges' objections, to compel the Exchanges to produce their "ordinary course" documents, which further confirm the existence of market power (*e.g.*, "naked price increases," decade-old marketing materials, sky-high profit margins); and it vigorously cross-examined the Exchanges' fact and expert witnesses, extracting key concessions. All of this is evidence.

The Exchanges' real complaint is that SIFMA did not call *members* in its case-in-chief. But the Exchanges could have called these members in their case-in-chief. And the entire purpose of associational standing is to allow an action to be brought by a trade association on behalf of its members without the members' individual participation. Indeed, the Commission already determined that "neither SIFMA's claim that the fees at issue are inconsistent with the Exchange Act, nor its request that we set those fees aside requires the participation of individual SIFMA members." Order Establishing Procedures and Referring Applications for Review to Administrative Law Judge for Additional Proceedings, Release No. 34-72182, at 12. That is because the issue in this proceeding is the reasonableness of the *Exchanges'* fees; the *Exchanges* have the burden of proof; and the vast majority of the relevant evidence is in the *Exchanges*' exclusive possession. Tr. 1098–1100, 1136–37, 1167–68, 1193–95, 1207, 1284–85.

Further, the lack of evidence from SIFMA members cannot be held against SIFMA because SIFMA had no legal right or ability to compel the members to provide evidence. *See Huthnance*, 722 F.3d at 378 (adverse inference appropriate only when party fails to produce "evidence within [its] control"); *In re NCAA Student-Athlete Name & Likeness Litig.*, No. 09-1967, 2012 WL 161240, at *1 (N.D. Cal. Jan. 17, 2012) (association could not be compelled to produce evidence from its members). And the Exchanges were free to subpoena evidence from SIFMA members, but they never even attempted to do so. *See Sherwin-Williams Co. v. Spitzer*, No. 04-185, 2005 WL 2128938, at *10 (N.D.N.Y. Aug. 24, 2005); *Builders Ass'n of Greater Chi. v. City of Chi.*, No. 96-1122, 2003 WL 291907, at *2 (N.D. Ill. Feb. 10, 2003).

The Chief ALJ also properly denied NYSE Arca's baseless motion for an adverse inference based on SIFMA's experts' meetings with two SIFMA members. As the Chief ALJ correctly found, SIFMA had no obligation to disclose the meetings because neither expert relied on any information from the meetings for his opinion. Order on Motion for Adverse Inference 5 (citing Tr. 969–70, 1101–02, 1190–92, 1224–25). And SIFMA was not required to produce the notes taken by Dr. Evans's assistant because they were not "created or maintained in the ordinary course of business" and thus were not responsive to the subpoena. *Id.* SIFMA fully complied with its obligations under the subpoena and did not "hide" anything.

Nor, contrary to NYSE Arca's contention, did SIFMA have any *reason* to hide the [redacted] meeting, since "nothing [Dr. Evans] learned at that meeting [was] in any way inconsistent with the opinions in [his] report." Tr. 1191. In fact, the information relayed at the meeting *supported* SIFMA's case by confirming there was no long-lasting diversion of order flow. Tr. 1192–93. If anyone has "hidden" relevant evidence from the Commission, it is NYSE Arca, which presented misleading customer-attrition figures to the Commission and failed to present any customer-attrition data for any of its many price increases other than the 2009 increase. *See supra* at 2–4. In accusing SIFMA of hiding evidence, therefore, NYSE Arca is throwing stones from its own glass house. The Exchanges have the burden to show their fees are subject to significant competitive forces. Their attempt to foist their burden onto SIFMA is a meritless attempt to divert attention from their own failure of proof.

CONCLUSION

The Commission should reverse the Initial Decision and vacate the Exchanges' fees.

Dated: December 07, 2016

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CERTIFICATE OF COMPLIANCE

Pursuant to Rule 450(d) of the Commission's Rules of Practice, I hereby certify that the foregoing brief contains 9,978 words exclusive of the cover page, table of contents, and table of authorities.

Dated: December 07, 2016

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