TESTIMONY CONCERNING PROPOSED REGULATION NMS

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Before the U.S. House Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises

March 15, 2005

Chairman Baker, Ranking Member Kanjorski, and Members of the Subcommittee:

Thank you for inviting me to testify today on proposed Regulation NMS. All of the proposals included in Regulation NMS are designed to benefit and protect investors in the U.S. equity markets, and to facilitate efficient capital formation, by modernizing and strengthening the national market system. The national market system encompasses the stocks of more than 5,000 listed companies, which collectively represent more than $14 trillion in U.S. market capitalization held by investors. The Commission is committed to assuring that investors have the fairest and most efficient markets possible for these stocks, and I welcome your continuing interest in an issue of such vital importance to investors and the economy.

Given where we are in the process of considering Regulation NMS, my testimony today reflects my own views and not necessarily those of my fellow Commissioners.

I will first give an overview of the process the Commission has followed in developing the NMS proposals and describe the principal components of Regulation NMS. Then I will focus more specifically on one aspect of the proposals that has generated the bulk of the public comments. Specifically, I will review the arguments for and against the trade-through proposal, including with respect to Nasdaq stocks which are not currently covered by any trade-through requirements.

I must point out that the Commission and its staff are currently in the final stages of deliberation on the NMS proposals, and the individual Commissioners continue to weigh the complex policy considerations presented by the proposals. I have not reached a final judgment on how to balance these considerations myself. Market structure is an extremely complex area of public policy and securities regulation. Regardless of what the Commission ultimately decides, this Subcommittee and the public should have full confidence that the Commission has systematically and responsibly analyzed the relevant data and carefully considered the views of all commenters. Hopefully, my testimony today will convey some measure of the enormous amount of careful consideration that the Commission has devoted to these issues over the last several years and, indeed, continues to devote today.

I. Overview of Regulation NMS

A. Extended and Open Commission Review

The Commission has undertaken its comprehensive review of market structure regulation to respond to the many changes in the equity markets since the national market system was created in 1975. To inform our thinking, we actively have sought out the views of the public and securities industry participants. Even prior to formulating proposals, our review included multiple public hearings and roundtables, an advisory committee, three concept releases, the issuance of temporary exemptions intended in part to generate useful data on policy alternatives, and a constant dialogue with industry participants and investors. This process continued after the proposals were published for public comment.[1] We held a public hearing on the proposals in April 2004 ("NMS Hearing").[2] To give the public an opportunity to respond to important developments at the hearing, we published a supplemental request for comment and extended the comment period on the proposals.[3] The public submitted more than 900 comment letters on the original proposals that encompassed a wide range of views.

The insights of the commenters on the proposals, as well as those of the NMS Hearing panelists, contributed to significant improvements in the original proposals. Responding appropriately to these comments led to changes in the rule text as originally proposed. Consequently, rather than immediately adopting rules, the Commission reproposed Regulation NMS in its entirety in December 2004 to afford the public an additional opportunity to review and comment on the details of the rules.[4] In response, the Commission received more than 1500 additional comments on the reproposal.

B. Substantive Components of Regulation NMS

The Regulation NMS proposals include four broad substantive initiatives: trade-throughs, access to markets, sub-penny quoting, and market data. The trade-through proposal would require all markets to establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent trade-throughs of protected quotations. To qualify for protection, a quotation would have to be automated – one that, among other things, is displayed and immediately accessible through automatic

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1 Securities Exchange Act Release No. 49325 (Feb. 26, 2004), 69 FR 11126 (Mar. 9, 2004) ("Proposing Release").

2 A full transcript of the NMS Hearing ("Hearing Tr."), as well as an archived video and audio webcast, is available on the Commission's Internet Web site (http://www.sec.gov).

3 Securities Exchange Act Release No. 49749 (May 20, 2004), 69 FR 30142 (May 26, 2004) ("Supplemental Release").

Securities Exchange Act Release No. 50870 (Dec. 16, 2004), 69 FR 77424 (Dec. 27, 2004) ("Reproposing Release).

execution. Thus, the trade-through proposal would not require market participants to route orders to access manual quotations, which generally entail a much slower speed of response than automated quotations.

The trade-through proposal also includes a variety of exceptions that would make intermarket price protection as efficient and workable as possible. These would include an intermarket sweep exception, which would allow market participants to access multiple price levels simultaneously at different trading centers – a particularly important function now that trading in penny increments has dispersed liquidity across multiple price levels. The intermarket sweep exception would enable trading centers that receive sweep orders to execute those orders immediately, without waiting for better-priced quotations in other markets to be updated. In addition, the trade-through proposal would provide exceptions for the quotations of trading centers experiencing, among other things, a material delay in providing a response to incoming orders and for flickering quotations with prices that have been displayed for less than one second. Both exceptions would serve to limit the application of the trade-through rule to quotations that are truly automated and accessible.

The access proposal would set forth new standards governing access to quotations in NMS stocks. As many commenters on the proposals have emphasized, protecting the best displayed prices against trade-throughs would be futile if broker-dealers and trading centers were unable to access those prices fairly and efficiently. The access proposal is designed to achieve this goal in three ways. First, it would enable the use of private linkages offered by a variety of connectivity providers, rather than mandating a collective linkage facility such as the Intermarket Trading System ("ITS"), to facilitate the necessary access to quotations. The lower cost and increased flexibility of connectivity in recent years has made private linkages a feasible alternative to mandated public linkages. To facilitate these private linkages, the access proposal would prohibit a trading center from imposing unfairly discriminatory terms that would prevent or inhibit the access of any person through members, subscribers, or customers of such trading center.

Second, the access proposal would limit the fees that any trading center can charge for accessing its protected quotations to no more than three tenths of one cent per share. The purpose of the fee limitation is to ensure the fairness and accuracy of displayed quotations by establishing an outer limit on the cost of accessing such quotations. For example, if the price of a protected offer to sell an NMS stock is displayed at $10.00, the total cost to access the offer and buy the stock will be $10.00, plus a fee of no more than $0.003. The access proposal thereby would assure order routers that displayed prices are, within a limited range, true prices.

Finally, the access proposal would require SROs to establish and enforce rules that, among other things, prohibit their members from engaging in a pattern or practice of displaying quotations that lock or cross the automated quotations of other trading centers. Trading centers would be allowed, however, to display automated quotations that lock or cross the <u>manual</u> quotations of other trading centers. The proposed access rule thereby would reflect the disparity in speed of response between automated and manual quotations, while also promoting fair and orderly markets by establishing that the first automated quotation at a price, whether it be a bid or an offer, is entitled to an execution at that price instead of being locked or crossed by a quotation on the other side of the market.

The sub-penny proposal generally would prohibit market participants from displaying, ranking, or accepting quotations in NMS stocks that are priced in an increment of less than one cent. A strong consensus of commenters has supported the sub-penny proposal as a means to promote greater price transparency and consistency, as well as to protect displayed limit orders. In particular, the proposal would address the practice of "stepping ahead" of displayed limit orders by trivial amounts. It therefore should further encourage the display of limit orders and improve the depth and liquidity of trading in the national market system.

The market data proposal would promote the wide availability of market data and allocate revenues from market data fees to the SROs that produce the most useful data for investors. It thereby would strengthen the existing market data system, which provides investors in the U.S. equity markets with real-time access to the best quotations and most recent trades in thousands of stocks throughout the trading day. For each stock, quotations and trades are continuously collected from many different trading centers and then disseminated to the public in a consolidated stream of data. As a result, investors of all types have access to a reliable source of information for the best prices. When Congress mandated the creation of the national market system in 1975, it noted that the systems for disseminating consolidated market data would "form the heart of the national market system."[5] Accordingly, one of the Commission's most important responsibilities is to preserve the integrity and affordability of the consolidated data stream.

[5] H.R. Rep. No. 94-229, 94th Cong., 1st Sess. 93 (1975).

The proposal would promote this objective in several different respects. First, it would update the formulas for allocating revenues generated by market data fees to the various SRO participants in the joint industry plans for the dissemination of market information to the public ("Plans"). The current Plan formulas are seriously flawed by an excessive focus on the number of trades, no matter how small the size, reported by an SRO. They thereby create an incentive for distortive behavior, such as wash sales and trade shredding, and fail to reflect an SRO's contribution to the best displayed and automated quotations in NMS stocks. The formula is designed to promote an allocation of revenues to the various SROs that more closely reflects the usefulness to investors of each SRO's market information.

The proposal also is intended to improve the transparency and effective operation of the Plans that disseminate market data by broadening participation in Plan governance. It would require the creation of advisory committees composed of non-SRO representatives. Such committees would give interested parties an opportunity to be heard on Plan business, prior to any decision by the Plan operating committees. Finally, the market data proposal would promote the wide availability of market data by authorizing markets to distribute their own data independently (while still providing their best quotations and trades for consolidated dissemination through the Plans) and streamlining outdated requirements for the display of market data to investors.

Many commenters on the market data proposal expressed frustration with the current operation of the Plans. These commenters generally fell into two groups. One group, primarily made up of individual markets that receive market data fees, believed that the current model of consolidation should be discarded in favor of a new model, such as a "multiple consolidator" model under which each SRO would sell its own data separately. The other group, primarily made up of securities industry participants that pay market data fees, believed that the current level of fees is too high. This group asserted that, prior to modifying the allocation of market data revenues, the Commission should address the level of fees that generated those revenues.

As noted in the Reproposing Release, the Commission has considered these concerns at length in the recent past. A drawback of the current market data model, which requires all SROs to participate jointly in disseminating data through a single consolidator, is that it affords little opportunity for market forces to determine the overall level of fees or the allocation of those fees to the individual SROs. Prior to publishing the proposals, therefore, the Commission undertook an extended review of the various alternatives for disseminating market data to the public in an effort to identify a better model. These alternatives were discussed at length in the original Proposing Release, but each has serious weaknesses. The Commission noted that it was particularly concerned that the integrity and reliability of the consolidated data stream must not be compromised by any changes to the market data structure.

For example, although allowing each SRO to sell its data separately to multiple consolidators may appear at first glance to subject the level of fees to competitive forces, this conclusion does not withstand closer scrutiny. If the benefits of a fully consolidated data stream are to be preserved, each consolidator would need to purchase the data of each SRO to assure that the consolidator's data stream in fact included the best quotations and most recent trade report in an NMS stock. Payment of every SRO's fees would effectively be mandatory, thereby affording little room for competitive forces to influence the level of fees.

The Commission noted in the Proposing Release that it also considered the suggestion of many in the second group of commenters that market data fees should be cut back to encompass only the costs of the Plans to collect and disseminate market data. Under this approach, the individual SROs would no longer be allowed to fund any portion of their operational and regulatory functions through market data fees. Yet nearly the entire burden of collecting and producing market data is borne by the individual markets, not by the Plans. If, for example, an SRO's systems fail on a high-volume trading day and it can no longer provide its data to the Plans, investors will suffer the consequences of a flawed data stream, regardless of whether the Plan is able to continue operating.

If the Commission were to limit market data fees to cover only Plan costs, SRO funding would have been cut by $386 million in 2003.[6] Given the potential harm if vital SRO functions are not adequately funded, I believe that the level of market data fees is most appropriately addressed in a context that looks at SRO funding as a whole. The Commission therefore has requested comment on this issue in its recent concept release on SRO structure.[7] In addition, the recently proposed rules to improve SRO transparency would, if adopted, assist the public in assessing the level and use of market data fees by the various SROs.[8]

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6 See Proposing Release, 69 FR at 11179 (table setting forth revenue allocations for 2003).

7 Securities Exchange Act Release No. 50700 (Nov. 18, 2004), 69 FR 71256 (Dec. 8, 2004) ("SRO Structure Release").

8 Securities Exchange Act Release No. 50699 (Nov. 18, 2004), 69 FR 71126 (Dec. 8, 2004) ("SRO Transparency Release").

In sum, there is inherent tension between assuring price transparency for investors, which is a fundamental objective of the Exchange Act,[9] and expanding the extent to which market forces determine market data fees and SRO revenues. Each alternative model for data dissemination has its particular strengths and weaknesses. The great strength of the current model, however, is that it benefits investors, particularly retail investors, by helping them to assess quoted prices at the time they place an order and to evaluate the best execution of their orders against such prices by obtaining data from a single source that is highly reliable and comprehensive. In the absence of full confidence that this benefit would be retained if a different model were adopted, the market data proposal has been formulated to implement such immediate steps as are necessary to improve the operation of the current model.

II. NMS Principles and Objectives

A. Competition Among Markets and Competition Among Orders

Before getting to the details of the trade-through rule, the proposed rule must be placed in proper context. The Commission's range of policy choices cannot be appreciated without first having a clear understanding of the fundamental principles that underlie the national market system and the ultimate objectives for the U.S. equity markets which were, indeed, given to us by Congress in the 1975 Amendments to the Exchange Act, when it directed us, with "due regard for the public interest, the protection of investors, and the maintenance of fair and orderly markets," to use our "authority under [the Exchange Act] to facilitate the establishment of a national market system for securities."[10] I therefore will briefly address these principles and objectives.

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[9] Exchange Act Section 11A(a)(1)(C)(iii).
[10] Exchange Act Section 11A(a)(2).

The fundamental challenge of the national market system can be expressed in a nutshell as promoting and balancing two essential, yet distinct, types of competition: competition among markets for trading services and competition among the orders of buyers and sellers in individual stocks. Each of these forms of competition is essential to the well-being of investors and listed companies. The importance of competition among markets for trading services is self-evident, yet competition among orders is at least as important, for this competition to be the best price produces narrow spreads and deep liquidity. Over the years, the Commission's often difficult task has been to promote both these forms of competition as technology and trading practices evolve.

With respect to competition among markets, the record of the last thirty years should give pause to those who believe that a national market system is inherently inconsistent with vigorous competition. Other countries with significant equity trading typically have a single, overwhelmingly dominant public market, and separate dealer trading in block size. The U.S., in contrast, is fortunate to have equity markets that integrate retail and block orders, and that are characterized by extremely vigorous competition among a variety of different types of markets, including traditional exchanges, electronic order books, market-making dealers, and automated matching systems for large orders.

The public policy challenge, however, is that competition among multiple markets simultaneously trading the same stocks can interfere with competition among orders in those stocks, thereby detracting from the quality of price discovery and leading to reduced market depth and high volatility. Congress, when it directed the establishment of the national market system in 1975, emphasized that "investors must be assured that they are participants in a system which maximizes the opportunities for the most willing seller to meet the most willing buyer."[11] If this goal is not achieved and competition among orders is seriously impaired, investors will be harmed. In particular, investors would receive inferior prices for their trades, and our markets would be characterized by reduced depth and liquidity and excessive price volatility. Consequently, the Commission must always seek to promote both competition among markets and competition among orders. A trade-through rule is intended primarily to assure that the most willing buyers meet the most willing sellers in the national market system.

B. Giving Precedence to the Interests of Investors

When the Commission published its December release reproposing Regulation NMS, I believed that one of its more straightforward statements was that the interests of investors are entitled to take precedence over the interests of professional short-term traders and market intermediaries when evaluating conflicting policy choices. The statement was made in the specific context of evaluating the effect of a trade-through rule on the interests of professional traders in profiting from extremely short-term trading strategies that can depend on millisecond differences in order response time from markets. Noting that any protection against trade-throughs could interfere to some extent with such short-term trading strategies, the release framed the Commission's policy choice as follows: "Should the overall efficiency of the NMS defer to the needs of professional traders, many of whom rarely intend to hold a position overnight? Or should the NMS serve the needs of longer-term investors, both large and small, that would benefit substantially from intermarket price protection?"

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[11] H.R. Rep. No. 94-123, 94th Cong., 1st Sess. 50 (1975).

Most of the time, the interests of short-term traders and long-term investors will not conflict. Short-term traders clearly provide valuable liquidity to the market. But when the interests of long-term investors and short-term traders diverge, few issues are more fundamentally important in formulating public policy for the U.S. equity markets than the choice between these interests. While achieving the right balance of competition among markets and competition among orders will always be a difficult task, there will be no possibility of accomplishing it if, in the case of a conflict, the Commission cannot choose whether the U.S. equity markets meet the needs of long-term investors or short-term traders.

I strongly believe that one of the most important goals of the equity markets is to minimize the transaction costs of long-term investors and thereby to reduce the cost of capital for listed companies. These functions are inherently related because the cost of capital of listed companies depends on the transaction costs of those who are willing to accept the risk of holding corporate equity for an extended period. To the extent that the interests of professional short-term traders conflict with those of investors in listed companies, the interests of investors are entitled to take precedence. My view is that any other outcome would be directly contrary to the Exchange Act and its objectives of promoting fair and efficient markets that serve the public interest.

I recognize that it is important to avoid false dichotomies between the interests of traders and investors, and that many difficult line-drawing issues potentially can arise in precisely defining the difference between a "trader" and an "investor." For present purposes, however, these issues can be handled by simply noting that it makes little sense to refer to someone as "investing" in a company for a few seconds, minutes, or hours.

Given my views on this matter, I was quite surprised that several commenters sharply questioned whether the Commission should make any distinction between the interests of investors and those of short-term traders. I realized that much of the dispute over Regulation NMS – and the trade-through proposal in particular – may relate more to a lack of common ground on ultimate objectives than to disagreement on particular data and analytical issues. I therefore want the Subcommittee to know quite clearly where I stand on this issue and why.

Short-term traders and market intermediaries unquestionably provide needed liquidity to the equity markets and are essential to the welfare of investors. Consequently, much, if not most, of the time the interests of investors and professional traders in efficient markets will coincide. But when they conflict, the Commission's clear responsibility under the Exchange Act is to uphold the interests of investors.

Indeed, the core concern for the welfare of investors was first expressed in the foundation documents of the Exchange Act itself. In language that remains remarkably relevant today, the 1934 congressional reports noted how the national public interest of the equity markets had grown as more and more Americans had begun to place their savings in equity investments. Given this development, the reports emphasized that "stock exchanges which handle the distribution and trading of a very substantial part of the entire national wealth . . . cannot operate under the same traditions and practices as pre-war stock exchanges which handled substantially only the transactions of professional investors and speculators."[12]

[12] H.R. Rep. No. 1383, 73rd Cong., 2d Sess. 4 (1934).

In the years since 1934, the priority placed by Congress on the interests of investors has grown more and more significant. Today, more than 84 million individuals representing more than one-half of American households own equity securities.[13] More than 70 million of these individuals participate indirectly in the equity markets through ownership of mutual fund shares. Most of them hold their investments, at least in part, in retirement plans. Indeed, nearly all view their equity investments as savings for the long-term, and their median length of ownership of equity mutual funds, both inside and outside retirement plans, is 10 years.[14]

In assessing the current state of the NMS and formulating its rule proposals, the Commission has focused on the interests of these millions of Americans who depend on the performance of their equity investments for such vital needs as retirement security and their children's college education. Their investment returns are reduced by transaction costs of all types, including the explicit costs of commissions and mutual fund fees. But the largely hidden costs associated with the prices at which trades are executed often can dwarf the explicit costs of trading. For example, the implicit transaction costs associated with price impact of trades by mutual funds and other institutional investors is estimated at more than $30 billion per year.[15] Such hidden costs eat away at the long-term returns of millions of individual mutual fund shareholders and pension plan participants. One of the primary objectives of the NMS is to help reduce such costs by improving market liquidity and depth. The best way to promote market depth and liquidity is to encourage vigorous competition among orders. As a result, the

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13 Investment Company Institute and Securities Industry Association, Equity Ownership in America 17 (2002).

14 Id. at 85, 89, 92, 96.

15 Reproposing Release, 69 FR 77424, 77443-77444.

Commission cannot merely focus on one type of competition – competition among markets to provide trading services – at the expense of impaired competition among orders. The interests of U.S. investors and listed companies require that the national market system continue to promote both types of competition.

III. Benefits of Trade-Through Rule

With that overview, I'd now like to turn to the topic of the proposed trade-through rule, and will begin with three basic observations.

First, I would observe that throughout the Commission's deliberations over the proposed trade-through rule, we have kept our eye on one overriding objective – the protection of investors – with particular attention to the concerns of small investors who may not have the resources to monitor the behavior of their agents, the brokers. The thrust of the proposed trade-through rule is actually quite simply stated: when an investor sends an order to a market, the market can either execute the order at the best price then being quoted in the national market system, or the market must send the order to the best quoting market. What does this mean? Two things. It means that a broker executing an order will be required to give that order the best price then available in any electronically accessible market, even if the broker internalizes the order or would prefer to trade in another market that may offer the broker itself, if not the customer, an advantage. And second, it means that an investor who is willing to place an aggressively priced limit order on the book will not have his order ignored in favor of a less aggressively priced order. This second point is sometimes overlooked, so let me expand on it a bit. The investor who is willing to post a limit order supplies liquidity to the marketplace. The limit order shows the market where trading interest lies and helps to establish the best prices for stock trading. This investor provides a public service, and the market as a whole benefits.

But this investor acts at a cost to himself, for he reveals his trading interest, and he offers an option that any other investor can exercise simply by placing a market order. He risks having that option exercised only when the market is moving against him, and losing the trade when the market is moving away from him. His only compensation is the ability to trade when his quote is the best quote available. If he does not get an execution, then he is not compensated, and he will soon question why he posted the limit order. Worse, if he only gets an execution when the market is moving against him, we can begin to understand why he might choose not to offer the option to the market in the first place. A trade-through rule helps protect that investor for his willingness to supply liquidity in the market.

So the trade-through rule is, in the most fundamental sense, a rule that protects investors.

This simple point can get lost in all of the sound and fury unleashed by the vested interests for whom a market-wide trade-through rule would require new ways of doing business. I know that the members of this Subcommittee have been lobbied just as hard as I have on this issue, and I am sure that you have asked yourself, as I have, just exactly whose interests are being advocated.

The second broad observation I would make, is that I think it useful to note that much of the hue and cry over the trade-through rule is somewhat wide of the mark. The most strident criticism that we hear about the trade-through rule appears to focus on the existing ITS rule, a 35-year-old anachronism that has plainly outlived its usefulness. Let me be absolutely clear. The Commission is not proposing to validate or extend the ITS rule. Quite the contrary: the Commission has proposed a different type of trade-through rule – one that would work in today's marketplace.

The ITS rule is like a horse-and-buggy driving down the runway at Reagan National Airport. That is because the key weakness of the ITS rule is that it does not distinguish between an electronic quote – one that can be executed immediately – and a manual quote – one that requires human beings to negotiate. The ITS rule has made it difficult for electronic marketplaces to compete with floor-based exchanges, and in the process has helped floor-based markets maintain their competitive dominance. The Commission has proposed to fix that problem. The only quotes entitled to protection under the proposed trade-through rule are electronic quotes – quotes that are immediately and automatically accessible.

As so structured, the proposal addresses the main criticism that one hears about the ITS rule – that when a market is forced to send an order to New York, it languishes while the specialist decides whether to trade with it. That cannot happen under the rule the Commission has proposed. If the quote is not automatic, then it is not protected.

The proposal addresses other legitimate criticisms of the old ITS rule, such as the block-trade exception that results in the bulk of trade-throughs in listed stocks, and the weak and cumbersome "satisfaction" remedy that the old rule provides. In effect, the old rule does not prohibit trade-throughs – it merely tells a market that is traded-through that it can go and complain to the other market, and demand "satisfaction." As you can imagine, such a weak remedy is weakly enforced.

The Commission's proposed rule would eliminate the broad block exception in favor of more tailored benchmark and intermarket sweep exceptions, and would require market centers actually to implement policies and procedures that are reasonably designed to prevent trade-throughs, instead of merely providing for an after-the-fact "satisfaction" remedy.

To my final observation, I want to emphasize that the trade-through rule that the Commission has proposed is pro-competitive – in the best tradition of the market-reform initiatives that the Commission has spearheaded over the last several years. Much of the public debate over the trade-through rule has focused on one type of competition – competition between markets. But as I alluded to above, we must remember that there are two kinds of competition that Congress directed us to foster. One is competition between markets – like the competition between Nasdaq and Instinet, for example – and the other is competition between investors, or, as it is usually called, competition between orders.

Both kinds of competition are essential for vibrant and healthy markets, as Congress recognized in 1975 when it told us to perfect the national market system. Some of the powerful market centers and professional traders most vocal in this debate seem to downplay order competition. But as noted below, the Commission has not forgotten that one of the great strengths of the U.S. equity markets is that the trading interest of all types and sizes of investors is integrated, to the greatest extent possible, into a unified market system.

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The primary objective of a trade-through rule is to promote competition among orders – to encourage the most willing buyers and sellers of a stock to meet on an order-by-order basis, no matter where their orders are submitted in the national market system. The proposed rule therefore would require all markets to establish, maintain, and enforce policies and procedures that are reasonably designed to prevent "trade-throughs" – the execution of an order at a price that is inferior to the price of a protected quotation, often representing an investor limit order, displayed by another market. In evaluating whether to adopt a trade-through rule, the Commission must consider two broad categories of issues: first, whether there is a need for intermarket protection against trade-throughs and, second, whether the potential benefits would justify the implementation and other costs of a trade-through rule.

Commenters supporting the trade-through proposal have emphasized three important benefits of trade-through protection. First, a trade-through rule would provide an order-by-order backstop to a brokers' duty of best execution for customer market orders. Although all brokers owe a duty of best execution to customers when handling their orders, the interests of agents and their principals often can conflict. Brokers may have strong financial and other interests for routing orders to a particular market, which may or may not be displaying the best price for a stock. I believe that most investors, particularly retail investors, assume that their market orders will be executed at the best available prices. It can be difficult, however, for investors to monitor whether, in fact, their orders have been executed at the best available price in stocks with rapidly changing quotations. Investors generally will know the best quoted price at the time they place their order, but prices can change during the interval between order submission and order execution. A trade-through rule would protect the interests of retail investors by affirming the principle of best price on an order-by-order basis.

Second, commenters have emphasized that a trade-through rule would promote fair and orderly treatment of investor limit orders. Many of the limit orders in today's equity markets are submitted by retail investors. Indeed, one of the great strengths of the U.S. equity markets is that the trading interest of all types and sizes of investors is integrated, to the greatest extent possible, into a unified market system. Such integration ultimately works to benefit both retail and institutional investors. Retail investors will participate directly in the U.S. equity markets, however, only to the extent they perceive that their orders will be treated fairly and efficiently. I am concerned about retail investors' perception of unfairness when they display an order representing the best price for a stock, yet see that price bypassed by trading in other markets. A trade-through rule such as the one the Commission has proposed would help maintain the confidence of all types of investors in the U.S. equity markets.

Finally, commenters supporting a trade-through rule have emphasized the need to promote greater depth and liquidity in NMS stocks by encouraging the use of limit orders. They noted, for example, that limit orders typically establish the "market" for a stock. In the absence of limit orders setting the current market price and the size available at that price, there would be no benchmark for the submission and execution of market orders. Focusing solely on best execution of market orders – and the interests of orders that <u>take</u> displayed liquidity – would miss a critical part of the equation for promoting the most efficient markets – the best execution of orders that <u>supply</u> displayed liquidity. The trade-through rule is designed to promote best execution of both market orders and limit orders.

IV. Applying Proposed Trade-Through Rule to Nasdaq Stocks

Commenters disputing the need for a trade-through rule for Nasdaq stocks have focused on two factual contentions. First, they have claimed that few trade-throughs occur in Nasdaq stocks and that a rule therefore simply would impose unnecessary costs. Second, they have claimed that trading in Nasdaq stocks, which currently are not covered by any trade-through rule, is more efficient than trading in NYSE stocks, which are covered by the ITS trade-through provisions.

The Commission staff has evaluated the first factual contention by measuring the rate of trade-throughs for Nasdaq and NYSE stocks. The staff study found that trade-through rates are significant for Nasdaq stocks. For example, 1 of every 40 trades in Nasdaq stocks, or approximately 98,000 trades per day, receive a price that is inferior to a displayed and accessible quotation. Given that retail investors can have serious difficulty monitoring whether their orders receive the best price, I am greatly concerned that thousands of retail investors each day may unwittingly be receiving an inferior execution of their orders in Nasdaq stocks. Moreover, I do not believe that retail investors would consider the current rate of trade-throughs in Nasdaq stocks to be "insignificant," as it has been characterized by some of the commenters.

The staff also found significant trade-through rates when measured as a percentage of share volume in Nasdaq stocks. The staff used a number of different methods to calculate such rates, but the overall rates generally ranged from a low of 1.9% when considered as the volume of traded-through quotations, to a high of 7.9% when considered as the total volume of trades that were executed at inferior prices. In hundreds of the most active Nasdaq stocks, this latter figure rises to 9% and higher.

Some commenters have argued that only the relatively low share volume of traded-through quotations is relevant for assessing the need for a trade-through rule. The low figure, however, reflects the current shortage of displayed size in the absence of trade-through protection. It therefore is a symptom of the problem, rather than an indication of the health of the Nasdaq market. For example, many active Nasdaq stocks trade millions of shares per day, yet average less than 2000 shares of displayed size at their best prices. Given this small amount of displayed size, it simply is impossible for traded-through quotations to represent a large percentage of total share volume in these stocks. But lack of displayed depth is evidence of a market problem, not market quality.

Finally, the staff study also found significant trade-through rates for NYSE stocks – 2.5% of trades and 7.1% of share volume. Notably, however, the great majority of such trade-throughs fall within loopholes to the current ITS provisions that would be closed by the Commission's rule. Moreover, the ITS rules are seriously flawed because they merely provide an inefficient "satisfaction" remedy, rather than truly protecting limit orders by giving them a fast and efficient execution. Finally, the ITS rules are flawed by their failure to distinguish between automated and manual quotations. Thus, while trade-through rates in NYSE stocks are significant and need to be addressed, they do not demonstrate the inherent ineffectiveness of trade-through rules, but rather the severe weaknesses of the ITS approach.

Commenters on the reproposal offered a variety of reasons why they believed the staff study of trade-through rates might be flawed. Commission staff currently is evaluating their comments. One claim, for example, was that the sample dates chosen for the study involved unusual trading activity. In fact, our economists chose dates that were well within the norms for trading volume and volatility.

Another claim was that the staff study failed to consider the use of reserve size for Nasdaq stocks and therefore greatly overestimated current trade-through rates. The basic flaw in the commenters' claim is that its validity would depend on the failure of sophisticated order routers to consider reserve size when they route orders to multiple markets to sweep available liquidity. Reserve size, however, is a quite well known characteristic of the market for Nasdaq stocks. Indeed, the evidence indicates that order routers are quite accustomed to sweeping both displayed and reserve size when they truly intend to obtain the best prices for their customers. It is most unlikely, therefore, that the existence of reserve size caused the staff study to overestimate trade-through rates for Nasdaq stocks.

The second principal factual contention of commenters opposed to a trade-through rule was that trading in Nasdaq stocks currently is more efficient than trading in NYSE stocks. The Nasdaq market unquestionably has improved significantly for investors over the years. Notably, the most significant steps forward have followed Commission action to extend national market system principles to Nasdaq stocks. These initiatives have included trade reporting, limit order display, inclusion of ECNs in the consolidated data systems, and disclosure of order execution quality.

Nevertheless, the relevant data does <u>not</u> support any sweeping claim that trading in Nasdaq stocks now is generally more efficient than trading in NYSE stocks. As was discussed at length in the Commission's December release, the data submitted by commenters, which purported to demonstrate the superiority of order execution quality for Nasdaq stocks, was flawed in many different respects. An appropriate analysis reveals that the markets for Nasdaq and NYSE stocks each have their particular strengths and weaknesses.

Moreover, in assessing the need for a trade-through rule, I do not believe it is necessary for the Commission to make any final judgments regarding the relative efficiency of trading in Nasdaq and NYSE stocks. Rather, the critical issue is whether effective protection against trade-throughs would benefit each market, given its specific trading characteristics. On this point, the data indicates that the market for Nasdaq stocks has weaknesses that the implementation of an effective trade-through rule would be designed to address. Although many commenters have been willing to sharply criticize the quality of the exchange-listed markets, they have been much less willing to closely scrutinize weaknesses in the market for Nasdaq stocks.

For example, the fill rates for marketable limit orders in Nasdaq stocks are low, generally falling below 50% for larger order sizes. Many of these unfilled orders may have been probing unsuccessfully for undisplayed "reserve" liquidity and consequently have limit prices that preclude any execution outside the best quotations. Such orders have been called "pinging" orders, but they could just as aptly be named "liquidity search" orders because they are searching for both displayed and reserve liquidity. Consequently, although the effective spreads obtained for orders that actually receive an execution may be relatively narrow, these spreads give only a partial view of total investor transaction costs because they do not encompass costs associated with the more than 50% of orders that did not receive a fill. The evidence indicates that such costs likely are substantial for investors

In addition, nearly all studies of Nasdaq trading, both by Commission staff and academics, have found significant short-term price volatility. Short-term volatility should be distinguished from fundamental volatility – price fluctuations associated with factors independent of market structure, such as earnings changes and other economic determinants of stock prices. Excessive short-term volatility indicates a shortage of liquidity. Such volatility may offer profitable trading opportunities for short-term traders and other market professionals, but this comes at the expense of investors, who buy at higher or sell at lower prices. Retail investors, in particular, tend to be relatively uninformed concerning short-term price movements and are apt to bear the brunt of the trading costs associated with excessive volatility. The trade-through rule, by promoting greater depth and liquidity, is designed to help reduce short-term volatility in Nasdaq stocks.

In its comment on the reproposal, one of the major Nasdaq market centers questioned whether volatility was, in fact, a market weakness that even needed to be addressed.[16] While volatility may encourage greater trading volume on electronic marketplaces, it is widely considered a negative condition indicating an illiquid market. For example, when creating the national market system in 1975, Congress emphasized that one of its "paramount" objectives was "the maintenance of stable and orderly markets with maximum capacity for absorbing trading imbalances without undue price

[16] Instinet Reproposal Letter at 7-8.

movements."[17] This congressional emphasis on minimizing volatility was yet another manifestation of its intent to give precedence to the interests of investors over those of professional traders and market intermediaries.

Improving market depth and liquidity also would help minimize transaction costs for large institutional investors. The largest component of institutional trading costs is caused by adverse price movements when attempting to execute large orders. These largely hidden costs annually amount to more than $30 billion for equity mutual funds and other large institutional investors. The proposed trade-through rule is designed to improve incentives for displaying liquidity by guaranteeing effective price priority. More displayed liquidity will *at least* lower the search costs associated with trying to find liquidity. If this displayed liquidity represents new orders, it should also reduce transaction impact cost. Consequently, if trade-through protection produced even a small percentage reduction in these costs, this would generate hundreds of millions of dollars in benefits every year for individual mutual fund investors and pension plan participants.

V. Alternatives to Trade-Through Rule

In addition to raising factual claims concerning the extent of trade-throughs and the efficiency of trading in Nasdaq stocks, some commenters have argued that a trade-through rule is unnecessary because reliance on market access and brokers' duty of best execution would achieve similar results. This argument, however, fails to address the problem of "free-riding" on displayed quotations. Even when market participants act in their own economic self-interest, or brokers act in the best interests of their customers, they may deliberately choose, for various reasons, to bypass limit orders with the best displayed prices. For example, an institution may be willing to accept a dealer's

[17] S. Rep. No. 94-75, 94th Cong., 1st Sess. 7 (1975).

execution of a particular block order at a price outside the best prices, thereby transferring the risk of any further price impact to the dealer. Market participants that execute orders at inferior prices without protecting displayed limit orders are effectively free-riding on the price discovery provided by those limit orders. Displayed limit orders benefit all market participants by establishing the best prices, but, when bypassed, do not themselves receive a benefit, in the form of an execution, for providing this public good. This economic externality, in turn, creates a disincentive for investors to display limit orders, particularly limit orders of any substantial size.

One commenter on the reproposal questioned whether large trades that bypass displayed quotations should be considered as free-riding on the price discovery provided by displayed orders.[18] It emphasized that the price-formation process reflects information stemming from all trading interest and that institutional trading interest is an important part of the process. As evidence, the commenter noted that almost one-third of reported volume on the NYSE in 2004 was of block size, typically representing undisplayed institutional trading interest.

Institutional trading interest, both displayed and undisplayed, undoubtedly is an important part of the price discovery process. Notably, the large volume of block trades currently executed on the NYSE is subject both to the NYSE's order interaction rules and the ITS trade-through rules. Accordingly, NYSE block trades cannot be considered as free-riding on displayed limit orders, in contrast to block trades reported by block positioners in the OTC market that currently do not interact with displayed liquidity and are not covered by the ITS provisions.

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18 Fidelity Reproposal Letter at 5.

Moreover, the proposed trade-through rule would not require that all institutional trading interest be displayed – a goal that would be both futile and counterproductive. Rather, the proposed trade-through rule would provide a greater incentive for the voluntary display of a greater proportion of latent trading interest by assuring that, when such interest is displayed, it is protected against most trade-throughs. In these circumstances, institutions would choose to display when they determined it was in their own interests, not because they were required by Commission rule. Greater displayed size would improve the quality of price discovery for all market participants.

Another commenter asserted that the reproposal overly emphasized the importance of displayed limit orders in the price discovery process.[19] As the commenter noted, many different factors contribute to the price discovery process, including previous trades and undisplayed trading interest. But displayed limit orders are a critically important element of efficient price discovery, both with respect to establishing the inside prices and the size that can be traded at such prices. In particular, such orders are the most transparent and accessible source of liquidity in the equity markets. There are, of course, other sources of liquidity, including (1) reserve size, (2) "not held" institutional orders that are worked by floor brokers on an exchange, (3) automated matching networks that allow large buyers and sellers to meet directly and anonymously, and (4) securities dealers that are willing to commit capital to facilitate customer orders. Displayed limit orders, however, give anyone the ability to trade when they want to trade on a first-come, first-served basis at the market where they are displayed. They thereby act as a vital reference point for all other sources of liquidity. Specifically, reserve size,

[19] TIAA-CREF Reproposal Letter, Attachment at 9, 15.

undisplayed floor interest, automated matching, and dealer capital commitments all are facilitated by displayed information concerning the price and size of stock that is available for immediate trading in the public markets.

Commenters opposing the trade-through proposal also questioned whether protection against trade-throughs would in fact lead to any increase in the use of limit orders, particularly given the many reasons militating against display. Clearly, a large investor interested in buying 50,000 shares of a stock will not suddenly decide to show his hand simply because his order is given trade-through protection. Without question, there are a host of reasons that deter market participants from displaying their trading interest in full. Indeed, it is the existence of these disincentives, combined with a shortage of positive incentives for display, that have contributed to the small displayed depth at the best prices that characterizes the market for many stocks today.

The objective of the proposed trade-through rule is more modest. It would simply be to increase the perceived benefits of order display, against which the countervailing factors are balanced. As a result, market participants that currently display only 500 shares of their trading interest might be willing to display 1000 shares. The collective effect of many market participants reaching the same conclusion would perhaps be a material increase in the total displayed depth in the market, thereby improving the quality of public price discovery and reducing investor transaction costs.

Some also have suggested that, if the Commission's goal is to protect limit orders, the most powerful tool to achieve that goal would be to establish strict price/time priority for limit orders across all markets.[20] Such an approach particularly would address the

[20] See, e.g., Instinet Proposal Letter at 12.

common practice of dealers when they internalize customer orders to match the best displayed prices for a stock. Those raising the possibility of restricting this price-matching practice believed that the Commission's only true choice is either to impose no intermarket priority rules, even price priority, or to impose full price/time priority. But the only means to implement intermarket price/time priority would be to mandate a true central limit order book – a "CLOB." The Commission previously has explored such an alternative, but determined that it had potentially severe drawbacks that offset its promotion of limit orders. Most importantly, a true CLOB would require that nearly all orders be funneled through a single trading facility so that they could be ranked by time. Such a facility would greatly reduce the opportunity for markets to compete by offering different trading services. As I discussed above, the challenge of the national market system is to achieve an appropriate balance of market competition and order competition. I believe that a trade-through rule would not have anywhere near the restrictive effect on market competition as a CLOB. The relevant issue before the Commission is whether the benefits of trade-through protection would justify its more limited costs.

VI. Difficulties and Costs of Implementing Trade-Through Rule

In sum, while I emphasize that the Commission has not reached a final judgment on this issue, there appear to be strong reasons to believe that applying the trade-through rule to Nasdaq stocks could generate significant benefits for investors. Clearly, in reaching a final decision, the Commission also must carefully consider the difficulties and costs of a trade-through rule. In addition to the explicit costs of implementation, I believe there are three primary concerns that the Commission must address: (1) the effect of a trade-through rule on competition among markets and investor choice, (2) the extent to which trade-through protection may lessen competitive discipline on inefficient markets, and (3) the extent to which a trade-through rule is workable for Nasdaq stocks.

Many commenters were concerned that a trade-through rule might unduly detract from competition among markets, particularly competition based on factors other than price, such as system performance and reliability. I share this concern, but wonder whether the commenters have overstated the risk that such competition would be dampened by adoption of a trade-through rule. Even with a rule, markets likely would have strong incentives to continue to compete and innovate to attract both market orders and limit orders. Market participants and intermediaries responsible for routing market orders, consistent with their desire to achieve the best price and their duty of best execution, would continue to rank trading centers according to the total range of services provided by those markets. Such services include cost, speed of response, sweep functionality, and a wide variety of complex order types. The most competitive trading center would be the first choice for routing market orders, thereby enhancing the likelihood of execution for limit orders routed to that trading center. Because likelihood of execution is of such great importance to limit orders, limit order providers would be attracted to this preferred trading center. More limit orders would enhance the depth and liquidity offered by the preferred trading center, thereby increasing its attractiveness for market orders, and beginning the cycle all over again.

Conversely, trading centers that offer poor services likely would rank near the bottom in order-routing preference of most market participants and intermediaries. Whenever the least-preferred trading center was merely posting the same price as other trading centers, orders would be routed to other trading centers. As a result, limit orders displayed on the least preferred trading center would be least likely to be executed in general. Moreover, such limit orders would be the least likely to be executed when prices move in favor of the limit orders, and the most likely to be executed only when prices are moving against the limit order, adding the cost of "adverse selection" to the cost of a low likelihood of execution. In sum, the lowest ranked trading center in order-routing preference, with or without intermarket price protection, would suffer the consequences of offering a poor range of services to the routers of marketable orders.

The second major concern with adopting a trade-through rule is that it might lessen the competitive discipline that market participants can impose on inefficient market centers. A trade-through rule requires that market participants either match quoted prices or route orders to any market center quoting the best price. This is good for investors generally, but may not be if the quoting market is inefficient. For example, a market center may have poor systems that do not process orders quickly and reliably. Or a low-volume market may not be nearly as accessible as a high-volume market. The reproposed trade-through rule attempts to address this concern by establishing stringent standards for automated quotes and automated markets. It gives other markets a "self-help" remedy to bypass slow markets. Nevertheless, these remedies may not be as effective or as flexible as unfettered competitive forces in disciplining problem markets. If problem markets are not dealt with effectively, implementation of a trade-through rule could detract from the current level of efficiency of trading for Nasdaq stocks.

The third major concern with adopting a trade-through is that it could be less workable for Nasdaq stocks than for exchange-listed stocks. Many Nasdaq stocks are more actively traded than exchange-listed stocks, and thus often have many trade and quote updates per second. In addition, a larger number of separate market centers currently trade Nasdaq stocks than trade exchange-listed stocks. The combination of more trades and quote updates with more market centers may make implementation of intermarket trade-through protection more difficult for Nasdaq stocks. More orders will need to be routed to more market centers. Moreover, the listed markets are accustomed to working with a trade-through rule, while the Nasdaq markets have developed without one and would have a greater cultural change.

Some commenters suggested that the Commission should consider an exemption from the proposed trade-through rule for stocks that trade very actively.[21] I believe that the benefit of such an exception could be the exclusion of those stocks for which implementation is likely to be most difficult. The downside, however, may be that these also are the stocks that have the highest level of investor participation. For example, the need for a trade-through rule to backstop a broker's duty of best execution by assuring that retail investors receive the best available price is perhaps most acute with respect to the active stocks. In assessing any active stock exemption, the Commission will need to carefully assess the effect it could have on the investor protection objectives of the trade-through proposal.

Although Nasdaq stocks are part of the national market system, some have suggested that the Commission should at this point adopt a trade-through rule only for exchange-listed stocks. Although this approach would preclude the possibility of unintended consequences in the Nasdaq market, this approach would have drawbacks that the Commission would need to consider carefully. One of the Commission's goals in its

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[21] See, e.g., SIA Reproposal Letter at 12.

years-long review of market structure has been to formulate rules for the national market system that adequately reflect current technologies and trading practices and that promote equal regulation of stocks and markets. This goal does not reflect a simple desire for uniformity, but is identified in the Exchange Act as a vital component of a truly national market system.[22] The trade-through rule objective of promoting best execution of customer orders would be a particularly difficult benefit to set aside for Nasdaq stocks. I question whether ordinary investors should have to remember that their orders are protected by a Commission rule for exchange-listed stocks, but that *caveat emptor* still prevails in the Nasdaq market. As I noted earlier, the relevant data indicates that thousands of investors in Nasdaq stocks each day may unwittingly be receiving an inferior price for their orders. The Commission will need to carefully consider whether, if a trade-through rule is indeed appropriate for exchange-listed stocks, its best execution and liquidity-enhancing benefits should not be extended to Nasdaq stocks.

In sum, the Commission should not extend a trade-through rule to Nasdaq stocks without addressing all potential costs and drawbacks, particularly the serious concerns about competitive discipline and workable implementation. In the coming weeks, I and my fellow commissioners intend to focus closely on these issues in formulating final rules.

VII. Conclusion

I will conclude by offering a few thoughts on the future of the Regulation NMS rulemaking process. Although I cannot predict the final outcome, I do believe it is extremely important that there be an outcome, and that the outcome be reached soon. Many of the issues raised by the Regulation NMS proposals have lingered for many years

[22] Exchange Act Section 11A(c)(1(F).

and caused serious discord among market participants. These issues have been studied and debated and evaluated from nearly every conceivable angle. Few would seriously oppose the notion that the current structure of the national market system is outdated in many respects and needs to be modernized. The Commission must move forward and make decisions with regard to final rules if the U.S. equity markets are to continue to meet the needs of investors and public companies.

I can assure you that the Commission fully recognizes the far-reaching nature of many of the proposals. If adopted, some would require significant industry efforts to modify systems and otherwise prepare for the new regulatory structure. We are sensitive to these concerns and, if the Commission chooses to adopt the rules, we will work closely with the industry on implementing them. This process clearly would include an extended time period for the industry to prepare before the new rules become effective. In addition, the process would include phase-in periods to test systems and compliance on a limited group of stocks prior to full implementation for all stocks. Moreover, if the rules were to be adopted, the Commission and its staff would need to consult with the industry throughout the implementation period to clarify any issues that arise, to seek pragmatic solutions to any potential systems or other compliance difficulties, and in general to promote the most efficient possible process for the industry to respond to the adopted rules.

As I have emphasized, the Commission is still considering the Regulation NMS proposals, including all of the issues that I have discussed today. I look forward to hearing your views and answering your questions on the market structure issues facing the Commission, with the simple caveat that, as I am sure you appreciate, it would be inappropriate for me to attempt to prejudge where the Commission will arrive in its deliberations on these complex subjects. Thank you again for inviting me to speak. I would be happy to try and answer any of your questions.