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# Intermarket Competition and Monopoly Power in the U.S. Stock Markets

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# ARTICLES

# INTERMARKET COMPETITION AND MONOPOLY POWER IN THE U.S. STOCK MARKETS

*Roger D. Blanc*[*]

## I. INTRODUCTION

Stock exchanges in the United States have undergone dramatic change in the last several years. Their conversion from not-for-profit entities controlled by their members into for-profit, publicly owned corporations over which their former members have substantially less influence and control has significantly altered the initial regulatory assumptions that allow stock exchanges to be self-regulatory organizations. The introduction of electronic trading media put substantial pressure on floor-based exchanges and encouraged stock exchanges to embrace electronic technology. The new profit incentives and ease of transferring information in the age of electronic communications led the exchanges to begin marketing the quotation and trading data their members were required by law to give them. The exchanges are now using the data entrusted to them as self-regulatory organizations to further their new profit-seeking objectives.

In response, the Securities and Exchange Commission (SEC) has substantially revised its regulation of the markets in light of several of these changes, yet its revised regulations consistently appear to be one step behind the exchanges, which have used their regulatory revenues to serve private, for-profit ends rather than the ends the Securities Exchange Act of 1934 (Exchange Act) envisions. This article reviews some of the effects of those changes on market structure and on market participants, including the effects on "fragmentation" of the markets. A particular concern is that a result of the exchanges' profit-seeking structure has been to foster the creation of a two-tiered market where large investors are charged market data fees beyond the means of smaller investors and then given faster access to that data, thus granting them substantial trading advantages. The article then reviews the current debate over the revenues the exchanges are

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* Mr. Blanc is a member of the New York Bar and is a member of Willkie Farr & Gallagher. Mr. Blanc has represented some of the companies mentioned in this article in connection with the issues discussed. Copyright © 2007 Roger D. Blanc. The Creative Commons license is not applicable to this article.

attempting to collect by selling depth-of-market data, and the recent petition by NetCoalition.com seeking to overturn the SEC staff's approval of certain NYSE Arca market data fees. That petition strikes at the heart of the revenues exchanges collect. It has sparked a vigorous debate and challenges the staff's use of its delegated authority to approve exchange rule changes setting market data fees.

## II. THE FRAGMENTATION OF THE U.S. STOCK MARKETS

There was a time not very long ago when fragmentation of the U.S. stock markets was thought to arise from having separate market centers. It was a time when trading resided mostly on physical exchange floors and in the offices of over-the-counter dealers. In fact, the SEC may have helped promote fragmentation in 1941 when, in the *Multiple Trading Case*,[1] it forbade the New York Stock Exchange (NYSE) from preventing its members from trading in NYSE-listed securities on other exchanges. Indeed, the exchanges' "off board trading rules," chiefly the now-rescinded NYSE Rule 390 (formerly Rule 394), severely limited the ability of NYSE members to trade NYSE-listed stocks in the over-the-counter market.[2]

The time when physical exchange floors dominated equity trading in the United States began to draw to a close in the 1970s. In 1975, the Congress directed the SEC to use its authority under the newly amended Exchange Act to foster the establishment of a national market system (NMS). It cast serious doubt, moreover, on whether off-board trading rules, such as NYSE Rule 390, would continue to have a place in the new system.[3] It was not until the late 1990s, however, that the SEC responded to that call and directed the NYSE to abandon its off-board trading rule.[4] But

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1. In the Matter of The Rules of the New York Stock Exchange, 10 SEC 270, 297 (Oct. 4, 1941) (holding that the NYSE rule prohibiting dealings on other markets is against public interest and illegal).

2. *See* Order Approving Proposed Change to Rescind Exchange Rule 390, Exchange Act Release No. 42,758, 65 Fed. Reg. 30,175 (May 5, 2000) (approving the NYSE rescission of Rule 390). *See also* Andrew M. Klein & Andre E. Owens, *The Intermarket Trading System: Reassessing the Foundation of the National Market System*, WALLSTREETLAWYER.COM, Mar. 2000, at 1.

3. Exchange Act § 11A(a)(2), 15 U.S.C. § 78k-1(a)(2) (2000). The Congress added this section to the Exchange Act as part of the Securities Acts Amendments of 1975, Pub. L. No. 94-29, 89 Stat. 113.

4. *See* Arthur Levitt, Chairman, SEC, Remarks at Columbia Law School: Dynamic Markets, Timeless Principles (Sept. 23, 1999), *available at* http://www.sec.gov/news/speech/speecharchive/1999/spch295.htm [hereinafter Levitt 1999 Speech].

> This rule has long prohibited NYSE members from dealing in listed securities off an exchange. For years, proponents have argued that Rule 390 prevents fragmentation. Others contend that the rule is an anticompetitive use of market power by a dominant market. As I see it, Rule 390 may very well be on its ninth life. Now is the time to ask

what then happened? In fact, trading in the NYSE-listed stocks, if anything, became more concentrated on the NYSE as its market share grew by a small amount to over 80% before later settling back to under 70%.[5]

Did any of that have to do with increasing or decreasing market fragmentation? If market fragmentation is taken, erroneously this writer believes, to mean dispersion of order flow among competing market centers, then concentrating trading on the NYSE would diminish fragmentation, and diversion away from that market center would increase it. That, however, is not fragmentation in today's context.

The SEC correctly views efficient markets as resulting from the exposure of all buying interest to all selling interest, and vice versa, regardless of how that exposure occurs.

> The NMS is premised on promoting fair competition among individual markets, while at the same time assuring that all of these markets are linked together, through facilities and rules, in a unified system that promotes interaction among the orders of buyers and sellers in a particular NMS stock. The NMS thereby incorporates two distinct types of competition—competition among individual markets and competition among individual orders—that together contribute to efficient markets. Vigorous competition among markets promotes more efficient and innovative trading services, while integrated competition among orders promotes more efficient pricing of individual stocks for all types of orders, large and small. Together, they produce markets that offer the greatest benefits for investors and listed companies. Accordingly, the Commission's primary challenge in facilitating the establishment of an NMS has been to maintain an appropriate balance between these two vital forms of competition.[6]

In fact, increasing competition among market centers will no doubt promote innovation while rewarding efficiency and punishing inefficiency. In a system of electronically interconnected markets where order-entry firms can use "smart" order-routing technology to route and, as necessary,

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> ourselves: is there a valid justification for a rule that appears to be more a barrier than a benefit? And how, under any circumstances, could such an anticompetitive rule be sustained should the NYSE become a for-profit corporation? While rulemaking is certainly an option, one way or another, Rule 390 should not be part of our future.

*Id*. *See also* Order Approving Proposed Change to Rescind Exchange Rule 390, 65 Fed. Reg. at 30,175.

5. *See* Gaston F. Ceron, *NYSE's Market Share In Its Listed Stocks Falls*, WALL ST. J., Jan. 8, 2007, at C5 (finding the NYSE share of the securities market peaked at eighty percent); *see also* Historical NYSE Group Monthly Volume, *available at* http://www.nyse.com/financials/1143717022567.html (last visited Mar. 31, 2007).

6. Regulation NMS, Exchange Act Release No. 51,808, 70 Fed. Reg. 37,496, 37,503 (June 29, 2005).

re-route orders in search of the best sources of liquidity and best prices, it matters far less than it once did how many markets there are or whether any single market center becomes or remains dominant. In place of the traditional assumption that having multiple market centers quoting and trading the same securities meant the market was fragmented is the new reality that, given the relatively low cost of bandwidth, a system of electronically interconnected market centers competing for order flow both permits orders to be shunted back and forth in search of liquidity and price and promotes economic efficiency and investor choice.

SEC Chairman Arthur Levitt recognized this in a speech at Columbia Law School when he extolled the virtues of the then relatively new phenomenon of electronic communications networks (ECNs), which had begun to erode the market share Nasdaq enjoyed in Nasdaq securities. He stated:

> Electronic communication networks have been one of the most important developments in our markets in years—perhaps decades. But exactly what are ECNs, and what are we to make of their impact on our markets? In simplest terms, ECNs bring buyers and sellers together for electronic execution of trades. They have provided investors with greater choices, and have driven execution costs down to a fraction of a penny. As a result, these networks present serious competitive challenges to the established market centers. More fundamentally, they illustrate the breath-taking pace of change that results when technology and competition coalesce.[7]

A number of regulatory changes had promoted an environment in which technology could begin effectively to challenge the control over order flow previously enjoyed by the exchanges. The establishment of Nasdaq itself at the end of the 1960s signaled the beginning of the new era. Originally, Nasdaq was just a quotation medium—a way to shine light in the dark corner of over-the-counter trading where market efficiencies were all but absent and dealers were not easily put in competition with one another. Over time, however, with further prodding from the SEC, Nasdaq grew into an automated system that involved publication to investors and not just dealers of the "inside inside," that is, the best available bids and offers (instead of the earlier "representative bid and asked" that gave a far less accurate indication of what the best prices actually were)[8] and a

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7. *See* Levitt 1999 Speech, *supra* note 4.

8. *See*, *e.g.*, Order Approving Proposed Reporting Plan for NASDAQ/NMS Securities Traded on an Exchange on an Unlisted or Listed Basis, submitted by the National Association of Securities Dealers, Inc., and the American, Boston, Midwest and Philadelphia Stock Exchanges, Exchange Act Release No. 28,146, 55 Fed. Reg. 27,917, 27,917 (July 6, 1990).

quotation montage—called for by Exchange Act Rule 11Ac1-2 (now Rule 603 of Regulation NMS)[9]—that showed investors the available alternatives.

The dealer community, however, found an alternative. Instinet offered a way for dealers to put better quotations on a private system available only to a favored institutional clientele without offering the same pricing to other dealers and the retail public.[10] That of course contributed to a two-tier market, with the institutional investors getting preferred treatment.[11] Whether that made sense from the point of view of public policy was more debatable. On one hand, retail customers tend to think they should get the same pricing as institutional investors regardless of the different costs of servicing them—just as many retail consumers buying automobiles would doubtless be upset if they knew of the better pricing offered to large buyers such as the major automobile rental companies. Getting to the bottom of that issue may depend, it seems, on how to resolve the question of who is the small investor: the retail individual, such as a doctor, lawyer, or corporate executive who buys a few hundred shares at a time, or the large pension fund or mutual fund that buys several hundred thousand shares at a time on behalf of thousands of indirect investors such as schoolteachers, firefighters, and police officers, whose aggregate investments may be quite a bit smaller than those of the individual retail investors who invest directly through their brokers.

In any event, the SEC decided that the Instinet game had to end. In August 1996, it adopted the Order Execution Rules.[12] Chief among their provisions were requirements that: (1) broker-dealers making markets in publicly traded stocks not quote better prices, or publish customer limit orders at better prices, in private networks such as Instinet unless they adjusted their publicly disseminated quotations to match the private ones, and (2) unless—and this was an important unless—the private networks published the best quotations on their books in their own names in Nasdaq or another permissible venue. The dealers could thus continue to quote inferior prices under their own names in Nasdaq, but the better pricing they were offering via Instinet or other similar media would for the first time see the light of day publicly in an anonymous way via the private network's

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9. 17 C.F.R. § 242.603 (2006).

10. *See* SEC, REPORT PURSUANT TO SECTION 21(A) OF THE SECURITIES EXCHANGE ACT OF 1934 REGARDING THE NASD AND THE NASDAQ MARKET (Aug. 8, 1996), *available at* http://www.sec.gov/litigation/investreport/nasdaq21a.htm; *see also* In the Matter of National Association of Securities Dealers, Inc., Exchange Act Release No. 37,538, Administrative Proceeding File No. 3–9056, 1996 SEC LEXIS 2146 (Aug. 8, 1996).

11. In the Matter of National Association of Securities Dealers, Inc., 1996 SEC LEXIS 2146, at *2–4.

12. *See* Order Execution Rules, Exchange Act Release No. 37,619A, 61 Fed. Reg. 48,290 (Sept. 6, 1996).

own name. The SEC's rules required, moreover, that these better quotations be accessible by any registered broker-dealer.[13]

This regulation was an important, indeed watershed, event for two reasons. First, it made it more difficult, although by no means impossible, for dealers to publish better pricing in some media than in others. Second, and quite possibly more important, it led to the rise of a new class of competing electronic communications networks that challenged both the hegemony of Instinet among private networks and Instinet's own market share. At the same time, to goad the order-entry brokers into searching out the best prices, and possibly to reward dealers who took the risk of offering price improvements, the Commission published a release announcing the adoption of its Order Execution Rules, including a long discussion of a broker's duty of "best execution."[14] The Commission thus federalized a duty previously thought to be a creature of state agency law. The SEC made it clear that it would consider it improper, for example, for a dealer to quote a bid and asked and to take two customer market orders, one to buy and one to sell, and to then execute the customer sell order against the dealer's bid and execute the customer buy order against the dealer's asked quotation. Instead, the dealer would need to execute the customer orders against one another, presumably inside the bid-asked spread, giving each a better price than it would have received had its order been executed against the dealer bid or asked.[15]

These steps did much to curtail fragmentation in the Nasdaq market. Previously, market makers in Nasdaq stocks had operated pretty much independently. There was no public disclosure of the actual "inside inside" on Nasdaq and what was published as the National Best Bid and Offer (NBBO) did not really represent true best pricing in many securities. With the implementation of the new rules, for the first time, the true best prices (not including the pricing of block transactions, which were largely excluded from operation of the Order Execution Rules) were being published and were accessible to any registered broker-dealer. The SEC has

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13. *See* 17 C.F.R. § 242.602(b)(5)(ii) (2006); *see generally id.* § 242.604(b)(5) (regarding the display of customer limit orders).

14. Order Execution Rules, 61 Fed. Reg. at 48,322–24.

15. *Id.* at 48,322–24. The Commission also suggested that a customer limit order executed against a customer market order had to receive the limit price (even though a limit order was commonly understood to mean "give me a price no worse than my limit price and try to get me a better price"). *See id.* That, of course, made limit orders even more susceptible than otherwise to the risk of adverse selection and gave rise to the "not held" limit order—a stratagem introduced by the institutional dealers to neutralize the Commission's unfairly discriminatory treatment of limit orders. The not-held limit order was a limit order not held to the market price; its terms provided that the broker should try to get the best price possible but in any event a price no worse than the limit price. That, of course, was what many had thought—until the SEC spoke to the contrary—was the implicit or explicit understanding underlying all limit orders.

made it clear, as a matter of federal law, that brokers were expected to live up to a duty of best execution requiring them to use commercially reasonable efforts to get the best available prices for their customers.

The SEC reinforced that duty a few years thereafter by adopting Rules 11Ac1-5 (now Rule 605 of Regulation NMS)[16] and 11Ac1-6 (now Rule 606 of Regulation NMS),[17] which, respectively, required market centers—exchanges, electronic communications centers and market makers—to disclose information concerning orders executed on their markets and required order-entry firms to disclose their order-routing policies and methods. Those rules increased the amount of data available to order-entry firms and required them to publish how they were taking advantage of the data.

During this period, another major development affected pricing in the markets and the risk of fragmentation—the decimalization of securities pricing. Originally quoting prices mostly in eighths of a dollar and then for a short time in sixteenths, the exchange markets and Nasdaq were required to move to pricing in pennies, producing 100 price points to the dollar instead of the previous eight or sixteen. That development had a number of implications and adumbrations. Among them, the regulatory provisions turning on "tick" tests—whether a trade was above or below the previous one—ceased to make any sense and the SEC began to move toward deletion of the price test in the short sale rule.[18] Also, and more importantly, it began to cast doubt on whether getting the best price, down to the last penny, was worth the trouble, particularly if it meant incurring the extra costs and possible delay inherent in going to several different market venues in search of pennies. Finally, it vastly diminished the informational value of the best bid and offer since, with 100 price points to the dollar, the amount of liquidity apparently available at a market's best bid or offer was a small fraction of what it had been when prices were quoted in eighths or even sixteenths.

Notwithstanding these developments, there always has been some ambiguity as to whether a two-tiered market could in fact be eliminated, and whether it was sound public policy to require that institutional investors not be permitted to use their economies of scale and scope to obtain from the markets any special advantages over retail investors. Some, including some in Washington, may have believed that all orders should interact with all other orders and institutional investors should "walk" the market up or down, filling retail orders by the bushel in the process of satisfying their gargantuan appetites, much like a baleen whale devouring untold millions

16. 17 C.F.R. § 242.605 (2006).

17. *Id.* § 242.606.

18. *See, e.g.*, Amendments to Regulation SHO and Rule 10a-1, Exchange Act Release No. 54,891, 71 Fed. Reg. 75,068 (Dec. 7, 2006) (to be codified at 17 C.F.R. pts. 240, 242).

of plankton. Of course, the institutional investors and their brokers and block positioners have long recognized that best execution of institutional orders hardly would be achieved in such a fashion. One commented:

> At Fidelity, we have no reason or incentive to by-pass readily accessible limit orders in any market where executions are certain and immediate. In seeking best execution of large orders, we seek the best overall execution, that is, best overall price. Walking the market up or down over several minutes or even seconds, if the ability to sweep the limit order book is denied, seriously impairs our ability to obtain the best execution for our funds. Often, liquidity at prices above or below the NBBO will fade away if we have to work our way, over the course of several seconds or minutes, above or below the NBBO. That fading away occurs as market professionals see us taking up liquidity at the prices nearer to the NBBO and then either compete with us for liquidity at the more distant prices or withdraw orders they have placed at those prices only to put them further away from what had been the NBBO. All of this suggests the markets are sufficiently complex that a one-size-fits-all trade-through rule is too limiting unless market participants are permitted to opt out of the rule when their fiduciary duty or economic self-interest tells them they should.[19]

Those facts and comments did not fit an idealized picture of a homogeneous market where all order flow could interact in an orderly fashion and everyone would stand in line and get the same treatment as everyone else. In fact, as institutional investors and major dealers know, an "order" may not necessarily become an order unless the order entrant has some idea of what execution price or prices it might receive. Particularly in the context of large orders, factors affecting the overall price an investor received, such as the degree to which its buying or selling interest would be kept confidential from other players in the market, can exert a profound influence on the overall execution price of a large block. That means the sophisticated trader is not looking solely at quoted prices in selecting a venue to present its orders. Fidelity listed some of the non-price factors it considered important:

- What are the out-of-pocket costs that a market center imposes on investors? These may include not only access or transactional fees, but also market data costs. Market centers differ in their pricing of supplemental market data, that is, market data other than best bid or offer quotes and last sale reports. Some markets charge separate fees to

19. Letter from Eric D. Roiter, Senior Vice President and Gen. Counsel, Fidelity Mgmt. & Research Co., to Jonathan Katz, Sec'y, SEC (June 22, 2004), *available at* http://www.sec.gov/rules/proposed/s71004/sdesano072204.pdf.

investors who seek to view the depth of quoted bids and offers—which, as the Commission is aware, has become much more important upon the introduction of decimalization. Even among markets who charge such market-data costs, pricing may vary significantly. From the investor's standpoint, best execution involves not only the price at which a security is bought or sold, but other costs which investors must pay to enter into and clear their trades.

- What is the liquidity and depth of any particular market center? Again, if a market center charges a fee to an investor for the "privilege" of seeing the depth of quotes away from the best bid and offer, should this market be viewed by investors as offering liquidity comparable to that of another market center that discloses the depth of its quotations for no fee or lower fees?
- What is the quality of a market center's program of self-regulation? How well does a market center monitor the trading activities of its members and how strong or consistent is its record of disciplining members who violate its trading rules?
- How fair are the market center's trading rules? Does a market center confer special privileges on some of its members that give them an advantage over public investors?
- How competitive is a market's own trading venue? For any given security, does it allow for competing market makers or does it confer a monopoly market-making privilege on a single member?
- How efficiently, quickly, and reliably does a market center confirm trades occurring in its trading venue? The advantage to an investor of being able to enter into automated trades on a given market can be undermined if confirmations of those trades are marked by delay or uncertainty.
- How quickly does a market center refresh its quoted prices after a trade occurs? This is crucial to investors seeking to effect large transactions in stages.
- How well does a market center maintain the anonymity of investors placing orders in that market?[20]

For other traders, particularly those operating algorithmic trading programs that spit out thousands of trades a day in search of minute profit opportunities thought to be available only for very short periods of time

20. *Id.*

intra-day, speed is all important. Speed is similarly important in the case of trades that involve simultaneously executing orders in a physical stock and one or more derivative instruments; there, capturing the spread is all important and the actual execution prices is less so.[21]

## III. WHERE WE ARE TODAY: THE SEC ADOPTION OF REGULATION NMS

The SEC's response to these various developments, notwithstanding vigorous and well-reasoned objection, came in the form of a massive set of rules known as Regulation NMS.[22] Many of these rules were in fact old wine in new bottles, previous rules somewhat recast and renumbered. Others broke new ground, such as a prohibition on trading in sub-pennies, an access rule, and amendments to joint industry plans. The most significant and controversial of these rules was the Order Protection Rule, also known as the Trade-Through Rule.[23] The SEC apparently was not convinced that its 1996 statements about broker-dealers' duties of best execution[24] would be sufficient to cause investors to fill publicly displayed limited orders. Thus, given the likelihood that sophisticated investors would not be willing to wait in line with everyone else but would instead seek to "jump the queue" to get greater liquidity at prices somewhat inferior to the NBBO (where little liquidity now resides), the SEC pushed over the past objections of several major commenters and imposed its Trade-Through Rule.[25]

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21. *See, e.g.*, Aaron Lucchetti, *Fast Lane: Firms Seek Edge Through Speed as Computer Trading Expands*, WALL ST. J., Dec. 15, 2006, at A1.

22. *See* Regulation NMS, Exchange Act Release No. 51,808, 70 Fed. Reg. 37,496 (June 29, 2005).

23. *See id.* at 37,501.

24. *See* Order Execution Rules, Exchange Act Release No. 37,619A, 61 Fed. Reg. 48,290, 48,291 (Sept. 6, 1996).

25. *See, e.g.*, Letter from Eric D. Roiter, Senior Vice President and Gen. Counsel, Fidelity Mgmt. & Research Co., to Jonathan Katz, Sec'y, SEC (Mar. 28, 2005), *available at* http://www.sec.gov/rules/proposed/s71004/edroiter032805.pdf; Letter from Thomas N. McManus, Managing Dir. and Counsel, Morgan Stanley & Co. Inc., to Jonathan Katz, Sec'y, SEC (Feb. 7, 2005), *available at* http://www.sec.gov/rules/proposed/s71004/s71004-754.pdf; Letter from Richard M. Whiting, Executive Dir. and Gen. Counsel, The Fin. Services Roundtable, to Jonathan Katz, Sec'y, SEC (Feb. 4, 2005), *available at* http://www.sec.gov/rules/proposed/s71004/fsrt020405.pdf; Letter from Jeffrey T. Brown, Senior Vice President, Charles Schwab & Co., Inc., to Jonathan Katz, Sec'y, SEC (Feb. 1, 2005), *available at* http://www.sec.gov/rules/proposed/s71004/charlesschwab020105.pdf; Letter from Stewart P. Greene, Chief Counsel, Securities Law, Teachers Insurance and Annuity Corporation of America/College Retirement Equities Fund, to Jonathan Katz, Sec'y, SEC (Jan. 16, 2005), *available at* http://www.sec.gov/rules/proposed/s71004/spgreene012705.pdf; Letter from C. Thomas Richardson, Managing Dir., U.S. Equities, Citigroup Global Markets Inc., to Jonathan Katz, Sec'y, SEC (Jan. 26, 2005), *available at* http://www.sec.gov/rules/proposed/s71004/ctrichardson012605.pdf; Letter from Kim Bang, Bloomberg L.P., to Jonathan Katz, Sec'y, SEC (Jan. 25, 2005), *available at* http://www.sec.gov/rules/proposed/s71004/kbang012505.pdf.

If it had been adopted in a form that would have protected limit orders below the NBBO—below the national best bid or above the national best offer—the Trade-Through Rule might have actually achieved its objectives. But to do so, the Commission would also have had to mandate that exchanges and other market centers publish quotations above and below the liquidity displayed at the NBBO. In such a case, a more robust Trade-Through Rule would have required the protection of published limit orders above and below the NBBO, so that a competing market center would have to protect not only the best bid or order in a competing market—that is, not trade at quoted prices inferior to it—but also not be able, having matched or filled that order, to trade through the next best prices in line.

Such a rule, had it been adopted, might have done much to invigorate the competitors of the major markets, particularly the NYSE. At the same time, however, unless block trades were exempted,[26] it might well have disrupted institutional trading and, possibly, driven institutions even more toward what are being called "dark pools of liquidity," which would have increased, rather than diminished, fragmentation (in the sense of the failure of orders to interact).[27] As it happened, though, the Commission was lobbied heavily and settled for the current rule, which might be called Trade-Through Rule Light. The current rule protects only the top of the file in a given market center, even though the liquidity represented by the top of the file—that is, the best bid or best offer—may be trivial indeed (especially now that stocks trade *in hundredths of a dollar*).

As a result, a trader—such as a block positioner—can take out a market center's best bid or offer and then trade through all that market's liquidity at inferior prices. This prevents the Trade-Through Rule from offering any substantial limit-order protection. Equally important, the rule does not have any notion of time priority and permits a market center to match rather than ship. That is, a market center does not have to forward an order to a competing market center that was the first to offer price improvement. In concrete terms, if the best bid on the NYSE is $X.05 and a bid is available at $X.07 on another venue, the NYSE can match the best bid, $X.07, and trade at that price even though the same bid had been presented in the other market center, possibly long before, the NYSE trade. Effectively, that disadvantages someone who took the risk of offering "price improvement"

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26. The Intermarket Trading System Trade-Through Rule, which (by design) was largely unenforced, had a block exception that prevented it from interfering with block trading. The Regulation NMS Order Protection Rule does not contain such an exception.

27. *See, e.g.*, Aaron Lucchetti, *Shares Bought in the Dark, As Large Institutional Investors Use Anonymous Trading, Regulators and Small Investors Worry About Pricing, Disclosure*, WALL ST. J., Jan. 9, 2007, at C1; Nina Mehta, *SEC New Market Reg Chief Has Dark Pools in Focus*, TRADERS MAGAZINE, Oct. 30, 2006 (quoting Dr. Erik R. Sirri, Director of the Commission's Division of Market Regulation).

by placing a limit-order in a competing market. The party that placed the unexecuted limit-order ran the risk of adverse selection—that it would get executed only if the market was moving away from it—but was denied an execution as a reward for taking that risk.[28]

Regulation NMS did serve an important role as a catalyst. Even if it did not actually address fragmentation in any meaningful way, the limited protections that the Trade-Through Rule afforded were available only to a fast market—a market that responds electronically to incoming order flow. The NYSE floor members were the last vestige of a physical exchange floor in any major securities market in the world—other than the American Stock Exchange and options exchanges—and they would be cut out from the Trade-Through Rule's protection. That realization provided an important impetus for the NYSE to reform and introduce electronic technology.[29]

### A. EXCHANGES RESPOND TO REGULATION NMS

The NYSE's response—in the form of a "hybrid" market—did a number of things. First, it provided for an expansion of a previously trivial electronic execution functionality so that it would begin operating alongside

28. Since the Regulation NMS so-called Order Protection Rule protects only the best bid and the best offer in any trading center, it would require a trading center such as the NYSE to match or fill an order at a competing "fast" trading center (e.g., Nasdaq or the Philadelphia Stock Exchange) before trading at an inferior price (lower in the case of a bid, higher in the case of an offer). Accordingly, if the NYSE specialist filled all the orders at the best quoted price shown in each other trading center, it could then trade down to prices that were inferior to the next best price or prices on those other trading centers. For example, if the best bid on the NYSE was $X.03 and the best bids were $X.07 for 200 shares on Nasdaq and $X.08 for 300 shares on Philadelphia, respectively (with there being other bids on those exchanges at prices inferior to the best prices there), the NYSE specialist could: (a) sell as many shares as it wished at $X.08 without filling the Philadelphia order (or of course the $X.07 order on Nasdaq); (b) ship an order to Philadelphia to sell 300 shares at $X.08 and then sell as many shares as it wished at $X.07 without filling Nasdaq's $X.07 order or an $X.07 order (if it then existed) on Philadelphia; or (c) ship an order to Philadelphia to sell 300 shares at $X.08, ship an order to Nasdaq to sell 200 shares at $X.07 and then sell as many shares as it wished on the NYSE at prices below $X.07 even though those sales traded through any then remaining better bids (e.g., at $X.06, $X.05, $X.04 . . .) on Philadelphia and Nasdaq. Nevertheless, in the case of (c), the NYSE specialist's best-execution obligations, if enforced, may require a different result, one that goes beyond what the Order Protection Rule would alone command.

29. Other important catalysts include the prosecutions brought against all seven NYSE specialist units for frauds, chiefly involving specialists trading for their own accounts ahead of customer orders. Some of those prosecutions involved criminal liability and substantial jail time. Those actions underscored what many had been saying for some time, that business as usual on the NYSE floor was run without reference to the requirements of the Exchange Act. *See, e.g.*, David Glovin, *Former Van der Moolen Managers Sentenced for Fraud*, BLOOMBERG.COM, Jan. 19, 2007, http://www.bloomberg.com/apps/news?pid=newsarchive&sid=arM.tGw8KByI; Edgar Ortega, *NYSE Fines Specialists $2.8 Million for Violations,* BLOOMBERG.COM, Jan. 16, 2007, http://www.bloomberg.com/apps/news?pid=newsarchive&sid=acHH79QEiMCI (reviewing history in which specialists were fined $247 million in 2004 for similar conduct).

the traditional floor. That expansion, combined with the NYSE's acquisition of a major competitor, the Archipelago Exchange (ArcaEx), provided the foundation for a new NYSE.[30] Second, the NYSE took measures to protect the NYSE floor members—principally the specialists, but also the floor brokers. There were four principal ways in which the NYSE hybrid proposal did this: (i) specialists and floor brokers were able to enter what might be called "stealth orders"—that is, orders not visible to those off the floor—which were to be given equal priority with pre-existing orders from the public; (ii) specialists were given the power to have automated matching engines match superior quotations on other venues, thus having electronic means for taking advantage of the permission in the Commission's Trade-Through Rule to match such quotations rather than provide any reward to external competitors offering price improvement; (iii) incoming market orders to buy (sell) that were matchable against several limit orders at successively higher (lower) prices were to be given a "clean up" price that gave all the limit orders the highest (lowest) price, with the result that the market order was severely disadvantaged; and (iv) specialists were given the power to halt the operation of the electronic market—applying what might be called regulatory air brakes—if certain

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30. It also eliminated criticism of the NYSE's conduct by ArcaEx, which had long been skeptical about the NYSE's claim that it actually provided limit order protection. The Archipelago Exchange testified that under the then existing Intermarket Trading System Trade-Through Rule, the NYSE specialists traded through ArcaEx limit-orders hundreds of times a day without any risk of enforcement action by the NYSE:

> Empirical data shows that the NYSE trots out the trade through rule when it suits its competitive purposes, but ignores it when it does not. Here are some facts: ArcaEx runs software (aptly named "whiner") that messages alerts when exchanges trade through an ArcaEx quote in violation of the ITS plan. The whiner database reflects that ArcaEx customers suffered up to 7,500 trade-through violations in a single week by the NYSE. In fact, trade-through violations have actually risen most recently despite the glare of the regulatory spotlight on the NYSE. Since just this last . . . fall (2003), the annualized cost to investors of the NYSE specialists trading through ArcaEx's quotes has increased 3-fold from approximately $1.5 million to $5 million. On any given day, ArcaEx has a billion shares on or near the national best bid or offer. Yet on any given day, the NYSE sends only 2 million shares to ArcaEx over ITS when we have the best price.
>
> We have confronted the NYSE with our voluminous data but to no avail. If, in the NYSE's own words, the trade through rule "serves to protect investors," the NYSE has some "splaining" to do and needs to take corrective action forthwith to enforce and comply with the trade through rule in its own marketplace.

*Market Structure III: The Role of the Specialist in the Evolving Modern Marketplace: Hearing before the Subcomm. on Capital Markets, Insurance and Government Sponsored Enterprises of the H. Comm. on Financial Services*, 108th Cong., 2d Sess. 6 (Feb. 20, 2004) (written statement of Gerald Dean Putnam, Chairman & Chief Operating Officer, Archipelago Holdings, L.L.C.), *available at* http://financialservices.house.gov/media/pdf/022004gp.pdf.

price parameters were triggered—the so-called "Liquidity Replenishment Points" (a term possibly suggestive of kegs dotted around the NYSE floor to which thirsty members, beer mugs in hand, could repair).[31]

Notwithstanding these developments and the NYSE's efforts to maintain a grip on the order flow in NYSE-listed securities, the NYSE's share of that order flow began to decline precipitously during the time the SEC was considering Regulation NMS, from a high of about 80% to just under 70%.[32] Member firms, in turn, began to reduce the number of their employees on the NYSE floor.[33] This effect seems to have resulted largely in greater competition from Nasdaq, whose registration as a national securities exchange had finally been approved by the SEC.[34] It certainly did not result from the effectiveness of Regulation NMS, which even today is still unfolding. In any event, the NYSE has thus far been unable to reverse that trend. It may be that the gradual conversion of the market to electronic media from what had been the last vestige of a floor-based system among

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31. These various special advantages, which were soundly criticized to no avail by several commenters, preserved many of the time-and-place advantages the floor had previously enjoyed, at the expense of public investors, and they may have substantially reduced the likelihood that other markets would be able to offer meaningful competition to the NYSE specialists. *See, e.g.*, Letter from Ari Burstein, Assoc. Counsel, Inv. Co. Inst., to Jonathan Katz, Sec'y, SEC (July 20, 2005), *available at* http://www.sec.gov/rules/sro/nyse/nyse200405/aburstein072005.pdf; Letter from Kim Bang, President and CEO, Bloomberg Tradebook LLC, to Jonathan Katz, Sec'y, SEC (Sept. 22, 2004), *available at* http://www.sec.gov/rules/sro/nyse/nyse200405/kbang092204.pdf; Letter from Eric D. Roiter, Senior Vice President and Gen. Counsel, Fidelity Investments, to Jonathan Katz, Sec'y, SEC (Oct. 26, 2004), *available at* http://www.sec.gov/rules/proposed/s71004/fidelity102504.pdf (giving trading examples that demonstrated graphically the unfairness of the NYSE rules).

32. *See* Roger Aitken, *Technology Equity Markets—Big Players Set To Flex Their Muscles*, Sept. 1, 2006; *see also* Historical NYSE Group Monthly Volume, *available at* http://www.nyse.com/financials/1143717022567.html (last visited Mar. 31, 2007).

33. *See, e.g.*, Aaron Lucchetti, *The NYSE: Faster (and Lonelier)*, WALL ST. J., Jan. 24, 2007, at C1.

> For some traders left working on the floor of the New York Stock Exchange, it appears the Big Board has dimmed the lights. The exchange, a unit of NYSE Group Inc., is scheduled to finish today its long push to have its 3,618 securities traded almost exclusively electronically, a move that is translating into speedy service for investors. But for the employees on the NYSE's iconic trading floor it means fewer jobs and the biggest change to the way the Big Board has traded stocks in its 214-year history.
>
> Every day more of the human brokers disappear. Big brokerage firms like Lehman Brothers Holdings Inc. and J.P. Morgan Chase & Co. have let go some floor brokers in recent weeks, between five and 10 people each. Merrill Lynch & Co. has discussed with its brokers the possibility of transferring off the exchange.

*Id.*

34. *See* David Gaffen & Scott Patterson, *Yours is Mine and Mine Yours*, WALL ST. J., Feb. 20, 2007, at C6; In the Matter of the Application of the Nasdaq Stock Market, Exchange Act Release No. 66,572, 71 Fed. Reg. 3550 (Jan. 23, 2006).

equity exchanges has finally broken the NYSE's ability to use its regulatory powers to defeat competition. Of course, only time will tell whether that is the case.

## IV. THE FUTURE: THE MARKET DATA DEBATE

Accompanying the market structure developments reflected in the debate over fragmentation and the Commission's adoption of Regulation NMS has been considerable focus on the increasingly large revenues the exchange markets have extracted from market professionals and from investors by selling their market data in the form of quotations and last-sale data.[35] The exchanges are required under Regulation NMS to make public the best bid and offer, and the last sale trade, on a continuous basis.[36] Regulation NMS does not require them to make depth-of-market quotations available, but several of the exchanges have been developing depth-of-market products for sale to the public, at prices that have begun to stir up vigorous opposition, as discussed below.

### A. LEGISLATIVE REQUIREMENTS

In fashioning the Securities Acts Amendments of 1975, which added the national market system provisions in section 11A of the Exchange Act, the Congress was alert to the risk that exchanges, as government-protected monopolies, could exert monopoly power over market data. It warned that the exchanges—if allowed to continue to have monopoly powers—should be regulated as public utilities:

> The [Senate Banking] Committee believes that if economics and sound regulation dictate the establishment of an exclusive central processor for the composite tape or any other element of the national market system, *provision must be made to insure that this central processor is not under the control or domination of any particular market center. Any exclusive processor is, in effect, a public utility, and thus it must function in a manner which is absolutely neutral with respect to all market centers, all market makers, and all private firms*. Although the existence of a monopolistic processing facility does not necessarily raise antitrust problems, serious antitrust questions would be posed if access to this facility and its services were not available on reasonable and nondiscriminatory terms to all in the trade or if its charges were not reasonable. Therefore, in order to foster efficient market development and

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35. *See generally* Letter from Michael Atkin, Vice President, Fin. Info. Serv. Div. (FISD), Software & Info. Indus. Ass'n (SIIA), to Joel Seligman, Advisory Comm. on Mkt. Info., SEC (Apr. 2, 2001), *available at* http://www.fisd.net/mdregulation/sec_040201.asp (detailing the issues and considerations in the market data debate).

36. 17 C.F.R. § 242.603(b) (2007).

> operation and to provide a first line of defense against anti-competitive practices, Sections 11A(b) and (c)(1) would grant the SEC broad powers over any exclusive processor and impose on that agency a responsibility to assure the processor's neutrality and the reasonableness of its charges in practice as well as in concept.[37]

**B. COMMISSION RESPONSE**

The Commission's response to that severe admonition has been instructive. The Commission's oversight of exchange fees, including market data fees, is accomplished through its power to review and either approve or disapprove exchange rules. Exchange Act section 19(b) requires the exchanges to file as proposed rule changes any rules setting fees, as well as any other rules granting or limiting access to exchange facilities.[38] Exchange rules setting dues, fees, and other charges can become effective upon filing with the SEC.[39] However, the Commission traditionally expects the exchanges to file fee rules for ordinary course notice and public comment before taking effect if the fees are payable by anyone other than members of the exchange.[40] The Commission is required, with respect to fee rules, to determine whether the rates are "fair and reasonable" and "not unreasonably discriminatory" and whether the exchanges' rules provide for the "equitable allocation of reasonable . . . fees . . . among its members and issuers and other persons using its facilities.[41]

For many years, the Commission's oversight of exchange market data fees was benign and not vigorous. In a Concept Release issued in 1999, the Commission discussed the legal standards applicable to its review of such fees:

> Terms such as 'fair,' 'reasonable,' and 'equitable' often need standards to guide their application in practice. One standard commonly used to evaluate the fairness and reasonableness of fees, particularly those of a monopolistic provider of a service, is the amount of costs incurred to provide the service. Some type of cost-based standard is necessary in the monopoly context because, on the one hand, it precludes the excessive

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37. S. REP. NO. 94-75, at 11–12 (1975) (emphasis added).

38. *See* Exchange Act Rule 19b-4, 17 C.F.R. § 240.19b-4 (2006). The Commission's power to review exchange rules extends to regulatory provisions having to do with access to exchange facilities regardless of whether the provision is called a rule or is, for example, embedded in a contract the exchange requires those accessing its facilities to sign. *See* In the Matter of Bloomberg L.P., Exchange Act Release No. 49,076, 2004 SEC LEXIS 79 (Jan. 14, 2004).

39. Exchange Act § 19(b)(3)(A)(ii), 15 U.S.C. § 78s(b)(3)(A)(ii) (2000).

40. *See* Annual Filing of Amendments to Registration Statements of National Securities Exchanges, Securities Associations, and Reports and the Municipal Securities Rulemaking Board, Exchange Act Release No. 35,123, 59 Fed. Reg. 66,692, 66,697 (Dec. 28, 1994).

41. *See* Exchange Act § 6(b)(4), 15 U.S.C.§ 78f(4) (2000); Exchange Act § 11A(c)(1)(C)(D), 15 U.S.C. § 78k-1(c)(1)(C)(D) (2000); *see also* 17 C.F.R. § 242.603(a)(2) (3) (2007).

> profits that would result if revenues were allowed to far outstrip costs, and, on the other hand, it precludes underfunding of a service if the revenues were held far below costs (or subsidization of the service by other sources of revenues).[42]

At the same time, the Commission admitted that its approach had been basically limited to seeing whether anyone objected to fees and, if not, allowing them. "In this context, the Commission has relied to a great extent on the ability of the SROs and Plans to negotiate fees that are acceptable to SRO members, information vendors, investors, and other interested parties."[43] The Commission began using this approach of regulating fees shortly after the 1975 Amendments were enacted.[44]

The Commission did not change course or develop new approaches in light of the comment on its Concept Release, much of which was directed at SRO fees. It suggested that the fees should relate to costs, and that the only allowable costs should be the costs of "collecting, consolidating, and distributing the data."[45] The Commission subsequently published a Market Data Advisory Committee Report[46] whose majority recommendations were largely consistent with those of the exchange representatives on the Committee who wrote the report; it resulted in a strong dissent by others who had different views. Then, in a concept release issued in 2004 on the regulation and governance of exchanges and other self-regulatory organizations, the SEC reminded itself that it would be necessary to return to the subject of market data fees.[47]

42. Regulation of Market Information Fees and Revenues, Exchange Act Release No. 42,208, 64 Fed. Reg. 70, 613, 70,619 (Dec. 17, 1999).

43. *Id.* at 70,622. This might be analogized to a local zoning board that approves applications for variances, finding them to be justified to relieve "undue hardships," on the basis that the neighbors did not object. Today, as noted below, in the Commission's case, even when objections are raised by the neighbors, they do not seem to matter.

44. *Id.*

45. *See, e.g.*, Letter from Eric D. Roiter, Fidelity Invs., to Jonathan Katz, Sec'y, SEC (Apr. 25, 2000), *available at* http://www.sec.gov/rules/concept/s72899/roiter1.htm; Letter from W. Hardy Callcott, Senior Vice President and Gen. Counsel, Charles Schwab & Co., Inc., to Jonathan Katz, Sec'y, SEC (July 10, 2000), *available at* http://www.sec.gov/rules/concept/s72899/callcot1.htm; Letter from Marc E. Lackritz, President, Sec. Indus. Ass'n, to Jonathan Katz, Sec'y, SEC (Apr. 11, 2000), *available at* http://www.sec.gov/rules/concept/s72899/lackrit1.htm. (Following its merger with The Bond Market Association, the Securities Industry Association is known as the Securities Industry and Financial Markets Association.) *See also* Letter from Lou Eccleston, Bloomberg L.P., to SEC (Apr. 11, 2000), *available at* http://www.sec.gov/rules/concept/s72899/ecclest1.htm.

46. *See* Letter from Joel Seligman, Dean and Ethan A.H. Shepley University Professor, Washington University School of Law, to SEC, Report of the Advisory Committee on Market Information: A Blueprint for Responsible Change (Sept. 14, 2001), *available at* http://www.sec.gov/divisions/marketreg/marketinfo/finalreport.htm.

47. Concept Release on Self-Regulation, Exchange Act Release No. 50,700 (Nov. 18, 2004).

### C. CHANGES IN THE EXCHANGES' COMPOSITION

No discussion of this topic would be complete without a reference to the economic climate affecting the operation of exchange markets and their governance. The economics of exchanges were changing rapidly and dramatically. During Arthur Levitt's tenure as Commission Chairman (1993–2001),[48] the Commission pressured the exchanges to reconstitute their boards of directors to dramatically reduce the representation of exchange members.[49] Soon thereafter, the major exchanges converted from being cooperative not-for-profit organizations into for-profit organizations with publicly traded securities. That gave them the usual private sector incentives to use their powers to maximize their revenues, crush their competitors, and increase their share prices. They swiftly bought up their largest competitors—INET and BRUT, in the case of Nasdaq, and the ARCA Exchange, in the case of the NYSE—and, proposing to use their now public stock as an acquisition currency, set out to acquire exchanges in Europe and elsewhere.[50]

While the change in the constitution of exchanges was accompanied by dramatic increases in their market power, it was not accompanied by any change in the Exchange Act standards applicable to them. By law, they continue to be subject to a statutory regime that never contemplated that they would be publicly owned, for-profit companies. The monopoly powers they continue to enjoy give them increasing incentives to branch out into adjacent markets, such as value-added products, using the market data to which they enjoy monopoly access. In addition they can charge whatever the traffic will bear, effectively monopoly rents, for market data.[51] By

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48. *See* SEC Biography: Chairman Arthur Levitt, http://www.sec.gov/about/commissioner/levitt.htm (last visited Mar. 30, 2007).

49. Paula Dwyer, *Arthur Levitt's Hardball at the SEC*, BUS. WK., Sept. 29, 1997, at 50, *available at* http://www.businessweek.com/@@U@zn52YQG27gWQYA/1997/39/b3546087.htm. Notably, the NYSE did not change the structure of its board until 2003, after Chairman Levitt was gone. *See, e.g.*, *NYSE Board Members to Resign From Other Boards*, FORBES.COM, June 5, 2003, http://www.forbes.com/newswire/2003/06/05/rtr992168.html; Stephen Labaton, *Big Board Overhaul Plan Faulted*, N.Y. TIMES, Nov. 21, 2003, at C1.

50. *See* Aaron Lucchetti & Alistair McDonald, *Euronext Holders Approve Deal for Historic Merger with NYSE*, WALL ST. J., Dec. 20, 2006, at C3; Aaron Lucchetti & Eric Bellman, *NYSE Extends Reach to India*, WALL ST. J., Jan. 11, 2007, at C3; Gaston F. Ceron, *NYSE and Tokyo Tie a Knot*, WALL ST. J., Feb. 1, 2007, at C2; Edward Taylor & Alistair McDonald, *Exchanges Step Up Chase for Foreign Mates*, WALL ST. J., Jan. 19, 2007, at C5; Alistair McDonald, *Nasdaq Fails in Hostile Takeover Bid for London Stock Exchange*, WALL ST. J. ONLINE, Feb. 11, 2007.

51. Petition for Commission Review from Markham C. Erickson, Executive Dir. and Gen. Counsel, NetCoalition.com, to SEC, Regarding Exchange Act Release No. 54,597, at 14 (Nov. 14, 2006), *available at* http://www.netcoalition.com/vertical/Sites/%7BF1D948CC-5797-482E-B502-743C873E2848%7D/uploads/%7B2DE79A1C-7CFE-4DD8-BE12-EAEF3CE234C6%7D.PDF [hereinafter NetCoalition.com Petition]; Letter from Sanjiv Gupta, Bloomberg L.P., to Nancy

federalizing a duty of best execution, the Commission deprived exchange members and their fiduciary customers of the ability to control market data prices. They were ill-equipped to decline to buy the market data the exchanges sell at ever increasing prices, along with their value-added products. In particular, when offered data products by the exchanges that regulate them, many broker-dealers decide it is prudent to buy "protection" from their regulators.[52] The Commission's Market Data Study concluded that the Commission should not require exchanges to publish depth-of-book data; the exchanges interpreted this as license to sell the data for whatever they could get.[53]

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Morris, Sec'y, SEC (Jan. 17, 2007), *available at* http://www.sec.gov/comments/34-55011/3455011-5.pdf.

52. Securities Industry and Financial Markets Association made this point forcefully in a comment letter in response to a recent petition by NetCoalition, discussed post, concerning staff approval of market data fees:

> [T]he Commission has been placing increasing emphasis on the duty of best execution. Regulation NMS itself was designed, in large part, to support the duty of best execution. The Commission and the SROs have conducted repeated examination sweeps of broker-dealers' execution quality committees, to assure that those committees are adequately considering the execution quality data required by former Rule 11Ac1-5 (now Regulation NMS Rule 605). Similar examination sweeps have sought to assure that broker-dealers' order routing information, required by former Rule 11Ac1-6 (now Regulation NMS Rule 606) also is accurate. Still other widely publicized examination sweeps and enforcement investigations have reviewed very particularized elements of broker-dealers' order-routing practices, for example why some broker-dealers did not make use of a particular market's "opening cross" methodology. . . . As a result of these trends, broker-dealers and other securities market participants have become convinced that it is prudent to buy any number of single-exchange "depth-of-book" market data products that arguably could assist them in meeting their best execution obligations. . . .When the major SROs tell their member firms that a particular market data product facilitates better executions, those member firms understandably feel pressure to buy that market data product, regardless of their own evaluation of the merits of that product. As a result of these trends, many broker-dealers and other market participants have come to the conclusion that it is prudent to purchase and evaluate single-market "depth-of-book" market data, at least from the major markets, so there can be no doubt they have met their duty of best execution.

Letter from Ira Hammerman, Senior Managing Dir. and Gen. Counsel, Sec. Ind. and Fin. Mkts. Ass'n, to Nancy Morris, Sec'y, SEC, Regarding In the Matter of NetCoalition, File No. SR-NYSE Arca-2006-21, at 14 (Jan. 17, 2007), *available at* http://www.sec.gov/comments/34-55011/3455011-6.pdf [hereinafter Hammerman January 17, 2007 Letter].

53. *See, e.g.*, Letter from Exchange Market Data Coalition (The American Stock Exchange, The Boston Stock Exchange, The Chicago Board Options Exchange, The Chicago Stock Exchange, The International Securities Exchange, The NASDAQ Stock Market, The New York Stock Exchange, The NYSE/Arca Exchange, and The Philadelphia Stock Exchange), to Nancy Morris, Sec'y, SEC 5–6 (Jan. 26, 2007), *available at* http://www.sec.gov/comments/34-55011/3455011-9.pdf.

### D. NEW BUSINESS MOTIVATIONS OF THE EXCHANGES

The SEC Division of Market Regulation, meanwhile, continued to process exchange market data fee filings and to approve them by delegated authority,[54] regardless of the change in economic circumstances or other considerations bearing on the fairness and reasonableness of rates.[55] The Commission was not wholly unaware of the conflicts between regulatory power and the commercial impulses that the newly for-profit exchanges were beginning to exhibit. For example, the SEC did tell Nasdaq, in the order granting Nasdaq's registration as a national securities exchange, that it could not lawfully use OATS data (regulatory data gathered from Nasdaq members) for commercial (i.e., non-regulatory) purposes. Further, the SEC defined clear and unambiguous boundaries to what it would constitute commercial use of OATS data:

> Nasdaq responded to commenters' concerns [that Nasdaq should not be permitted to use OATS data for non-regulatory purposes] by reaffirming its commitment not to use OATS data for commercial purposes. Nasdaq, however, believes that its use of OATS data by Nasdaq's Department of Economic Research to study public policy issues, such as sub-penny trading and decimalization, does not constitute commercial use of the data. The Commission believes that any non-regulatory use of the data would have a commercial benefit.[56]

Gentle reminders were not enough. Notwithstanding the Commission's admonition, Nasdaq soon thereafter filed for immediate effectiveness a package of rule changes and told the Commission the rules were "non-controversial."[57] However, the rules contravened what the Commission had

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54. The Commission has delegated to its Division of Market Regulation the SEC's authority under Exchange Act section 19(b) to approve SRO rules. *See* 17 C.F.R. § 200.30-3(a)(12) (2007). Exchange Act section 4A delineates the Commission's power to delegate functions to its staff. That power does not extend to adopting SEC rules, but exchange rules are approved by order, not by rule. Nonetheless, NetCoalition has raised questions whether in fact the staff's issuance of "long orders, disputing public comment and reaching policy judgments, such as those at issue here, that have not been blessed by the Commissioners themselves" is consistent with the staff's delegated powers. Letter from Markham C. Erickson, Executive Dir. and Gen. Counsel, NetCoalition.com, to Nancy Morris, Sec'y, SEC 11 (Mar. 6, 2007), *available at* http://www.sec.gov/comments/34-55011/3455011-16.pdf.

55. *See* NetCoalition.com Petition, *supra* note 51.

56. In the Matter of the Application of the Nasdaq Stock Market LLC for Registration as a National Securities Exchange; Findings, Opinion, and Order of the Commission, Exchange Act Release No. 53,128, 71 Fed. Reg. 3550, 3558 n.133 (Jan. 13, 2006) (noting the approval of Nasdaq exchange registration).

57. Pursuant to paragraph (f)(6) of Rule 19b-4, added in 1994, an exchange may file a rule change for immediate effectiveness if the rule "[d]oes not significantly affect the protection of investors or the public interest" and "[d]oes not impose any significant burden on competition." 17 C.F.R. § 240.19b-4(f)(6)(i), (ii) (2006).

told the Nasdaq that it should not do, thereby effectively flouting the Commission's express directive. The Nasdaq rules include OATS data as well as a proposed analytics package that includes share data not visible in its existing quotation and order data feeds or in its quotation montage.[58]

Public criticism of that filing was swift and fierce,[59] but the 60-day period for summary abrogation[60] was allowed to expire without the Commission acting to curb Nasdaq's rules. The Commission neither effectively prevented Nasdaq from using its regulatory muscle to nourish its commercial ventures nor punished Nasdaq for flouting the Commission's policy.

## V. NETCOALITION.COM'S PETITION: CHALLENGING THE OLD ORDER

Not long thereafter push came to shove, but not directly from the Commission. NYSE Arca, following in Nasdaq's footsteps, filed a package of rule changes establishing fees for value-added data to which there was equal, if not more powerful, objection.[61] The Division of Market Regulation approved those rules.[62] The prospect of the NYSE, as the dominant securities exchange, commercializing regulatory data that Arca had previously provided without charge led to a most unusual step by the industry. NetCoalition.com, a trade group whose trustees include CNET Networks, Bloomberg L.P., Google, IAC/Interactive Corp. and Yahoo!, filed a petition under a little-used provision of the Commission's Rules of Practice—Rule

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58. *See* Notice of Filing and Immediate Effectiveness of Proposed Rule Change and Amendment No. 1 To Establish a Package of Real-Time and Near-Real-Time Data Products Called the Market Analytics Data Package, Exchange Act Release No. 54,003, 71 Fed. Reg. 36,141 (June 16, 2006).

59. *See* Letter from Gregory Babyak, Chairman, Mkt. Data Subcomm. of the SIA Tech. and Regulation Comm. & Christopher Gilkerson, Chairman, SIA Tech. and Regulation Comm., to Nancy Morris, Sec'y, SEC (July 14, 2006), *available at* http://www.sec.gov/comments/sr-nasd-2006-056/nasd2006056-2.pdf; Letter from Markham C. Erickson, Executive Dir. and Gen. Counsel, NetCoalition.com, to Christopher Cox, Chairman, SEC (Aug. 9, 2006), *available at* http://www.sec.gov/comments/sr-nasd-2006-056/mcerickson080906.pdf; Letter from Bruce Garland, Bloomberg L.P., to Nancy Morris, Sec'y, SEC (July 14, 2006), *available at* http://www.sec.gov/comments/sr-nasd-2006-056/nasd2006056-1.pdf; Letter from Sanjiv Gupta, Bloomberg L.P., to Nancy Morris, Sec'y, SEC (Aug. 22, 2006), *available at* http://www.sec.gov/comments/sr-nasd-2006-056/nasd2006056-4.pdf.

60. The second sentence of Exchange Act § 19(b)(3)(C), 15 U.S.C. § 78s(b)(3)(C) (2000), allows the Commission sixty days from the date of filing to abrogate summarily any exchange rule that became effective upon filing.

61. Notice of Filing of Proposed Rule Change Relating to Approval of Market Data Fees for NYSE Arca Data, Exchange Act Release No. 53,952, 71 Fed. Reg. 33,496 (June 9, 2006).

62. *See* Order Approving Proposed Rule Change Relating to NYSE Arca Data, Exchange Act Release No. 54,597, 71 Fed. Reg. 62,029 (Oct. 20, 2006) (approving the rule on October 12, 2006).

430[63]—asking the Commission to review and set aside the staff's action in approving NYSE Arca's rules.[64] NetCoalition argued basically five things:

1. NYSE Arca's fees are excessive and put access to NYSE Arca data, which had been free before Arca's merger with the NYSE, well beyond the reasonable economic reach of advertiser-sponsored media such as the Internet websites sponsored by NetCoalition's trustee Internet Service Providers (ISPs).
2. NYSE Arca's fees are not "fair and reasonable" and the Commission cannot so conclude in the absence of any data as to the cost of collecting, consolidating and distributing those data.
3. NYSE Arca failed to comply with the Commission's own Form 19b-4 since it did not discuss or give any justification for burdens on competition its fees would impose.
4. NYSE Arca is making anticompetitive and inappropriate use of its monopoly powers to enter and control downstream markets, such as the market for data analytics and other value-added products and services.
5. NYSE Arca is making inappropriate use of regulatory data to which it has exclusive access to foster the development of commercial products.

The SEC staff recommended to the Commission that the petition to review the staff action be granted—possibly, one might surmise, because a conclusion had been reached that the record on appeal would be rather weak unless the Commission granted the petition and gave further consideration to the issues at hand.[65] In any event, the Commission granted the petition unanimously at the end of 2006 and opened up a 21-day comment period, running, not as usual from the Federal Register publication of the order, but from the date of the order itself, which was issued during the Christmas holiday.[66]

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63. 17 C.F.R. § 201.430 (2004).

64. NetCoalition.com Petition, *supra* note 51. Under SEC Rule of Practice 431(e), 17 C.F.R. § 201.431(e) (2004), the filing of such a petition automatically stays the effectiveness of the challenged staff action. *See* Alan Sipress, *Internet Firms Seek Rollback of Quote Fees: Coalition to Ask SEC to Reconsider Charges for Posting Real-Time Stock Prices*, WASH. POST, Nov. 14, 2006, at D5; Jed Horowitz, *Internet Forms Seek SEC Review of Stock Exchanges' Data Fees*, WALL ST. J., Nov. 14, 2006, at C4.

65. Exchange Act § 25(a)(1), 15 U.S.C. § 78y(a)(1) (2000), provides for a direct appeal to the United States Court of Appeals of SEC final orders.

66. In the Matter of NetCoalition, Exchange Act Release No. 55,011, 2006 SEC LEXIS 3016 (Dec. 27, 2006) (order granting petition and scheduling filing of statements).

The public reaction has been substantial.[67] SIFMA strongly supported the NetCoalition petition and urged the Commission to reverse the staff decision on the grounds urged by NetCoalition and also to impose a moratorium on future exchange market data rule filings:

> The price of market data has a direct impact on its availability and on who can access it. In order for an exchange to justify a market data rule proposal as "fair and reasonable," "not unreasonably discriminatory" and representing "an equitable allocation of costs" as required by the Exchange Act, the Commission should require the exchanges to submit information regarding the exchange's cost to collect, consolidate and distribute that market data. The Commission should make it clear that the exchanges may take into account only their legitimate costs in producing the market data that they control. However, exchanges may not use their control to charge unfair or unreasonable fees for the market data at a level that would enable them to cross-subsidize their competitive operations.[68]

One significant point SIFMA made was that NYSE Arca and other exchanges are beginning to develop, even for the publicly mandated Best Bid and Offer data, streaming technology that operates markedly faster than the public utility data stream offered by Securities Industry Automation Corporation and thus will truly promote a two-tiered market in which "smart" investors—hedge funds and others—will have an inside track that will leave the average investor in the dust, an inside track resulting in part from the Commission's own emphasis on "best execution":

> [T]he process through which the SIPs consolidate quotes from different markets takes a certain amount of time (especially since the exchange administrators of the SIPs have little if any financial incentive to invest money to modernize their operations). As a result, some markets—including (as relevant in this petition) the NYSE and NYSE Arca—now advertise that their unconsolidated market data products are faster than the consolidated market data feeds. These markets (again, including the NYSE) also advertise that their market data products therefore offer better order execution opportunities than the consolidated market data feeds.[69]

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67. *See* SEC, Comments on Order Granting Petition for Review and Scheduling Filing of Statements (Exchange Act Release No. 55,011), *available at* http://www.sec.gov/comments/34-55011/3455011.shtml (last visited Mar. 27, 2007).

68. Hammerman January 17, 2007 Letter, *supra* note 52.

69. *Id.* at 13–14. SIFMA quoted NYSE Arca's promotional materials, which emphasized that the new data feed would be on a fast track 60 times faster than the slow-track data made generally available to the public and would provide six times the liquidity.

> The ArcaBook data feed provides real time, depth of book limit order information for NYSE Arca and ArcaEdge (OTCBB). By receiving the information directly from the source, ArcaBook clients are able to receive order information *approximately 60 times*

SIFMA also advised the Commission that it should address the risk that the exchanges would leverage their positions as government-sponsored monopolies to enter and dominate competition in adjacent markets, namely, the markets for value-added data products:

> The Commission should explore structural alternatives that would introduce competition in value added market data products as a supplement to, or even substitute for, cost-based regulation. The exchanges compete today for listings, investment products, and services they provide to traders and other users of an exchange. The Commission should encourage a structure in which they can compete also in the area of market data products. Today, however, they use exclusive control over basic market data (facts about orders and quotes submitted by broker-dealers) to package simple consolidation as a "product" for which they charge a fee unconstrained by market forces. A structural alternative for a new market data framework could include requiring each exchange to place market data operations in a separate subsidiary, and requiring each exchange to sell raw market data on the same terms to third parties as it does to its own subsidiary.[70]

The advantages enjoyed by exchanges in setting their fees amounted, according to several commenters, to a complete absence of any external control, from the Commission, from market forces or anywhere else. The Financial Services Roundtable observed:

> The most significant deterioration in market data price controls . . . has been the change in ownership structure at the exchanges. Rather than continuing as member-owned, not for-profit enterprises, nearly all U.S. exchanges have migrated to shareholder-owned, for profit corporations. Exchange management owes its fiduciary duties to the shareholders of the corporation and those duties include maximizing the revenue generated by market data fees. Brokers and users of the exchanges, while often owning shares in the exchange corporations, are far less capable of constraining the fee levels. This is particularly true of market data fees because exchanges retain government-sponsored control over the sale of market data. Exchange transaction fees are subject to competitive pressures among the competing markets. However, market data is consolidated

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> *faster than they can through the securities information processor (SIP)* and see 6 times the liquidity within five cents of the inside quote that is offered by the market inside.

NYSE ARCA, ARCABOOK—FEE TRANSITION FACT SHEET, *quoted in id.* at 14 n.24 (emphasis added).

70. Hammerman January 17, 2007 Letter, *supra* note 52, at 8–9.

among the exchanges prior to sale and the exchanges share in the proceeds. No mechanism for competition exists for this product.[71]

## VI. SIGNIFICANCE OF MARKET DATA TO EXCHANGES AND TO THE PUBLIC

Why is all of this important? Market data have often been called the "oxygen" of the markets. The Congress emphasized in 1975 that if exchanges were allowed to become or remain the sole source of market data, they should be subject to strict regulatory control to curb burdens on competition and to ensure the fairness and reasonableness of pricing. In the more than thirty years since then, the exchanges have been allowed to justify their fees not on the basis of the costs of collecting, consolidating, and distributing the data, which are probably relatively trivial—SIFMA has calculated on the basis of the Commission's own numbers that the exchanges extract a 1,000 percent mark-up over those costs[72]—but on the basis of comparing their fees against market data fees charged by other exchanges, which some commenters have suggested amounts to comparing one monopoly rent against another.[73] From time to time, the exchanges have adverted the notion that they have property rights in the data originating on their facilities, a proposition NetCoalition disputes vigorously in its petition, citing *Feist v. Rural Service Telephone Company, Inc.*[74] and the NYSE's unsuccessful efforts to get the Congress to adopt legislation overturning the case law.[75]

To the exchanges themselves, revenues from market data are a substantial portion of their overall revenues. In fact, the Commission acknowledged that market data fees were a substantial part of the overall revenues of the exchanges. In its 1999 Concept Release on Regulation of Market Information Fees and Revenues, the Commission reported that for 1998 the NYSE had received $111.5 million from the sale of market information, 15.3% of its total 1998 revenues of $728.7 million, while the NASD in that year had received $152.3 million from the sale of market

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71. Letter from Richard M. Whiting, Executive Dir. and Gen. Counsel, The Fin. Services Roundtable, to Nancy Morris, Sec'y, SEC (Jan. 17, 2007), *available at* http://www.sec.gov/comments/34-55011/3455011-7.pdf [hereinafter Whiting January 17, 2007 Letter].

72. Hammerman January 17, 2007 Letter, *supra* note 52, at 3.

73. *See* Letter by Gregory Babyak, Chairman, Market Data Subcomm. of the SIA Tech. and Reg Comm., to Nancy Morris, Sec'y, SEC (Aug. 18, 2006), *available at* http://www.sec.gov/comments/sr-nysearca-2006-21/gbabyak5693.pdf.

74. Feist Publications, Inc. v. Rural Tel. Serv. Co. Inc., 499 U.S. 340, 359–60 (1991).

75. NetCoalition.com Petition, *supra* note 51, at 17.

information, 21.7% of its total 1998 revenues of $699.8 million.[76] The NYSE Group's Annual Report on Form 10-K for 2005 reported that, for that year, the NYSE received $178.2 million from the sale of market information, 15.9% of its total 2005 revenues (net of section 31 fees) of $1,123.1 million. Nasdaq does not disclose the components in its Annual Report on Form 10-K for 2005 the components of a revenue category it calls "market services,"[77] but reported that, for the third quarter of 2006 ended September 30 of that year, Nasdaq received $38.6 million from the sale of "market services subscriptions," 22.5% of its total 2005 net revenues of $171.2 million.[78] These numbers show that market data fees account for a significant portion of these two exchanges' revenues, which affects their market capitalization and thus the value of their stock, including its value as an acquisition currency.

The exchanges certainly need revenues for public purposes such as market regulation, but traditionally there has been no effort to demonstrate how the market data revenues serve that purpose. SIFMA has asserted that market data fees should not go to pay those costs and that SIFMA's members would be willing to be charged separately for the costs of exchange regulation.[79] The absence of any real control on those costs, and the compulsion the Commission itself imposed on broker-dealers and investment managers to seek out "best execution" possibilities have removed, as the commenters suggested, any semblance of market discipline or market forces controlling such costs.[80] The congressional admonition in the 1975 Amendments to impose utility-type regulation on the exchanges to curb their abuses of monopoly powers—at a time when they remained cooperative, not-for-profit entities—seems not to have borne fruit.

The NetCoalition petition to the SEC Commissioners is an effort not only to prevent the creation of the two-tiered market structure, but also to prevent the exchanges from dominating both the securities and adjunct value-added data markets through the use of their privileged, monopoly access to market data. That the Commission granted the NetCoalition

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76. Regulation of Market Information Fees and Revenues, Exchange Act Release No. 42,208, 64 Fed. Reg. 70,613, 70,625 (Dec. 17, 1999); *see also* Concept Release Concerning Self Regulation, Exchange Act Release No. 50,700, 69 Fed. Reg. 71,256, 71,270 (Dec. 8, 2004).

77. *See* Nasdaq, Inc., Annual Report (Form 10-K), at F-4 (Mar. 8, 2006), *available at* http://www.sec.gov/Archives/edgar/data/1120193/000119312506054916/d10k.htm.

78. *See* News Release, Nasdaq Stock Exch., Nasdaq Announces Third Quarter 2006 Results (Oct. 19, 2006), *available at* http://www.nasdaq.com/newsroom/news/pr2006/ne_section06_120.stm; *see also* News Release, Nasdaq Stock Exch., Nasdaq Third Quarter 2006 Financial Statements (Sept. 30, 2006), *available at* http://www.nasdaq.com/newsroom/documents/NDAQ_3Q06_Financial_Statments.pdf.

79. Hammerman January 17, 2007 Letter, *supra* note 52, at 21.

80. *See, e.g.*, *id.* at 12–14, 23–24; Whiting January 17, 2007 Letter, *supra* note 71.

petition was certainly an unusual event. The SEC is not in the habit of granting petitions to review staff action taken by delegated authority. Indeed, there have been no other significant instances in which such a petition has been granted.[81] The issues involved, and the fact that the securities industry—represented by SIFMA—and several of the major Internet web operators—represented by NetCoalition—have lined up against the SEC staff and urged the Commission to reverse its staff, is certainly a first. The Commission has a real opportunity in this instance to deal with these important issues and to provide leadership to the markets, and to its staff.[82]

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81. Letter from Markham C. Erickson, Executive Dir. and Gen. Counsel, NetCoalition.com, to Nancy Morris, Sec'y, SEC 1 (Jan. 17, 2007), *available at* http://www.sec.gov/comments/34-55011/3455011-2.pdf.

> It is our understanding that the Commission has rarely—if ever—approved such a petition for review. We believe this step underscores the Commission's appreciation of the critical importance to the investing public of addressing the issues raised in the NetCoalition petition.

*Id.*

82. The American Bar Association's Committee on Federal Regulation of Securities, in a comment letter on the NetCoalition petition, emphasized the importance of the issues facing the Commission:

> With this trend away from self governance, exchange members are afforded less of an opportunity to act as a check on SRO rules, including those relating to market data fees, to ensure that they are designed
>
> > to promote just and equitable principles of trade, . . . to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and are not designed to permit unfair discrimination between customers, issuers, brokers or dealers.
>
> In recent years, greater pressure has been placed on this analysis as SROs have transformed themselves to compete with their broker-dealer members for market share and trading volume. Thus, although SROs remain largely the exclusive purveyors of market information for their associated exchanges, they are no longer necessarily neutral public utilities for the mutual benefit of their respective members. This necessarily bears on the Commission's view of SRO rulemaking, particularly in the context of rules imposing fees on exchange members and on public investors, as is the case here.
>
> Steps have been taken to allay concerns about potential conflicts-of-interest associated with the role of member firms in the governance of particular SROs. The Committee believes, however, that action is also needed to address other potential conflicts, such as the ability of exchanges to use their position as exclusive purveyors of market data to disadvantage the investing public as well as their members with whom they compete. The Committee urges the Commission to tackle comprehensively the issues of SRO governance and funding, including the associated issue of market data fees.

The policy issues involved are complex, but the fundamental question is whether the Commission will reject the approval of fees on the basis of comparing one monopoly rent to another and call the exchanges to task for using their market power to muscle their way into, and potentially dominate, adjacent markets. The public interest is substantially and inexorably involved in both issues.

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Letter from Keith F. Higgins, Chair, Comm. on Fed. Regulation of Sec., ABA, to Nancy Morris, Sec'y, SEC 2–3 (Feb. 12, 2007), *available at* http://www.sec.gov/comments/sr-nysearca-2006-21/nysearca200621-20.pdf (citations omitted).