# SECURITIES AND EXCHANGE COMMISSION (Release No. 34-63291; File No. SR-NYSEArca-2010-97)

November 9, 2010

Self-Regulatory Organizations; Notice of Filing and Immediate Effectiveness of Proposed Rule Change by NYSE Arca, Inc. Relating to Fees for NYSE Arca Depth-of-Book Data

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on November 1, 2010, NYSE Arca, Inc. (the "Exchange" or "NYSE Arca") filed with the Securities and Exchange Commission (the "Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

The Exchange, through its wholly owned subsidiary, NYSE Arca Equities, Inc. ("NYSE Arca Equities"), is filing a proposed rule change to authorize market data fees for the receipt and use of depth-of-book market data that the Exchange makes available. The text of the proposed rule change is available at the Exchange, the Commission's Public Reference Room, and the Exchange's Web Site at www.nyse.com.

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

In its filings with the Commission, the self-regulatory organization included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the

<sup>&</sup>lt;sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>&</sup>lt;sup>2</sup> 17 CFR 240.19b-4.

places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in sections (A), (B) and (C) below, of the most significant aspects of such statements.

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

- 1. <u>Purpose</u>
- [i.] The Services and Fees
- A. Description

Through NYSE Arca Equities, the Exchange's equities trading facility, the Exchange makes ArcaBook<sup>SM</sup>, a compilation of all limit orders resident in the NYSE Arca limit order book, available on a real-time basis.<sup>3</sup> In addition, the Exchange makes available real-time information relating to transactions and limit orders in debt securities that are traded through the Exchange's facilities.

The Exchange makes ArcaBook and the bond trade and limit order information (collectively, "NYSE Arca Data") available to market data vendors, broker-dealers, private network providers and other entities by means of data feeds. By making the data it includes available, ArcaBook enhances market transparency, fosters competition among orders and markets, and enables buyers and sellers to obtain better prices.

B. Procedural Background

The fees for which the Exchange is filing this proposed rule change have a procedural history, including the following:

<sup>&</sup>lt;sup>3</sup> The Exchange notes that it makes available to vendors the best bids and offers that are included in ArcaBook data no earlier than it makes those best bids and offers available to the processors under the CQ Plan and the "Reporting Plan for Nasdaq/National Market System Securities Traded on an Exchange on an Unlisted or Listed Basis" (the "UTP Plan").

- On May 23, 2006, NYSE Arca submitted the 2006 Rule Change to establish fees for the receipt and use of ArcaBook data.
- On October 12, 2006, the Commission issued an order, by delegated authority, approving the 2006 Rule Change (the "Delegated Order").<sup>4</sup>
- On November 15, 2006, NetCoalition submitted a petition (the "Petition") requesting that the Commission review and set aside the Delegated Order.<sup>5</sup>
- On December 27, 2006, the Commission issued an order granting NetCoalition's request for the Commission to review the Delegated Order.<sup>6</sup>
- On June 4, 2008, the Commission published notice of a proposed order (the "Draft Order") approving the NYSE Arca proposed fees to give the public an additional opportunity to comment.<sup>7</sup>
- On December 8, 2008, the Commission set aside the Delegated Order and approved the 2006 Rule Change directly (the "Direct Order").<sup>8</sup>
- On or about January 1, 2009, the Exchange began charging the fees set forth in the 2006 Rule Change.
- On January 30, 2009, NetCoalition and SIFMA petitioned the United States Court of Appeals for the D.C. Circuit (the "D.C. Circuit") for review of the Direct Order.

<sup>&</sup>lt;sup>4</sup> Securities Exchange Act Release No. 54597 (October 12, 2006) 71 FR 62029 (October 20, 2006).

<sup>&</sup>lt;sup>5</sup> Petition for Commission Review submitted by Petitioner, dated November 14, 2006.

<sup>&</sup>lt;sup>6</sup> Securities Exchange Act Release No. 55011 (December 27, 2006).

<sup>&</sup>lt;sup>7</sup> Securities Exchange Act Release No. 57917 (June 4, 2008), 73 FR 32751 (June 10, 2008).

<sup>&</sup>lt;sup>8</sup> Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770 (December 9 2008).

- On July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") was signed into law.
- On August 6, 2010, the D.C. Circuit issued a decision on the petitions for review (the "NetCoalition Decision").
- On September 17, 2010, the Exchange filed a petition for panel rehearing asking the D.C. Circuit to remand rather than vacate the Direct Order.
- On September 24, 2010, the D.C. Circuit ordered NetCoalition, SIFMA, and the Commission to respond to the Exchange's petition for panel rehearing.
- On October 12, 2010, NetCoalition, SIFMA, and the Commission filed responses to the Exchange's petition for panel rehearing.
- On October 25, 2010, the D.C. Circuit denied the petition for panel rehearing.

In this filing, the Exchange proposes to continue to assess the same fees that have been in effect since the Direct Order.

C. Fees

This filing will enable the Exchange to continue to assess the Market Data Fee Schedule set forth in Exhibit 5 hereto for the receipt and use of NYSE Arca Data. As the Market Data Fee Schedule details, this proposed rule change allows the Exchange to continue to assess access fees and professional and nonprofessional subscriber device fees. These are categories of fees that are consistent with the fees that the New York Stock Exchange ("NYSE") and the Nasdaq Stock Market ("Nasdaq"), and the Participants in the CTA, CQ, UTP and OPRA Plans, charge for the receipt and use of their market data. They are the same fees that NYSE Arca has charged since it received approval of those fees pursuant to the Direct Order.

## 1. Access Fees

The Exchange will continue to charge a monthly \$750 fee for a data recipient to gain direct access to the datafeeds through which the Exchange makes NYSE Arca Data available. This fee entitles the datafeed recipient to gain access to NYSE Arca Data for a set of up to four "Logons." A "Logon" is activation of a means of direct access to any of the NYSE Arca datafeeds. For instance, if a datafeed recipient gains access to NYSE Arca Data one or more times during a month using an Exchange-provided and approved logon that provides access to the ArcaBook datafeed, that would constitute a "Logon." It would constitute a second "Logon" if, during that month, the datafeed recipient uses a different logon name that allows access to the ArcaBook datafeed.

The Exchange will continue to charge a monthly \$750 fee for a data recipient to gain indirect access to the datafeeds through which the Exchange makes NYSE Arca Data available for any number of Logons. "Indirect access" refers to access to a NYSE Arca datafeed indirectly through one or more intermediaries, rather than by means of a direct connection or linkage with the Exchange's facilities.

#### 2. Device Fees

The Exchange will continue to charge device fees for professional and nonprofessional subscribers for the display of ArcaBook. In differentiating between professional and nonprofessional subscribers, the Exchange applies the same criteria for qualification as a nonprofessional subscriber as the CTA and CQ Plan Participants use, as more fully set forth in Exhibit 5.

# a. For Professional Subscribers

For professional subscribers, the Exchange will continue to charge (i) a monthly fee of \$15 per device for the receipt of ArcaBook data relating to Exchange-Traded Funds and those equity securities for which reporting is governed by the CTA Plan ("CTA Plan and ETF Securities") and (ii) a monthly fee of \$15 per device for the receipt of ArcaBook data relating to those equity securities for which reporting is governed by the UTP Plan (excluding Exchange-Traded Funds; "UTP Plan Securities").

The combined monthly professional subscriber device fee of \$30 (i.e., for receipt of NYSE ArcaBook data relating to CTA Plan and ETF Securities and to UTP Plan Securities) compares favorably with fees charged by other exchanges for similar products. For instance, for professional subscribers, Nasdaq charges \$76 for its combined TotalView<sup>9</sup> and OpenView<sup>10</sup> products and NYSE charges \$60 for NYSE OpenBook.<sup>11</sup>

b. For Nonprofessional Subscribers

For nonprofessional subscribers, the Exchange will continue to charge monthly fees of \$5 per device for the receipt of ArcaBook data relating to CTA Plan and ETF Securities and \$5 per device for the receipt of ArcaBook data relating to UTP Plan Securities (i.e., a combined fee of \$10 for both CTA Plan and ETF Securities and UTP Plan Securities).

The Exchange will continue to limit for any one month the maximum amount of device fees payable by any broker-dealers in respect of nonprofessional subscribers that maintain

<sup>&</sup>lt;sup>9</sup> Through TotalView, Nasdaq provides information relating to the displayed quotes and orders of Nasdaq participants in UTP Plan Securities. TotalView displays quotes and orders at multiple prices and is similar to ArcaBook.

<sup>&</sup>lt;sup>10</sup> Through OpenView, Nasdaq provides information relating to the displayed quotes and orders of Nasdaq participants in CTA Plan Securities. OpenView displays quotes and orders at multiple prices and is similar to ArcaBook.

<sup>&</sup>lt;sup>11</sup> Through NYSE OpenBook, NYSE provides information relating to limit orders.

brokerage accounts with the broker-dealer. Professional subscribers may be included in the calculation of the monthly maximum amount, so long as:

- (i) nonprofessional subscribers comprise no less than 90 percent of the pool of subscribers that are included in the calculation;
- (ii) each professional subscriber that is included in the calculation is not affiliated with the broker-dealer or any of its affiliates (either as an officer, partner or employee or otherwise); and
- (iii) each such professional subscriber maintains a brokerage account directly with the broker-dealer (that is, with the broker-dealer rather than with a correspondent firm of the broker dealer).

When the Exchange first established the maximum amount in 2006, it set the maximum amount for any calendar month at \$20,000. It provided that, for the months falling in a subsequent calendar year, the maximum monthly payment shall increase (but not decrease) by the percentage increase (if any) in the annual composite share volume<sup>12</sup> for the calendar year preceding that subsequent calendar year, subject to a maximum annual increase of five percent.<sup>13</sup> For example, if the annual composite share volume for a calendar year increases by three percent over the annual composite share volume for the prior calendar year, then the monthly "Maximum Amount" for months falling in the next subsequent calendar year would increase by three percent. Given that the ArcaBook fees did not become effective until 2009 and composite share

<sup>&</sup>lt;sup>12</sup> "Composite share volume" for a calendar year refers to the aggregate number of shares in all securities that trade over NYSE Area facilities for that calendar year.

<sup>&</sup>lt;sup>13</sup> This is the same annual increase calculation that the Commission approved for the CTA Monthly Maximum (discussed below). <u>See</u> File No. SR-CTA/CQ-99-01, Release No. 34-41977, October 5, 1999.

volume did not rise in 2009, the Maximum Amount for 2010 remains at \$20,000. The Exchange will continue to apply the annual adjustment described above.

The Maximum Amount compares favorably with monthly maximums payable to Nasdaq and to the CTA Plan Participants. Nasdaq set the maximum at \$25,000 per month for nonprofessional subscribers' receipt of TotalView and OpenView. The CTA Plan Participants currently set the maximum at \$660,000 per month for internal distribution within a brokerdealer's organization and for the broker-dealer's distribution to nonprofessional subscribers that maintain brokerage accounts (the "CTA Monthly Maximum").

#### D. Free Trial Period

As an incentive to prospective subscribers, the Exchange will continue to offer NYSE Arca Data free of charge for the duration of the billable month in which the subscriber first gains access to the data. For example, if a subscriber (whether professional or nonprofessional) is billed on a calendar-month basis and first gains access to NYSE Arca Data on October 10, the device fees set forth in this proposed rule change will not apply during that month of October. The Exchange has maintained this incentive since the Direct Order was issued.

#### ii. Justification of Fees

The market data fees that are the subject of this filing, in conjunction with fees for other services, provide for an equitable allocation of NYSE Arca's overall costs among users of its services. The market data fees are fair and reasonable because they compare favorably to fees that other markets charge for similar products and because competition provides an effective constraint on the market data fees that the Exchange has the ability and incentive to charge.

#### A. Other Markets' Fees

The combined monthly professional subscriber device fee of \$30 (i.e., for receipt of NYSE Arca data relating to CTA Plan and ETF Securities and to UTP Plan Securities) compares favorably with the \$76 that Nasdaq charges professional subscribers for its combined TotalView and OpenView products and the \$60 that NYSE charges professional subscribers for NYSE OpenBook.

Nonprofessional subscriber monthly fees of \$5 per device for the receipt of ArcaBook data relating to CTA Plan and ETF Securities and \$5 per device for the receipt of ArcaBook data relating to UTP Plan Securities (a combined \$10) compare favorably with the fees NYSE and Nasdaq charge for limit order data services;<sup>14</sup> NYSE Arca proposes to continue to assess these fees. For nonprofessional subscribers, Nasdaq charges a device fee of \$14 per month for its TotalView product and \$1 per month for its OpenView product. NYSE charges nonprofessional subscribers a monthly device fee of \$15, with a monthly maximum of \$25,000.<sup>15</sup> NYSE Arca subjects its monthly maximum for nonprofessional subscribers to the same annual escalator as NYSE.

For direct access, NYSE Arca will continue to charge \$750 per month for a set of up to four logons For indirect access, NYSE Arca will continue to charge \$750 per month for any number of logons. In contrast, NYSE charges \$5000 per month for direct or indirect access to OpenBook and Nasdaq charges \$2500 per month for access to TotalView and another \$2500 per month for access to the OpenView datafeed.

<sup>&</sup>lt;sup>14</sup> The Exchange does not propose to impose device fees for the display of limit order, quotation and last sale price information relating to bonds that are traded through the Exchange's facilities.

<sup>&</sup>lt;sup>15</sup> Securities Exchange Act Release No. 34-59544 (March 9, 2009), 74 FR 11162 (March 16, 2006).

# B. Dodd-Frank Act

Some industry participants have expressed the view that the Dodd-Frank Act materially alters the scope of the Commission's review of fee filings for proprietary market data products.<sup>16</sup> In the Dodd-Frank Act, Congress allowed the Commission to rely upon the forces of competition to ensure that fees for market data are fair and reasonable. The Dodd-Frank Act creates a presumption that exchange fees, including market data fees imposed upon non-members, are to take effect immediately. It provides that the Commission should only take action to temporarily suspend a fee change (which suspension would then be followed by a proceeding to determine whether the fee change should be approved or disapproved) in certain specified situations.<sup>17</sup> There is no basis to suspend the immediate effectiveness of this filing.

#### C. Competition

ArcaBook fees are fair and reasonable because competition for order flow provides an effective constraint on the level of fees that the Exchange has the ability and incentive to charge for its market data products.

# 1. The Direct Order

In approving the fees in the Direct Order, the Commission adopted a "market-based approach" to assess whether non-core fees, such as the ArcaBook fees, satisfy the statutory requirements of fairness and reasonableness. Under this two-part approach, the Commission first

 <sup>&</sup>lt;u>See</u> Securities Exchange Act Release No. 34-62887 (September 10, 2010); 75 FR 57092 (September 17, 2010); Securities Exchange Act Release No. 34-62907 (September 14, 2010); 75 FR 57314 (September 20, 2010); and Securities Exchange Act Release No. 34-62908 (September 14, 2010); 75 FR 57321 (September 20, 2010).

<sup>&</sup>lt;sup>17</sup> The NetCoalition Decision does not address the statutory amendments encompassed by the Dodd-Frank Act in any way. No questions relating to the operation or effect of those amendments were before the D.C. Circuit in connection with the petitions for review of the Direct Order. Nor did the D.C. Circuit have any occasion to discuss those amendments in connection with the NetCoalition Decision.

determines "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."<sup>18</sup> If so, the Commission approves the proposal "unless it determines that there is a substantial countervailing basis to find that the terms" violate the Exchange Act or Commission rules.<sup>19</sup>

In the Direct Order, the Commission approved the ArcaBook fees after determining that the market-based approach provided alternative indicators of price fairness and reasonableness that made Commission consideration of costs unnecessary. It cited the availability to market participants of alternatives to purchasing ArcaBook data. The Direct Order also cited NYSE Arca's compelling need to attract order flow from market participants and the negative effect of higher market data fees on order flow. The Commission found no countervailing basis to find that the terms of the Exchange's proposal violated the Exchange Act or the Commission's rules.<sup>20</sup>

# 2. The NetCoalition Decision

The D.C. Circuit held that the Commission's market-based approach does not contravene the Exchange Act, rejecting the Petitioners' claims that Congress intended for the Commission to apply a cost-based approach in determining whether market data fees are fair and reasonable.<sup>21</sup> However, the Court found that the record did not provide adequate support for the Commission's determinations that (i) the availability of alternatives to ArcaBook data and (ii) the adverse effect

<sup>&</sup>lt;sup>18</sup> Direct Order at 74,781.

<sup>&</sup>lt;sup>19</sup> <u>Id.</u>

<sup>&</sup>lt;sup>20</sup> <u>See infra</u> § 3(a)(ii)(C)(4)(c); Direct Order at 74,782-74,784.

<sup>&</sup>lt;sup>21</sup> NetCoalition Decision at 14-15.

of higher ArcaBook fees on order flow and trading revenues provide effective constraints on the market data fees that the Exchange has the ability and incentive to charge.<sup>22</sup>

## 3. The Competitive Market For Market Data Products

Several features of the market data business directly indicate that it is subject to competition. Investors can find suitable substitutes for most proprietary market data products. A market stands a high risk that investors may substitute another source of market information for its own because securities and investment methodologies are fungible.

A high correlation exists among the fee levels that NYSE, NYSE Arca, Nasdaq, and NASDAQ OMX BX charge and among the characteristics of their respective proprietary data products. That itself is consistent with the presence of competition in general, and of competition among those participants in particular. Similarly, the history and continued schedule of product innovation are consistent with the presence of competition. Examples include the advent of multicast feeds, format improvements, new execution messages, improvements in message efficiency, enterprise licensing, unified pricing for multiple categories of data, free trials, nonprofessional subscriber discounts, and new alternative methodologies for counting usage. These changes and innovations, and the fact that other markets adopted similar changes, provide strong evidence of competition in the market for depth-of-book data products among exchanges.

#### 4. Availability of Alternatives to ArcaBook

One reason that ArcaBook fees are fair and reasonable is that market participants have alternatives to purchasing ArcaBook data. For example, market participants can use depth-ofbook data from BATS, NYSE, and/or Nasdaq to gauge liquidity and place orders at NYSE Arca

<sup>&</sup>lt;sup>22</sup> <u>Id.</u> at 25-27.

and/or at other markets. Indeed, NYSE Arca's data indicates that ten of the top 30 users of intermarket sweep orders ("ISOs")<sup>23</sup> on NYSE Arca do not subscribe to ArcaBook. They believe they have adequate sources of data to submit ISOs without purchasing ArcaBook data.

To illustrate how the availability of alternatives constrains fees for depth-of-book data, suppose there were a hypothetical increase in the fee for a market's depth-of-book data from \$10 to \$15, where \$10 is the fair and reasonable level. Suppose that at \$10 the depth-of-book data would have 1,000 subscribers, and thus total revenue of \$10,000. Suppose that an increase in the fee to \$15 would cause 400 users to cancel their subscriptions in favor of available alternatives (which might include not purchasing depth-of-book data at all), leaving 600 subscribers and total revenue of \$9,000. Assuming there are no variable costs that depend on the number of subscribers, the hypothetical fee increase would reduce net revenue by \$1,000, and hence the Exchange would not have an incentive to raise the price from \$10 to \$15.

NYSE Arca's experience also demonstrates that its proprietary market data customers are sensitive to the price charged for access to ArcaBook, and that the elasticity of demand for access to ArcaBook would deter the Exchange from requesting a fee unconstrained by competitive forces. The Commission issued the Direct Order in December 2008, and NYSE Arca started charging for ArcaBook soon after. As Table 8<sup>24</sup> shows, there was an immediate and significant reduction in the number of accounts with at least one subscription for ArcaBook after the Exchange started charging for ArcaBook.<sup>25</sup> One can infer that any unreasonable increase in

<sup>&</sup>lt;sup>23</sup> An intermarket sweep order is a limit order designated for automatic execution in a specific market center even when another market center is publishing a better quotation; they are typically used by institutional algorithmic investors, not retail investors.

<sup>&</sup>lt;sup>24</sup> Copies of all charts and tables referenced herein are included in Exhibit 3 B.

<sup>&</sup>lt;sup>25</sup> It should also be noted that before NYSE Arca began charging for ArcaBook, many users were not required to report their ArcaBook usage to the Exchange. Table 8's pre-2009 figures thus likely understate both the number of users before the Exchange began to

the fee would cause a loss in subscribers, and therefore a loss of the fee revenue that NYSE Arca would earn from these subscribers.

Another way to examine this issue is to examine the nature of the market for depth-ofbook data. The D.C. Circuit noted that depth-of-book data might be of more use for certain types of market participants than others, and NYSE Arca agrees. One important category of users of depth-of-book data are those who use ISOs. The primary type of ISO on NYSE Arca is the "PNP ISO" order type. In July 2010, 30 firms generated approximately 99% of the PNP ISO orders on NYSE Arca (by both trade and order volume).<sup>26</sup> There are several important pieces of information that go with that statistic: First, ten of the firms (approximately 33.3% of the firms, representing approximately 7.4% of the PNP ISO orders) did not subscribe to ArcaBook in June, 2010, indicating that they believed they had viable alternative sources of the data necessary to submit large ISOs on NYSE Arca).

Second, the top 20 firms that used ISOs on NYSE Arca and did subscribe to ArcaBook accounted for 54.72% of NYSE Arca's Tape A and Tape B volume for June 2010.<sup>27</sup>

This confirms that users of depth-of-book data account for significant trading volume, even though they only amount to a small percentage of all traders.<sup>28</sup>

charge and the magnitude of the decline in users after NYSE Arca began to charge.

<sup>&</sup>lt;sup>26</sup> Together, these 30 firms accounted for approximately 56% of NYSE Arca's Tape A and Tape B volume for June 2010.

<sup>&</sup>lt;sup>27</sup> These statistics likely understate the comparative contributions of sophisticated users of depth-of-book data. Because of the way market participants submit, execute, and report trades, the data the Exchange used to derive these statistics does not include all trades that are attributable to these firms. (For example, "Firm A" may purchases ArcaBook data under the name "Firm A" but submit trades under many different names. This data would not capture trades by entities other than "Firm A".)

<sup>&</sup>lt;sup>28</sup> <u>See NetCoalition Decision at 26 n.14.</u>

In assessing the competitive landscape for depth-of-book data, one must determine whether the availability of alternative depth-of-book products would make this subset of market participants sensitive to one market's unreasonable depth-of-book product pricing. We believe that it is self-evident that it does. All of the investors within this subset make rapid decisions regarding what market data to purchase and where to direct their orders. They base those decisions on all their costs to trade (including the costs of market data they choose to purchase). They invest significant amounts of capital based on those decisions.

In contrast, the primary objectors to the 2006 Rule Change were data vendors (as opposed to market participants) whose business interests lie firmly rooted in reselling the exchanges' market data at significant mark-ups (or in attracting "eyeballs" to their sites to generate advertising revenue). For acting as middlemen in distributing the exchanges' market data to investors, traditional market data vendors, such as several that are SIFMA members, receive from investors a large multiple of the amounts that those vendors pay the exchanges for the right to distribute the data. No statutory standard constrains the amounts that those vendors may charge investors. Obviously, protesting the exchanges' fees is in their business interests because, if successful, it would increase their profit margins.

#### 5. Competition for Orders and Trades

In addition, ArcaBook fees are fair and reasonable because competition for order flow and trade executions provides an effective constraint on the level of fees that the Exchange has the ability and incentive to charge for its market data products. NYSE Arca competes for orders, which represent liquidity, by offering liquidity rebates and by advertising those orders through dissemination of depth-of-book data. NYSE Arca competes for trades by offering liquidity, competitive trading fees, and high quality, efficient trading services.

#### a. Hypothetical

The hypothetical discussed above can be adapted to demonstrate how (i) the availability of alternatives to an exchange's depth-of-book data, combined with (ii) the adverse effect of a higher fee for depth-of-book data on net revenue from execution of trades, together constrain the fee for depth-of-book data to a fair and reasonable level. As before, suppose there were a hypothetical increase in the fee for depth-of-book data from \$10 to \$15, where \$10 is the fair and reasonable level. Suppose that at \$10, the depth-of-book data product would have 1,000 subscribers, and thus total revenue of \$10,000. Suppose that an increase in the fee to \$15 would cause 200 users (rather than 400, as in the preceding hypothetical) to cancel their subscriptions, leaving 800 subscribers and total revenue of \$12,000. Assuming no variable costs that depend on number of subscribers, the hypothetical fee increase would increase net revenue by \$2,000, and hence the exchange would have an incentive to raise the price from \$10 to \$15. However, suppose that the increase in the price of depth-of-book data caused a reduction in order flow and net trading revenue (above variable costs) from \$25,000 to \$21,000. In that case, the sum of net revenues from the depth-of-book data and execution of trades would decline from \$35,000 to \$33,000 as a result of the increase in the fee for depth of book data, and the exchange would not have an incentive to raise the fee. This hypothetical is consistent with the record evidence regarding the linkage between market data and order flow.

#### b. The Record Regarding Order Flow Competition

Considerable evidence exists to support the conclusion that competition for order flow and the availability of suitable alternatives constrain fees for non-core market data to levels that are fair and reasonable, both within the existing record and as supplemented herein.

i. Hendershott & Jones

Prior studies provide evidence that order flow on a market depends directly and substantially on the availability of depth-of-book data for that market. Of particular importance is an empirical study by Terrence Hendershott & Charles M. Jones, Island Goes Dark: Transparence, Fragmentation, and Regulation ("Hendershott & Jones").<sup>29</sup> Hendershott & Jones is an independent, exhaustive, refereed, published, and publicly available study, based on substantial empirical data and economic and statistical analysis, of the effects of one market's decision to stop displaying depth-of-book data entirely for certain products (because it did not wish to comply with the then-current version of Regulation ATS). The Commission previously relied on this study in concluding that order flow competition constrains market data fees<sup>30</sup> (although the NetCoalition Decision did not refer to it). Hendershott and Jones are well-respected academics.

Hendershott and Jones studied the impact of Island ECN ceasing to display its limit order book in the three most active ETFs for which it was the dominant venue; this occurred in late 2002. Hendershott and Jones found that Island's share of trading activity in each of these three ETFs fell when Island ceased displaying its limit order book for those ETFs. The following are among the elements of this empirical study that support the Commission's conclusion in the Direct Order that competition for order flow provides an effective constraint on the market data fees that the Exchange has the ability and incentive to charge:

• Hendershott & Jones examined "all trades and quotes" for the three ETFs. Their analysis of these data demonstrate the direct and substantial relationship between order flow and the availability of market data. Island's decision to cease

<sup>&</sup>lt;sup>29</sup> 18 Review of Financial Studies 743 (2005). A copy of Hendershott & Jones is attached hereto as Exhibit 3 A.

<sup>&</sup>lt;sup>30</sup> Direct Order at 74,784 n. 218.

displaying depth-of-book and other market data caused a 40% to 55% decline in trading in each of these ETFs on Island, and a comparable increase in trading in these ETFs at other venues, and those effects were *immediate* and statistically significant at a high level.<sup>31</sup> Hendershott & Jones make clear that they found "order flow migration" to other venues after Island ceased displaying depth-of-book and other market data.<sup>32</sup> Indeed, they concluded that the date Island went dark represented a "shift in regime" that not only caused order flow to migrate "substantially" from Island to other markets, but also from ETFs to E-mini futures (a different product entirely).<sup>33</sup> Hendershott & Jones also specifically addressed the point that even non-professional traders are likely to direct their order flow to venues in which more information about the likely terms of a trade is available.<sup>34</sup>

Hendershott & Jones also analyzed what happened to order flow when Island eventually re-displayed depth-of-book and other market data. When Island did so, it regained some (but not all) of the order flow it had lost.<sup>35</sup>
Hendershott & Jones thus provides detailed and persuasive evidence that availability of depth-of-book and other data relating to one trading venue has a substantial effect on the level of order flow at that venue.<sup>36</sup>

<sup>&</sup>lt;sup>31</sup> <u>Id.</u> at 755-58.

<sup>&</sup>lt;sup>32</sup> <u>Id.</u> at 764. <u>See also id</u>. at 765 ("Given that Island's going dark is a change in transparency that leads to order flow migration ... .").

<sup>&</sup>lt;sup>33</sup> <u>Id.</u> at 769.

<sup>&</sup>lt;sup>34</sup> <u>Id.</u> at 779.

<sup>&</sup>lt;sup>35</sup> <u>Id.</u> at 782-84.

<sup>&</sup>lt;sup>36</sup> In addition, Hendershott & Jones noted that the introduction of NYSE's OpenBook realtime limit order book data feed was associated with increased order flow to NYSE. <u>Id.</u> at 747.

Hendershott & Jones supports an inference that an increase in the price of depth-of-book data for a market will cause a reduction in order flow at that market. Therefore, it is clear that, if a market were to consider charging a higher price for its depth-of-book data, it would need to weigh the increased revenues it would receive from depth-of-book customers that continue to purchase the product against the reduced revenues from (a) subscription cancellations and (b) fewer trade executions. Thus, the effect of availability of depth-of-book data on order flow constrains the ability and incentive of a market to charge a higher price for its depth-of-book data.

# ii. Pricing of Depth-of-Book Data by Exchanges other than NYSE and Nasdaq

Observations of past and current behavior of markets support the conclusion that because of order flow competition markets do not have the ability or incentive to set supra-competitive prices for non-core market data. BATS (a recent entrant that has experienced significant market share growth) has publicly noted that part of its strategy to gain order flow is to provide its depth-of-book data for free, because BATS believes that the widest possible dissemination of these data is essential to attract order flow at the current stage of BATS's development. NYSE Arca notes that it used the same strategy initially to attract order flow. If the price charged for depth-of-book data did not have a significant effect on order flow and revenue from the execution of trades, it would not be rational for BATS to provide its depth-of-book data free of charge, and it would not have been rational for NYSE Arca to have done so initially.

# iii. Effects of Competition on Shares of Trading

In the Direct Order, the Commission concluded that there is fierce competition for order flow. More recent data show that this conclusion was correct and that competition has intensified. Table 1 shows the monthly trading volume of U.S. equities on NYSE Arca from 2001 through July 2010. After initially climbing, volume on NYSE Arca has been volatile, and, indeed, since October 2008 has fallen significantly. Table 2 shows NYSE Arca's percentage share of U.S. equities trading. Together, Tables 1 and 2 show that market participants are not wedded to NYSE Arca's platform and that NYSE Arca must continually compete to sell its trading services. <sup>37</sup>

The volatility and trends in the shares of total trading volume on each of the various markets demonstrate that competition among these markets in the sale of trading services is intense. Tables 3, 4, 5, and 6 provide graphical decompositions of shares from 2001 through July 2010 for NYSE Arca, NYSE, Nasdaq, the trade reporting facilities ("TRFs"), BATS, and other markets.<sup>38</sup> Table 3 shows shares for all U.S. equities trading. It demonstrates that NYSE, NYSE Arca, and Nasdaq's shares of trading have fallen, while the TRFs and BATS have taken a larger share of trading. This shows not only that the market for trading equities is competitive but also that entry has been easy.<sup>39</sup> Table 4 shows similar results for Tape A, and in particular shows that the TRFs have captured a significant share of trading from other markets. Table 5

<sup>&</sup>lt;sup>37</sup> This volatility evidences the speed and frequency with which market participants change their order routing determinations.

<sup>&</sup>lt;sup>38</sup> The TRF data includes non-exchange trades through NYSE, Nasdaq, BSE, NSX, and FINRA.

<sup>&</sup>lt;sup>39</sup> Ease of entry into this market is further evidenced by the recent entry of Direct Edge, which began operating two exchanges in July 2010. For the month of July 2010, the Direct Edge exchanges, EDGA and EDGX, accounted for 1.69% and 2.57%, respectively, of all tape-reported trade volume. For the month of August, those numbers increased to 3.79% and 4.75%. This rapid increase in trading volume evidences both the ease of entry into this market and the speed with which market participants change the venues to which they route orders. Direct Edge's rapid market share growth is not unique, NYSE Arca experienced a similarly rapid increase in market share when it commenced operations in 2004, and, as shown in Tables 4, 5, and 6, BATS's trading volume grew quickly, further evidencing ease of entry.

shows shares for Tape B. Interestingly, Table 5 shows NYSE Arca coming into the market and quickly capturing a share of other exchanges' trading activity. It goes on to show the TRFs then coming in and doing the same (including capturing a share of NYSE Arca's trading activity), eventually achieving a share of nearly 30%. Table 6 shows a similar result for Tape C. Table 7 shows data on the same shares for the period January 2010-July 2010.

Moreover, this data provides additional support for the platform competition concept discussed below and further demonstrates that individual market depth-of-book products are substitutable to the extent market participants might not wish to purchase all such products. For example, large market participants place orders on many markets simultaneously, so they may not need all markets' depth-of-book products or may choose to purchase some but not others based on price and/or other features. Table 7 shows that Nasdaq had approximately the same share in Tape A and B securities that NYSE Arca did during the January-July 2010 period, meaning that a market participant placing orders in both markets could choose one depth-ofbook product rather than the other based on price and/or other features.

#### iv. Effects of Competition on Trading Revenues

Since July 2007 NYSE Arca's per share net revenue capture has fallen and market share has declined, although its trading volume has increased somewhat due to growth in industry volumes. This is the result of fierce competition for order flow and is not consistent with NYSE Arca being able to set prices for its proprietary market data (such as ArcaBook) at its whim; it is also further support for the platform competition discussion below. As the Commission is aware, transaction fees have generally fallen across markets. The competition between those markets is passed through to traders in the form of lower net prices for trading services.

# D. Pricing for Joint Products

Other market participants have noted that the liquidity provided by the order book, trade execution, core market data, and non-core market data are joint products of a joint platform and have common costs.<sup>40</sup> The Exchange agrees with and adopts those discussions and the arguments therein. The Exchange also notes that the economics literature confirms that there is no way to allocate common costs between joint products that would shed any light on competitive or efficient pricing.<sup>41</sup>

That large market participants, including internalizers handling retail order flow, use proprietary exchange feeds (rather than CTS and CQS feeds) to make trade and routing decisions further demonstrates the joint nature of market data and order flow.<sup>42</sup> So does the fact that some

<sup>41</sup> See generally Mark Hirschey, FUNDAMENTALS OF MANAGERIAL ECONOMICS at 600 (2009) ("It is important to note, however, that although it is possible to determine the separate marginal costs of goods produced in variable proportions, it is impossible to determine their individual average costs. This is because common costs are expenses necessary for manufacture of a joint product. Common costs of production—raw material and equipment costs, management expenses, and other overhead—cannot be allocated to each individual by-product on any economically sound basis. ... Any allocation of common costs is wrong and arbitrary."). This is not new economic theory. See, e.g., F. W. Taussig, "A Contribution to the Theory of Railway Rates," <u>Quarterly Journal of Economics</u> V(4) 438, 465 (July 1891) ("Yet, surely, the division is purely arbitrary. These items of cost, in fact, are jointly incurred for both sorts of traffic; and I cannot share the hope entertained by the statistician of the Commission, Professor Henry C. Adams, that we shall ever reach a mode of apportionment that will lead to trustworthy results.").

 <sup>&</sup>lt;u>See</u> Securities Exchange Act Release No. 34-62887 (September 10. 2010); 75 FR 57092 (September 17, 2010); Securities Exchange Act Release No. 34-62907 (September 14. 2010); 75 FR 57314 (September 20, 2010); and Securities Exchange Act Release No. 34-62908 (September 14. 2010); 75 FR 57321 (September 20, 2010); <u>see also</u> attachment to August 1, 2008 Comment Letter of Jeffrey S. Davis, Vice President and Deputy General Counsel, NASDAQ OMX Group, Inc. (Statement of Janusz Ordover and Gustavo Bamberger) (a copy of which is attached hereto as Exhibit 3 C.).

<sup>&</sup>lt;sup>42</sup> See Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues — Findings Regarding the Market Events of May 6, 2010 at 76-79 (Sept. 30, 2010). That report again recognized that most retail order flow is handled by internalizers. <u>See id.</u> at 77.

exchanges use certain market data quote revenue as a form of direct market maker liquidity provider rebate to drive more liquidity to their books in less active stocks. This highlights that market data and trade executions are joint products that are linked on a platform basis. Charts 3-7 provide additional support for the existence of this type of platform competition.

# E. Pricing Non-Core Data Based on Cost Is Impractical

The Exchange believes that, even if it were possible as a matter of economic theory, costbased pricing for non-core market data would be so complicated that it could not be done practically.<sup>43</sup> The record relating to the 2006 Rule Change includes several documents attesting to the difficulty of cost-based pricing in this area. In addition to those, we respectfully direct the Commission's attention to two reports issued by PHB Hagler Bailly, Inc. ("PHB").<sup>44</sup> The New York Stock Exchange retained PHB to assist it in connection with its response to the Commission's 2000 Concept Release on the Regulation of Market Information Fees and Revenues (the "2000 Concept Release"). The PHB reports conclude that cost-based pricing would inevitably stifle competition and innovation and entangle both the industry and the

<sup>&</sup>lt;sup>43</sup> In addition, the evidence of competitive constraints on market data pricing (both directly and in the context of joint platforms) is so strong that it makes devoting the resources that would be necessary to try to incorporate a cost-based pricing model unnecessary. Because of the level of competition that already exists and the compelling need to devote regulatory resources to other issues, the Exchange does not believe there is any need for the Commission and markets to become embroiled in what would almost certainly become prolonged rate-making proceedings. Indeed, the amendment of Section 19 effected by the Dodd-Frank Act is further evidence that Congress intended market data fees to be governed by the development of competition in the markets rather than costbased ratemaking.

<sup>&</sup>lt;sup>44</sup> See "Issues Surrounding Cost-Based Regulation of Market Data Prices," which provides a view of cost-based pricing from a historical regulatory perspective, and "The Economic Perspective on Regulation of Market Data," which provides an economic assessment of cost-based pricing. The two reports constitute Appendix C to NYSE's comments to the 2000 Concept Release ("NYSE Comments") and can be found on the Commission's website at <u>http://www.sec.gov/rules/concept/s72899/buck1.htm</u>. They are attached hereto as Exhibits 2 D. and E. for the Commission's convenience.

Commission in time-consuming, expensive, and ultimately fruitless proceedings and data analysis. Their conclusions include the following:

- <u>Enormous Administrative Burdens</u>. The administrative burdens that cost-based pricing would place on all parties, in particular the Commission, would be "enormous." The Commission would have to cost-regulate a large number of participants. Extraordinary amounts of information, accounts, and reports would have to be standardized and analyzed to make determinations that would stand the scrutiny and challenges to which rate-making decisions are often subject. This is the source of the Exchange's belief that cost-based rate regulation is infeasible.<sup>45</sup>
- Joint Products. It is impossible to regulate market data prices in isolation from prices charged by markets for other services that are joint products. Market data and transaction execution are "joint products," linked in a way that pricing of one inevitably affects pricing of the other. If rate regulation were to reduce the revenues that could be realized from market data fees, then other fees transaction fees or, in the case of the primary markets, listing fees would have to be increased to maintain the total revenue infrastructure and the same level of services. However, because the three types of fees fall differently on broker-dealers, investors, and listed companies, the result would be a reallocation of market costs based not on competition and constituent governance but rather as a side-effect of governmental intervention.

<sup>&</sup>lt;sup>45</sup> Footnote 11 to the NYSE Comments describes the significant nature of the burdens associated with cost-based pricing and the Exchange incorporates that discussion here by reference.

- <u>Litigation</u>. Under cost-based rate regulation, litigation is inevitable, if only to delay rate decisions deemed unfavorable by one party or another.
- <u>Waste and Negative Incentives</u>. Consistently across industries where it has been used, cost-based regulation of pricing has been found to distort incentives, including incentives to minimize costs and to innovate, and to lead to considerable waste. Making arbitrary cost allocations provides disincentives for markets to invest in more resilient systems and to make their data services more widely available. It encourages padding and cross-subsidization of costs, yet provides no incentive to reduce costs through operating or administrative efficiencies. It would create incentives to use accounting practices to shift the recovery of costs to market data fees and away from transaction and listing fees.
- <u>Fee Increases</u>. In contrast to the dramatic decline in market data costs over the past quarter century, under cost-based regulation of prices, it is quite possible the industry would experience over time frequent rate increases based on escalating expense levels. Without the demonstration of a strong need to move to this form of regulation, such a result cannot be justified.
- <u>Rate of Return</u>. Rate regulation is never aimed solely at minimizing rates to consumers, since very low rates may affect the attractiveness of the business to competitors and potential competitors, or the level of service provided. The regulator must determine what rate of return is "fair" and provide a suitable incentive for service providers while protecting consumers as well. No one has demonstrated why the Commission needs to be the arbiter of this issue to enforce its responsibilities under Section 19 of the Exchange Act.

- <u>Market Forces</u>. Rate regulation implies a belief that an industry cannot rely upon market forces. We believe that constituent boards and customer control have in fact provided the pricing discipline that any government would expect and desire in the area of market data services and fees. Indeed, the discussion above demonstrates that the competitive constraints that apply to market data pricing are formidable.
- <u>Trends</u>. In contrast to cost-based pricing, the Commission's market-based approach to approving market data fees is currently the goal of many other regulatory bodies in other industries. Even in industries historically subject to utility regulation, cost-based rate making has been discredited and other regulated industries are moving away from cost-based rate-making. Proprietary market data dissemination is far from an ordinary utility function, and cost-based regulation is particularly inappropriate in the proprietary market data arena.

Such results would not be in the best interests of market participants and would be inconsistent with Congress's direction that the Commission use its authority to foster the development of the national market system.

F. Impact on Retail Investors

Pricing for non-core data products generally does not impact retail investors. As the Commission and the Commodities Futures Trading Commission recently noted, most retail equities transactions are internalized by a broker-dealer.<sup>46</sup>

 <sup>46</sup> See Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues — Findings Regarding the Market Events of May 6, 2010 at 77 (Sept. 30, 2010).

That makes depth-of-book data of little relevance to retail investors. And retail brokerdealers are not required to purchase depth-of-book data to fulfill their duties of best execution.<sup>47</sup> iii. Contracts

As before, the Exchange will require or continue to require each recipient of a datafeed containing NYSE Arca Data to enter into the form of "vendor" agreement into which the CTA and CQ Plans require recipients of the Network A datafeeds to enter. That agreement will authorize the datafeed recipient to provide NYSE Arca Data services to its customers or to distribute the data internally.

In addition, the Exchange will require or continue to require each professional end-user that receives NYSE Arca Data displays from a vendor or broker-dealer to enter into the form of professional subscriber agreement into which the CTA and CQ Plans require end users of Network A data to enter. It will also require or continue to require vendors and broker-dealers to subject nonprofessional subscribers to the same contract requirements as the CTA and CQ Plan Participants require of Network A nonprofessional subscribers.

The Network A Participants drafted the vendor and Network A professional subscriber agreements as one-size-fits-all forms to capture most categories of market data dissemination. They are sufficiently generic to accommodate or continue to accommodate NYSE Arca Data. The Participants in the CTA and CQ Plans have submitted the vendor form and the professional subscriber form to the Commission on Form 19b-4 on multiple occasions. (See Release Nos. 34-22851 (January 31, 1986), 34-28407 (September 10, 1990), and 34-49185 (February 4, 2004).

See NetCoalition Decision at 6 n.6; Direct Order at 74,788 & nn.259-266.

# 2. <u>Statutory Basis</u>

For the foregoing reasons, NYSE Arca believes that the proposed rule change is consistent with the provisions of Section 6 of the Act, in general, and with Section  $6(b)(4)^{48}$  of the Act, in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using the facilities of NYSE Arca. In this regard, the market data fees that are the subject of this filing, in conjunction with fees for other services, provide for an equitable allocation of NYSE Arca's overall costs among users of its services. The market data fees are fair and reasonable because they compare favorably to fees that other markets charge for similar products and because competition provides an effective constraint on the market data fees that the Exchange has the ability and incentive to charge.

## B. Self-Regulatory Organization's Statement on Burden on Competition

For the reasons described above, the Exchange believes that the re-proposed fees will not impose any burden on competition that is not necessary or appropriate in the furtherance of the purposes of the Exchange Act.

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

The Exchange has not solicited, and does not intend to solicit, comments regarding the proposed rule change or re-authorization. Subsequent to the NetCoaliton Decision, the Exchange has not received any unsolicited written comments from Exchange participants or other interested parties.

<sup>&</sup>lt;sup>48</sup> 15 U.S.C. 78f(b)(4).

## III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective upon filing pursuant to Section 19(b)(3)(A)(ii) of the Act<sup>49</sup> and subparagraph (f)(2) of Rule 19b-4 thereunder<sup>50</sup> because it establishes a due, fee, or other charge imposed by the Exchange. At any time within 60 days of the filing of the proposed rule change, the Commission summarily may suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

## IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

#### Electronic comments:

- Use the Commission's Internet comment form (<u>http://www.sec.gov/rules/sro.shtml</u>); or
- Send an e-mail to <u>rule-comments@sec.gov</u>. Please include File Number SR-NYSEArca-2010-97 on the subject line.

## Paper comments:

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

<sup>&</sup>lt;sup>49</sup> 15 U.S.C. 78s (b)(3)(A)(ii).

<sup>&</sup>lt;sup>50</sup> 17 CFR 240.19b-4(f)(2).

All submissions should refer to File Number SR-NYSEArca-2010-97. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet Web site (http://www.sec.gov/rules/sro.shtml). Copies of the submission, <sup>51</sup> all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to

<sup>&</sup>lt;sup>51</sup> The text of the proposed rule change is available on the Commission's website at <u>http://www.sec.gov/rules/sro.shtml</u>.

make available publicly. All submissions should refer to File Number SR-NYSEArca-2010-97 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>52</sup>

Florence E. Harmon Deputy Secretary

<sup>&</sup>lt;sup>52</sup> 17 CFR 200.30-3(a)(12).