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Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * 118

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Form 19b-4

File No.* SR - 2010 - * 174
Amendment No. (req. for Amendments *)

Proposed Rule Change by NASDAQ Stock Market

Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial *	Amendment *	Withdrawal
☑	☐	☐

Section 19(b)(2) *	Section 19(b)(3)(A) *	Section 19(b)(3)(B) *
☐	☑	☐

Pilot ☐

Extension of Time Period for Commission Action * ☐

Date Expires *

Rule

☐ 19b-4(f)(1)	☐ 19b-4(f)(4)
☑ 19b-4(f)(2)	☐ 19b-4(f)(5)
☐ 19b-4(f)(3)	☐ 19b-4(f)(6)

Exhibit 2 Sent As Paper Document ☐

Exhibit 3 Sent As Paper Document ☐

Description

Provide a brief description of the proposed rule change (limit 250 characters, required when Initial is checked *).

A Proposal to Reduce Market Data Fees and Transaction Execution Fees for Retail Investors.

Contact Information

Provide the name, telephone number and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the proposed rule change.

First Name * Jeffrey Last Name * Davis

Title * Vice President and Deputy General Counsel

E-mail * jeffrey.davis@nasdaqomx.com

Telephone * (301) 978-8484 Fax (301) 978-8472

Signature

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized officer.

Date 12/30/2010

By Edward S. Knight
(Name *)

Executive Vice President and General Counsel
(Title *)

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

Edward S Knight,

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFS website.

Form 19b-4 Information (required)

Add Remove View

The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

Exhibit 1 - Notice of Proposed Rule Change (required)

Add Remove View

The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications

Add Remove View

Exhibit Sent As Paper Document ☐

Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

Exhibit 3 - Form, Report, or Questionnaire

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Exhibit Sent As Paper Document ☐

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

Exhibit 4 - Marked Copies

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The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

Exhibit 5 - Proposed Rule Text

Add Remove View

The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.

Partial Amendment

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If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1. Text of Proposed Rule Change

(a) Pursuant to the provisions of Section 19(b)(1) under the Securities Exchange Act of 1934 ("Act")[1] and Rule 19b-4 thereunder,[2] The NASDAQ Stock Market LLC ("NASDAQ") is filing with the Securities and Exchange Commission ("Commission") a proposed rule change to reduce market data fees and transaction execution fees for retail investors. NASDAQ, like the Commission, "is particularly focused on the interests of long-term investors."[3]

Retail investors' orders are often executed away from well-regulated public exchanges that offer pre-trade transparency. The Commission has noted that absent extraordinary conditions such as those occurring on May 6, 2010, retail orders are generally executed by internalizers away from exchanges and without pre-trade transparency, exposure or order interaction.[4] In NASDAQ's view, the likelihood that retail investors' orders are executed away from exchanges is impacted by disparities in regulation between lit markets such as those operated by exchanges[5] on one hand and broker systems or dark markets operated as Alternative Trading Systems on the other. One such disparity provides dark

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1 15 U.S.C. 78s(b)(1).

2 17 CFR 240.19b-4.

3 *See* Exchange Act Release 61358, Concept Release on Equity Market Structure (Jan. 14, 2010), at p. 33.

4 *See* Findings Regarding The Market Events Of May 6, 2010, Report Of The Staffs Of The CFTC And SEC To The Joint Advisory Committee On Emerging Regulatory Issues, September 30, 2010, at p. 56. It is often contended that dark markets serve the interests of large investors whose order sizes give rise to the potential for adverse market movements. Such potential does not exist in the case of smaller retail orders.

5 Alternative Trading Systems that meet the five percent display threshold under Regulation ATS also qualify as lit markets with higher regulatory requirements. NASDAQ is not aware that any ATS is operating under these conditions today.

markets great flexibility to price differentiate between subscribers, while denying exchanges the same flexibility to differentiate between members. Furthermore, although exchanges and dark markets compete for the same order flow and for the same transactions, exchanges must file proposed fee schedules and changes, while other markets have no such burden. The result is that proposed rule changes that impact NASDAQ's ability to compete for order flow, transactions, and market data , such as the current proposal, are subject to significant scrutiny and potential delay while similar conduct by other markets is subject to no public filing requirement, no regulatory delay, and for dark markets is opaque to investors and competitors alike.

This filing is an attempt by NASDAQ to compete to attract retail investors' orders and to improve the experience of retail investors on NASDAQ's public market. NASDAQ is reducing fees for members that serve retail investors. Specifically, NASDAQ is reducing the costs of executing trades and of providing "depth of book" data products for NASDAQ member firms that service "non-professional" users with which the firm has a brokerage relationship. The more NASDAQ data a firm provides to retail investors, and the more that firm trades on NASDAQ, the lower its fees will be. This is an optional pricing proposal designed to benefit non-professional investors by providing an incentive for them to trade in the well-regulated, publicly-displayed market that NASDAQ operates.

The text of the proposed rule change is attached as Exhibit 5.

(b) Not applicable.

(c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposed rule change was approved by senior management of NASDAQ pursuant to authority delegated by the Board of Directors of NASDAQ on June 17, 2009 NASDAQ staff will advise the Board of Directors of NASDAQ of any action taken pursuant to delegated authority. No other action by NASDAQ is necessary for the filing of the rule change.

NASDAQ will implement the proposed rule change on January 3, 2011. Questions regarding this rule filing may be directed to Jeffrey Davis, Vice President and Deputy General Counsel, NASDAQ, at (301) 978-8484.

3. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

a. Purpose

This filing reduces prices for NASDAQ market data and for trading on NASDAQ. The proposed price reduction is targeted at retaining the business of members that represent retail investors and that redistribute market data to them in a non-professional capacity. NASDAQ believes that this proposal thereby promotes NASDAQ's and the Commission's goal of better serving long-term, retail investors and restoring confidence in public capital markets. The participation of these investors in NASDAQ's market benefits NASDAQ, its listed companies, its market quality, and the quality of its data products. The proposal is also a competitive response to other trading venues that have used price discounts to entice firms to shift order flow and data consumption, and that may continue to do so in the future. In short, NASDAQ is attempting to compete on price for the business of customers that are highly valued to NASDAQ and important to the health of U.S. capital markets.

Description of the Pricing Proposal

NASDAQ is proposing a discount for its depth-of-book data products and an enhanced liquidity provider rebate based upon the extent to which a NASDAQ member both consumes NASDAQ market data and also contributes to the quality of NASDAQ data through liquidity provision. This program focuses on non-professional use of "NASDAQ Depth Data Product Fees" which are the non-professional fees for NQDS (Rule 7017), and TotalView and OpenView (Rule 7023), including fees for usage (Rule 7026) and enterprise license fees. It also focuses on average daily liquidity provision to the NASDAQ Market Center as that activity is measured today in NASDAQ Rule 7018 This pricing is completely optional; no member is required to participate or excluded from participating.

The market data discount provided through the proposal is for fees incurred by NASDAQ members in providing NASDAQ depth-of-book data to non-professional users. A member incurs non-professional fees when it offers depth-of-book data to natural persons that are not acting in a capacity that subjects them to financial industry regulation (e.g., retail customers).[6] NASDAQ seeks to encourage wide distribution of

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[6] NASDAQ Rule 7017(c) defines a non-professional as a natural person who is neither:

(1) registered or qualified in any capacity with the Commission, the Commodities Futures Trading Commission, any state securities agency, any securities exchange or association, or any commodities or futures contract market or association;

(2) engaged as an "investment adviser" as that term defined in Section 201(11) of the Investment Advisors Act of 1940 (whether or not registered or qualified under that Act); nor

(3) employed by a bank or other organization exempt from registration under federal or state securities laws to perform functions that would require registration or qualification if such functions were performed for an organization not so exempt.

market data to non-professional users, because it believes that this will encourage more order flow from investors whose trading volumes are elastic and therefore influenced by factors such as the availability of data. NASDAQ also expects that some of the benefit of the fee reductions offered through the proposal will be passed on to brokerage customers. For this reason, NASDAQ already provides a discounted rate for non-professional data, whether it is sold directly to a non-professional user or distributed to the user through a broker. NASDAQ believes that non-professional users that are able to make use of depth data also have a degree of knowledge about market structure that would cause them to favor limit orders, rather than market orders, when buying and selling. Thus, through the proposal, NASDAQ hopes to encourage a "virtuous circle" in which firms route more liquidity-providing orders to NASDAQ and consume and distribute more data in order to receive the discount, with increased data distribution in turn encouraging still more liquidity provision. NASDAQ also hopes to encourage additional firms to provide depth-of-book to their customers.

The program has three tiers, each with two requirements, one based on liquidity provision and the other based on data consumption. A member will qualify as a "Tier 1 Firm" for purposes of the discount during a particular month if it (i) has an average daily volume of 12 million or more shares of liquidity provided through the NASDAQ Market Center in all securities during the month; and (ii) incurs NASDAQ Depth Data Product Fees (as defined above) during the month of $150,000 or more (prior to applying the discount provided by this proposal). A member will qualify as a "Tier 2 Firm" for purposes of the discount during a particular month if it (i) has an average daily volume of

35 million or more shares of liquidity provided through the NASDAQ Market Center in all securities during the month; and (ii) incurs NASDAQ Depth Data Product Fees during the month of $300,000 or more (prior to applying the discount provided by this proposal). A member will qualify as a "Tier 3 Firm" for purposes of the discount during a particular month if it (i) has an average daily volume of 65 million or more shares of liquidity provided through the NASDAQ Market Center in all securities during the month; and (ii) incurs NASDAQ Depth Data Product Fees during the month of $500,000 or more (prior to applying the discount provided by this proposal).

Firms that qualify as Tier 1, Tier 2, or Tier 3 Firms will receive discounted market NASDAQ Depth Data Product Fees and, in the case of Tier 1 Firms, increased liquidity provider credits. With respect to market data fees, Tier 1 Firms will receive a 15% discount on non-professional fees for NASDAQ Depth Data Products charged to them. Tier 2 Firms will receive a 35% discount on non-professional fees for NASDAQ Depth Data Products charged to them. Tier 3 Firms will receive a 50% discount on non-professional fees charged to them.[7] The discounted NASDAQ Depth Data Product Fees are tailored to benefit firms that provide a high quantity of data to non-professional retail investors and that also contribute significantly to the quality of NASDAQ data.

With respect to liquidity provider credits, Tier 1 Firms will qualify for a credit of $0.0028 per share of displayed liquidity provided and a $0.0015 per share of non-displayed liquidity. These rates are higher than the $0.0020 and $0.0010 per share of

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[7] Since the eligibility of a member for the discount is determined on a month-by-month basis, data fees that are paid on an annual basis, such as the annual administrative fee for market data distributors under Rule 7019(a), are not covered by the definition of NASDAQ Depth Data Product Fees, and are therefore not counted in determining a firm's status as a Tier 1, Tier 2 or Tier 3 Firm.

displayed and non-displayed liquidity provider credit available to firms that provide the same 12 million shares of liquidity per day without also consuming NASDAQ Depth Data Products sufficient to qualify for Tier 1 as defined here.[8] These credits are not incrementally higher than the credit currently available to firms providing 35 and 65 million shares of liquidity daily. In other words, the benefit available to Tier 2 and Tier 3 Firms under this program is limited to the discount for NASDAQ Depth Data Products described above.

The proposal is designed to recognize the benefits to NASDAQ, its listed companies, its market quality, and the quality of its proprietary data products that are provided by member firms that both post retail liquidity on NASDAQ and redistribute data to their customers. The proposal is also a direct competitive response to other trading venues that have used price discounts to entice firms to shift order flow and data consumption, and that may continue to do so in the future. Firms that are eligible for the discount are key contributors to market quality, by providing liquidity to support rapid execution of incoming orders with minimal price impact. These firms are able to shift their business immediately to competing exchanges, which requires NASDAQ to offer competitive responses to keep the business of these valued customers. NASDAQ currently recognizes the value of liquidity provision by offering liquidity provider credits that rise with the volume of liquidity provided. For companies listed on NASDAQ, liquidity provision dampens volatility by allowing higher volumes to trade at a consistent price.

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[8] Tier 2 and Tier 3 Firms will receive the current liquidity provider credit of $0.00295 per share of displayed liquidity and $0.00015 per share of non-displayed liquidity. There is no enhancement to these liquidity provider credits at this time.

Single Platform, Joint Products.

NASDAQ is offering a joint discount on market information and executions because, as described in greater detail in the attached Statement of Ordover and Bamberger (Exhibit 3), The NASDAQ Market Center is a single trading platform that unavoidably produces joint products: execution services and market data. Every execution of a trade automatically produces market information about that trade including the price and quantity traded. Every execution requires posted and taking orders, which in turn produce market data in the form of quotations, including top-of-book and depth-of-book quotations. Market information and executions are inextricably linked; each is both an input and a byproduct of the other and neither can exist without the other.

The operation of The NASDAQ Market Center and the production of joint products (executions and market information) require NASDAQ to incur joint costs. NASDAQ's costs to produce market information and executions are inseparable in that most of them are not uniquely incurred on behalf of either of the services provided by the exchange. To operate its trading platform, NASDAQ must incur high fixed costs before accepting a single order, executing a single trade, or producing a single element of market information. Each year, NASDAQ spends millions of dollars on market infrastructure such as servers, processors, line handlers, software, and personnel; data intake, processing and dissemination equipment and networking hardware and software; and regulatory and surveillance systems of both a manual and automated nature. NASDAQ incurs these high costs to operate the platform and to produce both executions and market

information. In other words, without these costs, neither product is produced, but with them, both products are unavoidably produced.[9]

NASDAQ recaptures the cost of operating its platform through the sale of both executions and market information. The total return that NASDAQ or any trading platform earns reflects the revenues it receives from the sale of these joint products and other services, net of the joint and other costs (i.e., those limited costs that can be directly attributed to one of the relevant products) it incurs. Different platforms choose different pricing strategies and ways of recovering total costs. NASDAQ pays rebates to attract orders, charges relatively low prices for market information and charges relatively high prices for accessing posted liquidity. Other platforms may choose a strategy of paying lower liquidity rebates to attract orders, setting relatively low prices for accessing posted liquidity, and setting relatively high prices for market information. Still others may provide most data free of charge and rely exclusively on transaction fees to recover their costs. Finally, some platforms may incentivize use by providing opportunities for equity ownership, which may allow them to charge lower direct fees for executions and data.[10]

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[9] This point was recognized over a century ago by the British economist Alfred Marshall, who noted the inextricability of producing wool and mutton and the inextricable nature of the costs associated with such production.

[10] See, e.g., Securities Exchange Act Release No. 62358 (June 22, 2010), 75 FR 37861 (June 30, 2010) (SR-NSX-2010-06). It has also been reported than NYSE Amex has offered equity incentives to active members. While Nasdaq is aware of no Amex rule filing with the Commission, Amex consistently refers publicly to the "semi-mutualization." program. *See, e.g.*, NYSE Euronext Brings Partners Into Options Market (Dow Jones Newswires, September 9, 2009); Comments of Duncan Neiderauer at NYSE Euronext Q3 2009 Earnings Call (October 30, 2009).

These strategies can vary over time in response to changing market and regulatory factors.[11]

The Commission has acknowledged many times that trading platforms compete fiercely for executions. Platforms also compete for the sale of market data. For example, in June 2008, NASDAQ launched two proprietary "Last Sale" products. In each case, the terms included subscription rates and an "enterprise cap" rate designed for Web portals. The enterprise cap rates for the two products were $100,000 per month and $50,000 per month for the two products (i.e., a total of $150,000 per month for customers who purchased both products). The majority of NASDAQ's sales were at the cap level. In early 2009, we understand that BATS offered an alternative product (BATS PITCH data) as a zero-cost alternative to the NASDAQ Last Sale products.[12] Also in early 2009, NYSE Arca announced the launch of a competitive product with an enterprise price of $30,000 per month. In response, NASDAQ combined its two Last Sale products into one in April 2009, and reduced the enterprise cap to $50,000 per month (i.e., a reduction of $100,000 per month).

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11 Similarly, Marshall's sheep farmer would be expected to cover his costs of production through the sale of both wool and mutton, and it would be unreasonable for sweater-wearers to demand free sweaters subsidized by consumers of mutton. Moreover, in contrast to sheep farming, consumption of each of NASDAQ's main products enables further production and consumption of the other – more executions translate into more data, and more data usage encourages more executions. Accordingly, as discussed below, there is no basis in the Act for requiring these inextricably linked products to be priced in isolation from one another. Such a result makes no more economic sense than requiring the price of a live sheep to be divorced from the price of wool and mutton.

12 Subsequently, BATS has begun to charge for certain of its data products, signaling a shift in strategy to recover a greater percentage of its costs through data, rather than using data solely as a means to draw (fee-liable) orders to its market.

Given the joint nature of these products and the competitive markets in which they are offered, a bundled discount that is linked to total spending across the joint products is economically sensible for a single platform producing joint products. Bundling recognizes the value of liquidity provision and data distribution in creating the conditions that further encourage the creation of the trading platform's products. It also recognizes the fact that customers are differentiated on multiple dimensions in terms of their willingness to pay for data and for accessing liquidity. Platform pricing of market data and executions enables NASDAQ to design a plan that will appeal to a broader group of potential customers – in this case those serving retail investors – and stimulate overall sales of both data and trading. NASDAQ expects that bundling will be more appealing to its customers than offering discounts based only on the volume of one kind of activity or another, as it has done in the past. By conditioning the discount on two activities, NASDAQ can achieve improved participation from both retail brokers that distribute data and their order-providing customers, as compared to a disaggregated pricing approach.[13]

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[13] Bundled pricing is also evident – indeed, it arguably finds its most complete expression – in exchange programs to offer equity ownership to favored members. Equity allows its owner to participate in the upside of all aspects of an exchange's operations, including executions, data, and listings. Thus, equity shares offered in exchange for liquidity provision offset the costs of all exchange products that the favored member consumes, effectively translating into an across-the-board discount and encouraging further consumption that enhances the value of the equity. Moreover, participation in such programs is conditioned upon being a member that directs order flow to the exchange in question, thereby excluding non-members, such as non-broker data distributors, as well as members that choose to direct order flow elsewhere. Moreover, an equity distribution program cannot be open-ended without diluting its value to the first recipients. Accordingly, once the equity distribution program is closed, incumbent owners benefit on an ongoing basis and new members are frozen out.

Given the fierce competition between platforms, as evidenced by rapid shifts in order flow and price cutting behavior in markets for data, the competitive concerns potentially implicated by bundling are not present here. Competitive concerns from a practice of bundling discounts across a range of products may potentially arise when such bundling is used to foreclose entry (expansion) of rival firms that may not be able to offer an array of products as broad as that offered by an incumbent. In the instant case it is not likely that the combined offer will induce rival exchanges to exit (or become less competitively potent due to a reduction in volume), since many of NASDAQ's competitors command a comparably strong measure of market share in the relevant markets. Accordingly, their product offerings can readily compete with NASDAQ's in terms of execution functionality, depth of data, and price (included, if they deem it appropriate, bundled prices). It is also not likely that the combined offer will have the effect of creating significant barriers to entry or expansion for new exchanges. Current conditions of market fragmentation underscore the absence of barriers to entry in the market to attract and execute order flow. Because executions necessarily create data, barriers to entry in that market are correspondingly low.[14]

Price Differentiation Is Consistent with the Exchange Act

For many years, exchanges have engaged in and the Commission has accepted the practice of price differentiation, both in the context of market data as well as in the context of executions. With respect to market data, NASDAQ and NYSE in their capacities as network processors and exchanges have differentiated in pricing between professional and non-professional market data users often charging professionals many

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[14] A further discussion of competitive conditions in the market for exchange data is provided in NASDAQ's "Statement on Burden on Competition" below.

times more than non-professionals for using the same data. For example, consolidated data for NASDAQ stocks costs non-professional investors just one dollar per month, whereas professional investors pay twenty dollars per month for the same data. Also, NASDAQ currently charges $15 per terminal for its TotalView product to non-professionals, while professional investors pay roughly five times the non-professional rate. This reflects the value of the service to various constituencies (i.e., lower prices are charged to consumers with more elastic demand) and allows both types of investors to contribute to the high fixed costs of operating an exchange platform.[15] Thus, one of the two bases for differentiation employed here – reduced prices for non-professional data usage – is completely consistent with economic theory and past Commission precedent.

Similarly, the Commission has long accepted price differentiation between and among members of trading platforms that provide and take liquidity to execute trades. For example, exchanges have offered and continue to offer differential pricing based on absolute volume, incremental volume, order type, ticker symbol, routing strategy, stock price, equity ownership,[16] and other characteristics. Other platforms, including electronic communications networks and other forms of alternative trading systems ("ATSs"),

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15 As discussed in Exhibit 3, charging lower fees to non-professional consumers increases overall economic welfare by increasing output – in this case, providing more data to more investors – and avoids two equally undesirable alternatives: (i) requiring the firm to charge uniformly high prices that constrict demand, or (ii) insisting on uniformly low prices at marginal cost (in this case, zero or close to zero) that do not allow the firm to cover its fixed costs and thereby lead to bankruptcy.

16 An equity ownership program in which a member receives equity in exchange for its initial order flow commitment gives rise to differential pricing in which two classes of participants that thereafter engage in the same behavior are treated differently on an ongoing basis: the equity owner is rewarded for participation through the increased value of its stock, and the non-owner is not.

including dark pools, differentiate on these dimensions and, NASDAQ understands, other dimensions that exchanges are prohibited from using.[17] The differentiation that NASDAQ's proposes here – higher rebates for larger liquidity providers – is entirely consistent with past precedent and with the Act as interpreted and applied by the Commission.

Thus, the Commission has accepted in individual form the precise elements of the price differentiation that NASDAQ is proposing here in joint form. As explained above and in Exhibit 3, this is especially appropriate where the products subject to the joint pricing – market data and executions – are themselves joint products of a single platform: joint pricing will allow exchanges to structure fees that recognize the contribution of particular classes of members to the creation of the products and thereby broaden output and reduce fees

The Commission should also recognize that trading platform operations are characterized by high fixed costs and low marginal costs. This cost structure is common in content and content distribution industries such as software, where developing new software typically requires a large initial investment (and continuing large investments to "upgrade" the software), but once the software is developed, the incremental cost of providing that software to an additional user is typically small, or even zero (e.g., if the software can be downloaded over the internet after being purchased).[18] In NASDAQ's case, it is costly to build and maintain a trading platform, but the incremental cost of

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17 For example, we understand that ATSs routinely negotiate individualized pricing packages with their subscribers, and deny access to disfavored users.

18. See William J. Baumol and Daniel G. Swanson, "The New Economy and Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power," *Antitrust Law Journal*, Vol. 70, No. 3, 2003.

trading each additional share on an existing platform, or distributing an additional instance of data, is very low. Market information and executions are each produced jointly (in the sense that the activities of trading and placing orders are *the* source of information that is distributed) and are each subject to significant scale economies.[19]

That NASDAQ's platform produces market information and executions jointly and in scale does not mean that either of the joint products should be, or even can be, offered at no charge or at marginal cost. Marginal cost pricing is not feasible when there are increasing returns to scale because if all sales were priced at marginal cost, NASDAQ would be unable to defray its platform costs of providing the joint products. Moreover, to offer market data at no cost would require NASDAQ to raise the cost of providing execution services because it would require execution services to cover 100 percent of the recovery of the joint and common costs of both execution services and market data. While this may be a viable choice for some platforms, individual platform operators can and do reasonably choose other pricing models to allocate the recovery of cost between the joint products. At the same time, as discussed below and in Exhibit 3, competition between platforms clearly constrains the ability of platform operators to price execution services and market data products.

The Commission has previously stated, in dicta, that "the Exchange Act precludes exchanges from adopting terms for data distribution that unfairly discriminate by favoring participants in an exchange's market or penalizing participants in other

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[19]. This is not the case with Marshall's sheep farming. Sheep are likely produced with constant or increasing marginal cost, and the pricing complication is confined to the most efficient recovery of the marginal cost of a sheep.

markets."[20] The Commission provided no analysis in support of this statement. NASDAQ believes that consideration of the joint nature of the products in question and the Commission's precedents will allow a more developed analysis of conduct that constitutes unfair discrimination under the Act. As noted above, the Commission has allowed exchanges to price discriminate in a wide range of respects, including, for example, volume-based execution discounts that directly favor participants in the exchange's market, discounts on uses of particular order types or strategies that favor participants with certain trading models, and selective equity ownership that provides effective discounts on all of the exchange's products, including data, and that discriminates in favor of active participants in the exchange's market during a set offering period. Moreover, in light of the joint nature of an exchange's transaction and data products, uniform fees – requiring exchanges to charge the same fees to data consumers that help to produce data as it charges to those who do not – could be said to discriminate against participants by requiring them to pay fees that are not allocated based on the value of their participation in the market. Thus, if it is fair to discount execution fees to liquidity providers because they add value to the market place, it should also be considered fair to discount data fees to liquidity providers because they add value to data.

In addition, it is difficult to discern a reasonable policy goal behind a strict prohibition on data discounts that consider transaction activity. As noted above and in Exhibit 3, differences in pricing may increase economic welfare by allowing greater

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[20] Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770 (December 9, 2008) (SR-NYSEArca-2006-21), *vacated by* NetCoalition v. SEC, No. 09-1042 (DC Cir. 2010).

distribution than would otherwise be the case, and also, in this case, enhance the value of NASDAQ's joint product to the extent that greater consumption of data encourages further investor activity, which in turn results in the production of more data. Moreover, differentiating pricing based on reasonable distinctions among consumers cannot be considered unfair under the Act, since the Commission has approved numerous instances of such distinctions. If the Commission were to adopt such a prohibition, therefore, it would seem to be driven by a concern that exchanges might use bundled data pricing in an anticompetitive manner.[21]

This concern would be reasonable only if the exchange actually enjoyed substantial market power in the data segment of the market and could use it to attempt to reduce competition in the transactions segment. Thus, if all market participants needed data from a particular exchange to operate, and the exchange conditioned low data fees on market participants directing order flow to the exchange, the exchange might attempt to use its control over data to monopolize trading as well. These conditions are not present here, nor is it likely that they could ever arise in these markets. First, an exchange that attempted to restrict the provision of data to disfavored recipients would be restricting access to one of the key mechanisms by which the exchange attracts orders to

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[21] Another possibility is that the Commission might somehow conclude that transactions and data must be priced in isolation of one another, despite their wool/mutton nature, merely to ensure that data consumers who do not use transaction services pay the same fees as those who do. There is nothing in the Act that speaks directly to maintaining a dichotomy between products in establishing their prices, and the Act clearly allows differential pricing within a product category. Nor would it be reasonable for the Commission to conclude that fairness mandates that consumers with different cost and benefit profiles nevertheless pay the same fees. Thus, before the Commission concludes that a particular price differential is "unfair," it should first conclude that the differential lacks a reasonable basis in fact. NASDAQ respectfully maintains that the Commission may not reach such a conclusion in this instance.

its matching engine. Moreover, as discussed in detail throughout this filing, the market participants with the most demand for an exchange's data are the ones that actually trade on that exchange, but no one is required to trade on any particular exchange or to consume its data. Indeed, no single exchange controls proprietary data that is indispensible to any particular market participant. Therefore, an effort to use pricing to "penalize" market participants for sending orders to other venues would likely succeed only in driving more orders to those venues and cutting demand for data as well. Finally, because the marginal cost of selling data to one more customer is zero or close to zero, exchanges have every interest in selling as much data as possible, in order to ensure that they cover their high fixed costs. As a result, exchanges readily sell data to market participants and also to non-market participants that direct no order flow to the exchange at all. Penalizing "disloyal" consumers of data would do nothing more than diminish the exchange's revenue opportunities.

Under traditional antitrust analysis, pricing systems under which the prices for two products are "bundled" have generally been found to be beneficial to consumers, rather than anticompetitive. A court will not uphold a challenge to bundled pricing unless it is clear that a party has market power in one product and is using the bundled pricing to extend its market power to another product. "Buyers often find package sales attractive; a seller's decision to offer such packages can merely be an attempt to compete effectively – conduct that is entirely consistent with the Sherman Act." Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 12 (1984). As noted in the recent report of a

bipartisan commission on antitrust law,[22] "[l]arge and small firms, incumbents, and new entrants use bundled discounts and rebates in a wide variety of industries and market circumstances. Because they involve lower prices, bundled discounts and bundled rebates typically benefit consumers." The report noted that bundled discounts can be used appropriately to reduce the seller's costs, to improve the quality of products, to advertise the benefits of related products, and to increase demand for a product. If, as is the case here, the markets for both bundled products are competitive, bundled pricing will not give rise to any competitive concerns.

Nevertheless, since the Act clearly bars discrimination that is unfair, it would be reasonable for the Commission to disapprove fees or other conditions to access that appear to have anticompetitive aims, such as rules that selectively prohibit some parties from having access to data. The Commission should not, however, block efforts by exchanges to reduce their prices merely because they do not cut prices "across the board." As the Supreme Court has recognized, "cutting prices in order to increase business often is the very essence of competition." Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 594 (1986). "Mistaken inferences in cases" involving alleged harm from low prices "are especially costly, because they chill the very conduct the antitrust laws are designed to protect." Matsushita, 475 U.S. at 594. In this case, disapproval of NASDAQ's proposed fee reductions would leave the fees for NASDAQ depth products untouched: consumers that would have paid lower fees under the proposal will continue to pay higher fees, and other consumers will pay exactly what they

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[22] Report and Recommendations of the Antitrust Modernization Commission (April 2007) (available at http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf).

do now, and exactly what they would have paid if the proposal had gone into effect. It is difficult to see how the interests of any parties, or of the marketplace as a whole, would be served by that outcome.

Conclusion

This filing reduces prices for NASDAQ market data and for trading on NASDAQ. It is designed to promote NASDAQ's and the Commission's goal of better serving retail investors whose participation in NASDAQ's market benefits NASDAQ, its listed companies, its market quality, and the quality of its data products. It is also a competitive response to other trading venues. In short, NASDAQ is cutting prices for customers that are highly valued to NASDAQ and are important to the health of U.S. capital markets.

b. Statutory Basis

NASDAQ believes that the proposed rule change is consistent with the provisions of Section 6 of the Act.[23] In particular, NASDAQ believes that the proposal is consistent with Section 6(b)(4) of the Act,[24] in that it provides an equitable allocation of reasonable fees among users and recipients of the data, Section 6(b)(5) of the Act,[25] in that it is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers, Section 6(b)(8) of the Act,[26] in that it does not impose any burden on competition not necessary or appropriate in the furtherance of the purposes of the Act, and Rule 603(a) of

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23 15 U.S.C. 78f.

24 15 U.S.C. 78f(b)(4).

25 15 U.S.C. 78f(b)(5),

26 15 U.S.C. 78f(b)(8).

Regulation NMS,[27] in that it provides for distribution of information with respect to quotations for or transactions in an NMS stock on terms that are fair and reasonable and are not unreasonably discriminatory. In adopting Regulation NMS, the Commission granted self-regulatory organizations and broker-dealers[28] increased authority and flexibility to offer new and unique market data to the public. It was believed that this authority would expand the amount of data available to consumers, and also spur innovation and competition for the provision of market data.

NASDAQ Depth Data Products are precisely the sort of market data product that the Commission envisioned when it adopted Regulation NMS. The Commission concluded that Regulation NMS—by lessening regulation of the market in proprietary data—would itself further the Act's goals of facilitating efficiency and competition:

> [E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data. The Commission also believes that efficiency is promoted when broker-dealers may choose to receive (and pay for) additional market data based on their own internal analysis of the need for such data.[29]

By removing unnecessary regulatory restrictions on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in

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27 17 CFR 202.603(a).

28 It should be stressed that Rule 603, 17 CFR 202.603(a), both allows broker-dealers to distribute their own data, singly or on an aggregated basis, and generally subjects them to the same regulatory standards as exchanges. Thus, any broker or dealer that distributes information must do so on terms that are not unreasonably discriminatory, and any broker or dealer that distributes information for which it is the exclusive source must do so on terms that are fair and reasonable. As a result, to the extent that the Commission establishes procedures or legal standards applicable to exchange data, it must apply the same procedures and standards to broker-dealer data.

29 Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

its legislative history. If the free market should determine whether proprietary data is sold to broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well.

The recent decision of the United States Court of Appeals for the District of Columbia Circuit in NetCoaliton v. SEC, No. 09-1042 (D.C. Cir. 2010) upheld the Commission's reliance upon competitive markets to set reasonable and equitably allocated fees for market data. "In fact, the legislative history indicates that the Congress intended that the market system 'evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed' and that the SEC wield its regulatory power 'in those situations where competition may not be sufficient,' such as in the creation of a 'consolidated transactional reporting system.' NetCoaltion, at 15 (quoting H.R. Rep. No. 94–229, at 92 (1975), *as reprinted in* 1975 U.S.C.C.A.N. 321, 323). The court agreed with the Commission's conclusion that "Congress intended that 'competitive forces should dictate the services and practices that constitute the U.S. national market system for trading equity securities.' " "[30]

The Court in *NetCoalition*, while upholding the Commission conclusion that competitive forces may be relied upon to establish the fairness of prices, nevertheless concluded that the record *in that case* did not adequately support the Commission's conclusions as to the competitive nature of the market for NYSEArca's data product at issue in that case. For the reasons discussed in this filing and in Exhibit 3, however, NASDAQ believes that there is substantial evidence of competition in the marketplace for data that was not in the record in the *NetCoalition* case, and that the Commission is

[30] NetCoaliton v. SEC, No. 09-1042 (D.C. Cir. 2010) at p. 16,

entitled to rely upon such evidence in concluding that the fees established in this filing are the product of competition, and therefore in accordance with the relevant statutory standards.[31] In addition, as discussed in the "Purpose" section of the filing above, NASDAQ believes that it is not inequitable or unfairly discriminatory to establish discounts for market data fees that take account of a market participant's transaction volumes.

4. Self-Regulatory Organization's Statement on Burden on Competition

NASDAQ does not believe that the proposed rule change will result in any burden on competition. To the contrary, NASDAQ's proposed price reduction in response to competitive pricing offers is the essence of competition. As the Supreme Court has recognized, "cutting prices in order to increase business often is the very essence of competition." Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 594 (1986). NASDAQ is acting pro-competitively by offering more attractive pricing, designed to attract order flow and business away from competing platforms:

> When a firm . . . lowers prices but maintains them above predatory levels, the business lost by rivals cannot be viewed as an "anticompetitive" consequence of the claimed violation. A firm complaining about the harm it suffers from nonpredatory price competition "is really claiming that it [is] unable to raise prices." This is not *antitrust* injury; indeed, "cutting prices in order to increase

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[31] It should also be noted that Section 916 of Dodd- Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") has amended paragraph (A) of Section 19(b)(3) of the Act, 15 U.S.C. 78s(b)(3) to make it clear that all exchange fees, including fees for market data, may be filed by exchanges on an immediately effective basis. Although this change in the law does not alter the Commission's authority to evaluate and ultimately disapprove exchange rules if it concludes that they are not consistent with the Act, it unambiguously reflects a conclusion that market data fee changes do not require prior Commission review before taking effect, and that a formal proceeding with regard to a particular fee change is required only if the Commission determines that it is necessary or appropriate to suspend the fee and institute such a proceeding.

> business often is the very essence of competition." The antitrust laws were enacted for "the protection of *competition*, not *competitors*."

Atlantic Richfield Co. v. USA Petroleum Co., 495 U.S. 328, 337-38 (1990) (emphasis in original; citations omitted).

Platform Competition is Intense.

As the Commission recently recognized,[32] the market for transaction execution and routing services is highly competitive, and the market for proprietary data products is complementary to it, since the ultimate goal of such products is to attract further order flow to an exchange. Order flow is immediately transportable to other venues in response to differences in cost or value and in doing so directly impact the quality and quantity of data at any given platform.

With regard to the market for executions, broker-dealers currently have numerous alternative venues for their order flow, including multiple competing self-regulatory organization ("SRO") markets, as well as broker-dealers ("BDs") and aggregators such as the Direct Edge and LavaFlow electronic communications networks ("ECNs"). Each SRO market competes to produce transaction reports via trade executions, and FINRA-regulated Trade Reporting Facilities ("TRFs") compete to attract internalized transaction reports. It is common for BDs to further and exploit this competition by sending their order flow and transaction reports to multiple markets, rather than providing them all to a single market.

Public markets such as NASDAQ also compete for order flow and executions with dark pools and other ATSs that provide similar services under a lighter regulatory

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32 Id.

burden.[33] One such disparity that directly affects competition for order flow, executions, and market data is the greater flexibility of dark trading systems and certain ATSs to differentiate between their subscribers. Another is the requirement imposed on exchanges and not upon ATss to file proposed pricing schedules and changes, thereby subjecting exchanges prices to greater regulatory scrutiny, intervention and delay. NASDAQ has questioned and continues to question whether such disparities remain justified (assuming they once were justified) in light of current competition between exchanges and ATs and including increasingly high levels of executions occurring in ATSs.

Competitive markets for order flow, executions, and transaction reports provide pricing discipline for the inputs of proprietary data products. The large number of SROs, TRFs, and ECNs that currently produce proprietary data or are currently capable of producing it provides further pricing discipline for proprietary data products. Each SRO, TRF, ECN and BD is currently permitted to produce proprietary data products, and many currently do or have announced plans to do so, including NASDAQ, NYSE, NYSEArca, BATS, and Direct Edge.

Any ECN or BD can combine with any other ECN, broker-dealer, or multiple ECNs or BDs to produce jointly proprietary data products. Additionally, non-BDs such as order routers like LAVA, as well as market data vendors can facilitate single or multiple broker-dealers' production of proprietary data products. The potential sources of proprietary products are virtually limitless.

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33 *See* Letter dated April 30, 2010, from Joan Conley, Senior vice President and Corporate Secretary, The NASDAQ Stock Market LLC, to Elizabeth Murphy, Secretary, Securities and Exchange Commission (commenting on regulatory disparities and arbitrage in response to Concept Release on Market Structure)

The fact that depth data from ECNs, BDs, and vendors can by-pass SROs is significant in two respects. First, non-SROs can compete directly with SROs for the production and distribution of proprietary data products, as Archipelago, BATS, and DirectEdge did prior to registering as SROs. Second, because a single order or transaction report can appear in an SRO proprietary product, a non-SRO proprietary product, or both, the data available in proprietary products is exponentially greater than the actual number of orders and transaction reports that exist in the marketplace writ large.

Market data vendors provide another form of price discipline for proprietary data products because they control the primary means of access to end users. Although their business models may differ, vendors exercise pricing discipline because they can simply refuse to purchase any proprietary data product that fails to provide sufficient value. NASDAQ and other producers of proprietary data products must understand and respond to these varying business models and pricing disciplines in order to successfully market proprietary data products.

In addition to the competition and price discipline described above, the market for proprietary data products is also highly contestable because market entry is rapid, inexpensive, and profitable. The history of electronic trading is replete with examples of entrants that swiftly grew into some of the largest electronic trading platforms and proprietary data producers: Archipelago, Bloomberg Tradebook, Island, RediBook, Attain, TracECN, BATS Trading, and Direct Edge. Several ECNs have existed profitably for many years with a minimal share of trading, including Bloomberg Tradebook and LavaFlow.

Competition among platforms has driven NASDAQ continually to improve its platform data offerings and to cater to customers' data needs. For example, NASDAQ has developed and maintained multiple delivery mechanisms (IP, multi-cast, and compression) that enable customers to receive data in the form and manner they prefer and at the lowest cost to them. NASDAQ offers front end applications such as its "Bookviewer" to help customers utilize data. NASDAQ has created TotalView Aggregate to complement TotalView ITCH and Level 2, because offering data in multiple formatting allows NASDAQ to better fit customer needs. NASDAQ offers data via multiple extranet providers, thereby helping to reduce network and total cost for its data products. NASDAQ has developed an online administrative system to provide customers transparency into their data feed requests and streamline data usage reporting. NASDAQ has also expanded its Enterprise License options that reduce the administrative burden and costs to firms that purchase market data.

Despite these enhancements and a dramatic increase in message traffic, NASDAQ's fees for depth-of-book data have remained flat. In fact, as a percent of total customer costs, NASDAQ data fees have fallen relative to other data usage costs -- including bandwidth, programming, and infrastructure -- that have risen. The same holds true for execution services; despite numerous enhancements to NASDAQ's trading platform, absolute and relative trading costs have declined. Platform competition has intensified as new entrants have emerged, constraining prices for both executions and for data.

The proposed rule change is a direct response to this competition, and it is motivated by the conclusion that Tier 1, Tier 2 and Tier 3 Firms provide benefits to NASDAQ and its customers across business lines and therefore merit pricing incentives

to join or remain in these tiers. It recognizes the concern that the order flow and data product use that such firms currently bring to NASDAQ may migrate elsewhere if their contributions are not appropriately recognized. At the same time, if other customers determine that their fees are too high in comparison to those paid by firms qualifying for the discount, they will take their business to other venues. Thus, the proposal must strike a balance between growing and retaining the business of actual and potential Tier 1 and Tier 2 Firms and the business of firms that lack the volume of business to become eligible. In light of the highly competitive nature of these markets, NASDAQ's revenues and market share are likely to be diminished by the proposal if it strikes this balance in the wrong way.[34]

The NetCoalition Decision

The court in NetCoalition concluded that the Commission had failed to demonstrate that the market for market data was competitive based on the reasoning of the Commission's NetCoalition order because, in the court's view, the Commission had not adequately demonstrated that competition for order flow adequately constrains the pricing of depth-of-book data.[35] However, the Netcoalition court did cite favorably an economic study by Ordover and Bamberger which concluded that "[a]lthough an

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[34] The Commission has recognized that an exchange's failure to strike this balance correctly will only harm the exchange. "[M]any market participants would be unlikely to purchase the exchange's data products if it sets fees that are inequitable, unfair, unreasonable, or unreasonably discriminatory…. For example, an exchange's attempt to impose unreasonably or unfairly discriminatory fees on a certain category of customers would likely be counter-productive for the exchange because, in a competitive environment, such customers generally would be able to respond by using alternatives to the exchanges data." Id.

[35] The NetCoalition court did not consider or address the statutory amendments encompassed by the Dodd-Frank Act in any way.

exchange may price its trade execution fees higher and its market data fees lower (or vice versa), because of "platform" competition the exchange nonetheless receives the same return from the two "joint products" in the aggregate."[36]

Accordingly, NASDAQ is submitting along with this filing additional comments from Ordover and Bamberger expanding upon the impact of platform competition on the pricing of joint products, and in particular on the application of that theory to NASDAQ's current proposal. Among the conclusions that Ordover and Bamberger reach are: NASDAQ is subject to significant competitive forces in setting the prices and other terms of execution services and proprietary data products.

Competition among trading platforms can be expected to constrain the aggregate return each platform earns from the sale of the array of its products, including the joint products at issue here. In particular, cross-platform competition, and the adverse effects from overpricing proprietary information on the volume of trading on the platform, constrain the pricing of proprietary information.

Competitive forces constrain the prices that platforms can charge for non-core market information. A trading platform cannot generate market information unless it receives trade orders. For this reason, a platform can be expected to use its market data product as a tool for attracting liquidity and trading to its exchange.

While, by definition, information that is proprietary to an exchange cannot be obtained elsewhere, this does not enable the owner of such information to exercise monopoly power over that information vis-à-vis firms with the need for such information. Even though market information from one platform may not be a perfect substitute for

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[36] *See* NetCoalition at fn. 16.

market information from one or more other platforms, the existence of alternative sources of information can be expected to constrain the prices platforms charge for market data. Besides the fact that similar information can be obtained elsewhere, the feasibility of supra-competitive pricing is constrained by the traders' ability to shift their trades elsewhere, which lowers the activity on the exchange and so in the long run reduces the quality of the information generated by the exchange.

NASDAQ's Platform pricing can be described as a type of "differential pricing" and "bundling." Differential pricing in markets with high fixed costs and low incremental costs is common, efficient, and not anticompetitive. "Bundling" also is common and generally procompetitive.

NASDAQ's joint products are produced under the conditions of high fixed costs, which are also joint and common to a range of products, and low (or zero) marginal or incremental cost of serving an additional customer. In industries with these cost characteristics, charging all customers the same price is not economically efficient.

Additional evidence cited by NYSE Arca in SR-NYSE Arca-2010-097 which was not before the NetCoalition court also demonstrates that availability of depth data attracts order flow and that competition for order flow can constrain the price of market data:

1. Terrence Hendershott & Charles M. Jones, *Island Goes Dark: Transparence, Fragmentation, and Regulation*, 18 Review of Financial Studies 743 (2005);
2. Charts and Tables referenced in Exhibit 3B to that filing;
3. PHB Hagler Bailly, Inc., "Issues Surrounding Cost-Based Regulation of Market Data Prices;" and
4. PHB Hagler Bailly, Inc., "The Economic Perspective on Regulation of Market Data."

NASDAQ also submits that in and of itself, NASDAQ's decision voluntarily to cap fees on existing products is evidence of market forces at work. The instant proposal does just that, creating an expanded enterprise license on two product classes. Retail investors will be the primary beneficiaries.

5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

Written comments were neither solicited nor received.

6. Extension of Time Period for Commission Action

Not Applicable.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

Pursuant to Section 19(b)(3)(A)(ii) of the Act,[37] NASDAQ has designated this proposal as establishing or changing a due, fee, or other charge imposed by the self-regulatory organization on any person, whether or not the person is a member of the self-regulatory organization, which renders the proposed rule change effective upon filing.

8. Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission

Not applicable.

9. Exhibits

1. Completed notice of proposed rule change for publication in the Federal Register.

3. Statement of Janusz Ordover and Gustavo Bamberger, Compass Lexecon LLC, dated December 29, 2010.

5. Proposed rule language.

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[37] 15 U.S.C. 78s(b)(3)(A)(ii).

EXHIBIT 1

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34- ; File No. SR-NASDAQ-2010-174)

December __, 2010

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Reduce Market Data Fees and Transaction Execution Fees for Retail Investors

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),[1] and Rule 19b-4 thereunder,[2] notice is hereby given that on December 30, 2010, The NASDAQ Stock Market LLC ("NASDAQ") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by NASDAQ. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

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

NASDAQ proposes to reduce market data fees and transaction execution fees for retail investors. NASDAQ, like the Commission, "is particularly focused on the interests of long-term investors."[3] Retail investors' orders are often executed away from well-regulated public exchanges that offer pre-trade transparency. The Commission has noted that absent extraordinary conditions such as those occurring on May 6, 2010, retail orders are generally executed by internalizers away from exchanges and without pre-trade transparency,

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1 15 U.S.C. 78s(b)(1).

2 17 CFR 240.19b-4.

3 *See* Exchange Act Release 61358, Concept Release on Equity Market Structure (Jan. 14, 2010), at p. 33.

exposure or order interaction.[4] In NASDAQ's view, the likelihood that retail investors' orders are executed away from exchanges is impacted by disparities in regulation between lit markets such as those operated by exchanges[5] on one hand and broker systems or dark markets operated as Alternative Trading Systems on the other. One such disparity provides dark markets great flexibility to price differentiate between subscribers, while denying exchanges the same flexibility to differentiate between members. Furthermore, although exchanges and dark markets compete for the same order flow and for the same transactions, exchanges must file proposed fee schedules and changes, while other markets have no such burden. The result is that proposed rule changes that impact NASDAQ's ability to compete for order flow, transactions, and market data , such as the current proposal, are subject to significant scrutiny and potential delay while similar conduct by other markets is subject to no public filing requirement, no regulatory delay, and for dark markets is opaque to investors and competitors alike.

This filing is an attempt by NASDAQ to compete to attract retail investors' orders and to improve the experience of retail investors on NASDAQ's public market. NASDAQ is reducing fees for members that serve retail investors. Specifically, NASDAQ is reducing the costs of executing trades and of providing "depth of book" data products for NASDAQ member firms that service "non-professional" users with which

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4 *See* Findings Regarding The Market Events Of May 6, 2010, Report Of The Staffs Of The CFTC And SEC To The Joint Advisory Committee On Emerging Regulatory Issues, September 30, 2010, at p. 56. It is often contended that dark markets serve the interests of large investors whose order sizes give rise to the potential for adverse market movements. Such potential does not exist in the case of smaller retail orders.

5 Alternative Trading Systems that meet the five percent display threshold under Regulation ATS also qualify as lit markets with higher regulatory requirements. NASDAQ is not aware that any ATS is operating under these conditions today.

the firm has a brokerage relationship. The more NASDAQ data a firm provides to retail investors, and the more that firm trades on NASDAQ, the lower its fees will be. This is an optional pricing proposal designed to benefit non-professional investors by providing an incentive for them to trade in the well-regulated, publicly-displayed market that NASDAQ operates.

NASDAQ will implement the proposed change on January 3, 2011. The text of the proposed rule change is available at http://nasdaq.cchwallstreet.com/, at NASDAQ's principal office, and at the Commission's Public Reference Room.

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

In its filing with the Commission, NASDAQ 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 places specified in Item IV below. NASDAQ has prepared summaries, set forth in Sections A, B, and C below, of the most significant aspects of such statements.

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

1. Purpose

This filing reduces prices for NASDAQ market data and for trading on NASDAQ. The proposed price reduction is targeted at retaining the business of members that represent retail investors and that redistribute market data to them in a non-professional capacity. NASDAQ believes that this proposal thereby promotes NASDAQ's and the Commission's goal of better serving long-term, retail investors and restoring confidence in public capital markets. The participation of these investors in NASDAQ's market benefits NASDAQ, its listed companies, its market quality, and the

quality of its data products. The proposal is also a competitive response to other trading venues that have used price discounts to entice firms to shift order flow and data consumption, and that may continue to do so in the future. In short, NASDAQ is attempting to compete on price for the business of customers that are highly valued to NASDAQ and important to the health of U.S. capital markets.

Description of the Pricing Proposal

NASDAQ is proposing a discount for its depth-of-book data products and an enhanced liquidity provider rebate based upon the extent to which a NASDAQ member both consumes NASDAQ market data and also contributes to the quality of NASDAQ data through liquidity provision. This program focuses on non-professional use of "NASDAQ Depth Data Product Fees" which are the non-professional fees for NQDS (Rule 7017), and TotalView and OpenView (Rule 7023), including fees for usage (Rule 7026) and enterprise license fees. It also focuses on average daily liquidity provision to the NASDAQ Market Center as that activity is measured today in NASDAQ Rule 7018 This pricing is completely optional; no member is required to participate or excluded from participating.

The market data discount provided through the proposal is for fees incurred by NASDAQ members in providing NASDAQ depth-of-book data to non-professional users. A member incurs non-professional fees when it offers depth-of-book data to natural persons that are not acting in a capacity that subjects them to financial industry regulation (e.g., retail customers).[6] NASDAQ seeks to encourage wide distribution of

[6] NASDAQ Rule 7017(c) defines a non-professional as a natural person who is neither:

market data to non-professional users, because it believes that this will encourage more order flow from investors whose trading volumes are elastic and therefore influenced by factors such as the availability of data. NASDAQ also expects that some of the benefit of the fee reductions offered through the proposal will be passed on to brokerage customers. For this reason, NASDAQ already provides a discounted rate for non-professional data, whether it is sold directly to a non-professional user or distributed to the user through a broker. NASDAQ believes that non-professional users that are able to make use of depth data also have a degree of knowledge about market structure that would cause them to favor limit orders, rather than market orders, when buying and selling. Thus, through the proposal, NASDAQ hopes to encourage a "virtuous circle" in which firms route more liquidity-providing orders to NASDAQ and consume and distribute more data in order to receive the discount, with increased data distribution in turn encouraging still more liquidity provision. NASDAQ also hopes to encourage additional firms to provide depth-of-book to their customers.

The program has three tiers, each with two requirements, one based on liquidity provision and the other based on data consumption. A member will qualify as a "Tier 1

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(1) registered or qualified in any capacity with the Commission, the Commodities Futures Trading Commission, any state securities agency, any securities exchange or association, or any commodities or futures contract market or association;

(2) engaged as an "investment adviser" as that term defined in Section 201(11) of the Investment Advisors Act of 1940 (whether or not registered or qualified under that Act); nor

(3) employed by a bank or other organization exempt from registration under federal or state securities laws to perform functions that would require registration or qualification if such functions were performed for an organization not so exempt.

Firm" for purposes of the discount during a particular month if it (i) has an average daily volume of 12 million or more shares of liquidity provided through the NASDAQ Market Center in all securities during the month; and (ii) incurs NASDAQ Depth Data Product Fees (as defined above) during the month of $150,000 or more (prior to applying the discount provided by this proposal). A member will qualify as a "Tier 2 Firm" for purposes of the discount during a particular month if it (i) has an average daily volume of 35 million or more shares of liquidity provided through the NASDAQ Market Center in all securities during the month; and (ii) incurs NASDAQ Depth Data Product Fees during the month of $300,000 or more (prior to applying the discount provided by this proposal). A member will qualify as a "Tier 3 Firm" for purposes of the discount during a particular month if it (i) has an average daily volume of 65 million or more shares of liquidity provided through the NASDAQ Market Center in all securities during the month; and (ii) incurs NASDAQ Depth Data Product Fees during the month of $500,000 or more (prior to applying the discount provided by this proposal).

Firms that qualify as Tier 1, Tier 2, or Tier 3 Firms will receive discounted market NASDAQ Depth Data Product Fees and, in the case of Tier 1 Firms, increased liquidity provider credits. With respect to market data fees, Tier 1 Firms will receive a 15% discount on non-professional fees for NASDAQ Depth Data Products charged to them. Tier 2 Firms will receive a 35% discount on non-professional fees for NASDAQ Depth Data Products charged to them. Tier 3 Firms will receive a 50% discount on non-professional fees charged to them.[7] The discounted NASDAQ Depth Data Product Fees

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[7] Since the eligibility of a member for the discount is determined on a month-by-month basis, data fees that are paid on an annual basis, such as the annual administrative fee for market data distributors under Rule 7019(a), are not

are tailored to benefit firms that provide a high quantity of data to non-professional retail investors and that also contribute significantly to the quality of NASDAQ data.

With respect to liquidity provider credits, Tier 1 Firms will qualify for a credit of $0.0028 per share of displayed liquidity provided and a $0.0015 per share of non-displayed liquidity. These rates are higher than the $0.0020 and $0.0010 per share of displayed and non-displayed liquidity provider credit available to firms that provide the same 12 million shares of liquidity per day without also consuming NASDAQ Depth Data Products sufficient to qualify for Tier 1 as defined here.[8] These credits are not incrementally higher than the credit currently available to firms providing 35 and 65 million shares of liquidity daily. In other words, the benefit available to Tier 2 and Tier 3 Firms under this program is limited to the discount for NASDAQ Depth Data Products described above.

The proposal is designed to recognize the benefits to NASDAQ, its listed companies, its market quality, and the quality of its proprietary data products that are provided by member firms that both post retail liquidity on NASDAQ and redistribute data to their customers. The proposal is also a direct competitive response to other trading venues that have used price discounts to entice firms to shift order flow and data consumption, and that may continue to do so in the future. Firms that are eligible for the discount are key contributors to market quality, by providing liquidity to support rapid

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covered by the definition of NASDAQ Depth Data Product Fees, and are therefore not counted in determining a firm's status as a Tier 1, Tier 2 or Tier 3 Firm.

8 Tier 2 and Tier 3 Firms will receive the current liquidity provider credit of $0.00295 per share of displayed liquidity and $0.00015 per share of non-displayed liquidity. There is no enhancement to these liquidity provider credits at this time.

execution of incoming orders with minimal price impact. These firms are able to shift their business immediately to competing exchanges, which requires NASDAQ to offer competitive responses to keep the business of these valued customers. NASDAQ currently recognizes the value of liquidity provision by offering liquidity provider credits that rise with the volume of liquidity provided. For companies listed on NASDAQ, liquidity provision dampens volatility by allowing higher volumes to trade at a consistent price.

Single Platform, Joint Products.

NASDAQ is offering a joint discount on market information and executions because, as described in greater detail in the attached Statement of Ordover and Bamberger (Exhibit 3), The NASDAQ Market Center is a single trading platform that unavoidably produces joint products: execution services and market data. Every execution of a trade automatically produces market information about that trade including the price and quantity traded. Every execution requires posted and taking orders, which in turn produce market data in the form of quotations, including top-of-book and depth-of-book quotations. Market information and executions are inextricably linked; each is both an input and a byproduct of the other and neither can exist without the other.

The operation of The NASDAQ Market Center and the production of joint products (executions and market information) require NASDAQ to incur joint costs. NASDAQ's costs to produce market information and executions are inseparable in that most of them are not uniquely incurred on behalf of either of the services provided by the exchange. To operate its trading platform, NASDAQ must incur high fixed costs before accepting a single order, executing a single trade, or producing a single element of market

information. Each year, NASDAQ spends millions of dollars on market infrastructure such as servers, processors, line handlers, software, and personnel; data intake, processing and dissemination equipment and networking hardware and software; and regulatory and surveillance systems of both a manual and automated nature. NASDAQ incurs these high costs to operate the platform and to produce both executions and market information. In other words, without these costs, neither product is produced, but with them, both products are unavoidably produced.[9]

NASDAQ recaptures the cost of operating its platform through the sale of both executions and market information. The total return that NASDAQ or any trading platform earns reflects the revenues it receives from the sale of these joint products and other services, net of the joint and other costs (i.e., those limited costs that can be directly attributed to one of the relevant products) it incurs. Different platforms choose different pricing strategies and ways of recovering total costs. NASDAQ pays rebates to attract orders, charges relatively low prices for market information and charges relatively high prices for accessing posted liquidity. Other platforms may choose a strategy of paying lower liquidity rebates to attract orders, setting relatively low prices for accessing posted liquidity, and setting relatively high prices for market information. Still others may provide most data free of charge and rely exclusively on transaction fees to recover their costs. Finally, some platforms may incentivize use by providing opportunities for equity ownership, which may allow them to charge lower direct fees for executions and data.[10]

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9 This point was recognized over a century ago by the British economist Alfred Marshall, who noted the inextricability of producing wool and mutton and the inextricable nature of the costs associated with such production.

10 See, e.g., Securities Exchange Act Release No. 62358 (June 22, 2010), 75 FR 37861 (June 30, 2010) (SR-NSX-2010-06). It has also been reported than NYSE

These strategies can vary over time in response to changing market and regulatory factors.[11]

The Commission has acknowledged many times that trading platforms compete fiercely for executions. Platforms also compete for the sale of market data. For example, in June 2008, NASDAQ launched two proprietary "Last Sale" products. In each case, the terms included subscription rates and an "enterprise cap" rate designed for Web portals. The enterprise cap rates for the two products were $100,000 per month and $50,000 per month for the two products (i.e., a total of $150,000 per month for customers who purchased both products). The majority of NASDAQ's sales were at the cap level. In early 2009, we understand that BATS offered an alternative product (BATS PITCH data) as a zero-cost alternative to the NASDAQ Last Sale products.[12] Also in early 2009, NYSE Arca announced the launch of a competitive product with an enterprise price of

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Amex has offered equity incentives to active members. While Nasdaq is aware of no Amex rule filing with the Commission, Amex consistently refers publicly to the "semi-mutualization." program. *See, e.g.,* NYSE Euronext Brings Partners Into Options Market (Dow Jones Newswires, September 9, 2009); Comments of Duncan Neiderauer at NYSE Euronext Q3 2009 Earnings Call (October 30, 2009).

11 Similarly, Marshall's sheep farmer would be expected to cover his costs of production through the sale of both wool and mutton, and it would be unreasonable for sweater-wearers to demand free sweaters subsidized by consumers of mutton. Moreover, in contrast to sheep farming, consumption of each of NASDAQ's main products enables further production and consumption of the other – more executions translate into more data, and more data usage encourages more executions. Accordingly, as discussed below, there is no basis in the Act for requiring these inextricably linked products to be priced in isolation from one another. Such a result makes no more economic sense than requiring the price of a live sheep to be divorced from the price of wool and mutton.

12 Subsequently, BATS has begun to charge for certain of its data products, signaling a shift in strategy to recover a greater percentage of its costs through data, rather than using data solely as a means to draw (fee-liable) orders to its market.

$30,000 per month. In response, NASDAQ combined its two Last Sale products into one in April 2009, and reduced the enterprise cap to $50,000 per month (i.e., a reduction of $100,000 per month).

Given the joint nature of these products and the competitive markets in which they are offered, a bundled discount that is linked to total spending across the joint products is economically sensible for a single platform producing joint products. Bundling recognizes the value of liquidity provision and data distribution in creating the conditions that further encourage the creation of the trading platform's products. It also recognizes the fact that customers are differentiated on multiple dimensions in terms of their willingness to pay for data and for accessing liquidity. Platform pricing of market data and executions enables NASDAQ to design a plan that will appeal to a broader group of potential customers – in this case those serving retail investors – and stimulate overall sales of both data and trading. NASDAQ expects that bundling will be more appealing to its customers than offering discounts based only on the volume of one kind of activity or another, as it has done in the past. By conditioning the discount on two activities, NASDAQ can achieve improved participation from both retail brokers that distribute data and their order-providing customers, as compared to a disaggregated pricing approach.[13]

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[13] Bundled pricing is also evident – indeed, it arguably finds its most complete expression – in exchange programs to offer equity ownership to favored members. Equity allows its owner to participate in the upside of all aspects of an exchange's operations, including executions, data, and listings. Thus, equity shares offered in exchange for liquidity provision offset the costs of all exchange products that the favored member consumes, effectively translating into an across-the-board discount and encouraging further consumption that enhances the value of the equity. Moreover, participation in such programs is conditioned upon being a member that directs order flow to the exchange in question, thereby excluding

Given the fierce competition between platforms, as evidenced by rapid shifts in order flow and price cutting behavior in markets for data, the competitive concerns potentially implicated by bundling are not present here. Competitive concerns from a practice of bundling discounts across a range of products may potentially arise when such bundling is used to foreclose entry (expansion) of rival firms that may not be able to offer an array of products as broad as that offered by an incumbent. In the instant case it is not likely that the combined offer will induce rival exchanges to exit (or become less competitively potent due to a reduction in volume), since many of NASDAQ's competitors command a comparably strong measure of market share in the relevant markets. Accordingly, their product offerings can readily compete with NASDAQ's in terms of execution functionality, depth of data, and price (included, if they deem it appropriate, bundled prices). It is also not likely that the combined offer will have the effect of creating significant barriers to entry or expansion for new exchanges. Current conditions of market fragmentation underscore the absence of barriers to entry in the market to attract and execute order flow. Because executions necessarily create data, barriers to entry in that market are correspondingly low.[14]

Price Differentiation Is Consistent with the Exchange Act

For many years, exchanges have engaged in and the Commission has accepted the practice of price differentiation, both in the context of market data as well as in the

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non-members, such as non-broker data distributors, as well as members that choose to direct order flow elsewhere. Moreover, an equity distribution program cannot be open-ended without diluting its value to the first recipients. Accordingly, once the equity distribution program is closed, incumbent owners benefit on an ongoing basis and new members are frozen out.

[14] A further discussion of competitive conditions in the market for exchange data is provided in NASDAQ's "Statement on Burden on Competition" below.

context of executions. With respect to market data, NASDAQ and NYSE in their capacities as network processors and exchanges have differentiated in pricing between professional and non-professional market data users often charging professionals many times more than non-professionals for using the same data. For example, consolidated data for NASDAQ stocks costs non-professional investors just one dollar per month, whereas professional investors pay twenty dollars per month for the same data. Also, NASDAQ currently charges $15 per terminal for its TotalView product to non-professionals, while professional investors pay roughly five times the non-professional rate. This reflects the value of the service to various constituencies (i.e., lower prices are charged to consumers with more elastic demand) and allows both types of investors to contribute to the high fixed costs of operating an exchange platform.[15] Thus, one of the two bases for differentiation employed here – reduced prices for non-professional data usage – is completely consistent with economic theory and past Commission precedent.

Similarly, the Commission has long accepted price differentiation between and among members of trading platforms that provide and take liquidity to execute trades. For example, exchanges have offered and continue to offer differential pricing based on absolute volume, incremental volume, order type, ticker symbol, routing strategy, stock price, equity ownership,[16] and other characteristics. Other platforms, including electronic

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15 As discussed in Exhibit 3, charging lower fees to non-professional consumers increases overall economic welfare by increasing output – in this case, providing more data to more investors – and avoids two equally undesirable alternatives: (i) requiring the firm to charge uniformly high prices that constrict demand, or (ii) insisting on uniformly low prices at marginal cost (in this case, zero or close to zero) that do not allow the firm to cover its fixed costs and thereby lead to bankruptcy.

16 An equity ownership program in which a member receives equity in exchange for its initial order flow commitment gives rise to differential pricing in which two

communications networks and other forms of alternative trading systems ("ATSs"), including dark pools, differentiate on these dimensions and, NASDAQ understands, other dimensions that exchanges are prohibited from using.[17] The differentiation that NASDAQ's proposes here – higher rebates for larger liquidity providers – is entirely consistent with past precedent and with the Act as interpreted and applied by the Commission.

Thus, the Commission has accepted in individual form the precise elements of the price differentiation that NASDAQ is proposing here in joint form. As explained above and in Exhibit 3, this is especially appropriate where the products subject to the joint pricing – market data and executions – are themselves joint products of a single platform: joint pricing will allow exchanges to structure fees that recognize the contribution of particular classes of members to the creation of the products and thereby broaden output and reduce fees

The Commission should also recognize that trading platform operations are characterized by high fixed costs and low marginal costs. This cost structure is common in content and content distribution industries such as software, where developing new software typically requires a large initial investment (and continuing large investments to "upgrade" the software), but once the software is developed, the incremental cost of providing that software to an additional user is typically small, or even zero (e.g., if the

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classes of participants that thereafter engage in the same behavior are treated differently on an ongoing basis: the equity owner is rewarded for participation through the increased value of its stock, and the non-owner is not.

17 For example, we understand that ATSs routinely negotiate individualized pricing packages with their subscribers, and deny access to disfavored users.

software can be downloaded over the internet after being purchased).[18] In NASDAQ's case, it is costly to build and maintain a trading platform, but the incremental cost of trading each additional share on an existing platform, or distributing an additional instance of data, is very low. Market information and executions are each produced jointly (in the sense that the activities of trading and placing orders are *the* source of information that is distributed) and are each subject to significant scale economies.[19]

That NASDAQ's platform produces market information and executions jointly and in scale does not mean that either of the joint products should be, or even can be, offered at no charge or at marginal cost. Marginal cost pricing is not feasible when there are increasing returns to scale because if all sales were priced at marginal cost, NASDAQ would be unable to defray its platform costs of providing the joint products. Moreover, to offer market data at no cost would require NASDAQ to raise the cost of providing execution services because it would require execution services to cover 100 percent of the recovery of the joint and common costs of both execution services and market data. While this may be a viable choice for some platforms, individual platform operators can and do reasonably choose other pricing models to allocate the recovery of cost between the joint products. At the same time, as discussed below and in Exhibit 3, competition between platforms clearly constrains the ability of platform operators to price execution services and market data products.

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[18]. See William J. Baumol and Daniel G. Swanson, "The New Economy and Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power," *Antitrust Law Journal*, Vol. 70, No. 3, 2003.

[19]. This is not the case with Marshall's sheep farming. Sheep are likely produced with constant or increasing marginal cost, and the pricing complication is confined to the most efficient recovery of the marginal cost of a sheep.

The Commission has previously stated, in dicta, that "the Exchange Act precludes exchanges from adopting terms for data distribution that unfairly discriminate by favoring participants in an exchange's market or penalizing participants in other markets."[20] The Commission provided no analysis in support of this statement. NASDAQ believes that consideration of the joint nature of the products in question and the Commission's precedents will allow a more developed analysis of conduct that constitutes unfair discrimination under the Act. As noted above, the Commission has allowed exchanges to price discriminate in a wide range of respects, including, for example, volume-based execution discounts that directly favor participants in the exchange's market, discounts on uses of particular order types or strategies that favor participants with certain trading models, and selective equity ownership that provides effective discounts on all of the exchange's products, including data, and that discriminates in favor of active participants in the exchange's market during a set offering period. Moreover, in light of the joint nature of an exchange's transaction and data products, uniform fees – requiring exchanges to charge the same fees to data consumers that help to produce data as it charges to those who do not – could be said to discriminate against participants by requiring them to pay fees that are not allocated based on the value of their participation in the market. Thus, if it is fair to discount execution fees to liquidity providers because they add value to the market place, it should also be considered fair to discount data fees to liquidity providers because they add value to data.

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[20] Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770 (December 9, 2008) (SR-NYSEArca-2006-21), *vacated by* NetCoalition v. SEC, No. 09-1042 (DC Cir. 2010).

In addition, it is difficult to discern a reasonable policy goal behind a strict prohibition on data discounts that consider transaction activity. As noted above and in Exhibit 3, differences in pricing may increase economic welfare by allowing greater distribution than would otherwise be the case, and also, in this case, enhance the value of NASDAQ's joint product to the extent that greater consumption of data encourages further investor activity, which in turn results in the production of more data. Moreover, differentiating pricing based on reasonable distinctions among consumers cannot be considered unfair under the Act, since the Commission has approved numerous instances of such distinctions. If the Commission were to adopt such a prohibition, therefore, it would seem to be driven by a concern that exchanges might use bundled data pricing in an anticompetitive manner.[21]

This concern would be reasonable only if the exchange actually enjoyed substantial market power in the data segment of the market and could use it to attempt to reduce competition in the transactions segment. Thus, if all market participants needed data from a particular exchange to operate, and the exchange conditioned low data fees on market participants directing order flow to the exchange, the exchange might attempt to use its control over data to monopolize trading as well. These conditions are not

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[21] Another possibility is that the Commission might somehow conclude that transactions and data must be priced in isolation of one another, despite their wool/mutton nature, merely to ensure that data consumers who do not use transaction services pay the same fees as those who do. There is nothing in the Act that speaks directly to maintaining a dichotomy between products in establishing their prices, and the Act clearly allows differential pricing within a product category. Nor would it be reasonable for the Commission to conclude that fairness mandates that consumers with different cost and benefit profiles nevertheless pay the same fees. Thus, before the Commission concludes that a particular price differential is "unfair," it should first conclude that the differential lacks a reasonable basis in fact. NASDAQ respectfully maintains that the Commission may not reach such a conclusion in this instance.

present here, nor is it likely that they could ever arise in these markets. First, an exchange that attempted to restrict the provision of data to disfavored recipients would be restricting access to one of the key mechanisms by which the exchange attracts orders to its matching engine. Moreover, as discussed in detail throughout this filing, the market participants with the most demand for an exchange's data are the ones that actually trade on that exchange, but no one is required to trade on any particular exchange or to consume its data. Indeed, no single exchange controls proprietary data that is indispensible to any particular market participant. Therefore, an effort to use pricing to "penalize" market participants for sending orders to other venues would likely succeed only in driving more orders to those venues and cutting demand for data as well. Finally, because the marginal cost of selling data to one more customer is zero or close to zero, exchanges have every interest in selling as much data as possible, in order to ensure that they cover their high fixed costs. As a result, exchanges readily sell data to market participants and also to non-market participants that direct no order flow to the exchange at all. Penalizing "disloyal" consumers of data would do nothing more than diminish the exchange's revenue opportunities.

Under traditional antitrust analysis, pricing systems under which the prices for two products are "bundled" have generally been found to be beneficial to consumers, rather than anticompetitive. A court will not uphold a challenge to bundled pricing unless it is clear that a party has market power in one product and is using the bundled pricing to extend its market power to another product. "Buyers often find package sales attractive; a seller's decision to offer such packages can merely be an attempt to compete effectively – conduct that is entirely consistent with the Sherman Act." Jefferson Parish

Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 12 (1984). As noted in the recent report of a bipartisan commission on antitrust law,[22] "[l]arge and small firms, incumbents, and new entrants use bundled discounts and rebates in a wide variety of industries and market circumstances. Because they involve lower prices, bundled discounts and bundled rebates typically benefit consumers." The report noted that bundled discounts can be used appropriately to reduce the seller's costs, to improve the quality of products, to advertise the benefits of related products, and to increase demand for a product. If, as is the case here, the markets for both bundled products are competitive, bundled pricing will not give rise to any competitive concerns.

Nevertheless, since the Act clearly bars discrimination that is unfair, it would be reasonable for the Commission to disapprove fees or other conditions to access that appear to have anticompetitive aims, such as rules that selectively prohibit some parties from having access to data. The Commission should not, however, block efforts by exchanges to reduce their prices merely because they do not cut prices "across the board." As the Supreme Court has recognized, "cutting prices in order to increase business often is the very essence of competition." Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 594 (1986). "Mistaken inferences in cases" involving alleged harm from low prices "are especially costly, because they chill the very conduct the antitrust laws are designed to protect." Matsushita, 475 U.S. at 594. In this case, disapproval of NASDAQ's proposed fee reductions would leave the fees for NASDAQ depth products untouched: consumers that would have paid lower fees under the

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[22] Report and Recommendations of the Antitrust Modernization Commission (April 2007) (available at http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf).

proposal will continue to pay higher fees, and other consumers will pay exactly what they do now, and exactly what they would have paid if the proposal had gone into effect. It is difficult to see how the interests of any parties, or of the marketplace as a whole, would be served by that outcome.

Conclusion

This filing reduces prices for NASDAQ market data and for trading on NASDAQ. It is designed to promote NASDAQ's and the Commission's goal of better serving retail investors whose participation in NASDAQ's market benefits NASDAQ, its listed companies, its market quality, and the quality of its data products. It is also a competitive response to other trading venues. In short, NASDAQ is cutting prices for customers that are highly valued to NASDAQ and are important to the health of U.S. capital markets.

2. Statutory Basis

NASDAQ believes that the proposed rule change is consistent with the provisions of Section 6 of the Act.[23] In particular, NASDAQ believes that the proposal is consistent with Section 6(b)(4) of the Act,[24] in that it provides an equitable allocation of reasonable fees among users and recipients of the data, Section 6(b)(5) of the Act,[25] in that it is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers, Section 6(b)(8) of the Act,[26] in that it does not impose any burden on competition not necessary or appropriate in the furtherance of the purposes of the Act, and Rule 603(a) of

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23 15 U.S.C. 78f.

24 15 U.S.C. 78f(b)(4).

25 15 U.S.C. 78f(b)(5),

26 15 U.S.C. 78f(b)(8).

Regulation NMS,[27] in that it provides for distribution of information with respect to quotations for or transactions in an NMS stock on terms that are fair and reasonable and are not unreasonably discriminatory. In adopting Regulation NMS, the Commission granted self-regulatory organizations and broker-dealers[28] increased authority and flexibility to offer new and unique market data to the public. It was believed that this authority would expand the amount of data available to consumers, and also spur innovation and competition for the provision of market data.

NASDAQ Depth Data Products are precisely the sort of market data product that the Commission envisioned when it adopted Regulation NMS. The Commission concluded that Regulation NMS—by lessening regulation of the market in proprietary data—would itself further the Act's goals of facilitating efficiency and competition:

> [E]fficiency is promoted when broker-dealers who do not need the data beyond the prices, sizes, market center identifications of the NBBO and consolidated last sale information are not required to receive (and pay for) such data. The Commission also believes that efficiency is promoted when broker-dealers may choose to receive (and pay for) additional market data based on their own internal analysis of the need for such data.[29]

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27 17 CFR 202.603(a).

28 It should be stressed that Rule 603, 17 CFR 202.603(a), both allows broker-dealers to distribute their own data, singly or on an aggregated basis, and generally subjects them to the same regulatory standards as exchanges. Thus, any broker or dealer that distributes information must do so on terms that are not unreasonably discriminatory, and any broker or dealer that distributes information for which it is the exclusive source must do so on terms that are fair and reasonable. As a result, to the extent that the Commission establishes procedures or legal standards applicable to exchange data, it must apply the same procedures and standards to broker-dealer data.

29 Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005).

By removing unnecessary regulatory restrictions on the ability of exchanges to sell their own data, Regulation NMS advanced the goals of the Act and the principles reflected in its legislative history. If the free market should determine whether proprietary data is sold to broker-dealers at all, it follows that the price at which such data is sold should be set by the market as well.

The recent decision of the United States Court of Appeals for the District of Columbia Circuit in NetCoaliton v. SEC, No. 09-1042 (D.C. Cir. 2010) upheld the Commission's reliance upon competitive markets to set reasonable and equitably allocated fees for market data. "In fact, the legislative history indicates that the Congress intended that the market system 'evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed' and that the SEC wield its regulatory power 'in those situations where competition may not be sufficient,' such as in the creation of a 'consolidated transactional reporting system.' NetCoaltion, at 15 (quoting H.R. Rep. No. 94–229, at 92 (1975), *as reprinted in* 1975 U.S.C.C.A.N. 321, 323). The court agreed with the Commission's conclusion that "Congress intended that 'competitive forces should dictate the services and practices that constitute the U.S. national market system for trading equity securities.' " "[30]

The Court in *NetCoalition*, while upholding the Commission conclusion that competitive forces may be relied upon to establish the fairness of prices, nevertheless concluded that the record *in that case* did not adequately support the Commission's conclusions as to the competitive nature of the market for NYSEArca's data product at issue in that case. For the reasons discussed in this filing and in Exhibit 3, however,

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[30] NetCoaliton v. SEC, No. 09-1042 (D.C. Cir. 2010) at p. 16,

NASDAQ believes that there is substantial evidence of competition in the marketplace for data that was not in the record in the *NetCoalition* case, and that the Commission is entitled to rely upon such evidence in concluding that the fees established in this filing are the product of competition, and therefore in accordance with the relevant statutory standards.[31] In addition, as discussed in the "Purpose" section of the filing above, NASDAQ believes that it is not inequitable or unfairly discriminatory to establish discounts for market data fees that take account of a market participant's transaction volumes.

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

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act.[32] At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the

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31 It should also be noted that Section 916 of Dodd- Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") has amended paragraph (A) of Section 19(b)(3) of the Act, 15 U.S.C. 78s(b)(3) to make it clear that all exchange fees, including fees for market data, may be filed by exchanges on an immediately effective basis. Although this change in the law does not alter the Commission's authority to evaluate and ultimately disapprove exchange rules if it concludes that they are not consistent with the Act, it unambiguously reflects a conclusion that market data fee changes do not require prior Commission review before taking effect, and that a formal proceeding with regard to a particular fee change is required only if the Commission determines that it is necessary or appropriate to suspend the fee and institute such a proceeding.

32 15 U.S.C. 78s(b)(3)(a)(ii).

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, as amended, is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (http://www.sec.gov/rules/sro.shtml); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-NASDAQ-2010-174 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.

All submissions should refer to File Number SR-NASDAQ-2010-174. 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, 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 inspection and copying 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 such filing also will be available for inspection and copying at the principal offices 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 make available publicly.

All submissions should refer to File Number SR-NASDAQ-2010-174, 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.[33]

Florence E. Harmon
Deputy Secretary

[33] 17 CFR 200.30-3(a)(12).

Statement of Janusz Ordover and Gustavo Bamberger

I. INTRODUCTION.

1. I, Janusz Ordover, am a Professor of Economics at New York University and a former Director of the Masters in Economics Program. I served as the Deputy Assistant Attorney General for Economics in the Antitrust Division of the U.S. Department of Justice in 1991-1992. In that post, I was responsible for formulating and implementing the economic aspects of antitrust policy and enforcement of the United States Government, including co-drafting of the 1992 Agency Horizontal Merger Guidelines. I have also served as an advisor on competition and regulatory matters to the Department of Justice, the Federal Trade Commission, the governments of Poland, Russia, Hungary and Australia, as well as to the World Bank, the Organization for Economic Cooperation and Development, the Inter-American Development Bank, the Australian Competition and Consumer Commission and the New Zealand Commerce Commission. I have served on numerous American Bar Association and International Bar Association panels. I also am a Senior Consultant to Compass Lexecon, an economics consulting firm that specializes in the application of economic analysis to legal and regulatory issues.

2. I have authored and co-authored numerous articles on industrial organization economics, law and economics, antitrust, and intellectual property. In particular, I have authored or co-authored several articles dealing with market power and its abuse. In addition, I have written and testified on the issues of pricing of information as well as on the benefits and costs of regulatory interventions in markets. My curriculum vitae, which contains a complete list of my publications, is attached as Appendix A.

3. I, Gustavo Bamberger, am a Senior Vice President of Compass Lexecon. I received a B.A. degree from Southwestern at Memphis, and M.B.A. and Ph.D. degrees from the University of Chicago Graduate School of Business. I have provided expert testimony on a

variety of economic issues to federal courts, the U.S. Senate, the U.S. Federal Energy Regulatory Commission, the U.S. International Trade Commission, the U.S. Department of Transportation, U.S. state regulatory agencies, the Canadian Competition Tribunal, the New Zealand Commerce Commission and the High Court of New Zealand. A copy of my curriculum vitae is attached as Appendix B.

4. We have been asked by counsel for the NASDAQ Stock Market ("NASDAQ") to evaluate the extent to which competitive forces constrain NASDAQ's ability to set prices and terms for "proprietary" data products. We have also been asked to comment from an economic perspective on the proposed "Platform Pricing" schedule that offers discounts to non-institutional investors. Our submission builds upon and expands our earlier comments submitted in connection with a Notice of Proposed Order Approving Proposal by NYSE Arca, Inc. To Establish Fees for Certain Market Data and Request for Comment, Release No. 34-57917, June 4, 2008 released by the Securities and Exchange Commission ("the Commission").[1]

5. We conclude that NASDAQ is subject to significant competitive forces from other platforms. This means, in particular, that competition for orders constrains NASDAQ's freedom in setting the prices and other terms of proprietary data products. Competition among trading platforms can be expected to constrain the aggregate return each platform earns from the sale of the array of its products, including the joint products at issue here, which are execution services and proprietary data. In particular, cross-platform competition and the adverse effects of increasing the price of proprietary information on the volume of trading on the platform constrain the pricing of proprietary information. Similarly, overpricing of execution services will reduce the volume of trading on the platform and reduce the production of proprietary information. By definition, information that is proprietary to an exchange cannot be obtained elsewhere, but this does not enable the owner of such information to exercise monopoly power

1. See Statement of Janusz Ordover and Gustavo Bamberger, filed with the Securities and Exchange Commission, Release No. 34-57917, on behalf of NASDAQ Stock Market, August 1, 2008.

over that information vis-à-vis firms that purchase such information. Besides the fact that similar information can be obtained elsewhere, the feasibility of supra-competitive pricing is constrained by traders' ability to shift their trades elsewhere, which lowers the activity on the exchange and, in the long run, reduces the quality of the information generated by the exchange. The presence of these potent economic forces facing NASDAQ strongly suggests that there is no need to regulate the pricing of proprietary data, including pricing schedules like the proposed "Platform Pricing."

6. In our view, each platform should be free to determine how best to recover the costs – including a return on capital – of its joint products (i.e., execution of trades and proprietary information). This includes "bundling" of discounts across an array of products as contemplated in the "Platform Pricing" proposal being submitted by NASDAQ. Each platform will make its pricing and bundling decisions based on its individual circumstances and the business strategies of the platform. Moreover, these decisions can – and likely will – change over time as the forces of competition reveal whether these strategies are profitable or not. Regulatory forbearance is thus fully warranted in the absence of any showing that the pricing strategies will anti-competitively disadvantage rival platforms and some well-defined customer groups of the investing public.

7. The "Platform Pricing" proposal appears designed to benefit non-professional investors, a group which we understand is predominantly comprised of average (as measured by transaction volumes) individual investors. The discount is provided to NASDAQ members that receive the data and, acting as intermediaries, provide it to their non-professional brokerage customers generally as part of a service. By providing discounts to the intermediaries based on both order activity and qualifying data activity related to non-professional investors, the proposal should encourage the increased provision of data to that set of investors and stimulate their activity on the exchange.

8. As we discuss in this statement, the products at issue in this regulatory proceeding are produced under the conditions of high fixed costs, which are also joint and common to a range of products, and low (or zero) marginal or incremental costs of serving an additional customer. Economics amply demonstrates that marginal cost pricing in an industry with these cost characteristics is not feasible, and some deviations from marginal cost pricing are unavoidable. In general, economic efficiency in these circumstances requires that different customers pay different prices. Economists call this type of pricing structure "differential pricing" or "price discrimination." Price differentiation in markets with high fixed costs and low incremental costs is common, efficient, and not anticompetitive.

9. One might object perhaps that such pricing is "unfair." It is important to note that "fairness" is not a core concept of microeconomics or of industrial organization. In this submission, we discuss possible interpretations of a "fairness" standard and conclude that it most plausibly forbids cross subsidies among customers groups and capricious differential treatment that is unrelated to market fundamentals. We find that the rates proposed by NASDAQ in its "Platform Pricing" plan do not violate fairness standards as summarized above.

10. The remainder of our statement is organized as follows. In Section II, we show that competition between trading platforms constrains the price of market data sold by each platform. In Section III, we provide an economic analysis of NASDAQ's "Platform Pricing" proposal. We summarize our conclusions in Section IV.

II. COMPETITION BETWEEN TRADING PLATFORMS CONSTRAINS THE PRICE OF MARKET INFORMATION.

A. Background Information.

11. Since the Securities Act Amendments of 1975, the volume of equity trading in the United States has increased dramatically. Between 1976 and 1986, for example, total trading in stocks listed on the New York Stock Exchange ("NYSE") increased from 6.3 billion shares to

42.5 billion shares annually, an increase of about 575 percent. Annual trading in those shares further increased and reached 126.3 billion shares in 1996 and 1.43 trillion shares in 2009. Thus, between 1976 and 2009, trading in stocks listed on the NYSE increased by a factor of 227 (from 6.3 billion to 1.43 trillion shares per year).[2]

12. Along with the growth of volume, trading in exchange-listed stocks is increasingly occurring over a variety of platforms. In early 2002, for example, approximately 80 percent of trading volume in NYSE-listed stocks took place on the listing exchange (i.e., the NYSE). (For NASDAQ-listed stocks, this percentage was somewhat higher.) By October 2010, only 35.2 percent of trading on NYSE-listed stocks, in the aggregate, took place on the NYSE and NYSE Arca platforms.[3] The NYSE accounted for 22.6 percent of trading in NYSE-listed shares, and NYSE Arca for 12.0 percent.[4] In the same month, NASDAQ's share of trading in NASDAQ-listed securities was 29.5 percent.[5]

13. Furthermore, an exchange's share of trading in a given set of stocks overstates the share of information on total liquidity regarding these stocks that is generated by an exchange because trading platforms only hold a portion of the available liquidity on their books. Other liquidity exists on the trading desks of brokerage firms. We understand that such liquidity is readily available to those firms' clients.

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2. See "Consolidated tape volume by market (thous. of shares) (1976-2003)" and "Volume in NYSE Listed Issues (millions of shares), 2009," nyxdata.com/factbook.
3. See http://www.nyse.com/pdfs/NYSE_Euronext_Transactions_Data.pdf.
4. For October 2010, BATS Trading reports "consolidated volume" of 94.8 billion shares on "Tape A" (i.e., the NYSE). Of this amount, BATS Trading reports that the NYSE accounted for 21.4 billion shares (22.6 percent) and NYSE Arca accounted for 11.4 billion shares (12.0 percent). See http://www.batstrading.com/market_summary/ (and link to "Download last 30 days" of data). We understand that the NYSE and BATS Trading report trades on a somewhat different basis (e.g., the NYSE-reported consolidated volume for June 2010 for NYSE-listed stocks is about one percent larger than the amount reported by BATS Trading). For this reason, the shares derived from NYSE and BATS Trading data do not align exactly (e.g., the BATS Trading data imply that the aggregate share of the NYSE and NYSE Arca in October 2010 for NYSE-listed stocks was 34.6 percent, while the NYSE reports an aggregate share of 35.2 percent).
5 . See http://www.nasdaqtrader.com/trader.aspx?id=marketshare.

14. Rapid entry into the platform business is possible, which further constrains any incumbent's ability to act in non-competitive manner. For example, BATS Trading began trading on January 27, 2006.[6] By June 2008, it accounted for 7.5 percent of trading in NYSE-listed stocks and 10.3 percent of trading in NASDAQ-listed stocks.[7]

15. This evidence shows that no trading platform has a "monopoly" on generating market data on shares listed on that platform. As we discuss further later in this report, although any firm can be described as the "exclusive" seller of its branded product, it is not appropriate as a matter of economics to characterize every firm that sells such a product as a "monopolist" in any meaningful sense.

16. In the case of data jointly generated through trading on NASDAQ, the volume and quality of the information depends on the volume of orders and trades on the exchange. Here, by the "quality" of data we mean its informative value. For example, all else equal, the deeper is the "depth-of-book" information on an exchange, the more valuable it is. Consequently, exchanges compete for liquidity and thus for data quality, which, as we have seen, is linked to the volume of transactions.

17. As we discussed in our prior submission and will discuss again later in this statement, the volume of transactions on an exchange in a given stock and in the aggregate is determined in a competitive market for accessing liquidity on various platforms. Each platform's share of trades is not fixed but, rather, results from competition across a broad range of platforms on which the particular stock can be traded. From that perspective, therefore, the volume and quality of data relating to any particular stock is also determined by and as a result of the interplay of economic forces. As long as inter-platform competition is not impeded, NASDAQ neither has monopoly power in trading, even in a stock listed on NASDAQ, nor does it

6. See http://www.batstrading.com/data/daily_volume.php?period=2006Q1. BATS Trading traded 200 shares on January 27, 2006 (and 934,804,026 shares on June 30, 2008).
7. Also see Edgar Ortega, "Yahoo Will Offer Free Real-Time Stock Quotes From Bats Trading," Bloomberg, May 28, 2008 (BATS Trading "handles about 605 million shares a day, representing about 8.9 percent of the shares traded in the U.S.").

have a monopoly over the information pertaining to the depth of book in a stock, because other exchanges also will have such information (albeit determined by the depth-of-book on that exchange). As competition for the execution of trades shifts in response to market signals, so will the quality of information available from the alternative platforms. Hence, competition for listings and trading also affects competitive conditions in the "market" for information.

18. In theory at least, "network" (or "liquidity") effects could potentially lead to a situation where one platform captures a large share of all trades in one or more stocks or some other financial instrument. In such a case, the exchange would have a "monopoly" in trading in the stock as well over the information pertaining to that stock. Two points are worth making in this context. First, the demonstrated ability of platforms to capture a substantial percentage of trades of stocks listed on other exchanges indicates that such effects are generally mitigated in the market for equity trading, or that such effects have been offset by other forces (including the introduction of Regulation NMS), or that there is sufficient inter-platform product differentiation so that, given the large trading volumes, two or more exchanges can compete alongside each other. If anything, the empirical evidence on platform shares we have discussed indicates that there is no powerful trend towards concentration of trading in a given stock on a single exchange: quite the opposite. Second, at least from the competition (or antitrust) perspective, it is rather implausible that a single stock (or trading in a single stock) would constitute a relevant market. Hence, for the effects we have discussed to be a source of competitive concern, such effects would have to be powerful over a broad range of equities. Empirical evidence clearly shows that this is not the case.

B. Trading Platforms Produce "Joint Products."

19. Execution services and market data are an example of "joint products." This is because every execution of a trade automatically produces another potential product, namely information about that trade (such as the price and quantity traded). Similarly, depth-of-book

information is automatically produced when traders post limit orders on a platform. The production of joint products necessarily involves incurring "joint costs," i.e., costs that are not uniquely incurred on behalf of any one of the services provided by the exchange.[8] The total return that a trading platform earns reflects the revenues it receives from the sale of these joint products and other services, net of the joint cost and direct costs (i.e., costs that can be directly attributed to the relevant products) it incurs.

20. Trading platforms make simultaneous pricing decisions regarding liquidity rebates, execution fees, and market data fees. Liquidity rebates attract orders that create available liquidity by paying the order submitter a fee when the order executes; execution fees are incurred when an investor's order interacts with available liquidity resulting in a trade; and market data fees pay for access to information about, for example, currently available liquidity and past trades. All of these decisions are made with the goal of maximizing profits, or fostering other legitimate business objectives, subject to competitive and regulatory constraints.[9]

21. In general, there is no economic basis for placing some arbitrary regulatory caps on prices for one of the joint products in market situations where suppliers face competitive constraints across the range of their offerings.[10] The simple reason is that, in general, an "excessive" price for one of the products will, ultimately, have to be reflected in lower prices for

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8. It is widely accepted that there is no meaningful way to allocate "common" or "joint" costs across different joint products. For this reason, "cost-based" regulation of pricing of market data requires inherently arbitrary cost allocations. Furthermore, it is widely recognized that cost-based regulation can create significant inefficiencies and distortions. At least in part for this reason, such regulation has been widely abandoned or replaced with other forms of regulation in a variety of industries (e.g., telecommunications). For example, common costs are recovered from various services based on customers' willingness to pay. For a succinct and elegant treatment see, e.g., J-J. Laffont and J. Tirole, *Competition in Telecommunications*, MIT Press, 2000, especially. chapters 1 and 2.
9. For example, regulation requires that some information, such as a platform's best bid and offer, be provided at non-market determined rates.
10. For a discussion on the conditions under which regulation is appropriate in network industries, see R. D. Willig, "Economic Principles to Guide Post-Privatization Governance," in F. Besañes et al. (eds), *Can Privatization Deliver?*, Inter-American Bank, 1999.

other products sold by the firm or the firm will otherwise experience a loss in the volume of its sales that will be adverse to the overall profitability of the enterprise.

22. Exchanges compete with each other on a variety of dimensions. For example, U.S. exchanges compete with each other (and foreign exchanges) initially for new listings and subsequently for listing switches. With respect to a given stock, unless a stock is listed on an exchange, other platforms have nothing to produce, no market data and no executions. Once a stock has been listed on a particular exchange, rival exchanges and other trading platforms – such as electronic communications networks – compete to execute trades of shares in that stock. Thus, a listing exchange bestows a positive externality on its potential rivals.

23. Different platforms may choose different pricing strategies and ways of recovering total costs and earning a return on their investments. Some platforms may choose to pay rebates to attract orders, charge relatively low prices for market information (or provide market information "at no cost") and charge relatively high prices for accessing posted liquidity. Other platforms may choose a strategy of not paying liquidity rebates to attract orders, setting relatively high prices for market information and relatively low prices for accessing posted liquidity. Others may choose to foster trading on a platform by establishing ownership interests among customers that provide liquidity and consume market data. These strategies can vary over time in response to changing market, life-cycle, and regulatory factors. BATS Trading, for example, has chosen an initial strategy of setting low (or zero) prices for market data, mid-range prices for executions, and relatively high liquidity rebates.[11]

24. The economic evidence shows that exchanges and other trading platforms compete with each other on pricing. To illustrate, in 2007, NYSE Euronext changed its prices to compete more effectively with rival trading platforms:

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11. Pricing of services on an exchange may vary over the life of the exchange in response to its changing market position. For example, at the time of entry, pricing on an exchange may be motivated by the need to attract liquidity. At later stages, as the information flows from an exchange become richer and more relevant to consumers, the exchange may introduce fees for data, which help to recoup in part the initial up-front investments in the platform..

> NYSE Euronext introduced new pricing on [September 12, 2007], including higher rebates for stock trades on its exchanges, to better compete with aggressive pricing set by electronic rivals such as BATS Trading.
>
> Under the new pricing system effective Oct. 1, customers trading on the Big Board's all-electronic NYSE Arca platform will get a rebate of 25 cents for every 100 shares of NYSE-listed stocks traded, 5 cents more than the current rebate.
> . . .
>
> The exchange also lowered the charge for customers taking liquidity in Nasdaq-listed stocks out of its market by 5 cents, from 30 cents to 25 cents. Liquidity providers in Nasdaq-listed stocks will continue to get a rebate of 20 cents.
>
> . . .
> Upstart electronic platform BATS Trading recently introduced a pricing structure providing a rebate of 34 cents per 100 shares for customers providing liquidity in NYSE-listed stocks, and a charge of 24 cents per 100 shares for customers taking liquidity in NYSE-listed stocks away from BATS.
>
> "We're pleased at this reaction to BATS's consistently aggressive pricing," said Randy Williams, a spokesman [for BATS].[12]

25. Some trading platforms pay substantial sums in the form of liquidity rebates to induce customers to "post orders" on their platform.[13] For example, in 2009, NASDAQ paid $1.394 billion in liquidity rebates.[14] These posted orders allow NASDAQ to attract additional "order flow" that interacts with the posted orders by taking available liquidity and results in trades executing on its exchange. Posted orders, the liquidity-taking order flow, and the executed trades produce information that is valuable to investors.[15] Other platforms do not offer

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12. Anupreeta Das, "NYSE Euronext changes equities transaction pricing," Reuters, September 12, 2007.
13. In 2008, the National Stock Exchange ("NSX") introduced a new pricing structure that included "market data rebates embedded in liquidity rebates" (http://www.nsx.com/content/news/story/91#January312008). That is, NSX uses revenue it receives from selling market data to increase the rebates it pays for liquidity.
14. Form 10-K for NASDAQ Stock Market Inc., February 18, 2010, at 54.
15. Some commentors suggest that fees for proprietary data must be set "at cost." As we explain in this submission, there is no need to impose a cost-based pricing standard for such data and there is no unique cost basis that could be used for such a purpose. As we have discussed, the latter conclusion follows from the fact that the information at issue is a joint product and since the incremental cost of providing such information to an additional customer is small (or zero), marginal cost pricing is not feasible. Additionally, those commenters ignore that NASDAQ paid over a billion dollars in liquidity rebates in 2009 to

rebates to liquidity providers but instead offer lower fees or even free executions to liquidity-taking order flow. We understand that some exchanges, including the National Stock Exchange and the American Stock Exchange, offer equity ownership as an incentive/reward for active trading on their platforms.

26. Platforms also compete on data fees. For example, in June 2008, NASDAQ launched two proprietary "Last Sale" products. In each case, the terms included subscription rates and an "enterprise cap" rate designed for Web portals. The enterprise cap rates for the two products were $100,000 per month and $50,000 per month for the two products (i.e., a cap of $150,000 per month for customers who purchased both products). The majority of NASDAQ's sales were at the cap level. We understand that in early 2009 BATS offered an alternative product (BATS PITCH data) as a "free" alternative to the NASDAQ Last Sale products. Also in early 2009, NYSE Arca announced the launch of a competitive product with an enterprise price of $30,000 per month. In response, in April 2009, NASDAQ combined the two Last Sale products into one and reduced the enterprise cap to $50,000 per month (i.e., a reduction of $100,000 per month).

27. The fact that different exchanges adopt dissimilar pricing strategies suggests that customers have different preferences over the services provided by the exchanges as well as different willingness (or ability) to pay for these services. Thus, pricing heterogeneity partly reflects customer heterogeneity and adds to customer value as well as profitability.

28. Information on trading volumes further confirms that platforms compete actively for trading in listed stocks. For example, as we have noted, the NYSE accounted for about 80 percent of trading in NYSE-listed stocks in 2006; by October 2010, NYSE's share of trading in those stocks has fallen to as low as 22.6 percent, and the NYSE Group's share – i.e., the NYSE

(...continued)

induce trading on its platform and thereby generate the information that such commenters apparently want to obtain at a price that reflects only the cost of creating the proprietary data products (i.e., ignoring the costs of rebates and other joint costs).

and NYSE Arca – has fallen to 35.2 percent. Such large shifts in trading volumes across platforms indicate that traders can, and do, quickly move their orders from one exchange to another in response to market signals, which is clear evidence that platforms compete with each other. This intense competition among trading platforms can be expected to constrain the aggregate return each platform earns from its sale of all of its products.

29. Further increases in the price of proprietary data by a platform can be expected to reduce the volume of trading on that platform, which reduces the profitability of such a price increase and thus constrains the pricing of proprietary information. Conversely, a platform might reduce prices for proprietary information in order to maintain or increase the volume of trading on that platform. For example, we understand that in late 2009, a member notified NASDAQ that in the absence of a fee reduction for "non-displayed use" of depth data, the member would move order flow from NASDAQ to a competing platform. After meeting with the member and analyzing the potential loss of trading volume, NASDAQ sought and obtained SEC approval for an Enterprise License for non-displayed use of certain depth data.[16] NASDAQ's decision linked data revenue to transactions revenue, reflecting platform-based pricing and the nature of joint products.

C. The Role of Market Information in Trading Platform Competition.

30. Prior Commission rules mandate that certain types of market information must be made available to all customers. For example, in 1978, the Commission implemented the "Display Rule" which required information vendors and broker-dealers "to display a consolidated array of information for each stock including the single best quotation available in the reporting markets or a montage of all markets' best quotations, and the last sale data including price,

16. See Securities Exchange Act Release No. 61700 (March 12, 2010); 75 F.R. 13172 (March 18, 2010) (approving SR-NASDAQ-2010-034).

place and volume."[17] Exchanges and other trading platforms are required to provide their trade (or "core") information to a "securities information processor" ("SIP") which consolidates data from all platforms to produce the mandated information.[18]

31. In addition to the information that trading platforms are required to provide to SIPs, exchanges and other platforms can, but are not required to, individually make available additional market data – sometimes referred to as non-core, or "proprietary", information. As we have discussed, the posting of trades on a platform, the execution of those trades, and market information about order flow to the platform and trades on the platform, are joint products.

32. There is no question that core data are valuable, which is reflected in the Commission's requirement that this base information be provided at reasonable fees to all parties. There is, of course, value in additional information flowing from the exchange. But there is no evidence that this additional information is of the same fundamental value to the financial markets as the information that exchanges are required to provide. Whether or not a customer purchases the incremental information depends on the cost/benefit analysis of the individual customer. Moreover, the decision of an individual customer not to purchase this incremental information is not likely to create a material negative externality on the trading public and thus a decision to buy or not is best left to individual customers while ensuring that competition among exchanges creates effective constraints on the pricing of proprietary data.

33. Market information is useful in a number of ways, including as an input into trading activities, for valuing securities and portfolios, and for evaluating the performance of a broker or trader.[19] Depth-of-book market information can help investors make better trading

17. Sharon Brown-Hruska, "Competing Models for Market Data Dissemination: A Comparison of Stock and Futures Markets," at 7 (describing Rule 11Ac1-2).
18. Trade information is consolidated into three data streams – referred to as Tape A (for NYSE-listed shares); Tape B (for shares listed on the AMEX and regional exchanges); and Tape C (for NASDAQ-listed shares). One SIP compiles Tape A and Tape B information; a different SIP compiles Tape C information.
19. Market information can be useful to firms that act as intermediaries between trading

decisions. The decision to post an order that would be disseminated by a depth-of-book feed reflects a trade-off between the cost of offering a "free option" to the market and the benefit of attracting a taking order and thereby creating an execution.[20] The costs and benefits of posting an order will depend on the attributes of the platform where the order can be posted, including the platform fees, data quality and price and distribution of its data products. Without the prospect of a taking order seeing and reacting to a posted order on a platform with a depth-of-book feed, there would be little incentive to post a displayed order. Independent of trading, depth-of-book data also may be useful as a barometer of market sentiment. For example, a "deep" book with many orders at numerous prices near the current price may be considered to be a sign of investor confidence; conversely, a "thin" book with few orders may be considered a sign of investor uncertainty. Whether depth-of-book data are used for trading or not, a platform must attract orders, both posting and taking, to generate depth-of-book information.

34. It is important to keep in mind that a trader can participate in trading even without proprietary information from a particular platform regarding a particular stock or array of stocks. That is, while it is conceivable that proprietary information generated by NASDAQ could be potentially quite valuable to certain traders who wish to trade on NASDAQ, the key point is that a trader is not compelled to trade on NASDAQ in NASDAQ-listed stocks. Such a trader, while potentially benefiting from information generated by traders who trade on NASDAQ, contributes nothing to the recovery of joint costs incurred by NASDAQ.

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platforms and the trading public but do not trade themselves. For example, web sites like Google and Yahoo! benefit in a variety of ways from attracting more visitors because such visitors are likely to "stick" to the website and generate other business and thus incremental revenues. Such web sites would not have an incentive to buy non-core data products if they were of no value to ultimate consumers. These web sites are thus engaged in joint production and have devised sophisticated pricing mechanisms to monetize their investments in the production of content.

20. See, for example, Notice of Proposed Order Approving Proposal by NYSE Arca, Inc. To Establish Fees for Certain Market Data and Request for Comment, Release No. 34-57917, June 4, 2008, released by the Securities and Exchange Commission, Appendix A, at 51-53.

35. Ubiquitous access to core data (e.g., National Best Bid and Offer, or NBBO, information) is perceived by the regulatory authorities as essential to the efficient functioning of the equity markets.[21] This conclusion does not, however, apply to proprietary products which are valuable to some traders but are not required to ensure baseline efficiency of the trading system. This being the case, and given that all costs of an exchange have to be recovered on a forward-looking basis, it makes economic sense that the beneficiaries of such proprietary information help to defray some portion of the joint and common costs incurred by the exchange.

36. Although proprietary data are jointly produced with trading activity on the exchange, such raw data needs to be further processed and stored in order to be usable to customers. Exchanges would have little or no economic incentive to expend resources on developing, processing, and maintaining proprietary data unless it were valuable to at least some customers and could generate income for the exchange directly or indirectly. For example, an exchange that offered for sale additional information – beyond what is mandated by regulatory fiat – must incur the costs of collecting, preparing and marketing that data, but would gain no commensurate revenues unless at least some customers considered it valuable and were willing to pay for it either directly or through fees on trades.[22]

37. Thus, even if certain information is generated every time customers post buy/sell orders or execute trades, that information has to be maintained and continuously updated on databases, processed using software packages, and disseminated out to the public, all at substantial cost. This alone suggests that such proprietary data should not be made available

21. We understand that NASDAQ receives a share of the revenue generated from the sale of core data at regulated rates.
22. As we have discussed, different trading platforms may choose different pricing strategies. For example, a platform owner may choose to distribute non-core market information “at no cost” to increase demand for trade execution services on that platform. All else equal, that owner will thus be able to charge more for trade execution services than a platform owner that sells market information.

for free. Even more importantly, proprietary data are generated by the exchange using an expensive software and hardware infrastructure. These costs, together with the costs of executing trades, have to be recovered. As we shall explain in more detail later, sale of proprietary data should be called upon to contribute to the recovery of all the costs incurred by the exchange on behalf of all its products.[23]

38. Even if a trading platform had some unique information that is potentially valuable to (some) consumers, the total price of trading on that platform – which includes the price of market data available from the platform that the trader elects to purchase – is constrained by the total price of trading on rival platforms. Therefore, it is incorrect as a matter of economics to focus on whether any given information can only be obtained from a particular platform in order to gauge that platform's "market power." Proper economic assessment focuses on inter-platform competition which is driven by a variety of factors, including the availability and quality of platform-generated data and the extent to which that competition constrains pricing.

39. Because customers can choose between competing trading platforms, the competitive constraints faced by sellers of market data differ from the constraints faced by the sellers of regulated "monopoly" inputs. For example, consider the case of a Regional Bell Operating Company ("RBOC") that sold access to its "local loop" for residential customers (i.e., the connection to a customer's home). Beginning in the 1980s, residential customers could choose among long-distance operators, but typically had no choice of providers for local-loop service because each home was reached by only one "wire." Thus, a firm that wanted to offer

23. This point was recognized over a century ago by the British economist Alfred Marshall who noted that the total cost of raising and maintaining a sheep should be recovered from wool and mutton and not from either one alone, even though it is unavoidable that a sheep will produce both, unless there is no demand for mutton, for example. *See*, Alfred Marshall, *Principles of Economics,* Cambridge University Press, 1890. There is no danger in the instant case that there will be no demand for either execution or proprietary data on NASDAQ. The whole point is that there is demand for such data, but those who have such demand have balked (apparently) at paying for it.

long-distance service to a consumer had to buy "access" to that local-loop service from the monopoly provider in that area (i.e., the only way into a customer's home was through the wire owned by the local phone company).[24]

40. In contrast to the case of RBOCs selling local-loop access, individuals who want market data can obtain it from a variety of platforms, some of it even at no cost. Even though market information from one platform may not be a perfect substitute for market information from other platform(s), the existence of alternative sources of information can be expected to constrain the prices platforms charge for market data, especially when reinforced by inter-platform competition.[25]

41. For competitive concerns to conceivably arise in a setting like this, the quality (breadth and depth) of information from other platforms would have to be so inferior (and the incremental benefit from proprietary information so overwhelming), that the competitive viability of the alternative platforms would be undermined if traders had to pay market prices for the "dominant" platform's proprietary information. In such a case, these other platforms would not be in a position to offer attractive opportunities for traders and would not exercise a meaningful constraint on the dominant platform. This was precisely the market situation facing carriers that wished to connect to an RBOC's network. In essence, these carriers had to either pay the monopoly price or invest in costly and inefficient by-pass technologies. Regulatory constraint on pricing of access at the time may have been the most effective solution to the RBOCs' monopoly power. However, this concern is not present here because, as we have seen, other exchanges have been able to enter, flourish, and divert business from NASDAQ.

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24. More recently, cable firms started providing a competitive alternative to RBOC local-loop access in some areas.
25. Competition among platforms is similar to "source competition" that keeps railroad rates down – if an electric utility can get coal from two sources, each of which is served by a "monopoly" railroad then both apparent railroad monopolies are undermined. Similarly, if a customer can purchase power from two different generators, each served by a single railroad, both apparent railroad monopolies are undermined.

IV. ECONOMIC ANALYSIS OF NASDAQ'S "PLATFORM PRICING" PROPOSAL.

A. Summary of NASDAQ's "Platform Pricing."

42. We understand that the "Platform Pricing" program introduces tiered pricing that reflects customers' *joint* activity on the exchange through trading volumes and purchases of proprietary data. A customer who is an active trader *and* an active consumer of data receives an aggregated discount relative to the fees paid by other customers. NASDAQ already offers volume discounts on trades and proprietary data spend. Hence, the only novel element of this proposal is the discounting based on the customer's aggregate activity. As such, in general, it should not trigger any regulatory concerns. However, below we comment on the possible situation in which such concerns could arise and find that these are not present in the instant case.

43. NASDAQ is introducing a discount of its proprietary depth-of-book products (TotalView, OpenView and Level2) sold to "non-professional" investors. "Non-professional" investors include traditional retail brokers such as AG Edwards, Raymond James and Merrill Lynch and online brokers such as Scottrade, Schwab, Fidelity, TD Ameritrade and E*Trade. Such investors can purchase depth-of-book information that will be used by their clients (i.e., retail investors) to make trading and other decisions. That is, customers who could qualify for "Platform Pricing" discounts purchase information on behalf of retail investors and will attempt to recover the costs of these valuable purchases from the ultimate consumer whether directly or indirectly (e.g., through increased trading). The likely effect of the volume discounts in the "Platform Pricing" proposal will be to "pass through" lower fees to the ultimate non-professional investors on whose behalf NASDAQ's customers purchase proprietary data.[26]

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26. We understand that non-professional proprietary spending includes expenditures associated with the distribution of the following products: TotalView, OpenView and Level2. This calculation includes the monthly usage, distributor fees and enterprise license fees for the firm. Members must meet both the volume requirement and the proprietary data

44. The "Platform Pricing" discounts are not available to "Professional" investors, which include trading firms that can connect directly to the NASDAQ trading platform (e.g., high frequency traders). Even prior to the introduction of "Platform Pricing," NASDAQ charged different fees for its depth-of-book products to "professional" and "non-professional" investors. In particular, "professionals" pay substantially higher fees than "non-professionals." For example, we understand that NASDAQ currently charges $15 per terminal for its TotalView product to non-professionals, while professional investors pay roughly five times the non-professional rate. Such pricing reflects the value of the service in a manner that is consistent with pricing rules advocated by economists in the presence of large joint and common costs and low incremental costs, as we discuss next.

B. The Economics of Pricing Products in the Presence of Scale Economies Stemming from Large Joint and Common Costs and Low Marginal Costs.

45. The products at issue in this regulatory proceeding are produced under the conditions of high fixed costs, which are also joint and common to a range of products, and low (or zero) marginal or incremental costs of serving an additional customer. In addition, other incremental costs (such as developing information on the depth of book of an additional security) are also low when compared to the volume of costs associated with operating an exchange, including the underlying information technology. Indeed, state-of-the art information technology is at the heart of a competitive and efficiently operated financial market (such as an exchange).

46. This cost structure characterizes content production and distribution industries. For example, in the software industry, developing new software typically requires a large initial investment (and continuing large investments to "upgrade" the software), but once the software is developed, the incremental cost of providing that software to an additional user is typically

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(...continued)
requirement to be eligible for the discount.

small, or even zero (e.g., if the software can be downloaded over the internet after being purchased).[27] The same is true of newspapers, motion pictures, books, and so forth.

47. In the case of NASDAQ, the production process at the heart of this regulatory matter is even more complicated. In particular, besides being characterized by low incremental costs and high fixed costs, the products produced by NASDAQ (e.g., trade execution services and market data) are produced "jointly." There is no question that it is costly to build and maintain data bases that are needed to produce proprietary data, but providing that information to an additional customer involves little or no additional costs. Similarly, the incremental cost of trading an additional share of stock on an existing platform is likely to be low once the platform has been developed. The relevant products are produced jointly in the sense that the activities of trading and placing orders are *the* source of information that can be (and is) distributed to the interested parties and are subject to significant scale economies.[28]

48. There is a substantial economic literature that addresses the pricing principles for products and services in industries with this type of cost structure: i.e., scale economies and joint and common costs.[29] Economic analysis shows that charging prices equal to marginal cost is the most efficient pricing rule. However, given the cost structures noted above, marginal cost pricing is not economically feasible. That is, marginal cost pricing is not feasible when there are increasing returns to scale because if all sales were priced at marginal cost, the vendor would be unable to defray the forward-looking costs of providing the service and would (ultimately) go

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27. See William J. Baumol and Daniel G. Swanson, "The New Economy and Ubiquitous *Competitive* Price Discrimination: Identifying Defensible Criteria of Market Power," *Antitrust Law Journal*, Vol. 70, No. 3 (2003).
28. This is not the case with Marshall's sheep farming. Sheep are likely produced with constant or increasing marginal cost and the pricing complication is confined to the most efficient recovery of the marginal cost of a sheep.
29. *See*, e.g., R. R. Braeutigam, "Optimal Policies for Natural Monopolies," in R. Schmalensee and R.D. Willig (eds.), *Handbook of Industrial Organization*, vol. I, North Holland Publishers, 1989, for a review of pricing rules in the presence of scale and scope economies.

bankrupt and would have to exit the industry. Stated simply, pricing services at marginal cost in an industry with a cost structure like that of NASDAQ is a prescription for bankruptcy.[30]

49. For this reason, the services provided by a trading platform cannot be priced at marginal cost. Moreover, as we have discussed, execution services and market data are joint products. This does not mean that if one product is regarded as simply a by-product of another activity, it should be priced at a zero. Far from it: insofar as there is demand for that product at a positive price, the price for that product should be positive. Thus, even if information could be produced at zero marginal cost, economic principles mandate that it nevertheless be priced to the willing buyers at a price higher than the associated marginal cost.[31] That is, it is economically appropriate for such information to carry a positive price.

50. It is economically appropriate for information to carry a positive price in this context because if the platform incurs joint and common costs, "giving away" one product means that the other product(s) must cover all the joint and common costs.[32] This is potentially inefficient because it requires that the price of these services be raised above their respective marginal costs by more than would be necessary if the "free" product or service made some contribution to the recovery of the joint and common costs. Of course, as we have discussed, different platforms may choose different cost recovery strategies and may price one joint product at marginal cost (e.g., a platform may provide market data at "no cost") but will have to price another joint product (e.g., execution services) significantly above the appropriate marginal cost in order to remain viable.

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30. The marginal cost that we are focusing on is the additional cost incurred by the exchange in providing the information to an additional customer.
31. *See, e.g.,* W.J. Baumol and J.A. Ordover, "On the Optimality of Public Goods Pricing with Exclusion Devices," *Kyklos,* Fasc. 1, 5-21 (1977).
32. It is uncontroverted that in the absence of a platform for trading, there would be no information regarding the depth-of-book or information about prices at which trades occur. Thus, a trading platform is a "cost center" for both trade execution services and market data.

C. "Price Differentiation" in Markets with High Fixed Costs and Low Incremental Costs is Common, Efficient, and not Anticompetitive.

51. Given that marginal cost pricing is generally not feasible in high fixed cost industries, some deviations from marginal cost pricing are unavoidable. One alternative might be to charge all customers a price equal to average total cost (including a return to capital). It is, however, well known that uniform average cost pricing – that is, charging the same price equal to average cost to all customers – is not socially efficient. In general, economic efficiency in these circumstances requires that customers whose demand is more responsive to price changes pay prices closer to marginal cost as opposed to customers who are less responsive to price changes. By offering a lower price to customers whose demand is more responsive to price, the seller stimulates demand, increases overall revenue, and in fact can offer a discount off the starting price (set at an average cost) even to the less responsive customers. Economists call this type of pricing structure "differential pricing" or "price discrimination." Incidentally, this type of pricing reflects the underlying values that different consumers place on the product. To illustrate, a buyer whose demand is very responsive to price changes likely does not value the product very much above the available alternatives. Hence, this type of differentiated pricing is really a "value-driven" pricing. There is nothing problematic with such pricing once it is realized that neither marginal cost pricing nor uniform pricing are desirable from efficiency principles; and there is a great deal to recommend it.

52. Another form of differential pricing entails quantity (volume) discounts. In this pricing scenario, the incremental price (that is, the price for incremental units) falls with volume. This makes business and efficiency sense as long as the incremental price exceeds the incremental cost of the additional sales. In this case, the total volume of sales expands, which

is socially efficient, and consumers and the firm benefit.[33] In fact, volume discounts are ubiquitous in industries characterized by high fixed costs and low marginal costs.

53. Differential pricing (price discrimination) can benefit all groups of customers, provided it is implemented within some limits.[34] In particular, when competition constrains the overall profits earned by a supplier, such as is the case with trading platforms, differential pricing will, on balance, tend to benefit all customers as compared to, for example, uniform pricing. As we have discussed, competition in the provision of trading platform services is fierce. Hence, in the industry discussed here, differential pricing involving volume discounts should be encouraged rather than discouraged.

54. Differential pricing allows a provider to recover more of its fixed costs from some customers than from others and more on some units of sale than on others. For example, as we have discussed, professional investors' fees for market data generally are many times larger than fees paid by non-professional investors for the same product. That is, with this type of pricing structure both types of investors contribute to fixed costs but, all else equal, professional investors contribute more than non-professional investors on each unit purchased.

55. As we have discussed, NASDAQ's "Platform Pricing" differentiation strategy is based on two distinct criteria: (1) trading volume and (2) purchases of market information. The current proposal envisages that the marginal price (which is the increment that the customer has to pay for additional data and access to liquidity) falls with the volume of the activity and with the total volume of the trader's dealings with NASDAQ. That is, the proposed schedule exhibits effective volume discounts and also certain "bundling" of discounts. As we have discussed, volume discounts are generally procompetitive and efficiency enhancing, especially in situations like here where the marginal cost of the activity (e.g., providing market information

33. It is also possible to combine price differentiation across customer groups with volume discounts. That is, it is possible to have different discount schedules for different customer categories.
34. This has been shown by R. D. Willig, "Pareto-Superior Non-linear Price Schedules," *Bell Journal of Economics* (1978).

to an additional consumer) is likely to be low or zero while the fixed costs are substantial. The reason is that with marginal costs low (or even zero), any price above this low marginal cost (say, equal to the average cost), suppresses output and thus lowers economic welfare. Hence, it is desirable to stimulate demand by offering volume discounts.

56. Volume discounts can improve a firm's profits *and* consumers' welfare. The firm's profit increases because additional purchases at any price above marginal cost help the firm recoup high fixed costs. Consumers' welfare increases where the policy causes consumers to purchase incremental units, which reveals that consumers obtain a net benefit from incremental purchases. This is true because the purchase of incremental units is voluntary, as is the case for depth-of-book data.

D. "Bundling" is Common and Generally Procompetitive.

57. The proposed NASDAQ price schedule provides for discounts that depend not only on volume but also on the combined spend on providing liquidity as well as the use of data. This type of pricing structure is sometimes referred to as "bundled" discounts.

58. It is not unusual for firms to offer discounts that are linked to total spend across a number of products. These types of pricing plans often reflect the fact that customers are differentiated on more than one dimension in terms of their willingness to spend on any given product. Here such differences might be differences in the willingness to pay for data and for accessing liquidity. In such a case, combining different products into one package makes it easier to design a plan that will appeal to a broader group of potential customers and stimulate overall sales than would a plan that offered discounts based only on the volume of one kind of activity or another. For example, some customers purchase substantial amounts of data but are not active in the market (e.g., market data vendors, independent software vendors, service bureaus, internet portals). Other customers may be active in the market but purchase little or no proprietary data (e.g., a small firm whose primary focus is trading at high frequencies). By

conditioning the discount on both activities, the "Platform Pricing" plan can achieve improved participation from both categories of users as compared to disaggregated plans.

59. Competitive concerns from a practice of bundling discounts across a range of products may potentially arise when such bundling-cum-discounting is used to foreclose entry (expansion) of rival firms which may not be able to offer an array of products as broad as that offered by the incumbent. In the instant case it is not likely that the combined offer will induce rival exchanges to exit (or become less competitively potent due to a reduction in volume). It is also not likely that the combined offer will have the effect of creating significant barriers to entry or expansion for new exchanges.

E. Price Differentiation is Consistent with "Fairness."

60. "Fairness" is a concept that is often referenced in regulatory settings; however, it does not have a clear meaning in economics. Various definitions of what "fair" means have been provided in the economics literature but they are, in the end, arbitrary. The underlying idea is to propose a definition of "fairness" and then test its implications for public policy. In the current context, because we are dealing with pricing of services to different customers, the concept of fairness could be related to the permissible price differences for the same products charged to different customers (or customer groups).

61. From this perspective, one highly restrictive interpretation of the concept of fairness would be a requirement that all customers pay the same price for the same service, unless there are differences in the costs of serving them (i.e., fairness would be equated to the absence of price discrimination). In this interpretation of the fairness concept, the only permissible source of different treatment is the difference in the marginal (or incremental) cost of providing the product (service) to a customer. This view is consistent with the purely theoretical benchmark of perfect competition where all buyers pay the "marginal cost" of the good.

62. However, as we have discussed, marginal cost pricing is not feasible in a variety of realistic market settings and thus this pricing rule is not appropriate in situations like those considered in this submission. In the alternative, if all consumers have to pay the same price, non-discriminatory might mean pricing all services at an average cost.[35] There are two problems with this prescription. First, when there are joint and common costs, all calculations of average cost are arbitrary because the allocation of joint costs to different products is arbitrary. Second, such pricing is inefficient in the sense that it represses output and economic welfare relative to what could be realized with more complex pricing rules. From this brief discussion it follows that some differential treatment of different customers or customer classes should be allowed in order to promote overall economic efficiency which conduces to overall economic well-being and also serves to improve the profitability of firms.

63. So the question arises as to how far such differentiation should be allowed to go without violating some principle of fairness. Professor Gerald Faulhaber proposed that fair prices are those that are free of "cross-subsidy" of one customer group by another.[36] Cross-subsidy can be defined as a situation in which a customer (or customer group) pays more for what it purchases from a firm than what it would pay if it were not part of a broader customer group buying from that firm. In theory, the simplest benchmark for the absence of cross-subsidy is whether the price the buyer pays is below the marginal cost. If one customer pays less than the marginal cost of being served, another customer has to make up the difference by paying more than would be required if every customer covered (at least) the relevant marginal cost. In the current context, the marginal cost of serving an additional customer – be it accessing liquidity (transaction), posting offers, or obtaining information – are likely to be low, or perhaps even zero. Consequently, the rates proposed by NASDAQ in the "Platform Pricing" plan do not

35. Since average cost depends on the volume of sales, which in turn depends on prices, the average cost is calculated at the volume at which the market clears, when the price is set at average cost. There is always such an equilibrium price.
36. Gerald Faulhaber, "Cross-Subsidization: Pricing in Public Enterprises," *American Economic Review* (1975).

violate a fairness standard defined as systematically pricing below marginal cost to some customers on some purchases.

64. Professor Faulhaber also advanced a somewhat stricter definition of cross-subsidy which has been elaborated by William Baumol and Greg Sidak.[37] These authors propose that fairness requires that no group of customers should pay more for the service obtained than the incremental cost of serving them. This standard has been successfully applied for years in railroad regulation (following the passage of the Staggers Act) under the rubric of the "stand-alone cost test." Under such a test, prices to some customer groups could be conceivably quite high but even these high-paying customers obtain some benefits from sharing the facilities (such as the platform and the services it provides) with other customers.[38] Consequently, a plausible standard of fair pricing is that all customers of the vendor (such as NASDAQ) share in the benefits from participating on the platform, even if the sharing in the benefits may not be necessarily equal.[39]

65. In sum, fairness is not a core concept of microeconomics or of industrial organization. It can perhaps be best interpreted as forbidding cross subsidies among customers groups. After all is said and done, the metric of what is fair or unfair has to be imported from elsewhere from outside of the model.

66. More importantly, perhaps, differential pricing and bundled discounts should not be assessed against some abstract concept of fairness as long as these pricing practices arise

37. William J. Baumol and J. Gregory Sidak, *Toward Competition in Local Telephony*, MIT Press, 1994.
38. In the railroad setting, shippers who are the least responsive to price – those that buy coal, for example – pay the most. Here the large buyers pay the least which is reasonable since they are likely to be relatively price-responsive demanders.
39. Some potential purchasers of depth-of-book data are distributors (e.g., Google). These customers "consume" (i.e., purchase) data without trading. However, such distributors purchase data on behalf of retail investors who can be expected to trade (i.e., a distributor would have no incentive to purchase data unless it were valued by at least some of its customers).

in a market in which there is effective competition and the practices at issue are unlikely to lead to the diminution of competition and exclusion of more or equally efficient rivals. Because there is no plausible worry that the "Platform Pricing" plan will so disadvantage some customers of NASDAQ as to distort the workings of competition in the downstream market, the proposed pricing plan raises no competition concerns.

IV. CONCLUSIONS.

67. Significant competitive forces constrain the prices charged for non-core products by NASDAQ and other platforms. At least two types of competitive forces constrain the prices that platforms can charge for non-core market information. First, a trading platform cannot generate market information unless it receives trade orders. For this reason, a platform can be expected to use its market data product as a tool for attracting liquidity and trading to its exchange. Second, even though market information from one platform may not be a perfect substitute for market information from one or more other platforms, the existence of alternative sources of information can be expected to constrain the prices platforms charge for market data.

68. There are high fixed costs of supplying the products at issue in this regulatory proceeding. Moreover, these fixed costs are also joint and common to a range of products provided by the exchanges (such as NASDAQ). Finally, the marginal or incremental costs of serving an additional customer are low or close to zero. In industries with these cost characteristics, charging all customers the same price is not economically efficient. Instead, differential pricing which includes volume discounts and "bundling" can lead to improved economic welfare and market performance.

69. NASDAQ's "Platform Pricing" is an example of this type of "differential pricing" and "bundling." Differential pricing in markets with high fixed costs and low incremental costs is common, efficient, and not anticompetitive. "Bundling" also is common and generally procompetitive. Finally, differential pricing is consistent with "fairness".

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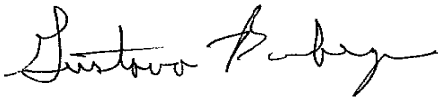

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December 29, 2010

Appendix A

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HONORS

1973	Columbia University: Highest distinction for the doctoral dissertation
1971-1972	Columbia University: Honorary President's Fellow
1969-1971	Columbia University: President's Fellow
1967-1968	McGill University: Honors Student
1964, 1965	Warsaw University: Award for Academic Achievement, Department of Political Economy
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PROFESSIONAL EXPERIENCE

June 1982 - present	Professor of Economics Department of Economics, New York University, New York, New York
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Aug. 1991 - Oct. 1992	Deputy Assistant Attorney General for Economics Antitrust Division United States Department of Justice, Washington, D.C.
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Mar. 1984 - June 1988	Visiting Professor of Economics Universita Commerciale "Luigi Bocconi", Milan, Italy
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Feb. 1982 - June 1982	Acting Director of Graduate Studies Department of Economics, New York University
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Sept. 1979 - May 1990	Lecturer in Economics and Antitrust New York University Law School
Sept. 1977 - June 1978	Member, Technical Staff Bell Laboratories, Holmdel, New Jersey
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Sept. 1973 - Aug. 1977	Assistant Professor of Economics New York University
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OTHER PROFESSIONAL ACTIVITIES

2010 – present	Member, ABA Section of Antitrust Law, Economics Task Force
2006 - present	Special Consultant, Compass Lexecon (formerly Compass)/FTI Company, Washington, D.C.
2003 - 2006	Director, Competition Policy Associates, Inc. ("Compass"), Washington, D.C.
1997 – 1999	Consultant, Inter-American Development Bank, Washington, D.C.
1997 – present	Board of Editors, *Antitrust Report*
1995 – 2001	Consultant, The World Bank, Washington, D.C.
1998 – 2004	Senior Consultant Applied Economic Solutions, Inc., San Francisco, California
1995 - 2000	Senior Affiliate Cornerstone Research, Inc., Palo Alto, California
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1994 - 1996	Senior Affiliate Law and Economics Consulting Group, Emoryville, California
1994 - 2000	Senior Affiliate Consultants in Industry Economics, LLC, Princeton, New Jersey
1993 - 1994	Director Consultants in Industry Economics, Inc., Princeton, New Jersey
1992 - 1993	Vice-Chair (*pro tempore*) Economics Committee, American Bar Association, Chicago, Illinois
1990 - 1991 1992 - 1995	Senior Consultant Organization for Economic Cooperation and Development, Paris, France
1991	Member *Ad hoc* Working Group on Bulgaria's Draft Antitrust Law The Central and East European Law Initiative American Bar Association
1990 - 1991	Advisor Polish Ministry of Finance and Anti-Monopoly Office Warsaw, Poland
1990 - 1991	Member Special Committee on Antitrust Section of Antitrust Law, American Bar Association
1990 - 1991	Director and Senior Advisor Putnam, Hayes & Bartlett, Inc., Washington, D.C.

1990 - 1996	Member Predatory Pricing Monograph Task Force Section of Antitrust Law, American Bar Association
1989	Hearings on Competitive Issues in the Cable TV Industry Subcommittee on Monopolies and Business Rights of the Senate Judiciary Committee Washington, D.C.
1989	Member EEC Merger Control Task Force, American Bar Association
1988 - present	Associate Member American Bar Association
1987 - 1989	Adjunct Member Antitrust and Trade Regulation Committee, The Association of the Bar of the City of New York
1984	Speaker, "Industrial and Intellectual Property: The Antitrust Interface" National Institutes, American Bar Association, Philadelphia, Pennsylvania
1983 - 1990	Director Consultants in Industry Economics, Inc
1982	Member Organizing Committee Tenth Annual Telecommunications Policy Research Conference, Annapolis, Maryland
1981	Member Section 7 Clayton Act Committee, Project on Revising Merger Guidelines American Bar Association
1980	Organizer Invited Session on Law and Economics American Economic Association Meetings, Denver, Colorado
1978 - 1979	Member Department of Commerce Technical Advisory Board Scientific and Technical Information Economics and Pricing Subgroup

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MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Economic Association
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PUBLICATIONS

A. Journal Articles

"Coordinated Effects in Merger Analysis: An Introduction," *Columbia Bus. Law Review*, No. 2, 2007, 411-36.

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"Supervision and Social Welfare: An Expository Example," C.V. Starr Center Working Paper, January 1982.

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GRANTS RECEIVED

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Regulation of Economic Activity Program, National Science Foundation, Microeconomic Analysis of Antitrust Policy, Principal Investigator, April 1, 1983 - March 31, 1984.

Economics Division of the National Science Foundation, "Political Economy of Taxation," Principal Investigator, Summer 1982.

Sloan Workshop in Applied Microeconomics (coordinator), with W.J. Baumol (Principal Coordinator), September 1977 - August 1982.

Economics Division of the National Science Foundation, "Collaborative Research on the Theory of Optimal Taxation and Tax Reform," July 1979 to September 1980, with E.S. Phelps.

Division of Science Information of the National Science Foundation for Research on "Scale Economies and Public Goods Properties of Information," W.J. Baumol, Y.M. Braunstein, M.I. Nadiri, Fall 1974 to Fall 1977.

National Science Foundation Institutional Grant to New York University for Research on Taxation and Distribution of Income, Summer 1974.

Appendix B

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EDUCATION

Ph.D., UNIVERSITY OF CHICAGO, 1987, GRADUATE SCHOOL OF BUSINESS

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B.A., SOUTHWESTERN AT MEMPHIS, 1981

EMPLOYMENT

COMPASS LEXECON (formerly Lexecon), Chicago, Illinois (3/87-Present): Senior Vice President

UNIVERSITY OF CHICAGO, (1984, 1986): Lecturer

GOVERNORS STATE UNIVERSITY, (1986): Community Professor

UNIVERSITY OF CHICAGO, (1982-1986): Teaching Assistant

UNIVERSITY OF CHICAGO, (1982-1986): Research Assistant

ACADEMIC HONORS AND FELLOWSHIPS

University of Chicago Fellowship, 1981-1984

H.B. Earhart Fellowship, 1985-1986

RESEARCH PAPERS

"Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?" co-authored with D. Carlton and R. Epstein, RAND Journal of Economics, (Vol. 26, No. 1, Spring 1995, pp. 131-147).

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TESTIMONIAL EXPERIENCE

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Statement and Supplemental Statement of Alan O. Sykes and Gustavo E. Bamberger in Re: Fresh Tomatoes and Bell Peppers, Investigation No. TA-201-66, United States International Trade Commission, June 3, 1996 (Statement); and June 10, 1996 (Supplemental Statement).

Testimony of Gustavo E. Bamberger in Re: Wisconsin Public Service Corporation; WPS Energy Services, Inc.; and WPS Power Development, Inc.: Before the Federal Energy Regulatory Commission, Docket No. ER96-1088-000, July 22, 1996.

Pre-Filed Direct, Rebuttal and Re-Direct Testimony of Gustavo E. Bamberger in Re: Disapproval of Rate Filings for American Casualty Company of Reading, Pennsylvania, and Continental Casualty Company, Before the State Office of Administrative Hearings (Texas), SOAH Docket No. 454-96-0800, September 10, 1996 (Direct); September 16, 1996 (Rebuttal); and September 27, 1996 (Re-Direct).

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Affidavit of Robert H. Gertner and Gustavo E. Bamberger in the Matter of: BellSouth Telecommunications, Inc.'s Entry into InterLATA Services PursuantTo Section 271 of the Telecommunications Act of 1996: Before the Georgia Public Service Commission, Docket No. 6863-U, May 31, 2001.

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Direct Testimony of Gustavo E. Bamberger in Re: Consideration of the Provision of In-Region InterLATA Services By BellSouth Telecommunications, Inc. Pursuant to Section 271 of the Telecommunications Act of 1996: Before the Mississippi Public Service Commission, Docket No. 97-AD-0321, June 15, 2001.

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Affidavit of Robert H. Gertner and Gustavo E. Bamberger in Re: Consideration and review of BellSouth Telecommunication, Inc.'s pre-application compliance with Section 271 of the Telecommunications Act of 1996, including but not limited to, the fourteen requirements set forth in Section 271(c)(2)(B) in order to verify compliance with Section 271 and provide a recommendation to the Federal Communications Commission regarding BellSouth Telecommunications, Inc.'s application to provide interLATA services originating in-region: Before the Louisiana Public Service Commission, Docket No. U-22252-E, June 21, 2001.

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Expert Preliminary Report, Supplemental Expert Report, Rebuttal Expert Report, Deposition, Declaration, Supplemental Declaration and Declaration of Gustavo E. Bamberger in Re: Nobody in Particular Presents, Inc., v, Clear Channel Communications, Inc., Clear Channel Entertainment, Inc., Clear Channel Radio, Inc., Clear Channel Broadcasting Inc., KBCO-FM, KBPI-FM, KFMD-FM, KRFX-FM, and KTCL-FM, In the U.S. District Court for the District of Colorado, Civil Action No. 01-N-1523, May 3, 2002 (Preliminary Report); July 26, 2002 (Supplemental Report); August 20, 2002 (Rebuttal Report); September 17, 2002 (Deposition); October 31, 2002 (Declaration); January 24, 2003 (Supplemental Declaration); and July 21, 2003 (Declaration).

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Expert Report, Reply Expert Report and Declaration of William Landes, Hal Sider and Gustavo Bamberger, and Declaration, Deposition and Supplemental Declaration of Gustavo E. Bamberger in Re: Vitamin Antitrust Litigation: In the U.S. District Court for the District of Columbia, M.D.L. No. 1285, May 23, 2002 (Report); July 17, 2002 (Reply Report); August 1, 2002 (Declaration with Landes and Sider); August 5, 2002 (Declaration); August 9, 2002 (Deposition); and September 27, 2002 (Supplemental Declaration).

Deposition of Gustavo E. Bamberger in Re: Devin Daniels, et al. v. Philip Morris Companies, Inc., et al.: In San Diego Superior Court, Case No. 719446, June 10, 2002.

Declaration of Gustavo E. Bamberger and Michael P. Bandow in Re: EB-01-1H-0352, Supplemental Response to Questions Posed by the Commission in its May 21, 2002 Letter re Verizon's Provisioning of Special Access Services, submitted to the Federal Communications Commission, July 31, 2002.

Affidavit, Expert Report and Deposition of Gustavo E. Bamberger in Re: National Association for the Advancement of Colored People (NAACP) and National Spinal Cord Injury Association (NSCIA) v. Acusport Corporation; Ellet Brothers, Inc., RSR Management Company, and RSR Group, Inc., individually and on behalf of similarly situated entities; and National Association for the Advancement of Colored People (NAACP) et al., v. American Arms, Inc., et al.: In the U.S. District Court for the Eastern District of New York, CV 99-7037 and CV 99-3999, August 20, 2002 (Affidavit); February 19, 2003 (Report); and March 6, 2003 (Deposition).

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Expert Rebuttal Report, Expert Report and Deposition of Gustavo E. Bamberger in Re: Baum Research and Development, Inc. and Steve Baum v. Hillerich & Bradsby Co., Inc.; Easton Sports, Inc.; Worth, Inc.; National Collegiate Athletic Association; and Sporting Goods Manufacturers Association: In the U.S. District Court for the Eastern District of Michigan, 98-72946, January 13, 2003 (Expert Rebuttal Report and Expert Report); and May 28-29, 2003 (Deposition).

Declaration of Gustavo E. Bamberger and Michael P. Bandow in Re: EB-01-1H-0352, Supplemental Response to Questions Posed by the Commission in its January 24, 2003 Letter re: Verizon's Provisioning of Special Access Services, submitted to the Federal Communications Commission, March 14, 2003.

Dennis W. Carlton, Janice H. Halpern and Gustavo E. Bamberger, "Economic Analysis of the News Corporation/DIRECTV Transaction," and "Response to William P. Rogerson and Daniel L. Rubinfeld and Duncan Cameron," submitted to the Federal Communications Commission, MB Docket No. 03-124, July 1, 2003; and September 8, 2003.

Expert Report, Deposition, Declaration and Testimony of Gustavo Bamberger in Re: Western Asbestos Company; Western MacArthur Company; and Mac Arthur Company, Debtors: In United States Bankruptcy Court, Northern District of California, Oakland Division, Nos. 02-46284, 02-46285, 02-46286, September 15, 2003 (Expert Report); October 21, 2003 (Deposition); November 17, 2003 (Declaration); and November 21, 2003 (Testimony).

Expert Report, Deposition and Testimony of Gustavo E. Bamberger in the Matter of the Arbitration Between: Rangemark Insurance Services, Inc., Petitioner vs. Claremont Liability Insurance Company, Respondent, October 24, 2003 (Expert Report); November 14, 2003 (Deposition); and February 12, 2004 (Testimony).

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Expert Report, Deposition and Reply Expert Report of Gustavo E. Bamberger in Re: Marketing and Management Information, Inc. v. The United States: In the U.S. Court of Federal Claims, No. 99-194C, March 16, 2004 (Expert Report); April 20-21, 2004 (Deposition); and May 6, 2004 (Reply Expert Report).

Joint Expert Witness Statement of Gustavo Bamberger, David Gillen, Margaret Guerin-Calvert, Andrew Hanssen, Jerry Hausman, Timothy Hazledine, Janusz Ordover, Robert Willig and Kieran Murray; Affidavit of Gustavo Ernesto Bamberger and Dennis William Carlton in Reply; Second Affidavit of Gustavo Ernesto Bamberger and Dennis William Carlton; Affidavit of Gustavo Ernesto Bamberger; and Testimony of Gustavo Bamberger in the Matter of: An appeal from determinations of the Commerce Commission between Air New Zealand Limited, Qantas Airways Limited, Appellants and Commerce Commission, Respondents: In the High Court of New Zealand Auckland Registry, CIV 2003-404-6590, May 21, 2004 (Joint Expert Witness Statement); June 4, 2004 (Reply Affidavit); July 2, 2004 (Second Affidavit); July 12, 2004 (Affidavit of Gustavo Bamberger); and July 13-16, 2004 (Testimony).

Expert Report, Supplemental Expert Report, Deposition and Rebuttal Expert Report of Gustavo Bamberger in Re: Congoleum Corporation et al.: In United States Bankruptcy Court, District of New Jersey, Case 03-51524 (KCS), July 9, 2004 (Expert Report); January 26, 2005 (Supplemental Expert Report); February 9, 2005 and March 18, 2005 (Deposition); and February 23, 2005 (Rebuttal Expert Report).

Statement and Letter of Gustavo Bamberger in the Matter of: A La Carte and Themed Tier Programming and Pricing Options for Programming Distribution on Cable Television and Direct Broadcast Satellite Systems: Before the Federal Communications Commission, MB Docket No. 04-207, July 15, 2004 (Statement); and November 4, 2004 (Letter with Michael G. Baumann, John M. Gale, Thomas W. Hazlett, Michael L. Katz, Kent W. Mikkelsen and Bruce M. Owen).

Expert Report, Supplemental Expert Report, Deposition and Testimony of Gustavo Bamberger in Re: Braid Electric Company, Claimant vs. Square D Company / Schneider Electric, Respondent: American Arbitration Association, Case No. 51 Y 181 01712 03, August 16, 2004 (Expert Report); October 8, 2004 (Supplemental Expert Report); October 29, 2004 (Deposition); and November 15, 2005 (Testimony).

Declaration, Deposition, Affidavit, Reply Declaration and Reply Report on Remand of Gustavo Bamberger in Re: Issuer Plaintiff Initial Public Offering Antitrust Litigation and Public Offering Fee Antitrust Litigation: In the U.S. District Court for the Southern District of New York, 00 Civ. 7804 (LMM) (DFE) and 98 Civ. 7890 (LMM), September 16, 2004 (Declaration); January 27, 2005 (Deposition); October 24, 2005 (Affidavit); October 17, 2007 (Reply Declaration); and March 6, 2008 (Reply Report on Remand).

Expert Report and Deposition of Gustavo Bamberger in Re: Congoleum Corporation v. Ace American Insurance Company, et al.: In the Superior Court of New Jersey, Law Division: Middlesex County, Docket No. MID-L-8908-01, December 17, 2004 (Expert Report); and March 18, 2005 (Deposition).

Declaration of Gustavo Bamberger in Re: Gas Plus, a California Corporation; and Gas Plus San Marcos, Inc., a California Corporation vs. Exxon Mobil Corporation, a Corporation; Mark McEnomy, an individual; Anthony Moss, an individual; and Does 1-50, inclusive: In the Superior Court of the State of California in and for the County of San Diego, North County Division, Case No. GIN 032455, February 14, 2005.

Declaration, Expert Report, Expert Rebuttal Report and Deposition of Gustavo Bamberger in Re: Robert Ross and Randal Wachsmuth, on behalf of themselves and all others similarly situated vs. American Express Company, American Express Travel Related Services, Inc., and American Express Centurion Bank: In the U.S. District Court for the Southern District of New York, 04 CV 05723, February 18, 2005 (Declaration); September 12, 2005 (Expert Report); November 14, 2005 (Expert Rebuttal Report); and December 14, 2005 (Deposition).

Expert Report of Gustavo E. Bamberger and Dennis W. Carlton, Testimony of Gustavo E. Bamberger and Rebuttal Report of Gustavo E. Bamberger in the Matter of: EchoStar Satellite, L.L.C v. Fox Television Holdings, Inc., Fox/UTV Holdings, Inc. and News Corporation Limited: American Arbitration Association, Case No. 71 472 E 00690 04, March 2, 2005 (Expert Report); March 12, 2005 (Testimony); and April 5, 2005 (Rebuttal Report).

Declaration, Reply Declaration and Ex Parte Submission of Gustavo E. Bamberger, Dennis W. Carlton and Alan L. Shampine in Re: Verizon Communications Inc. and MCI, Inc., Applications for Approval of Transfer of Control: Before the Federal Communications Commission, WC Docket No. 05-75, March 11, 2005 (Declaration); May 24, 2005 (Reply Declaration); and September 9, 2005 (Ex Parte Submission).

Statement of Gustavo Bamberger and Lynette Neumann, Further Statement of Gustavo Bamberger and Lynette Neumann, Updated Analysis of Effect of RSN Availability on DBS Penetration (with L. Neumann); Analysis of the Effect of "Clustering" on the Availability and Penetration of Digital Cable, High-Speed Data and Telephony Services (with L. Neumann); and Supporting Declaration of Gustavo Bamberger and Lynette Neumann in Re: Applications of Adelphia Communications Corporation, Comcast Corporation, and Time Warner Cable Inc., For Authority to Assign and/or Transfer Control of Various Licenses: Before the Federal Communications Commission, MB Docket No. 05-192, July 21, 2005 (Statement); March 1, 2006 (Further Statement); March 17, 2006 (Updated Analysis); March 30, 2006 (Effect of "Clustering"); and April 5, 2006 (Supporting Declaration).

Comments of Gustavo E. Bamberger, Dennis W. Carlton and Alan L. Shampine in the Matter of: The Joint Petition of Verizon Communications Inc., and MCI, Inc. for a Declaratory Ruling Disclaiming Jurisdiction Over, or, in the Alternative, for Approval of Agreement and Plan of Merger: Before the State of New York Public Service Commission, Case 05-C-0237, August 5, 2005.

Declaration of Gustavo Bamberger in Re: USG Corporation, a Delaware corporation, et al., Debtors, USG Corporation, et al., Movant v. Official Committee of Asbestos Personal Injury Claimants, Official Committee of Unsecured Creditors, Official Committee of Asbestos Property Damage Claimants and Legal Representative for Future Claimants, Respondents: In The U.S. District Court For The District Of Delaware, Chapter 11, Jointly Administered, Case No. 01-2094 (JKF), Civil Action No. 04-1559 (JFC) Civil Action No. 04-1560 (JFC), September 28, 2005.

Declaration, Deposition and Testimony of Gustavo Bamberger in Re: Marvin D. Chance, Jr., on behalf of himself and all other similarly situated Kansas residents, Thomas K. Osborn, on behalf of himself and all other similarly situated New York residents v. United States Tobacco Company, United States Tobacco Sales and Marketing Company, Inc., United States Tobacco Manufacturing Company, Inc., and UST, Inc.: In the District Court of Seward County, Kansas, Case No. 02-C-12, September 29, 2005 (Declaration); November 1, 2005 (Deposition); and January 19, 2006 and April 4, 2006 (Testimony).

Expert Report, Rebuttal Report and Deposition of Gustavo Bamberger in Re: Jame Fine Chemicals, Inc. (d/b/a JFC Technologies) v. Hi-Tech Pharmacal Co., Inc. v. MedPointe Inc. as successor in interest to and formerly known as Carter-Wallace, Inc., and ABC Corporation and XYZ, Inc., companies and/or corporations whose true identities are unknown to Third-Party Plaintiff: In the U.S. District Court for the District of New Jersey, Civil Action No. 00-3545 (AET), October 3, 2005 (Report); May 8, 2006 (Rebuttal Report); and June 15, 2006 (Deposition).

Deposition and second Deposition of Gustavo Bamberger in Re: John Crane, Inc. v. Admiral Insurance Company, et al., In the Circuit Court of Cook County, Illinois, County Department, Chancery Division, Case No. 04-CH-08266, October 17, 2005 (Deposition); and November 2, 2006 (Second Deposition).

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Submission of Gustavo Bamberger for Transpower New Zealand Limited to the New Zealand Commerce Commission, February 27, 2006.

Brief of Evidence of Gustavo Ernesto Bamberger and Testimony of Gustavo Bamberger in the Matter of: The Commerce Commission, Plaintiff and New Zealand Bus Limited, First Defendant and Blairgowrie Investments Limited, Copland Neyland Associates Limited, Rhoderick John Treadwell and Kerry Leigh Waddell, Karyn Justine Cosgrave and Ian Waddell, Second Defendants and Infratil Limited, Third Defendant: In the High Court of New Zealand Wellington Registry, CIV 2006-485-585, May 17, 2006 (Brief of Evidence); and May 30, 2006 (Testimony).

Rebuttal Testimony of Gustavo Bamberger on Damages and Deposition in Re: Tessera, Inc. vs. Micron Technology, Inc., Micron Semiconductor Products, Inc., Infineon Technologies AG, Infineon Technologies Richmond, LP, and Infineon Technologies North America Corp. and Qimonda AG: In the U.S. District Court for the Eastern District of Texas, Marshall Division, Case No. 2:05CV-94, June 23, 2006 (Rebuttal Testimony) and July 22, 2006 (Deposition).

Expert Report and Deposition of Gustavo Bamberger in Re: Electronic Data Systems Corporation and EDS Information Services, L.L.C. v. MCI Communications Services, Inc.: American Arbitration Association, Arbitration No. 13 181 00976 06, July 20, 2006 (Expert Report); and August 11, 2006 (Deposition).

Declaration, Revised Declaration and Deposition of Gustavo Bamberger in Re: Jason Feuerabend, a Wisconsin resident, on behalf of himself and all others similarly situated v. UST Inc., U.S. Smokeless Tobacco Brands Inc., U.S. Smokeless Tobacco Co., U.S. Smokeless Tobacco Manufacturing Limited Partnership, and Does 1-20 inclusive: In the Circuit Court of Milwaukee County, Wisconsin, Case No. 02CV007124, September 21, 2006 (Declaration); December 1, 2006 (Revised Declaration); and December 5, 2006 (Deposition).

Expert Report of Gustavo Bamberger in Re: Ronald Alcorn, d/b/a Highland Park Amoco; et al. vs. BP Products North America, Inc.: In the United States District Court for the District of Minnesota, Court File No. 04-120 (PAM/JSM), October 23, 2006.

Declaration of Gustavo Bamberger in Re: Smokeless Tobacco Cases I-IV: In the Superior Court of the State of California, City and County of San Francisco, Judicial Council Coordination Proceeding Nos. 4250, 4258, 4259 & 4262, March 21, 2007.

Testimony of Gustavo Bamberger before the Arkansas Oil and Gas Commission on behalf of Great Lakes Chemical Corp. and Tetra Technologies, Inc., Subject: Approval of Royalty Payment Procedure, Docket No. 173-2007-04, April 25, 2007.

Declaration of Gustavo Bamberger and Lynette Neumann in Re: In the Matter of National Exchange Carrier Association, Inc.'s Proposed 2007 Modification of Average Schedule Formulas: Before the Federal Communications Commission: WC Docket No. 06-223, May 4, 2007.

Brief of Evidence of Gustavo Ernesto Bamberger, Reply Brief of Evidence of Gustavo Ernesto Bamberger, Bamberger, Evans, and Hausman Joint Propositions, Summary of Evidence of Gustavo Bamberger and Testimony in the Matter of: The Commerce Commission, Plaintiff and Telecom Corporation of New Zealand Limited, First Defendant and Telecom New Zealand Limited, Second Defendant: In the High Court of New Zealand Wellington Registry, CIV 2000-485-673, June 10, 2007 (Brief); August 13, 2007 (Reply Brief); September 17, 2007 (Joint Propositions); September 19, 2007 (Summary); and September 19-20, 2007 (Testimony).

Declaration of Gustavo Bamberger in Re: Massachusetts Smokeless Tobacco Litigation: In the Superior Court of the Commonwealth of Massachusetts, Superior Court Dept. Docket No. 03-0320, Case No. 02-5038 BLS, August 1, 2007.

Statement of Evidence, Reply Statement of Evidence and Testimony of Gustavo Ernesto Bamberger in the Matter of: Each an appeal against a determination of the Commerce Commission between Woolworths Limited, Appellant and the Commerce Commission, Respondent, and Foodstuffs (Auckland) Limited, Foodstuffs South Island Limited, Foodstuffs (Wellington) Co-Operative Society Limited, Appellants and the Commerce Commission, Respondent, and The Warehouse Group Limited, Appellant and the Commerce Commission, Respondent: In the High Court of New Zealand Wellington Registry, CIV 2007-485-1255, CIV 2007-485-1379 and CIV 2007-485-1731, September 20, 2007 (Statement); October 29, 2007 (Reply Statement); and October 29-31, 2007 (Testimony).

Affidavit of Gustavo Bamberger in Re: United States of America v. Faust Villazan, Faustech Industries, Inc., Siemens Medical Solutions USA Inc., f/k/a Siemens Medical Systems, Daniel Desmond, and Ellen Roth: In the U.S. District Court for the Northern District of Illinois, Eastern Division, No. 05 CR 792, October 11, 2007.

Declaration of Gustavo Bamberger in Re: Burns & Roe Enterprises, Inc., et al., Debtors: In the United States Bankruptcy Court, District of New Jersey, Case Nos. 00-41610(RG) and 05-47946(RG) (Consolidated), October 17, 2007.

Statement, Report and Deposition of Gustavo Bamberger in Re: American Optical Corporation, Warner-Lambert Company, LLC, and W-L LLC v. Admiral Insurance Company, et al.: In the Superior Court of New Jersey Law Division: Union County, Docket No. UNN-L-2505-01, December 13, 2007 (Statement); December 26, 2007 (Report); and February 12, 2008 (Deposition).

Declaration of Gustavo E. Bamberger in Support of Plaintiffs' Opposition to Defendants' Motion for Partial Summary Judgment on Plaintiffs' Per Se Claim, Deposition and Declaration in Re: ATM Fee Antitrust Litigation: In the United States District Court, Northern District of California, Master File No. C04-2676 CRB, December 21, 2007 (Declaration); February 1, 2008 (Deposition); and August 20, 2010 (Declaration).

Declaration, Deposition, Reply Declaration and Deposition of Gustavo Bamberger in Re: Payment Card Interchange Fee and Merchant-Discount Antitrust Litigation: In the United States District Court, Eastern District of New York, Master File No. 1:05-md-1720-JG-JO, May 8, 2008 (Declaration); July 30-31, 2008 (Deposition); January 29, 2009 (Reply Declaration); and May 27, 2009 (Deposition).

Statement of Janusz Ordover and Gustavo Bamberger, filed with the Securities and Exchange Commission, Release No. 34-57917, on behalf of NASDAQ Stock Market, August 1, 2008.

Expert Report, Deposition, Expert Rebuttal Report, Testimony, Rebuttal Testimony, Supplemental Expert Report, Supplemental Expert Rebuttal Report and Deposition of Gustavo Bamberger in Re: Valassis Communications, Inc. v. News America Incorporated, a/k/a News America Marketing Group, News America Marketing FSI, Inc. a/k/a News America Marketing FSI, LLC and News America Marketing In-Store Services, Inc. a/k/a News America Marketing In-Store Services, LLC: In the United States District Court, Eastern District of Michigan, Southern Division, Case No. 2:06-cv-10240 and State Court of Michigan, in the Circuit Court for the County of Wayne, Case No. 07-706645-CZ, November 21, 2008 (Expert Report); December 23, 2008 (Deposition); February 6, 2009 (Expert Rebuttal Report); Testimony (June 11, 2009); Rebuttal Testimony (July 16, 2009); Supplemental Expert Report (December 21, 2009); Supplemental Expert Rebuttal Report (January 14, 2010); and Deposition (January 19, 2010) (Case No. 2:06-cv-10240 only for Supplemental Reports and second deposition).

Brief of Evidence of Dennis William Carlton and Gustavo Ernesto Bamberger, Affidavit of Gustavo Ernesto Bamberger in support of amended notice of opposition by the Commerce Commission to the amended notice of application by the bank defendants and the notice of application by MasterCard for orders as to admissibility of evidence, and Reply Brief of Evidence of Dennis William Carlton and Gustavo Ernesto Bamberger in the Matter of: The Commerce Commission, Plaintiff and Cards NZ Limited, First Defendant and others and DSE (NZ) Limited, First Plaintiff and others and Card NZ Limited, First Defendants and others: In the High Court of New Zealand Auckland Registry, CIV 2006-485-2535 and CIV-2006-485-2693, May 4, 2009 (Brief of Evidence); May 20, 2009 (Affidavit); September 4, 2009 (Reply Brief).

Expert Report of Gustavo Bamberger in Re: Valassis Communications, Inc. v. News America Incorporated, a/k/a News America Marketing Group, News America Marketing FSI, Inc. a/k/a News America Marketing FSI, LLC and News America Marketing In-Store Services, Inc. a/k/a News America Marketing In-Store Services, LLC: In the Superior Court of the State of California for the County of Los Angeles, May 11, 2009.

Affidavit of Gustavo Ernesto Bamberger in opposition to application by plaintiff for stay of execution, Brief of Evidence of Gustavo Ernesto Bamberger, Summary Statement of Gustavo Bamberger and Testimony in the Matter of: Todd Pohokura Limited, Plaintiff and Shell Exploration NZ Limited, First Defendant and OMV New Zealand Limited, Second Defendant: In the High Court of New Zealand Wellington Registry, CIV 2006-485-1600, November 4, 2009 (Affidavit); November 25, 2009 (Brief of Evidence); March 25, 2010 (Summary Statement); and March 25-26, 29-30 (Testimony).

Report of Gustavo Bamberger, Report of Gustavo Bamberger on the Revised January 6, 2010 Plan and Deposition in Re: Pittsburgh Corning Corporation: In the United States Bankruptcy Court for the Western District of Pennsylvania, Case No. 00-22876 JKF, November 13, 2009 (Report); January 28, 2010 (Report on Revised Plan); and February 22, 2010 (Deposition).

Report and Reply Report of Dennis W. Carlton and Gustavo E. Bamberger and Cross-Examination of Gustavo E. Bamberger in Re: Air Canada and Toronto Port Authority and Porter Airlines Inc.: Federal Court, File No. 10-T-6, February 5, 2010 (Report); May 18, 2010 (Reply Report); and June 15, 2010 (Cross-Examination).

Expert Report of Daniel R. Fischel and Gustavo E. Bamberger in Re: Genetically Modified Rice Litigation: In the United States District Court, Eastern District of Missouri, Eastern Division, Texana Rice Mill, Ltd., et al. v. Bayer CropScience, LP, et al., Case No. 4:07-cv-00416 CDP; Gulf Pacific Rice Co., Inc., et al. v. Bayer CropScience, LP, et al., Case No. 4:08-cv-1545-CDP; Phoenix Advisors Limited v. Bayer CropScience, LP, et al., Case No. 4:08-cv-1794-CDP; Farmers Rice Milling Co., Inc. v. Bayer CropScience, LP, et al., Case No. 4:07-cv-01780-CDP; Kennedy Rice Dryers, L.L.C. v. Bayer CropScience, LP, et al., Case No. 4:07-cv-01773-CDP; Planters Rice Mull, L.L.C. v. Bayer CropScience, LP, et al., Case No. 4:07-cv-01795-CDP; Beaumont Rice Mills, Inc. v. Bayer CropScience, LP, et al., Case No. 4:07-cv-00524-CDP; Master Case No. 4:06 MD 1811 CDP, April 23, 2010.

Expert Report of Daniel R. Fischel and Gustavo E. Bamberger and Deposition of Gustavo E. Bamberger in Re: Genetically Modified Rice Litigation: In the United States District Court, Eastern District of Missouri, Eastern Division, Tilda Ltd v. Riceland Foods, Inc., Producers Rice Mill, Inc., Bayer Cropscience Inc., and Bayer Cropscience LP; Producers Rice Mill, Inc. v. Bayer Cropscience LP and Bayer Cropscience Holding Inc., Bayer Corporation, Bayer Cropscience AG, Bayer AG, and Bayer Bioscience nv, Case No. 4:07-Cv-00457, Master Case No. 4:06 MD 1811 CDP, July 14, 2010 (Expert Report); and September 15, 2010 (Deposition).

Declaration of Gustavo Bamberger in Re: Credit/Debit Card Tying Cases: In the Superior Court for the State of California, City and County of San Francisco, J.C.C.P. No.: 4335, July 29, 2010.

Expert Report of Daniel R. Fischel, Gustavo E. Bamberger and David K.A. Mordecai in Response to the Reports of Professors Carter and Babcock in Re: Genetically Modified Rice Litigation: In the United States District Court, Eastern District of Missouri, Eastern Division, Master Case No. 4:06 MD 1811 CDP, July 30, 2010.

Expert Report of Daniel R. Fischel, Gustavo E. Bamberger and David K.A. Mordecai in Response to the Report of Dr. Ford in Re: Genetically Modified Rice Litigation: In the United States District Court, Eastern District of Missouri, Eastern Division, Master Case No. 4:06 MD 1811 CDP, July 30, 2010.

Report of Dennis W. Carlton and Gustavo E. Bamberger for Vector Limited to the New Zealand Commerce Commission, August 23, 2010.

Expert Report of Gustavo Bamberger in Re: JOC Inc. T/A Summit Exxon and Sung Eel Chang Auto, Inc. T/A Ashwood Exxon vs. ExxonMobil Oil Corporation: In the United States District Court for the District of New Jersey, Civil Action No.: 08-05344 (FSH) (PS), September 27, 2010.

EXHIBIT 5

The text of the proposed rule change is below. Proposed new language is underlined; proposed deletions are in brackets.

7054. NASDAQ Platform Pricing

(a) Effective January 3, 2011, firms that qualify as Tier 1, Tier 2 or Tier 3 Firms as defined in paragraph (b) below shall receive a discount with respect to distribution to non-professionals of NASDAQ Depth Data as set forth in paragraph (c) of this rule. Additionally, Tier 1 Firms shall receive enhanced liquidity provider credits as set forth in paragraph (d) of this rule.

(b) The following terms shall be defined for purposes of this rule as follows:

(1) "Tier 1 Firm" means a member (i) with an average daily volume through the Nasdaq Market Center in all securities during the month of 12 million shares or more of liquidity provided, and (ii) that incurs NASDAQ Depth Data Product Fees during the month of $150,000 or more.

(2) "Tier 2 Firm" means a member (i) with an average daily volume through the Nasdaq Market Center in all securities during the month of 35 million shares or more of liquidity provided, and (ii) that incurs NASDAQ Depth Data Product Fees during the month of $300,000 or more.

(3) "Tier 3 Firm" means a member (i) with an average daily volume through the Nasdaq Market Center in all securities during the month of more than 65 million shares or more liquidity provided, and (ii) that incurs NASDAQ Depth Data Product Fees during the month of $500,000 or more.

(4) "NASDAQ Depth Data" means the NQDS, TotalView and Open View data products that are established under Rules 7017 and 7023.

(5) "NASDAQ Depth Data Product Fees" means the fees set forth in Rules 7017, 7023, and 7026 that are assessed for usage and distribution of NASDAQ Depth Data to non-professional users, prior to application of any discount provided under this rule.

(c) NASDAQ Depth Data Product Fees shall be discounted by (i) 15% for each month during which a member was a Tier 1 Firm; (ii) 35% for each month during which a member was a Tier 2 Firm; and (iii) 50% for each month during which a member was a Tier 3 Firm.

(d) For each month during which a member qualifies as a Tier 1 Firm, it shall qualify for a liquidity provider credit equal to: (i) with respect to displayed quotes/orders, the greater of $0.0028 per share executed or the credit for which it is otherwise qualified under Rule 7018(a), and (ii) with respect to quotes/orders that are not displayed, $0.0015 per share executed.