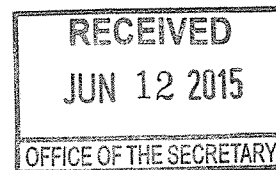


UNITED STATES OF AMERICA
before the
SECURITIES AND EXCHANGE COMMISSION



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 Murray,
Chief Administrative Law Judge

POST-HEARING BRIEF OF THE NASDAQ STOCK MARKET LLC

CONTAINS HIGHLY CONFIDENTIAL INFORMATION

REDACTED VERSION

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Pursuant to this Court's instructions, the Nasdaq Stock Market LLC ("Nasdaq") respectfully submits this post-hearing brief. As set forth below, the Application of the Securities Industry and Financial Markets Association ("SIFMA") challenging Nasdaq's immediately effective rule change—Exchange Act Release No. 34-62907, No. NASDAQ-2010-110 (Sept. 14, 2010) (the "Rule Change")—as a limitation on access under the Exchange Act should be dismissed.¹

I. INTRODUCTION AND SUMMARY OF CONCLUSIONS

The central issue in this proceeding is whether Nasdaq was "subject to significant competitive forces" in setting its prices for the sale of depth-of-book data. 73 Fed. Reg. 74,770, 74,781 (Dec. 9, 2008) (the "ArcaBook Order"). The evidence adduced at the hearing overwhelmingly demonstrates that Nasdaq is subject to significant competitive forces that constrain its depth-of-book data pricing. Indeed, the evidence demonstrating these competitive forces was either uncontroverted or, in many cases, conceded by SIFMA's own experts.

The evidence supports several key findings that compel a decision in favor of Nasdaq and NYSE Arca, Inc. ("NYSE Arca") (collectively, the "Exchanges"):

Conclusion #1: The vast majority of traders do not require depth-of-book data from all exchanges. Competition for sales to these traders constrains pricing.

¹ The Rule Change at issue in SIFMA's Application relates only to Level 2 distributor and access fees. However, SIFMA has used this Application as a platform for attacking a subsequent April 2012 rule change that established tiered pricing for non-display subscriptions. *See, e.g.*, Evans Tr. 1188. While Nasdaq notes that this April 2012 rule change is not at issue in this Application, Nasdaq will respond to SIFMA's arguments against the April 2012 rule change as it has occupied so much of SIFMA's and this Court's time and attention. Indeed, the arguments presented herein require the dismissal of all of SIFMA's pending rule challenges. Nasdaq also respectfully incorporates and preserves for further review all objections stated in footnote 1 of Nasdaq's Pre-Hearing Brief, including but not limited to its arguments on statutory interpretation (including the correct legal standard for a denial of access under Section 19(d)), standing, the applicable burden of proof, and the timeliness of SIFMA's application.

SIFMA's only argument in support of its assertion that the Exchanges are free from competitive forces is that "many market participants" supposedly require depth-of-book data from all "the major national exchanges," and therefore there is no meaningful substitution-related competition among the exchanges. SIFMA Pre-Hearing Br. at 18; Donefer Report at ¶ 59-70.² The evidence at trial, however, demonstrated that the vast majority of market participants either do not require depth-of-book data at all, or do not require depth-of-book data from all exchanges. As Mr. Oliver Albers, Head of Sales for Nasdaq Global Data Products, testified, "there are very few firms that are engaged in this activity [requiring depth-of-book data]. It's a very limited subset that's involved in these sort of advanced trading practices." Albers Tr. 410. In fact, only those customers who employ server-based electronic trading strategies arguably require full depth of book data. *See* Ordover Tr. 715-18. This point was effectively conceded by SIFMA's industry expert, Professor Bernard Donefer, who testified that SIFMA's argument about traders who supposedly require depth-of-book data from all exchanges applies principally to a group of roughly 100 of the largest banks and electronic trading firms who purchase depth-of-book data for their servers. Donefer Tr. 1013-16 ("It's a small number. Depth-of-book data . . . a group of people for whom that is essential. . . . There are about 100 firms who admittedly fall into that category.").

For all other customers—who comprise the vast majority of customers of depth-of-book data—the evidence clearly shows that the threat of customer switching provides a powerful constraint on depth-of-book data pricing. And SIFMA offers no evidence whatsoever to suggest

² Citations to the trial record will be denoted by the witness's last name, followed by the applicable page of the record, for example, "Albers Tr. 410." Exhibits will be denoted by the party producing the exhibit, followed by the applicable exhibit number, for example "NQ 501." Nasdaq's trial demonstratives will be marked as NQ-DEMO, followed by the demonstrative number, for example "NQ-DEMO 16."

that there is any lack of competitive constraint on the Exchanges' pricing. At trial, Mr. Albers testified that Nasdaq experiences customer churn (or turnover) frequently in large part because of "customers moving back and forth between different products." *See* Albers Tr. 442-44, 565. He further testified that, in his experience, customers can and do "scale back their usage" of data, expand or contract the number of downstream subscribers that receive data, and switch between full and partial depth-of-book data products. Albers Tr. 413, 465. This evidence was supported by Nasdaq's economics expert Professor Janusz Ordover's calculations and findings that traders' ability to switch among depth-of-book data suppliers has exerted downward pressure on prices and resulted in substantial annual churn rates. Ordover Report ¶¶ 23-26. Moreover, customers also "substantially increased or reduced (or both) the number of subscribers that received" depth-of-book data from Nasdaq. Ordover Report ¶ 27. These competitive forces constrain Nasdaq's pricing. Albers Tr. 415-17, 496-97, 542-43. As a result, Nasdaq's prices have been fairly consistent for more than a decade—even decreasing in important instances.

Conclusion #2: The roughly 100 large banks and electronic trading firms who might require depth-of-book data from all exchanges exert powerful competitive pressure on the Exchanges, including by shifting order flow.

At the hearing, it was clear that SIFMA's reference to market participants who supposedly require data from all exchanges was primarily in reference to the roughly 100 firms who purchase data for use by servers executing trading algorithms. *See* Donefer Tr. 1013. The evidence at trial clearly demonstrates that these firms—multi-billion dollar enterprises that include the world's largest banks and electronic trading firms—exercise powerful constraints on the Exchanges' data pricing through their control of order flow. Moreover, even this small group of firms benefits from the fierce price competition to sell data to those traders who do not require

all depth-of-book data. Thus, competition for depth-of-book data benefits all consumers, leading to restrained pricing even for those firms that supposedly require such data from all exchanges.

The 100 firms that are the subject of SIFMA's theory control roughly 90 percent of all trades executed on Nasdaq's equities exchanges. See Albers Tr. 534-36 (the firms that "consume, basically, the full content of the data set . . . account for 90 percent plus of the order flow"); Donefer Tr. 1014 (the "100 [firms], those 5,000 [machines], account for 90 percent of the transactions on the national exchange"). The evidence also showed that this order flow is the "life blood" of Nasdaq (and other exchanges), and that the Exchanges compete aggressively to attract and retain this order flow. Albers Tr. 451 ("Order flow . . . it's the life blood of our exchange. . . . Without the order flow, Nasdaq really doesn't exist."); Donefer Tr. 1042 ("There is significant competition for order flow. . . . And each of the venues is very afraid of losing order flow."); Evans Tr. 1068 ("What we've seen over the last decade, and I think this is a point of agreement among everyone, is there's been intensifying order flow competition over that period of time."). The evidence also showed, not surprisingly, that these large customers use their control over their order flow to constrain the Exchanges' pricing of depth-of-book data. Albers Tr. 416, 451 ("[I]f we are too aggressive on our pricing on the data side, customers can penalize us by routing order flow away from our market When they control order flow, they have the upper hand in almost all of our negotiations."). For example, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] NQ 505. As Mr. Albers testified, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The evidence on this point supplied a key missing piece identified in the D.C. Circuit’s decision in *NetCoalition v. SEC*, 615 F.3d 525 (D.C. Cir. 2010) (“*NetCoalition I*”). The court in *NetCoalition I* found that “competition for order flow is fierce”—requiring the exchanges to continue to compete in order to retain their shares of order flow. *Id.* at 539. The court also recognized that fierce competition for order flow could constrain the price of depth-of-book data such as, for example, if “a minority of professional traders is interested in . . . depth-of-book data but those few execute an outsized share of the total trading volume so that unreasonable fees would cause them to place their orders elsewhere and ultimately affect order flow.” *Id.* at 541 n.14. At the time, the court noted that such evidence was not in the record. *Id.* Now, however, that evidence is in the record. The evidence at the hearing demonstrated that, in fact, the customers who supposedly require depth-of-book data are both small in number and very powerful, thus supplying the evidence that was missing in *NetCoalition I*.

Conclusion #3: These competitive forces have constrained Nasdaq’s data pricing.

At the hearing, Mr. Albers testified that these competitive forces constrain Nasdaq’s pricing decisions, a point he illustrated with examples when such forces led Nasdaq either to reduce or decline to raise its depth-of-book data prices. For example, Nasdaq has instituted fee caps (in effect, permitting additional users to be added above the cap at a zero price) to attract customers who will distribute Nasdaq’s depth-of-book data to retail traders (who do not require all or necessarily any depth-of-book data) and can switch among data providers. *See, e.g.*, Albers Tr. 455. And, as Mr. Albers testified, Nasdaq considers the pressure from the large banks

and electronic trading firms when it makes its pricing decisions, and Nasdaq has in fact reduced its pricing tiers in response to such pressure. *See* Albers Tr. 506-507.

SIFMA attempts to gloss over this evidence with the sweeping assertion that Nasdaq has raised the price of depth-of-book data many times over the years. *See* SIFMA Pre-Hearing Br. at 2. But the evidence showed this to be false. Nasdaq has gone 5 to 10 years without raising its depth-of-book data prices *at all* for most of its customers. The supposed “price increases” to which SIFMA pointed were either *price reductions* or *new* prices for *newly introduced* products or price adjustments (typically affecting small numbers of customers) that reflected the *increased value* of products and services Nasdaq was providing. *See, e.g.,* Albers Tr. 585.

Conclusion #4: There is no evidence that any customer has been denied access to Nasdaq’s depth-of-book data.

This proceeding began with an assertion by SIFMA that its members were denied access to Nasdaq’s depth-of-book data by virtue of the prices charged by Nasdaq. *See* SIFMA Pre-Hearing Br. at 3. That assertion is utterly unsupported, and was contradicted by the evidence adduced at the hearing.

First, there is no suggestion that any retail investor or any trader who purchases depth-of-book data for display use has been denied access to Nasdaq’s depth-of-book data. The evidence at the hearing showed that most traders have no real use for depth-of-book data (*see* Albers Tr. 407-10), and those who do find a need for such data either get it for free or for a fee of a few dollars per month. *See* Albers Tr. 384 (“Our Depth-of-Book products are available to anyone and everyone. Any retail investor can get access to our depth-of-book data, many times free of charge, from a retail online broker like Charles Schwab or Ameritrade. They can also come directly to our website and enter in a credit card and pay \$14 a month to get access to this

information.”). As Mr. Albers testified, “[t]his type of information has never been more readily available than it is now.” Albers Tr. 384-85.

Second, the evidence thoroughly undermines any suggestion that the roughly 100 large banks and electronic traders who purchase depth-of-book data for non-display usage have been denied access to depth-of-book data. To the contrary, the evidence showed that most of these banks pay a few hundred or a few thousand dollars per month for this data. For example, as Mr. Lee Shavel, Nasdaq’s Chief Financial Officer, testified at trial, one of the largest banks in the world is able to thrive with just [REDACTED] receiving the direct feed for TotalView, at a cost of just [REDACTED] a month for that data. Shavel Tr. 1350-51. SIFMA offered no evidence from any member to suggest that these fees have denied any of these multi-billion dollar enterprises access to any data.

Conclusion #5: There is no evidence that anyone was denied access by the Nasdaq fee at issue in this proceeding.

The Rule Change harmonized access and distribution fees for Level 2 with those that existed already for TotalView and OpenView. *See* Ordover Report ¶ 45. In other words, the fee change impacted only access and distribution fees paid by customers not previously paying these fees for TotalView and OpenView. Customers already paying these fees for TotalView and OpenView saw no price change at all as a result of this rule change—including all of the SIFMA members who have submitted declarations in this proceeding. Indeed, SIFMA’s own economics expert, Dr. David Evans, conceded during the hearing that no price increase resulted from the rule change at issue. Evans Tr. 1183. And, as SIFMA’s industry expert conceded, those customers who purchase only Level 2 data are, by definition, not purchasing all depth-of-book data—in other words, they are not among the small set of customers who supposedly require all

depth-of-book data from all exchanges. *See* Donefer Tr. 964 (Level 2 is “barely” depth-of-book data); Donefer Tr. 992 (Level 2 products do not contain those characteristics that are important to the market participants who need depth-of-book data). Accordingly, SIFMA’s theory of market power does not apply to these customers. Not surprisingly, SIFMA has not identified anyone who was denied access to anything by this fee change.

Conclusion #6: There is no basis to conclude that the Exchanges’ depth-of-book data pricing should equal their marginal costs.

In its pre-hearing brief, SIFMA put great weight on a passage in the D.C. Circuit’s *NetCoalition I* opinion stating that, in a perfectly competitive market, “the price of a product is supposed to approach its marginal cost.” SIFMA Pre-Hearing Br. at 11-14.

But as every economist who testified at the hearing explained (including SIFMA’s own economist), it is unrealistic in this real-world market to expect any exchange’s price of its depth-of-book data to equal its marginal cost of transmitting data to customers. Ordover Report ¶¶ 51-53. As both SIFMA’s and Nasdaq’s economists testified, the model of perfect competition in which prices approach marginal cost is a “textbook” example that does not occur in the real world, even in markets that are fiercely competitive. Evans Tr. 1092 (“But the textbook model is really just designed to teach people and it’s a convenient way to talk about things, which is why you see that language, for example in . . . the *NetCoalition* decision.”); Evans Tr. 1146 (agreeing that “[i]n the real world virtually all firms charge prices that are greater than the marginal cost”); Ordover Tr. 735 (in this case with joint and common costs, “one cannot make [them] disappear by some fiat”).

As the economists explained, it is reasonable—and consistent with a competitive environment—to expect the Exchanges to price above their marginal costs in order to recoup

their fixed costs of producing depth-of-book data, along with the joint and common cost of running an exchange, which is necessary to produce such data. Ordover Report ¶ 55. This includes the Exchanges' costs to attract displayable orders—including the rebates paid by the Exchanges—which provide value to the Exchanges because such orders comprise the depth-of-book data that they sell. *See, e.g.*, Donefer Tr. 1030 (admitting that Nasdaq pays more for displayable orders because they need data for depth-of-book products); Ordover Tr. 737-38; Evans Tr. 1147-49. Nasdaq pays several hundred million dollars per year to attract order flow—a cost that is many times greater than the revenue Nasdaq earns on the sale of its depth-of-book data.³ Albers Tr. 389, 432. Accordingly, attributing even a fraction of these expenditures to Nasdaq's depth-of-book data would swamp Nasdaq's data margins. *See* Albers Tr. 389, 432; NQ 610. Thus, even if SIFMA could show that the D.C. Circuit's reference to “textbook” perfect competition should be taken at face value, it has offered no basis to apply that model in practice in a manner that accounts for the Exchanges' costs to acquire and produce their depth-of-book data.

For all of these reasons, and for the reasons set forth below, SIFMA's petition challenging Nasdaq's immediately effective rule change should be dismissed.

II. LEGAL STANDARD

The Commission ordered this hearing to determine “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 [the Commission's] 2008 ArcaBook Order, the D.C. Circuit's decision

³ As several witnesses explained at trial, (Ordover Tr. 735-38, Shavel Tr. 1337-38) Nasdaq's internal accounting methodologies do not attribute to its data business the shared costs of operating the trading platform and attracting orders, even though these costs are vital to the existence of the data business.

in *NetCoalition I*, and appropriate briefing from the parties.” Order Establishing Procedures And Referring Applications at 20 (May 16, 2014).

Section 19(f) of the Act calls for an inquiry into whether the rule “protect[s] investors and the public interest,” 15 U.S.C. § 78f(b)(5), whether it “impose[s] any burden on competition not necessary or appropriate in furtherance of the purposes” of the Act, *id.* § 78f(b)(8), and “whether the action will promote efficiency, competition, and capital formation.” *Id.* § 78c(f). The Commission has consistently interpreted these standards as requiring application of a market-based approach. *See, e.g.*, Regulation NMS, Exchange Act Release No. 34-51808 (June 9, 2005).

Consistent with the purposes of the Act, under the two-part ArcaBook test, Your Honor must first determine whether the exchange was “subject to significant competitive forces in setting the terms of its proposal for non-core data, including the level of any fees.” *ArcaBook Order*, 73 Fed. Reg. at 74,781. As the Commission and the D.C. Circuit have recognized, there are at least two types of competitive forces that can put pressure on exchanges in setting their prices. First, “the availability of alternatives to an exchange’s depth-of-book data significantly affects the terms on which an exchange distributes such data,” *ArcaBook Order*, 73 Fed. Reg. at 74,784, because customers can substitute competing products or simply “do without” if confronted with a supracompetitive price. *See also NetCoalition I*, 615 F.3d at 542, 544. Second, in light of the “compelling need to attract order flow from market participants,” *ArcaBook Order*, 73 Fed. Reg. at 74,782, exchanges’ depth-of-book prices are constrained when their customers can use the threat of shifting order flow to put pressure on the exchanges’ data prices. *See NetCoalition I*, 615 F.3d at 539-41.

Under the second part of the ArcaBook test, if the exchange “was subject to significant competitive forces in setting the terms of [the] proposal,” the rule change must be upheld unless the party challenging the rule demonstrates “a substantial countervailing basis to find that the terms nevertheless fail to meet an applicable requirement of the Exchange Act or the rules thereunder.” *ArcaBook Order*, 73 Fed. Reg. at 74,782. For example, a countervailing basis may arise if an exchange were to use a fee to forestall competition by penalizing market participants for trading in other markets. *See id.* Alternatively, if the exchange was not subject to significant competitive forces, it must provide “a substantial basis, other than competitive forces, in its proposed rule change demonstrating that the terms of the proposal are equitable, fair, reasonable, and not unreasonably discriminatory.” *Id.* at 74,781.

In *NetCoalition I*, the D.C. Circuit held that the Commission’s market-based approach to evaluating data fees, as reflected in the two-part ArcaBook test, was consistent with the Commission’s statutory mandates. *NetCoalition I*, 615 F.3d at 534-35. The court similarly recognized that evidence of competition could include both (a) the existence of alternative products and (b) evidence that indisputably “fierce” competition for order flow may constrain market data fees. *Id.* at 539-44. The court further noted that “evidence of trader behavior” was important in evaluating whether there are significant competitive forces. *Id.* at 543.

The court ultimately held that, on the record before it, the Commission had presented insufficient evidence to support its determination that significant competitive forces constrained NYSE Arca’s ability to set fees for ArcaBook data. *Id.* at 544. The evidentiary shortcomings in *NetCoalition I*, however, are not present here. As discussed below, Nasdaq (and NYSE Arca) presented significant evidence at trial to show, among other things, that traders can and do substitute market-data products in response to changes in price and other incentives, and that

competition for order flow constrains market data prices because the principal consumers of that data control an overwhelming proportion of the order flow.

In addition, there is no countervailing basis on which to find a violation of the Exchange Act. To the contrary, the evidence developed at trial shows that this market is performing competitively and serves the public interest, including through robust innovation, consistently low prices, and broad distribution of data.

III. ARGUMENT

A. Nasdaq's Fees Are Consistent With The Exchange Act Because The Market For Proprietary Data Products Is Subject To Significant Competitive Forces

1. Data Prices Are Constrained By Competition To Serve The Vast Majority Of Traders, Who Do Not Require Depth-Of-Book Data From All Exchanges And Who Can Switch Products, Reduce Usage, Or Drop Data Purchases Altogether.

SIFMA's argument that the exchanges are free from competitive forces in pricing market data is premised on the argument that "many market participants" require such data from "each of the major exchanges" to execute their trading strategies. SIFMA Pre-Hearing Br. at 18; Donefer Report ¶¶ 59-70. But even SIFMA's own experts, and counsel, conceded at trial that this premise is false. *See* Albers Tr. 564. Instead, it is undisputed that the vast majority of consumers either do not buy depth-of-book data at all, do not need (and cannot use) depth-of-book data from all exchanges, or trade in dark pools where there is no depth-of-book data at all. *See* Albers Tr. 385; Ordover Report ¶ 30.

SIFMA's industry expert, Professor Bernard Donefer, conceded at trial that SIFMA's argument that depth-of-book data is supposedly "essential" applies to roughly 100 firms that elect to pursue computer-based trading strategies that utilize depth-of-book data from all exchanges. *See* Donefer Tr. 1011-14; *see also* Albers Tr. 410; NQ-DEMO 16; Ordover Tr. 716-18. These roughly 100 firms house approximately 5,000 computers, or "machine subscribers,"

that receive the data as a direct feed, process it, and execute trading strategies based on it. Ordover Tr. 717-18. These 100 firms include some of the world's largest commercial banks and institutional investors, such as SIFMA members [REDACTED] [REDACTED] Shavel Tr. 1349.

Leaving aside this small number of large banks and electronic traders, SIFMA's experts conceded that depth-of-book data is *not* essential information for traders. *See, e.g.*, Donefer Tr. 996-98 (not all market participants need depth-of-book products); *id.* at 1013-14 (“[t]here are about 100 firms who admittedly fall into that category” requiring depth-of-book data); *id.* at 1005 (non-professionals do not need depth-of-book data); *id.* at 1011 (“The question of essentiality is, again, dependent on the user and what they're doing and what their strategy is. So what is essential to one user is not necessarily essential to another user.”); Evans Tr. 1265-66 (opinions regarding the essentiality of depth-of-book data are based on Professor Donefer's opinions). Indeed, the evidence at trial showed that there is a large set of traders who do not purchase *any* depth of book data at all, let alone all data from all exchanges. *See, e.g.*, Nevo Tr. 349.

Even among traders who purchase some market data, the type of data purchased varies significantly. Approximately [REDACTED] professional customers subscribe to some market data from Nasdaq—including SIP data (*i.e.*, “core” data or “top-of-book” data), Nasdaq Basic (Nasdaq's SIP data), Level 2, TotalView, and OpenView. *See* NQ-DEMO 16; *see also* Albers Tr. 409. Most of these professional subscribers do not purchase any depth-of-book data at all from Nasdaq. *Id.* Indeed, of these roughly [REDACTED] professional subscribers, only approximately [REDACTED] purchase any Nasdaq depth-of-book data. *See* NQ-DEMO 16. And among that subset of professional subscribers, approximately [REDACTED] purchase only Level 2 data, which is not even full depth-of-book data from Nasdaq—or, as SIFMA's expert conceded, it is “barely” depth-of-book

data. *See* Donefer Tr. 992-93; *see also* Albers Tr. 404; Ordover Tr. 707; Evans Tr. 1163; Albers Tr. 407-10; NQ-DEMO 16.⁴ Indeed, out of the entire universe of roughly [REDACTED] professional traders who purchase some type of Nasdaq market data, there are only approximately [REDACTED] subscribers to TotalView, Nasdaq's full depth-of-book product for Nasdaq-listed stocks. *Id.* At least [REDACTED] professional traders do not even purchase all of Nasdaq's depth-of-book data, and thus cannot be said to require all depth-of-book data from all exchanges.

Moreover, out of the roughly [REDACTED] professional subscribers to TotalView, most take the data for display usage—meaning they are not executing the server-based trading strategies for which, according to Professor Donefer, all depth-of-book data from all major exchanges is required. *See* Donefer Report ¶¶ 64-65; NQ-DEMO 16. There are roughly only 100 customers, operating roughly 5,000 servers, that fall into the category for which all data from all exchanges is supposedly required. *See* NQ-DEMO 16; *see also* Albers Tr. 407-10. For everyone else—hundreds of thousands of professional traders and millions of non-professionals—it is beyond serious dispute that the price of depth of book data is constrained by (i) competition among the exchanges for customers who can switch among available depth-of-book products, and (ii) the ability of customers to reduce or eliminate their usage of such data, including by utilizing non-depth market data options such as core data. In short, it is undisputed that most traders do not use depth-of-book data at all, and of those who do use it, most do not need depth-of book data from all exchanges.

⁴ *See* Albers Tr. 403 (“Level 2 is basically a product that fits in between the NASDAQ basic product and NASDAQ TotalView. So what Level 2 is, whereas TotalView provides every bid and every offer for all market participants . . . Level 2 only provides the best bid and best offer for each market [participant]. So you’ll get one bid and one offer for Morgan Stanley rather than multiple bids and multiple offers. So it’s a subset of TotalView data. . . . [Y]ou get 20 times more liquidity on TotalView than you do on Level 2.”).

As SIFMA's economic expert conceded, there is no evidence of monopoly power in this market. *See* Evans Tr. 1121 ("I have not made an assertion that the exchanges have monopoly power."). In particular, Dr. Evans testified that neither Nasdaq's nor NYSE Arca's depth-of-book data business is a natural monopoly requiring price regulation. Evans Tr. 1084-85. This testimony is consistent with the conclusion of the Antitrust Division of the Department of Justice in a separate merger investigation that depth-of-book data products offered by the different exchanges were reasonably interchangeable substitutes—not complements, as SIFMA's theory of essentiality necessarily implies. NQ 611 ¶¶ 20-21 (concluding that NYSE Arca and Direct Edge are among "four major competitors" who "sell competing proprietary market data products"); *see also* Ordover Tr. 685, Nevo Tr. 290-91 (testifying that each had reached the same conclusion as the Department of Justice: That there is vigorous competition among the exchanges for the provision of substitutable depth-of-book data products).

Contrary to SIFMA's allegations, the evidence at trial showed that depth-of-book data products are meaningful substitutes for most customers, that switching can and does occur, and that this competitive force constrains the Exchanges' pricing. Contrary to SIFMA's claim that customers require all data from all exchanges, Mr. Albers provided specific examples of firms that switched completely from Nasdaq's depth-of-book data to other exchanges (Albers Tr. 565, [REDACTED]), and Professor Ordover identified more than [REDACTED] firms who had switched between NYSE Arca and Nasdaq data based on his analysis of the companies' transactional data. *See* Ordover Tr. 702; *see also* Ordover Report ¶ 28 (identifying [REDACTED]
[REDACTED])

████████████████████).⁵ There was thus direct evidence at trial, in Mr. Albers's words, of "customers moving back and forth between different products." Albers Tr. 444; *see also* NQ 511. In addition, the evidence shows a number of customers—including large online retail brokers who provide data to tens of thousands of users—who purchase depth-of-book data from Nasdaq and not NYSE Arca and/or NYSE, and thus are in position to switch if they were charged a supracompetitive price. *See* NYSE Arca 87.

In addition to identifying specific customers who can and did switch between Nasdaq and NYSE Arca, Professor Ordover performed a "churn analysis," which measures the number of customers Nasdaq added and lost per year between 2008 and 2014, which demonstrated active turnover amounting to a significant percentage of Nasdaq's customer base. *See* Ordover Report ¶ 26; Ordover Tr. 696-97. Professor Ordover's analysis demonstrated that the number of customers added and lost per year comprised ██████████ of the total number of customers per year. Ordover Report ¶ 26; Ordover Tr. 702. This dynamic movement of customers from and to Nasdaq demonstrates that "people can switch and do switch from one supplier to another," which is consistent with the evidence that the availability of reasonable substitutes for Nasdaq's depth-of-book data constrains Nasdaq's pricing. *See* Ordover Tr. 696-97.

While SIFMA's economist argued that he would expect to see even more evidence of customers switching (Evans Tr. 1264-67), the substantial switching evidence discussed above is entirely inconsistent with SIFMA's theory that customers require all data from all exchanges.

⁵ As Professor Ordover testified, he was able to identify ██████ customers that switched from Nasdaq to NYSE Arca, but did not have access to information involving purchases from other exchanges (BATS, Direct Edge), although SIFMA's own members could have provided such examples. Ordover Tr. 702. Moreover, because customer accounts may have been held under different or multiple names and are not standardized across databases, Professor Ordover likely did not capture every instance of customer switching. Ordover Report at 15 & n.39.

Moreover, the evidence—including testimony from Mr. Albers—shows that the level of switching and the threat of additional switching constrain Nasdaq’s pricing. Albers Tr. 443-44, 565, NQ 511. That, of course, is the fundamental question here. In any event, Dr. Evans is wrong to speculate that there should be a high incidence of customer switching, given that Nasdaq’s prices for depth-of-book data are reasonably related to value, have generally remained unchanged for many years, and have even been capped in important instances in order to retain business. For example, Nasdaq’s monthly fee for TotalView data is \$14 per month for non-professional users and \$70 per month for professional users. Albers Tr. 452-53. These fees have not increased in 12 years. *Id.* And Nasdaq has implemented fee caps, such as one for [REDACTED] and similarly situated customers, that, once the cap is reached, offer the opportunity to add an unlimited number of users at no additional cost. Albers Tr. 455-56; *see also* NQ-DEMO 17. While SIFMA has mischaracterized fee caps as price increases, they have in fact significantly reduced the user fees. In this environment, where customers are getting products they want at reasonable prices that have not increased for years, there is no basis (and Dr. Evans has provided none) to expect them to switch to other providers in even greater numbers than the record already discloses.

As Mr. Albers testified, the threat of switching is always present and constrains Nasdaq’s pricing. In particular, because Nasdaq’s contracts with its customers for depth-of-book data run month-to-month, Nasdaq is in danger of losing customers at the end of any given month if its pricing should get out of step with competitors. *See* Albers Tr. 442-43; *see also* Albers Tr. 443 (“[C]lients . . . have built infrastructure to switch back and forth, you know, month to month based on market share changes, pricing changes, things like that”); Albers Tr. 515-17 (testimony about [REDACTED])

and reductions of the number of subscriptions purchased by [REDACTED]

[REDACTED]).

In addition, most customers (other than the roughly 100 firms that supposedly require full depth-of-book data) can switch from full to partial depth-of-book data, exerting further downward pressure on prices. Albers Tr. 409 (a substantial percentage of traders purchase only Level 2 data); Albers Tr. 411-15 (testifying that [REDACTED]

[REDACTED]

[REDACTED]); Ordo Report ¶ 30 (“[M]any market participants find a subset of the available depth-of-book information adequate for their trading strategies.”).

In short, SIFMA’s concessions and the undisputed evidence at trial show that depth-of-book data is not essential for most traders and, in fact, traders have readily available substitutes for any given data product that constrain the prices that exchanges can charge for such products. The theory underlying SIFMA’s case simply does not apply to the vast majority of the marketplace.

2. Powerful Competitive Pressures Are Imposed On Data Pricing By The Control Over Order Flow Held By The Roughly 100 Large Banks And Electronic Trading Firms That Purchase Depth-Of-Book Data From All Exchanges

As noted above, the best that SIFMA could muster at the hearing in support of its theory of essentiality was that roughly 100 large banks and electronic trading firms purchase depth-of-book data from multiple exchanges in order to execute certain trading strategies. But the evidence at trial conclusively showed that these market participants exercise enormous competitive pressures on the exchanges that constrain prices, including the ever-present threat to move order flow to a different exchange. And these constraints operate in a market already

made highly competitive because competition for the vast majority of customers who do *not* require all depth-of-book data drives the price of data products downward.

There is no dispute that competition among exchanges to secure order flow is intense. *See, e.g.*, Ordover Tr. 719; Donefer Tr. 1036, 1042; Evans Tr. 1068, 1076. And as Professor Donefer acknowledged, the small number of machine-based purchasers of depth-of-book data who supposedly require data from all exchanges account for an enormous share of this order flow—approximately 90% of all trades executed on the Nasdaq equities platform, with customers individually accounting for as much as 6% of order flow at nationwide. *See* Donefer Tr. 1014, 1034 (agreeing that a small number of market participants to whom depth-of-book data is essential exercise a tremendous influence over order flow); *see also* Albers Tr. 450. SIFMA’s experts agreed at trial that the potential loss of order flow from these customers created a significant competitive constraint on the exchanges, as each exchange is “afraid of losing order flow,” Donefer Tr. 1042, *see also* Donefer Tr. at 1038, including to dark pools, which has led to “intensifying order flow competition” over the last decade, Evans Tr. 1068, 1086-87. Because this small number of market participants “execute a huge share of trades on Nasdaq,” they have massive negotiating leverage over the exchanges. Ordover Tr. 718; *see also* Albers 541-43.

As reflected in Nasdaq’s internal documents, its sophisticated customers have recognized the power of their order flow, and they use this power to constrain the prices for the various products and services they buy from Nasdaq—including depth-of-book data. *See, e.g.*, NQ 526

As Mr. Albers testified, “if we are too aggressive on our pricing on the data side, customers can penalize us by routing order flow away from our market, and thereby, when we don’t have that order flow in our market, it reduces the value of our data products, and it’s very circular.” Albers

Tr. 416; see also Albers Tr. 494 (“[I]f we’re pricing data and, you know, pricing people out of the market and they’re switching their order flow, that impacts the quality of our market data product.”); Evans Tr. 1170 (“[o]rder flow . . . is portable. I’m not disagreeing that it’s portable. It’s obviously portable. . . . [C]ertainly, for depth-of-book data, I’m not disagreeing at all that it is possible for traders to move order flow between different exchanges and to pick different amounts of liquidity from different exchanges depending upon the prices.”).

As a result, these customers “have the upper hand in almost all of [Nasdaq’s] negotiations. . . . Without the order flow, Nasdaq really doesn’t exist.” Albers Tr. 451. Accordingly, every time Nasdaq considers changes in data pricing, it “do[es] a lot of internal analysis, modeling out what the different pricing changes would look like, what we think the potential individual client impacts are. How we think that each individual client will react. . . . We reach out to customers and walk them through what we’re looking to do and . . . get their feedback . . . on pricing decisions.” Albers Tr. 496-97. Moreover, because depth-of-book data purchase decisions are made by the same people who make decisions regarding order flow, exchanges are unable to “do what we want with our pricing,” as these decision-makers at the firms accounting for the lion’s share of all trading activity pressure Nasdaq to reduce its prices. Albers Tr. 542-43; *see also* Donefer Tr. 1042-43 (Nasdaq responds to threats and negotiates with its customers in an attempt to keep order flow). Thus, for example, when Nasdaq considered implementing fees for non-display data usage, it consulted with its customers and lowered the pricing tiers when its customers indicated that they viewed the pricing as too high. *See* Albers Tr. 506-508.

The evidence at trial demonstrated that Nasdaq’s recognition of the risk of shifting order flow is well-founded, as the evidence shows that powerful traders can and do move order flow or

credibly threaten to move it to put pressure on Nasdaq's depth-of-book data prices. This is illustrated powerfully by the behavior of [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] NQ 505 (emphasis added). [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] As Nasdaq's internal documents reflect: [REDACTED]
[REDACTED]

[REDACTED] NQ 506. [REDACTED]
[REDACTED]

[REDACTED]. See NQ 619; see also Evans Tr. 1198-99 (conceding that Nasdaq experienced a sustained order flow loss from [REDACTED]). [REDACTED]

[REDACTED] Albers Tr. 512.

SIFMA's only response to this evidence is the mistaken testimony of Dr. Evans, who testified that he was told by [REDACTED]—in a meeting that was not described in Dr. Evans's report, at which Dr. Evans took no notes, and upon which Dr. Evans claims not to have relied for his opinion—[REDACTED]. See Evans Tr. 1192-95. Dr. Evans had no other basis for his opinions on this point. Tellingly, however, SIFMA declined to call [REDACTED] to testify under oath, even though [REDACTED] was available to

SIFMA to sign a declaration in this matter and to meet with SIFMA’s experts. Moreover, Dr. Evans’s recitation of [REDACTED] hearsay statement is directly contradicted by the evidence, reflected in NQ 619, showing that, in fact, [REDACTED]
[REDACTED]
[REDACTED]. Upon being presented with this evidence at the hearing—which Dr. Evans could have sought from [REDACTED] but admittedly did not seek (Evans Tr. 1195)—Dr. Evans backpedaled from his prior testimony, acknowledging that “these data are inconsistent with what I am very sure [REDACTED] told me.” Evans Tr. 1200. The evidence—as reflected in the [REDACTED]
[REDACTED] (NQ 505), the documentary evidence that [REDACTED]
[REDACTED] (NQ 506), the data showing that [REDACTED] (NQ 619), [REDACTED] (Albers Tr. 512)—all powerfully undermine SIFMA’s unsupported assertions that it is impossible for large customers to shift order flow in response to data pricing.

In another example of powerful customers applying the threat of moving order flow to put downward pressure on Nasdaq’s depth-of-book data pricing, Nasdaq [REDACTED]
[REDACTED]
[REDACTED] Albers Tr. 531-34, 537; SIFMA 125 (“[REDACTED]
[REDACTED]
[REDACTED]”). Similarly, [REDACTED]

[REDACTED]

[REDACTED] Albers Tr. 537; SIFMA 125. A representative of [REDACTED] wrote to Nasdaq in 2009, stating bluntly: “[REDACTED] [REDACTED] [REDACTED].” NQ 606; *see also* Albers Tr. 538-39. As Mr. Albers testified, [REDACTED] were not isolated incidents—rather, it “happens all the time.” Albers Tr. 539.

Moreover, the evidence shows that the linkage between depth-of-book data pricing and order flow runs in the other direction as well—that is, an exchange can attempt to *attract* order flow by offering *lower* data prices. As Mr. Albers testified, “the data business can actually drive transactions order flow and, you know, add tremendous value to our clients.” Albers Tr. 391. For example, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *See, e.g.,* Albers Tr. 520 [REDACTED]

[REDACTED]

[REDACTED]); *see also* NQ 502. Nasdaq has also attempted to attract order flow by providing OpenView free of charge for some time, in the hope that it would drive trading flow into Nasdaq—which, in turn, would help induce customers to purchase OpenView. *See* Albers Tr. 433.

This uncontested evidence is precisely the type of evidence that the court in *NetCoalition I* held could supply proof of the competitive constraints imposed by competition for order flow on depth-of-book data pricing. The court in *NetCoalition I* specifically indicated that the fierce competition for order flow could constrain the price of depth-of-book data if, for example, “a

minority of professional traders is interested in . . . depth-of-book data but those few execute an outsized share of the total trading volume so that unreasonable fees would cause them to place their orders elsewhere,” and “ultimately affect order flow.” *NetCoalition I*, 615 F.3d at 541 n.14.⁶ While the record in *NetCoalition I* did not include such evidence, it is abundant here. As Professor Donefer conceded at trial when asked by Nasdaq’s counsel, “we have exactly in this record what the . . . circuit court said was missing previously,” which is “[e]vidence of a small number of market participants to whom Depth-of-Book data is essential, but who exercise a tremendous influence . . . over order flow.” Donefer Tr. 1034.

SIFMA offers no evidence in response. Indeed, SIFMA has presented no evidence from any member to dispute the evidence of the constraining effect of order flow competition. Nor can it produce such evidence, as its own members have demonstrated conclusively the impact of this constraint through their communications to Nasdaq—such as the email from [REDACTED] [REDACTED] describing the [REDACTED] NQ 505. SIFMA’s only response is to deny that customers can shift order flow in response to data pricing, based on the notion that best-execution obligations prevent large traders from shifting order flow from one exchange to another (*see* Donefer Report ¶ 69; SIFMA Pre-Hearing Br. at 25), and the willfully blind assertions of its experts that they had not seen evidence of sustained shifts in order flow, when in fact they had not even looked for the data (*see supra* at 21-23). But SIFMA’s position is belied by the evidence. First, it is undisputed that there is fierce competition to attract order flow (*see, e.g.*, Ordover Tr. 719; Donefer Tr. 1042; Evans Tr. 1068, 1076), and that Nasdaq

⁶ SIFMA argues that best execution obligations compel the usage of depth-of-book data from all exchanges, but this is untrue because broker-dealers are not required to purchase depth-of-book data to meet their duty of best execution. *See, e.g.*, ArcaBook Order, 73 Fed. Reg. 74,770, 74,779 (Dec. 9, 2008).

and other exchanges pay hundreds of millions of dollars per year in rebates to attract order flow. *See, e.g.*, Albers Tr. 431-32; Ordover Tr. 735-36. If large customers could not shift order flow, paying rebates to attract their orders would make no sense. Moreover, there is uncontroverted evidence that large customers (such as [REDACTED], and other large traders) can and do shift their order flow quickly, easily, and in great volumes. *See* Albers Tr. 469-70, 510-12, 519-20, 523; NQ 619. The evidence showed, further, that these customers can and do shift their order flow in response to depth-of-book data pricing, as well as any other issue on which they might seek to put pressure on the exchanges—even statements in the press by a Nasdaq executive. *See* Albers Tr. 514 (“[W]e’ve had clients move order flow because our CEO didn’t say the right thing in the press.”). SIFMA continues to deny this basic reality of the marketplace, but its positions cannot survive in the face of the evidence.

3. Competitive Forces Have Constrained Nasdaq’s Prices And Other Business Decisions

Further supporting the evidence of competitive constraints on Nasdaq’s depth-of-book data pricing, the record at trial is replete with evidence of responses by Nasdaq to these competitive forces. *See, e.g.*, Donefer Tr. 1038 (agreeing that Nasdaq took its customers’ threats to shift order flow seriously). Among other things, Nasdaq keeps a careful eye on the behavior of its competitors and customers, reduces prices or makes decisions about product offerings in response to competitor actions or customer reactions, and aggressively markets its data in an effort to expand output as broadly as possible to consumers. These are the actions of a participant in a well-functioning and competitive market, and further confirm that Nasdaq’s prices are subject to significant competitive forces.

(i) Evidence Of Price Reductions And Consistent Low Prices

Contrary to SIFMA's claim that "the Exchanges repeatedly raised the prices for their depth-of-book data products" (SIFMA Pre-Hearing Br. at 22), the record in this case instead reflects lengthy periods *without* any price increases, as well as price *reductions* taken in response to competitive pressures. Indeed, over the past 15 years, Nasdaq has implemented and preserved substantial depth-of-book data fee reductions and reduced its customers' costs even further through fee caps and product improvements. In the rare instances in which Nasdaq has implemented fee increases, the increases brought the costs of Nasdaq's products in line with the value they provided in the competitive market. This record of consistently low pricing, including reductions, caps, and carefully calibrated occasional increases, demonstrates the impact of the competitive forces that constrain Nasdaq's pricing.

Generally, Nasdaq's depth-of-book data fees have "remained constant or . . . declined" to the point that, after taking into account inflation and substantial product enhancements, Nasdaq actually experienced "an erosion in the prices that [it] is able to obtain in the marketplace." Ordover Tr. 679; *see also* Albers Tr. 526-27 (testifying that the prices paid by ██████████ in 2014 were less than those paid in 2006); Albers Tr. 527-28 (noting that while usage had increased dramatically, subscription prices for ██████████ had not changed since 2003); Ordover Tr. 706 (noting absence of price increases despite product improvements and inflation); NQ-DEMO 5; Ordover Report ¶ 16. And, contrary to SIFMA's unsupported narrative, Nasdaq has implemented significant permanent reductions in the fees for both TotalView and OpenView products since 2003. *See* Albers Tr. 451-55.

For TotalView, Nasdaq reduced professional subscriber fees by over 50 percent in 2003, and has not increased that fee since then. *See* Albers Tr. 453; Evans Tr. 1180; *see also* NQ-DEMO 5. Nasdaq also created a lower-price TotalView subscription for non-professional

subscribers—just \$14 per month for access to all of Nasdaq’s depth-of-book data—and it has not increased that fee since it was established in 2003. Albers Tr. 452; *see also* NQ-DEMO 5. Nasdaq also decreased its distribution fees⁷ and direct access fees⁸ in 2005 and 2007, respectively, and has not increased either fee since then. NQ 542; *see also* NQ-DEMO 5. Monthly subscriber and distribution fees for OpenView⁹ and Level 2¹⁰ reflect the same history of price reductions and many years without price increases. *See also, e.g.*, Evans Tr. 1183 (testifying that he had not focused on the rule change at issue in this proceeding for purposes of his report, which he stated did not result in a price increase for depth-of-book data).

SIFMA has no response to this history of price decreases and consistently low fees, which contradicts SIFMA’s attempt to concoct a narrative of consistently increasing prices. For example, SIFMA presented a demonstrative (SIFMA 379) that purported to list a series of increased Nasdaq data fees, but the majority of rule changes on SIFMA’s list were either fee reductions or simple continuations of fees already in place. *See* Albers Tr. 451-73; SIFMA 379. For example, SIFMA mischaracterized five pricing actions related to enterprise licenses and fee caps as new or increased fees—but these caps and enterprise licenses actually *decreased* fees

⁷ TotalView internal distribution fees were decreased from \$7,500/month to \$1,000/month; external distribution fees were decreased from \$7,500/month to \$2,500/month. 70 Fed. Reg. 22,162.

⁸ TotalView direct access fees were decreased from \$2,500/month to \$2,000/month. NQ 542.

⁹ The OpenView professional subscriber fee has remained constant at \$6/month since the end of the pilot period. The Openview non-professional subscriber fee decreased from \$6/month to \$1/month in 2007, and has not increased since then. The OpenView direct access fees decreased by 60 percent in 2007, from \$2,500/month to \$1,000/month. NQ 542. The OpenView distributor fees decreased by 50 percent in 2007, from \$2,500/month to \$1,250/month for external distribution and from \$1,000/month to \$500/month for internal distribution. *Id.*

¹⁰ The Level 2 non-professional subscriber fee decreased from \$30 to \$9/month, and has not increased since then. In 2010, the rule change at issue here established Level 2 direct access fee at \$2,000/month, the external distributor fee at \$2,500/month, and the internal distributor fee at \$1,000/month. Exchange Act Release No. 34-62907, No. NASDAQ-2010-110 (Sept. 14, 2010).

paid by Nasdaq's customers. These fee caps were principally put in place "as a response to competitive pricing pressures, as one would find in an effectively competitive marketplace" to retain customer subscriptions. Ordover Report ¶ 23; *see also* Albers Tr. 518, 532-33. As SIFMA's expert Professor Donefer conceded, these fee caps generally benefit the buyer, not the seller. *See* Donefer Tr. 972 ("As a buyer, I love [capped fees]. As a seller, I don't.").

Moreover, in the handful of instances in which Nasdaq increased prices for some of its customers, the impact of these increases on its customers was minimal and often even led to savings for users downstream. *See* Albers Tr. 454-72. For example, in October 2010, Nasdaq established its managed data solutions ("MDS") fee, which applied to fewer than 10 redistributor customers. Importantly, this distribution fee led to significant cost savings for "at least 100 firms downstream" because they could now pay a reduced fee to a redistributor for data, rather than contracting directly with Nasdaq. Albers Tr. 457-58. The enhanced display solution ("EDS") fee, while increasing fees for a small number of redistributors, led to considerable cost savings "downstream [for] tens of thousands of subscribers." Albers Tr. 462.

SIFMA attempts to kick up dust around Nasdaq's initiation of non-display pricing tiers for machine-users of depth-of-book data in April 2012 at levels higher than its professional rates, but this pricing action does not indicate any absence of competitive forces. To the contrary, this merely harmonized fees paid by the high-intensity users that had emerged in the marketplace: server-based users (or "non-display users") were consuming Nasdaq's depth-of-book data at a far greater rate than ordinary professional users and were deriving far greater value from the data, which supported a decision to charge higher fees to these non-display users than typical professional users (similar to the common practice of charging higher fees to professional users than non-professional users). *See* Albers Tr. 462-66. As Mr. Albers explained, prior to the fee

change, high frequency trading firms were getting tremendous value from the data but were paying less than some retail brokerages, so the fee change was intended to “charge them a fee that’s more commensurate with the value that they were getting out of it, while at the same time reduce fees for retail or nonprofessional use where we could, and then hopefully, charge a little bit more for this HFT type algorithm trading use.” Albers Tr. 534-36; SIFMA 125. The value these firms derive from the data they consume is exponentially higher than “someone sitting behind a computer in their kitchen,” and therefore the fee change was intended to adjust for this more valuable and intensive use of the data by these entities. Albers Tr. 669; *see also* Albers Tr. 585-86, 603.

Moreover, Nasdaq carefully assessed the pricing tiers before implementing them—including assessing the risk that these powerful users would respond negatively and divert order flow away from Nasdaq. Albers Tr. 464, 496-97. As a result of this assessment and the feedback it received from its customers, Nasdaq reduced the fees from its initial proposal—thus reflecting the pricing constraints discussed above. Albers Tr. 506-08. The non-display fees Nasdaq ultimately implemented applied to roughly 100 firms, comprising some of the largest financial firms in the world, who perform the highest proportion of trading on the market and were effectively paying rates that were disproportionately low relative to their usage of Nasdaq’s products and the value that they derived from them. *See* Ordover Tr. 716-18; *see also* Albers Tr. 534-36; NQ-DEMO 16. As Professor Ordover explained at trial, increasing non-display fees based on value conferred is not evidence of market power or nefarious pricing schemes, but rather is a type of commonly observed pricing behavior where price is “related to some observable characteristics of the consumer, the volume, and so on.” Ordover Tr. 709-10. This is

fully consistent with a competitive marketplace, not evidence of the absence of competitive forces.

(ii) Sensitivity To Customer Demands

Consistent with the availability of market data substitutes and the influence that large traders exert over order flow, Nasdaq is sensitive to its customers' reaction to pricing. As Mr. Albers testified, "we vet [a potential price change] with clients, and we also vet it with our transactions group to try to fully understand the impact of what we're trying to do and the impact it may have not only on our business but on our customers, as well as our transactions business." Albers Tr. 415. As Mr. Albers explained:

We do a lot of internal analysis, modeling out what the different pricing changes would look like, what we think the potential individual client impacts are. How we think that each individual client will react, and . . . the value of the data they're getting, and is the price commensurate with the value of the deal. And then, you know, we'll have a lot of internal discussions as well with our listings group or our transactions group. . . . [W]e reach out to customers and walk them through what we're looking to do and . . . get their feedback on . . . pricing decisions.

Albers Tr. 496-97. Thus, for example, Nasdaq reviewed and revised its proposed pricing tiers for non-display use in 2012, even after having proposed fees to the SEC, as a result of feedback from clients. *See* Albers Tr. 506-507 ("We initially went out with different tiers, and as we were working with clients, getting their feedback on those tiers, we had a lot of negative feedback from clients. And so, you know, we went back to the drawing board to some extent and refiled our tiers at a lower pricing point for a lot of these clients in order to retain their business").

Customers have also influenced Nasdaq's decisions with regard to the depth-of-book products that Nasdaq offers to customers. For example, [REDACTED]

[REDACTED] See, e.g., SIFMA 133; Albers Tr. 411-15. In response, Nasdaq has instead relentlessly pursued innovation in an attempt to improve product quality and service. See, e.g., Albers Tr. 392 ("Specifically on the Depth-of-Book products, we spend about [REDACTED] a year in terms of funding R&D and enhancements to those services and new innovations."); see also Ordoover Report ¶¶ 16-18, Albers Tr. 488-89.

(iii) Competition Posed By New Market Entrants

Indicia of competition in this market also include the lack of significant barriers to entry and the emergence of new data products, particularly from the "dark" sector of equity trading. "It is . . . important to examine the barriers to entry into the market, because 'without barriers to entry it would presumably be impossible to maintain supracompetitive prices for an extended time.'" *Cargill v. Monfort*, 479 U.S. 104, 119-20 n.15 (1986) (quoting *Matsushita v. Zenith Radio Corp.*, 475 U.S. 574, 591 n.15 (1986)).¹¹

Here, SIFMA has provided no evidence showing that there are significant barriers to entry—indeed, SIFMA's expert economist conceded that he had not offered any opinion on

¹¹ See also *Brooke Group Ltd. v. Brown & Williamson Tobacco Group*, 509 U.S. 209, 226 (1993) ("If market circumstances or deficiencies in proof would bar a reasonable jury from finding that the scheme alleged would likely result in sustained supracompetitive pricing, the plaintiff's case has failed. In certain situations — for example, . . . where new entry is easy . . . summary disposition of the case is appropriate."); see also *United States v. Microsoft Corp.*, 253 F.3d 34, 81 (D.C. Cir. 2001) ("plaintiffs were required . . . to provide both a definition of the browser market and barriers to entry to that market as part of their . . . claim").

whether there are barriers to entry. Evans Tr. 1113 (conceding that Dr. Evans had not addressed the issue of whether the market was subject to barriers to entry and stating that he has no opinion on whether barriers to entry exist). And for good reason, because there are no significant barriers to entry. As Nasdaq's economic expert testified, "[t]he rapid rise of BATS and Direct Edge, and the substantial increase in over-the-counter trading (including dark pools), indicates that the business of trading equities is not characterized by substantial barriers to entry or expansion." Ordover Report ¶ 8; see also Ordover Tr. 747-48 ("I do believe that...potential barriers to setting up a dark pool are actually quite low."). And entry into trading equities provides entry for potential suppliers of depth-of-book data—for example, both BATS and Direct Edge began as alternative trading platforms and now offer a range of depth-of-data products. Dark pools facilitate a significant and growing volume of trades, accounting for trading volume that nearly equals Nasdaq and NYSE Arca's trading volumes combined, and could choose to sell their data in competition with the exchanges. Ordover Tr. 747-48; Donefer Tr. 1020-21 (noting that up to 40 percent of trading occurs on dark pools, through internalizers, or on major exchanges by traders who insist on nondisclosure. SIFMA's economics expert, Dr. Evans, admitted that a firm must be able to exclude competitors in order to hold prices above a competitive level for a substantial period of time—but he conceded that Nasdaq did not hold this kind of power and could not exclude any other exchange or trading venue from entering the market and selling depth-of-book data. See Evans Tr. 1113-14.

(iv) Research And Development, Marketing, And Promotion Activities

The abundant evidence of Nasdaq's marketing and promotional activity, along with consistent innovation, are further indicia of robust competition for the sale of depth-of-book data. Ordover Report ¶¶ 16-18. As Professor Ordover explained, this intense innovation and promotion activity has "fueled a competitive 'arms race' that has benefited customers through

improved products and service and lower costs.” *Id.* at ¶ 16. Indeed, Nasdaq spends “about [REDACTED] a year in terms of funding R&D and enhancement to those services and new innovations,” Albers Tr. 392, and those investments have generated a lengthy list of product enhancements that have benefited consumers and fueled competition. *See* NQ 520 (noting enhancements Nasdaq has made in terms of delivery, cost savings, and content as part of its marketing and promotion agenda); *see also* Albers Tr. 483-89. Furthermore, as Mr. Albers testified, Nasdaq invests in extensive marketing efforts, which it views as “absolutely necessary. I don’t think anyone at NASDAQ would go through all the trouble here if it weren’t necessary.” Albers Tr. 438. Of course, if the marketplace were as SIFMA claims—with sales to captive customers who have no choice but to buy all data products at prices dictated by the exchanges—Nasdaq would have no reason to undertake these efforts.

4. Customers Have Not Been Denied Access To Nasdaq’s Depth-of-Book Data

SIFMA initiated these proceedings on the theory that its members have been denied access to market data as a result of the challenged rule change, which supposedly violates Section 19(d) of the Exchange Act. But this assertion has not been borne out by the facts developed at trial. Indeed, SIFMA has introduced not a shred of evidence to support its contention that anyone has been denied access to any data product.

Far from restricting access to its products, Nasdaq works to ensure that as many customers as possible subscribe to its products. The existence of major marketing campaigns designed to drive data sales demonstrates the absence of any intent to restrain supply in an anticompetitive manner. *See* Ordover Tr. 680 (“[T]he marketing and promotion, we see that NASDAQ is aiming at widespread distribution of its depth-of-book data products, where we know that one of the hallmarks of anticompetitive behavior is an attempt to restrain supply for the purposes of raising the price. I have not observed any such behavior here.”); Ordover Tr. 690

(“The hallmark of monopoly is to restrain supply, not try to sell more. And they are, on a daily basis, as we heard, sending people out into the field trying to sell the product.”). Similarly, Nasdaq’s enterprise licenses and fee caps are intended to promote the widespread distribution of its data products to as many customers as possible. Ordover Report ¶ 18.

Likewise, the low price of depth-of-book data for retail investors helps ensure ready access to anyone who wants it. As Mr. Albers testified: “Our Depth-of-Book products are available to anyone and everyone. Any retail investor can get access to our Depth-of-Book data, many times free of charge from a retail on-line broker, like Charles Schwab or Ameritrade. They can also come directly to our website and enter in a credit card and pay \$14 a month to get access to this information. This type of information has never been more readily available than it is now.” Albers Tr. 384-85; *see also* Ordover Report ¶ 18 (“if there were an absence of competition, I would expect to see evidence that NASDAQ and the other exchanges were limiting the output of their products in order to charge supracompetitive prices, but instead the evidence reflects efforts to distribute depth-of-book data as broadly as possible”). For example, NASDAQ offers pricing options, such as enterprise licenses with fee caps, that incentivize its customers to distribute its data products broadly for a modest fee that is paid to Nasdaq. And, as I have discussed, NASDAQ has undertaken extensive efforts to improve its data products and market them aggressively in order to expand the sales of its depth-of-book market data.” Ordover Report ¶ 18.

Nor are the approximately 100 large banks and electronic traders who supposedly require access to all depth-of-book data products denied access to Nasdaq’s depth-of-book data. In fact, most of these customers purchase [REDACTED] servers and many of them pay only [REDACTED] [REDACTED] per month for their direct feed of TotalView. *See, e.g.*, Shavel Tr. 1351 ([REDACTED])

██████████ for its non-display data usage); *see also* NQ 616; NQ 617; NQ 618. Thus, it is not surprising—but it is critically important—that SIFMA has failed to come forward with any evidence from any of its members suggesting that any of them has been denied access to these data products. These multi-billion dollar enterprises earn massive profits through their electronic trading strategies, including by using Nasdaq’s depth-of-book data to operate alternative trading platforms that compete directly with Nasdaq for order flow. There is no plausible claim that any of these entities has been denied access to depth-of-book data by paying fees of several thousand dollars per month, and there is no evidence in the record to support such a claim.

5. No Customer Has Been Denied Access By The Nasdaq Fee At Issue In This Proceeding

The record is similarly devoid of evidence that the fee change at issue in this proceeding has caused any denial of access to any data product. As noted above, the fee change at issue concerns only Level 2 fees, which were harmonized with the fees that already existed for TotalView and OpenView. *See* Albers Tr. 534-36; Evans Tr. 1183 (conceding that the rule change at issue was not a price increase); Ordover Report ¶¶ 26-28. Therefore, any customers paying access or distribution fees for TotalView or OpenView were not affected—and saw no fee increase as a result. And any customer purchasing Level 2 data is, by definition, not a customer who requires all depth-of-book data: Level 2 data provides less data than TotalView, and therefore a customer who requires all depth-of-book data would elect to purchase TotalView, not Level 2. Albers Tr. 403 (“So it’s a subset of TotalView data. . . . [Y]ou get 20 times more liquidity on TotalView than you do on Level 2.”); *see also* Donefer Tr. 964 (Level 2 is “barely” depth-of-book data); Donefer Tr. 992 (agreeing that Level 2 products do not contain those characteristics for products that are important to the “many market participants” who need depth-of-book data). The customers who purchase Level 2 data, therefore, are customers who have

ample substitutes, and SIFMA's theory of market power accordingly has no application here. It is, therefore, not surprising that SIFMA has not identified anyone who was denied access to anything by this fee change. There is simply no evidence that could support disapproving the rule change at issue in this proceeding.

6. SIFMA's Suggestion That Price Should Equal Marginal Cost Is Misplaced.

Finally, despite the overwhelming evidence of significant competitive forces, SIFMA has repeatedly urged Your Honor to evaluate the validity of market data fees by reference to the marginal cost of producing the data. But the Commission specifically rejected SIFMA's demand for cost-based pricing in the ArcaBook Order, which the Commission has ordered Your Honor to apply in this proceeding. *See ArcaBook Order*, 73 Fed. Reg. at 74,794 (criticizing cost-based pricing as "extraordinarily intrusive on competitive forces, as well as quite costly and difficult to apply in practice"); *see also* Order Establishing Procedures and Referring Applications for Review to Administrative Law Judge for Additional Proceedings at 20 (ordering a hearing "as informed by the two-part test set out in our 2008 ArcaBook Approval Order").

Likewise, the D.C. Circuit in *NetCoalition I* specifically approved of the Commission's conclusion in the ArcaBook Order that it need not adopt a cost-based approach to pricing. *NetCoalition I*, 615 F.3d at 535. While the court stated in dicta that cost data "can" be relevant in determining whether prices are competitive, it did not *require* the Commission to consider such data in every case. *Id.* at 537. To the contrary, the court, agreeing with the SEC, specifically upheld the SEC's use of a market-based approach in evaluating "fair and reasonable" fees and specifically rejected the petitioners' assertion that cost-based pricing was required:

The petitioners believe that the SEC's market-based approach is prohibited under the Exchange Act because the Congress intended "fair and reasonable" to be determined using a cost-based approach. The SEC counters that . . . its market-based approach is fully consistent with the Exchange Act. *We agree with the SEC.* . . . In its [ArcaBook] Order, the

SEC responded to the congressional desire that it rely on “on competition, whenever possible, in meeting its regulatory responsibilities for overseeing the SROs and the national market system. . . . *We conclude the SEC’s interpretation—that a market-based approach to evaluating whether NYSE Arca’s non-core data fees are “fair and reasonable”—is a permissible one.*

NetCoalition I, 615 F.3d at 534-35 (citations omitted) (emphasis added).

The D.C. Circuit noted that this conclusion was consistent with the Commission’s conclusion in Regulation NMS that ““market forces, rather than regulatory requirements’ [should] play a role in determining the market data . . . to be a made available to investors and at what cost.” *Id.* at 537. Thus, “alternative indicator[s] of competitiveness,” rather than marginal-cost analysis, could show that market forces sufficiently constrain the price of data. *Id.* at 539.

The court’s conclusion in that regard is consistent with decades of precedent (most commonly arising in the antitrust context, in which courts frequently assess the existence of competition), in which courts have recognized that “direct proof [of market power] is only rarely available” so that “courts more typically examine market structure in search of circumstantial evidence” *United States v. Microsoft*, 253 F.3d 34, 51 (D.C.Cir.2001) (en banc) (citations omitted); *see also, e.g., Rebel Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1434 (9th Cir.1995) (“The more common type of proof [of market power] is circumstantial evidence pertaining to the structure of the market.”). The court in *NetCoalition I* gave no indication that it was intending to chart a different course in this context.

Moreover, as all of the expert economists at trial agreed, the D.C. Circuit’s reference to prices approaching marginal cost was a description of a “textbook” model of pricing in an idealized market, which is not expected behavior in real-world markets, even in highly

competitive markets. *See* Evans Tr. 1092; Ordover Tr. 728.¹² The undisputed testimony at trial further showed that it would be wholly inappropriate to require firms to price at or near marginal cost in markets characterized by significant fixed, joint and common costs—such as the market for depth-of-book data. *See, e.g.*, Donefer Tr. 1030 (admitting that Nasdaq pays more for displayable orders because they need data for depth-of-book products); Ordover Tr. 737-38; Evans Tr. 1087-88, 1147-49.

Nasdaq has high fixed, joint and common costs related to its market data because its trading services are a necessary prerequisite to its data supply activities. Without trading volume, the data supply operations would simply not exist, and therefore, the costs of the trading platform and attracting traders are necessary for Nasdaq to sell data. As Professor Ordover explained:

And what it takes to produce data, in my view, and I think everybody here would agree, is that the exchanges have to expend huge amounts of money to get the order flow. In order to get the order flow, they pay rebates because if there is no order flow, there's no data and there's no trading. So the fact is that these purchases of expenditures on order [flow], which is the rebates, are in fact a cost that is joint and common to trading and to data. How you produce data requires rebates, and you cannot extract from those rebates and say those are only cost of trading.

Ordover Tr. 735; *see also* Albers Tr. 432 (noting that Nasdaq pays several hundred million dollars per year to attract order flow). These undisputed joint costs make it impossible to draw any conclusions about the competitiveness of the market for the sale of data based on the

¹² Indeed, SIFMA's expert Dr. Evans explained at length that pricing in competitive markets routinely deviates from this textbook model, which is "just designed to teach people and [is] a convenient way to talk about things, which is why you see that language, for example[,] in . . . the *Net Coalition* decision in this case." Evans Tr. 1192. Outside the academic context, however, "virtually all firms charge prices in excess of marginal cost even though they operate in industries that seem quite competitive," because otherwise, companies "probably would not be able to earn a normal competitive rate of return." Evans Tr. 1145-56.

marginal cost of providing any particular data product. Any such analysis would fail to account for the massive costs of developing the data in the first place. Likewise, any such analysis based on Nasdaq's operating margins would be similarly misguided because it would fail to account for important fixed, joint, and common costs. For example, Dr. Evans conceded at trial that the trading business is highly competitive, even though Nasdaq's accounting operating margins for the trading business are in the range of [REDACTED]. Evans Tr. 1086-88. He explained that because of the "fixed and common costs of running the trading platform," superficially high accounting margins do not undermine the conclusion that the "market is very competitive." Evans Tr. 1087-88. Accordingly, even if SIFMA could establish that data prices exceed any meaningful definition of marginal cost (which was not established here), such a showing would not indicate that there is an absence of significant competitive forces. Evans Tr. 1146.

Moreover, consumers would be worse off with pricing at marginal cost in markets with high fixed costs, because firms "probably would not be able to earn a normal competitive rate of return" or make enough profit to cover the risks of starting or continuing a business. Evans Tr. 1145; *see also* Ordovery Report ¶ 52. The inability to earn a competitive rate of return is problematic, because the exchanges would likely "give up on data or may surely cut back on investment in data, and they surely market its data products much less aggressively to the consuming public." Ordovery Tr. 740-41. Pricing at marginal cost also would not permit sellers to recoup their fixed costs of producing content—and thus marginal-cost pricing would mean that the content would likely never be developed in the first place. For example, the price of a hardcover book far exceeds the marginal cost of printing and distributing the book to each incremental consumer, but it would be an "obvious economic fallacy" to conclude thereby that

the book publisher does not face competition, because the publisher (and the retailer) must recoup the higher fixed costs of producing the book's content. Ordover Report ¶ 53.

SIFMA's attempted reliance on Nasdaq's accounting margins is especially problematic because Nasdaq's internal accounting methodologies do not attempt to attribute to the data business the common costs of operating Nasdaq's trading platform or the very substantial rebates Nasdaq pays to attract the displayable orders that make up its depth-of-book data. *See* Shavel Tr. 1337-38 (explaining that Nasdaq historically has not attributed any of the costs of trading operations (including rebates) to the costs of supplying data, even though they are essential to the production of data, because (i) it has maintained consistent reporting of its costs dating back to the period before there was a proprietary data business, and (ii) it makes sense "from a management standpoint . . . to make certain that the business unit that has direct control over those expenses is where those expenses are allocated"). As several witnesses explained at trial, while the costs of operating the trading platform and attracting orders are shared costs, (Ordover Tr. 732-36, 801; Evans Tr. 1088, 1272-73), Nasdaq historically does not attribute such costs to its data products in its internal accounting methodologies. *See* Shavel Tr. 1337-38; *see also* Ordover Report ¶ 55. While this approach is sound for accounting and business-management purposes, it yields accounting data that are meaningless for purposes of making economic determinations about data pricing in comparison to the costs of generating and distributing the data. Ordover Tr. 733-34 ("[H]ow do you allocate the cost of track, the cost of switching, the cost of all those things. Accountants do it. . . . But regulators and economists know that is a devilishly complicated task, which generally is subject to so many adjustments and so on that what ends up at the end of the process is likely to be often quite meaningless."); Ordover Report ¶ 55-57.

While SIFMA has not attempted to offer a meaningful approach to attribute Nasdaq's various joint costs to the data business (and it is dubious that any economically meaningful approach could be constructed), the evidence at trial indicated that an attribution of even a small portion of the joint costs of generating Nasdaq's depth-of-book data would swamp the margins for data. *See* Donefer Tr. 1031-32 (admitting same). For example, while Nasdaq's annual revenue from sales of TotalView, OpenView, and Level 2 is approximately [REDACTED] combined (NQ 610; Ordover Tr. 723-26), Nasdaq pays more than [REDACTED] each year in rebates to attract order flow. Albers Tr. 389, 432; Ordover Tr. 736-38; Evans Tr. 1031-32.

It is thus not surprising that Dr. Evans conceded that "[t]here are reasons why firms can have high profit margins yet still be faced with . . . competitive constraints," and thus evidence of profit margins must be "treated carefully." Evans Tr. 1132-33. Indeed, Dr. Evans agreed that it would be error to "leap to the conclusion that a firm had significant market power simply on the basis that it had high margins." Evans Tr. 1133; *see also* Ordover Report ¶ 55-56.

Courts, too, have been reluctant to act as ratemakers, due in part to the arbitrary cost allocation decisions involved. *See, e.g., Nat'l Rural Telecomm. Ass'n v. FCC*, 988 F.2d 174, 178 (D.C. Cir. 1993) (explaining that cost-based regulation "is costly to administer, as it requires the agency endlessly to calculate and allocate the firm's costs"); *Blue Cross & Blue Shield United of Wisc. v. Marshfield Clinic*, 65 F.3d 1406, 1412 (7th Cir. 1995) ("[I]t is always treacherous to try to infer monopoly power from a high rate of return [because] measured rates of return reflect accounting conventions more than they do real profits"); *Harrison Aire, Inc. v. Aerostar Int'l, Inc.*, 423 F.3d 374, 381 (3d Cir. 2005) (noting the difficulties involving in differentiating between a "competitive" or "supracompetitive" price); *see also* Ordover Tr. 735-38. And Dr. Evans conceded at trial that he is not a supporter of cost-based ratemaking. Evans Tr. 1077.

Thus, Your Honor should decline SIFMA's invitation to engage in a cost-based analysis that both courts and SIFMA's own expert have rejected as incredibly complicated and arbitrary.

B. The Proposed Rule Is In The Public Interest

Because the evidence at trial conclusively demonstrated robust competition in the market for data, Nasdaq's rule change must be upheld unless SIFMA can show "a substantial countervailing basis to find that the terms nevertheless fail to meet an applicable requirement of the Exchange Act or the rules thereunder." *ArcaBook Order*, 73 Fed. Reg. at 74,781. SIFMA failed to supply any evidence of a countervailing basis. No such countervailing basis exists.

In the *ArcaBook Order*, the Commission provided an example of a substantial countervailing basis for deeming a proposal inconsistent with the Exchange Act: "an exchange proposal that seeks to penalize market participants for trading in markets other than the proposing exchange." *Id.* at 74,782. There is no evidence here that Nasdaq has attempted to use fees to penalize traders who post liquidity elsewhere or has otherwise acted to defeat competition.

And even if there were some doubt as to whether competitive forces constrain Nasdaq's prices, the rule change must nevertheless be upheld where there is a "substantial basis, other than competitive forces [for concluding] that the terms of the proposal are equitable, fair, reasonable, and not unreasonably discriminatory." *Id.* at 74,781. While Your Honor need not reach this issue, there are significant reasons why it would be fair, equitable, and in the public interest to uphold Nasdaq's rule change apart from the evidence of competition set forth above.

First, this is merely the first of at least 90 challenges to immediately effective rules that have been brought by SIFMA under Section 19(d) of the Exchange Act in the past two years. If SIFMA prevails, there is no reason to believe that such challenges will abate. The Commission would therefore have to hold individual trials to review the fairness of each of these rule changes,

placing an enormous administrative burden on this agency and the courts, with no apparent countervailing benefit to investors or consumers of non-core data products.

SIFMA was unable to articulate any plausible standard at trial as to how the Commission would determine the fairness of any of these fees. Indeed, Dr. Evans even admitted that he “didn’t see [his] task . . . in this report as really saying in any kind of precise way what I was recommending the SEC do in the event that there’s an issue concerning how to go about calculating the appropriate price.” Evans Tr. 1173. As noted above, SIFMA’s reliance on accounting margins or marginal cost data is fundamentally flawed. And SIFMA’s experts supplied no alternative benchmark to determine the appropriate levels of fees. Indeed, Dr. Evans admitted that he did not address whether the Commission should regulate market data prices or what steps it should take to do so. *See* Evans Tr. 1073-74. He proclaimed himself a skeptic of price regulation generally, noting that regulation “often has unanticipated costs and rarely, if ever, has unanticipated benefits,” and testified that such regulation was appropriate only for natural monopoly businesses, which he admitted Nasdaq was not. Evans Tr. 1076-77, 1083-85, 1277. Dr. Evans also admitted that he did not know what the competitive price of these products should be. Evans Tr. 1175. Professor Donefer testified that he had no opinion regarding the appropriate pricing of non-core data, including “whether those prices are fair or unfair.” Donefer Tr. 990, 1014, 1016. And SIFMA offered no other witnesses, demonstrating that it is seeking to have the Commission embark on a perilous ratemaking journey without a map.

Second, SIFMA’s petition should be denied because, contrary to its assertions, it represents the Exchange’s *competitors*, not the interests of the public at large. While SIFMA has argued that its attacks on the Exchanges’ fee proposals would somehow support the public interest, SIFMA Pre-Hearing Br. at 28-30, the record at trial revealed that SIFMA’s arguments

align with the interest of roughly 100 of the largest banks and electronic trading firms in the world. *See* NQ 615.

There is ample reason to question any claim that these powerful banks and trading firms have pursued these actions in order to protect the interest of retail investors and ordinary traders. SIFMA's powerful members compete with Nasdaq and NYSE Arca for order flow by operating "dark pools"—which can account for up to 30 to 40 percent of trading activity—that lack price transparency and are not subject to the same degree of regulatory oversight. *Albers Tr.* 479-82; *Ordover Tr.* 716. If these operators of dark pools are able to handicap Nasdaq, NYSE Arca, and the other "lit" exchanges—such as by convincing the Commission to force them to sell their depth-of-book data at the marginal cost of distributing the data, thus rendering them unable to cover their fixed costs of generating the data—the exchanges would be weakened as competitors, the quality of their data would suffer, and trading would likely tilt further toward the dark pools, where information is less available and investors have fewer protections. SIFMA's members would surely benefit from such a shift, but they should not be heard to argue that the fruits of their "Tonya Harding-style competition" with the Exchanges serve the interest of ordinary traders and investors. *See Evans Tr.* 1076-77.

When rivals make anticompetitive use of antitrust law or other regulatory frameworks to impair rivals, the public interest is disserved. *Ordover Tr.* 743. For that reason, courts have been skeptical of such suits brought by rival firms. *See, e.g., Sterling Merch., Inc. v. Nestle, S.A.*, 656 F.3d 112, 121 (1st Cir. 2011). Your Honor should apply the same skepticism to this proceeding. Consistent with the public interest, Nasdaq's non-core data fees should be affirmed because the competitive forces operating in this market have resulted in price and product differentiation that has lowered costs while improving the quality and quantity of information available to investors.

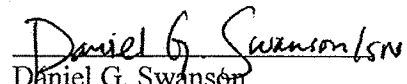
IV. CONCLUSION

Based on the foregoing and the evidence presented at the hearing, Nasdaq respectfully requests that Your Honor dismiss SIFMA's application challenging Nasdaq's Rule Change.

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Dated: June 5, 2015

CERTIFICATE OF SERVICE

I hereby certify that on June 5, 2015, I caused a copy of the foregoing Post-Hearing Brief Of The NASDAQ Stock Market LLC to be served on the parties listed below via First Class Mail. Service was accomplished on SIFMA and NYSE Arca via First Class Mail because of the large service list.

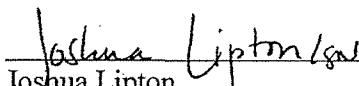
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