S. HRG. 108–887

# REGULATION NMS AND DEVELOPMENTS IN MARKET STRUCTURES

## HEARINGS

BEFORE THE

## COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

ON

EXAMINATION OF REGULATION OF THE NATIONAL MARKET SYSTEM AND DEVELOPMENTS IN MARKET STRUCTURE, FOCUSING ON PROPOSALS TO MODERNIZE THE NATIONAL MARKET SYSTEM TO IMPROVE THE REGULATORY STRUCTURE OF U.S. EQUITY MARKETS

JULY 21 AND 22, 2004

Printed for the use of the Committee on Banking, Housing, and Urban Affairs

Available at: http://www.access.gpo.gov/congress/senate/senate05sh.html

U.S. GOVERNMENT PRINTING OFFICE

26–057 PDF WASHINGTON : 2006

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

RICHARD C. SHELBY, Alabama, *Chairman*

ROBERT F. BENNETT, Utah
WAYNE ALLARD, Colorado
MICHAEL B. ENZI, Wyoming
CHUCK HAGEL, Nebraska
RICK SANTORUM, Pennsylvania
JIM BUNNING, Kentucky
MIKE CRAPO, Idaho
JOHN E. SUNUNU, New Hampshire
ELIZABETH DOLE, North Carolina
LINCOLN D. CHAFEE, Rhode Island

PAUL S. SARBANES, Maryland
CHRISTOPHER J. DODD, Connecticut
TIM JOHNSON, South Dakota
JACK REED, Rhode Island
CHARLES E. SCHUMER, New York
EVAN BAYH, Indiana
ZELL MILLER, Georgia
THOMAS R. CARPER, Delaware
DEBBIE STABENOW, Michigan
JON S. CORZINE, New Jersey

KATHLEEN L. CASEY, *Staff Director and Counsel*
STEVEN B. HARRIS, *Democratic Staff Director and Chief Counsel*
BRYAN N. CORBETT, *Counsel*
DEAN V. SHAHINIAN, *Democratic Counsel*
JOSEPH R. KOLINSKI, *Chief Clerk and Computer Systems Administrator*
GEORGE E. WHITTLE, *Editor*

# C O N T E N T S

## WEDNESDAY, JULY 21, 2004



### WITNESSES



## THURSDAY, JULY 22, 2004



### WITNESSES

# REGULATION NMS AND DEVELOPMENTS IN MARKET STRUCTURE

**WEDNESDAY, JULY 21, 2004**

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
*Washington, DC.*

The Committee met at 10:46 a.m., in room SD–538, Dirksen Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

## OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman SHELBY. The hearing will finally come to order.

[Laughter.]

This morning the Committee will hold the first of two hearings examining Regulation NMS and its potential impact on market structure. I would like to acknowledge here the work of my colleague, Senator Enzi, in this area. Senator Enzi has already held a hearing on market structure in the Subcommittee on Securities and Investment. These hearings are intended to compliment the Subcommittee's work.

In 1975, Congress mandated the creation of a "national market system" and gave the SEC substantial discretion to facilitate the development of this system. Congress enumerated certain principles to guide the SEC, including efficiency, competition, price transparency, best execution, and direct interaction of investor orders. These principles constitute the core of our securities markets and serve as a guidepost for reform. At the center of the current market structure reform debate is the question of how to implement these principles in today's market and with today's technology.

Since 1975, competition and technological developments have transformed our securities markets. Technological innovations allow investors to obtain near-instantaneous execution of their orders. As our market structure evolves, the SEC must monitor these changes and ensure that the our regulatory structure continues to facilitate competition, innovation, and efficient price discovery without producing unnecessary fragmentation of liquidity. As we consider fundamental changes to our markets, I believe we must remain mindful that our markets are the deepest and most liquid in the world.

The stakes are extremely high in this debate. We have to first truly retain capital market in the world. Ordinary Americans enter the securities markets in large part because they believe that our capital markets are fast, fair, and reliable, and that their order will

receive the same treatment as an order submitted by a professional trader.

The current debate is an opportunity to modernize and improve a national system that has generated tremendous wealth for millions of ordinary Americans. The goal should be to define the world's premier price discovery and order execution system, without unwanted, unintended consequences.

On February 24, the SEC proposed Regulation NMS as a response to calls for reform. This regulation is an important step in addressing the need to modernize our markets and charting a course for future development. As always, we should be mindful of picking winning or losing business models in this debate. In the end, market forces should be the final arbiter.

I look forward to discussing these issues and others with Chairman Donaldson this morning.

On the second panel, following Chairman Donaldson, the Committee will hear from Mr. Robert Greifield, President and CEO, Nasdaq Stock Market; Mr. David Harris, Senior Vice President, Strategic Planning, American Stock Exchange; Mr. Edward Nicoll, CEO and Director, Instinet Group; Mr. Gerald Putnam, CEO, Archipelago Exchange; and Mr. John Thain, CEO, New York Stock Exchange. We look forward to your testimony here.

I would note that this is the Chairman's second appearance before this Committee in the last week. The Chairman may be looking forward to an August recess as much as the Members.

[Laughter.]

We certainly appreciate your time and willingness to join us.

Chairman DONALDSON. Thank you.

Chairman SHELBY. Senator Sarbanes.

**STATEMENT OF SENATOR PAUL S. SARBANES**

Senator SARBANES. Thank you very much, Chairman Shelby.

The United States has the most sophisticated infrastructure in the world through which investors can trade securities. Our market structure includes stock exchanges, electronic stock markets, broker-dealers that internalize trades, and alternative display facilities. In many cases, a company's stock can be traded in any of several competing marketplaces.

Modern computer technology has changed trading dynamics and enhanced market efficiency. New investment strategies are developing which take advantage of such technology. New fully electronic marketplaces, which process transactions in a fraction of a second, have developed and compete with auction markets, which historically have served investors well.

The SEC has the responsibility to monitor these developments and to ensure that the Federal regulatory structure promotes the efficient and fair operation of the secondary securities markets, while not stifling competition.

I commend Chairman Donaldson, the Division of Market Regulation, and the Commission for proceeding very carefully and cautiously in their consideration of this complex subject, with very full input from the interested parties. As the proposal notes, the Commission's review of these issues "has included multiple public hearings and roundtables, an advisory committee, four 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."

On February 24 of this year, the SEC proposed Regulation NMS, which addresses four subjects: The trade-through rule, access fees, prohibiting stock quotes in increments finer than one penny, and changing the formula for distributing data fees to markets.

The Commission gave the public an appropriately long comment period, which extended until June 30 of this year. It has received over hundreds of comment letters, including many thoughtful comments from market participants that would be affected by the rule. The Commission is now in the process of reviewing these statements.

Mr. Chairman, I join with you in looking forward to hearing the testimony of Chairman Donaldson—we are very pleased to have the Chairman with us—and the testimony of the representatives of the equity marketplaces which will follow, on the impact of the SEC proposals on the systems and on investors.

Thank you very much.

Chairman SHELBY. Mr. Donaldson.

**STATEMENT OF WILLIAM H. DONALDSON CHAIRMAN, U.S. SECRETARIES AND EXCHANGE COMMISSION**

Chairman DONALDSON. Thank you very much, Chairman Shelby, Ranking Member Sarbanes, and Members of the Committee, wherever you are.

[Laughter.]

Chairman SHELBY. They might be trying to get in the building.

[Laughter.]

Chairman DONALDSON. Thank you for inviting me to testify today on proposals to modernize the national market system for equity securities. I welcome your continuing interest in an issue of such vital importance to investors and the economy. The national market system encompasses the equities of more than 5,000 companies, which collectively represent more than $15 trillion in market capitalization. The Commission is committed to ensuring that investors have the fairest and most efficient markets possible for investing in these securities.

Since I appeared before you last October to discuss the state of the national market system, the Commission has made a great deal of progress. In February, we published for public comment Regulation NMS, a broad set of proposals designed to improve the regulatory structure of the U.S. equity markets. In April, we held public hearings on the proposals, and then followed up in May by publishing a supplemental request for comment to reflect a number of important matters discussed at the public hearing. In addition, the comment period was extended until June 30 to give the public ample opportunity to prepare their views. I might add that the updated figure is close to 600 letters of comment with the extended period, still coming in.

Consequently, this Committee's hearings on the national market system are particularly timely. Your consultation and oversight will provide a major contribution to the Commission's efforts as it moves forward in the rulemaking process. With your help, I am

confident that we will succeed in our efforts to assure that the equity markets continue to meet the needs of investors and public companies.

The Regulation NMS proposals encompass four substantive areas: Trade-throughs, market access, sub-penny quoting, and market data. My written testimony provides an overview of the proposals, and I look forward to answering your questions about those specifics.

First, however, I would like to take a broader view of the market structure issues facing the Commission, as well as the policy objectives that the proposals are intended to achieve.

When assessing the current state of the national market system, the starting point is to recognize just how well it works overall. The system needs to be modernized for sure, but it is far from broken. The U.S. equity markets have never been more fair and efficient for such a broad spectrum of investors than they are today. Since the national market system was created, investor trading costs have significantly declined. Not surprisingly, as trading costs have declined, the volume of trading has climbed inexorably upward. Indeed, our markets now routinely handle trading volumes that would have been nearly unimaginable just a decade ago. These are telling indicators of markets that are vibrant and healthy.

With all of this success, inevitably, come problems. In the past few years, in particular, a remarkable confluence of forces has strained the existing components of the national market system. These forces have included technological advances, of course, but also the arrival of entirely new security products and trading strategies. These include among others, derivative products, such as exchange-traded funds, which generate enormous trading volumes, as well as program trading in large baskets of stocks and statistical arbitrage trading. Moreover, the commencement of decimal trading in 2001 further transformed the equity markets. The number of quote updates exploded, and the quoted size at any particular price level dropped. Investors adopted new tactics to deal with the changed trading environment and found that they needed new trading tools to implement these tactics. In particular, investors have adopted automated order routing strategies that require exceptionally fast execution and response times from the markets. Finally, a variety of new, electronic markets have arisen that offer innovative trading mechanisms designed to meet the needs of those using the new security products and trading strategies.

The proliferation of fast, electronic markets simultaneously trading the same stocks as slower, manual floor-based exchanges have complicated the task of making sure that an investor order receives best execution. The Commission's challenge is to craft rules that reconcile different trading models without sacrificing the fundamental principle of assuring the best execution for investor orders. I believe this creates the conditions under which an investor can achieve the best available price.

In sum, the national market system needs to be modernized, not because it has failed investors, but because it has been so successful in promoting growth, efficiency, and innovation that many of its old rules now are outdated. Identifying and improving these outdated rules is the ultimate goal of the Regulation NMS proposals.

To this end, the Commission is engaged in an exceptionally open and interactive process. It has actively sought out the views of a wide range of market participants. There are few areas of securities regulation in which the considered views of practitioners are more needed than market structure.

When the Commission published Regulation NMS proposals for public comment, it fully expected the proposals would be revised and improved after hearing the views of commentaters. Indeed, the public hearing on Regulation NMS in April produced just such valuable suggestions for improvements that the Commission published a supplemental request for comment to incorporate some of these suggestions. This process is continuing. I fully expect that our review of the comment letters will promote additional improvements in the proposals as the Commission moves foward in the rulemaking process.

This process will be guided by those fundamental principles for the national market system that were established by Congress in 1975 and have guided the Commission over the years. While the particular rules and facilities that implement these principles may be in need of updating, I believe that the principles themselves remain as valid as ever. In particular, the Commission has always sought to achieve the benefits of competition, while countering the negative effects of fragmentation from trading in multiple markets. The national market system has promoted the wide availability of market data so that investors can determine the best prices, ready access among markets to obtain those prices, protection of investor limit orders, and the duty of brokers to obtain best execution for their customer orders.

I particularly want to emphasize the importance of price protection and encouraging the display of investor limit orders. These orders typically define the best displayed prices in a stock. They are a critical source of public price discovery that is essential to the efficient operation of markets. Competition among markets is a vital aspect of efficient markets, but we must also assure vigorous competition among the orders of buyers and sellers in a stock. If investor limit orders are neglected and trades occur at inferior prices without good reason, I believe that it harms both the particular investors involved and perhaps more importantly, the integrity of the markets as a whole. Small investors, justifiably, may not understand why their order is bypassed by trading in other markets. But many of the largest institutional investors have also stressed to the Commission that they believe enhanced protection of investor limited orders is one of the weaknesses in the current national market system that needs to be addressed.

I will conclude by addressing the future of the Regulation NMS rulemaking process. When I spoke to you last fall, I emphasized that the Commission intended to take action to address market structure problems. Many of the issues raised by the Regulation NMS proposals have lingered for many years, and caused serious discord among market participants. These issues have been studied, debated, and evaluated from nearly every conceivable angle. Few would seriously oppose the notion that the current structure of the NMS is outdated in some respects and needs to be modernized. I believe that the Commission must move forward and make

decisions concerning final rules if the United States equity markets are to continue to meet the evolving needs of investors in public companies.

Thanks again for inviting me to speak on behalf of the Commission. I submitted, as I said earlier, extended written testimony that discusses the Regulation NMS proposals. I look forward to answering your questions on the particulars of the proposal, as well as on any other market structure issues facing the Commission. Thank you.

Chairman SHELBY. Thank you, Mr. Donaldson. Your written testimony will be made part of the record in its entirety for all Members to read.

Mr. Chairman, the trade-through rule is one of the more controversial issues in the market structure debate. Why do you believe that the trade-through rule is essential to our securities markets, and would you just give us an example of what you mean by the trade-through rule?

Chairman DONALDSON. Again, the trade-through rule is a rule designed to counter the effects of a proliferation of markets so that when the best price is available, the orders are executed against that best price.

Chairman SHELBY. Give us an example of how this might work or it could work.

Chairman DONALDSON. Basically, if you have an investor who has put a limit order on the books, and that limit order is a national best bid or offer, however, is not the national best bid or offer, the trade-through rule allows or forces that the execution of that order to be done at the best bid, and does not allow the so-called trading-through of that bid, and basically does not allow an order to be executed without its exposure to the rest of the marketplace.

What the trade-through rule does and why it is so important is that it encourages investor limit orders by protecting these best displayed prices, the source of price discovery and efficiency. And of course, the inducement for somebody to place a limit order is the essence of a marketplace, and to try and get as much display, both of price and size as you can get, and there needs to be an inducement to do that, to stick your neck out, if you will, and the trade-through tule rewards people for doing that, rewards traders for doing that by preventing people from trading around that. It promotes the best execution of customer orders. Customers should receive the best price when it is accessible. I think that is the clear issue here this morning, the accessibility of that best price.

The problem here, as you know better than I, is to update our existing rules to reflect to so-called "fast markets versus slow quotes," and eliminate any existing advantage that the slow markets have. The fast quote approach, which has evolved from our original publishing NMS rules and then the conversations and discussions we have had, we are now giving serious consideration to the quote, if you will, the fast quote approach.

Do you want me to go on? You asked a fairly defined question.

Chairman SHELBY. That is fine.

Chairman DONALDSON. Let me just try to elaborate on that.

Chairman SHELBY. This goes to the heart of what we are talking about here.

Chairman DONALDSON. Yes. The issue is that, because of electronic trading mechanisms, we now have the ability to trade at electronic speeds, if you will. The traditional floor-based auction markets, in main, have a delay in terms of executing an order, so that they may display a bid that is the best bid, but the electronic market cannot get to that bid, and oftentimes when it gets to that bid, the bid has either disappeared, or the electronic market is unable to get their size done because somebody else has nibbled away at it, and that is the frustration of the electronic markets.

What again has come from the discussions that we have had and the modifications that we are now considering is the concept of defining electronic execution as the electronic execution of a posted bid offer, and what we are saying, and it seems to be open for examination, is that if, let us say, the New York Stock Exchange or the Chicago Stock Exchange, can create an electronic capability, an instantaneous trading capability that matches what the electronic markets can do, and if that electronic capability is untouched by human hands if you will, and if the order that is being shown, it can be reached at the speed of light or at some electronic speed, then that market will be competitive with the electronic markets, and there will no longer be the problem that the electronic markets have of getting through to the bid.

Chairman SHELBY. Are we not really interested in first integrity in the markets? You have to have integrity, efficiency in the markets for the markets to work.

Chairman DONALDSON. I am sorry. I did not get the first.

Chairman SHELBY. What we are really interested in, in the execution of orders, is integrity and efficiency, is it not?

Chairman DONALDSON. With a big underline on integrity. In other words, if the markets are efficient, but lack integrity——

Chairman SHELBY. I agree. I said integrity first.

Chairman DONALDSON. I am defining integrity as being the not pushing aside the best bid or offer. Integrity, and here again, I get back to what——

Chairman SHELBY. Or not trading for yourself ahead of your customers too, right?

Chairman DONALDSON. I believe we have to have a marketplace that has integrity for both institutional and individual investors.

Chairman SHELBY. Absolutely.

Chairman DONALDSON. I am going to leap now ahead a little bit. Maybe I should not, but I will, if you will let me.

Chairman SHELBY. Go ahead.

Chairman DONALDSON. To the theory here that if a quote is electronic, is accessible, and is untouched by human hands, then one would question why you would need to have an opt out rule. In other words, why should you have to opt out of that a system? The second part of this is that if in fact you have a quote that is not electronic and is so designated, then it becomes a slow market quote, and there one can say that you would want to have to eliminate the trade-through rules and allow trading through a slow market. In other words, a slow market should not be protected by the trade-through rule.

Chairman SHELBY. You are talking about the two proposed exceptions to the trade-through rule? For example, the opt out exception, how it would work, and also the Fast Market or Fast Quote exception?

Chairman DONALDSON. What I am suggesting, and again, we are in the very midst of trying to determine exactly how to do this, but what we are really talking about is a bifurcated kind of approach, where you have the access to the electronic speeds and so forth, but at the same time, at the customer's discretion, they can move their order into a slow quote market, and get some of the advantages that some of the slow markets basically give, and that would be price improvement and a gathering together of liquidity that comes in a slow market.

Chairman SHELBY. Mr. Chairman, I know my time is up, but I will be generous with the others. The over-the-counter market, it is my understanding, has never operated under a trade-through rule. If that is so, how will application of the trade-through rule impact the over-the-counter market?

Chairman DONALDSON. We have suggested that the trade-through rule be extended to the over-the-counter Nasdaq market.

Chairman SHELBY. So it would have an impact on what they do today.

Chairman DONALDSON. We are suggesting that the benefits that come from electronic and trade-through, as I described it, be extended to the over-the-counter market.

Chairman SHELBY. Senator Sarbanes, thank you for your indulgence.

Senator SARBANES. Thank you very much, Mr. Chairman.

First of all, Chairman Donaldson, I have been struck by how open and comprehensive your examination of this issue has been. As I indicated at the outset, it is quite a complex issue, but you have held these hearings and roundtables, as I understand it, as a consequence of some of the hearings. You did a supplemental request for comment, which went out. Have you gotten any complaint from any source that the SEC has not been fully open and accessible with respect to drawing comments? Because we want to be certain that no one comes along later and says, "We were not included in the hearing process." My perception is that there is not a problem in that regard, but have you gotten any complaints?

Chairman DONALDSON. I think this has been the most incredibly complete process. It is a process that has really been going on for a number of years, if you will. I mean it really preceded the actual focus we are bringing to it in the last year or so. There has been incredible outreach on the part of the SEC. There has been, I think, great participation by the industry in panels and open discussions and so forth, and now it has been augmented by studies that have been done, and now augmented by comment letters. I think it would be pretty impossible for anybody to say that they have not been heard.

Senator SARBANES. That leads, of course, to the next question, so to speak. I notice in your statement toward the end you say, "Although I cannot predict the outcome of the Commission's proposed rulemaking, I do believe it is extremely important that there be an outcome, and that the outcome be reached in a timely manner."

What is your view of what a timely manner encompasses?

Chairman DONALDSON. I just knew you were going to ask that question.

[Laughter.]

As I said, we have 600 comment letters. We have all the testimony and data that has come from the meetings and so forth. We are digesting that. I believe that we should be in a position to boil this down and come up with some refined rules before the end of the year.

Having said that, when we get down to refining these rules and get down to plugging in on some of the contentious areas that they are at, that does not mean that there will not be an even more focused attempt on the part of commentators to judge those rules.

But in terms of the desires of the Commission, it is to try and bring this thing to fruition just as soon as we can.

Senator SARBANES. In recent years the securities markets have seen the consolidation of some electronic communication networks and market centers. What effect do you believe the proposal will have on the structure or consolidation of the securities marketplaces?

Chairman DONALDSON. There has already been some consolidation, as you know, in the markets, particularly the electronic markets, as there is this tradeoff between the diversity and spread of marketplaces. Fragmentation is the buzz word, fragmentation of the markets. Basically, the pure theory of the best market in economic terms is when buyers and sellers get together and compete with each other. That is the definition. In theory, the best market in the world would be where everybody is competing, all the buyers and sellers are together, and that is true price discovery. Insofar as you fragment that, you lose something. Now, you gain something too. You gain some service aspects to these markets, some innovation and so forth that has come from competing markets, but you lose. So it is a trade-off, and to answer your question specifically, I believe that the natural forces, first of all, have caused some electronic markets to go out of business because they did not have a good model, and I think it has taken some other electronic markets into a merge mode with other electronic markets, and I think that is healthy because that moves it toward all buying and selling in one place, but it does not move it completely. We still have the benefit of the competing market factor.

Senator SARBANES. Let me ask you this question. I am trying to understand these issues, and I do not pretend to be an expert in them, but in the electronic marketplace you would not be able to have the specialist abuses that occurred which prompted the New York Stock Exchange and the SEC to take these enforcement actions.

Would that be correct?

Chairman DONALDSON. You are asking a question that is not that easy to answer, the second part of it, which is the abuses that occurred on the floor of the stock exchange, and I guess my attitude toward that is the model wrong or was the policing of the abuses wrong, and that to me is the issue.

Senator SARBANES. Would such abuses be possible in an electronic marketplace?

Chairman DONALDSON. Different kinds of abuses, yes.

Senator SARBANES. The types that we encounter here?

Chairman DONALDSON. Yes. I mean there are a whole series of practices, let us say, that prevail. I do not mean to damn them all, but there is a series of practices that prevail that give monetary incentives, if you will, to bringing orders to an electronic market. An ugly word is the rebate, but in essence, to attempt to get and induce buyers and sellers to get together in the electronic market, and one would question whether some of those payments are valid payments.

Senator SARBANES. The fact that it is executed automatically without human hands, which presumably on its face would address these questions that were raised on the stock exchange with the specialists—where they said executing orders for the dealer accounts ahead of executable public customer agency orders, and therefore, violating the basic obligation to match executable public customer buy and sell orders, and not to fill customer orders through trades from the firm's own account when those customer orders could be matched with other customer orders, thereby profiting from it, disadvantaging customer orders. On an electronic exchange with an instantaneous execution, this abuse could not happen. But you are telling me other abuses could take place. Is that correct?

Chairman DONALDSON. Yes. And again, without excusing in any way violations on the floor of the stock exchange of the trading rules, I would simply say that decimalization and all of the things that I referred to before in terms of changes brought about by new trading strategies and so forth, and the reduction of spreads to pennies and so forth, severely tested the price improvement backbone of the New York Stock Exchange, severely tested the speed of all of this, has tested the ability of the specialists to do their thing.

Senator SARBANES. That raises a question now about whether they can perform their function in terms of affecting volatility. As I understand it, the arguments for the traditional exchange is you get better price, or at least the argument is made that we get better price, and also that you are able to ease the volatility issues. Now, is that argument being undercut or weakened by the development of this very fast transaction ability now?

Chairman DONALDSON. Yes. I think in the following way, that if we had only electronic markets and did not have the liquidity improving and price improving capabilities of the so-called "slow market," auction market, specialist market, or whatever name you want to put on it, I think our central market would lose a great deal. Particularly in times of stress, particularly in times of violently up markets, or more particularly or more importantly, violently down markets, where liquidity can be created not only by the specialist himself or herself, but also the liquidity that the specialist brings to bear on the marketplace. You have a human being, and human beings involved in a real time situation. I am going to say something now that I hope is not misinterpreted, but it is too easy to turn off an electronic market. It is too easy to have gaps, particularly under times of stress, and this gets to also the difference in the way stocks are traded. I mean there are stocks on

the Nasdaq market, on the New York Stock Exchange that, as the expression goes, trade like water. I mean there really is no intervening function here. That is very different than the great bulk of stocks that have wider spreads, have less liquidity on both sides of the market, and have less trading volume, and require the gathering together of liquidity to make an orderly market. Having an orderly market is so important to our system, I mean the multiples that stocks sell at, that the quality of the stock and so forth is dependent on the orderliness of the market, and it is in particularly times of stress that this is so important.

Senator SARBANES. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Schumer.

**STATEMENT OF SENATOR CHARLES E. SCHUMER**

Senator SCHUMER. Thank you, Mr. Chairman. I want to thank you for holding this very timely hearing. I want to add my voice to that of Senator Sarbanes here, and I imagine yours too, Mr. Chairman, although I did not get to hear your opening remarks. The process which the SEC is using deserves a lot of commendation. It is open, and I think it is very aware, if you will, if a process can be aware, that these are very difficult issues, and that if you make the wrong turn, you could do something terribly damaging that you might not recoup. I thank you for the care with which you are going through.

I know there has been a lot of pushing: Change quick, change quick. I worry about that. I worry because, again, our market system, you put it very well. It is far from broken, but it needs changing. Technology always introduces change. But technology is not the end-all and be-all, because if we were to have the most technologically efficient market, the quickest market, and yet it was not as transparent, it was not as deep, it became fragmented in six different places, and it was opaque, my guess is the number one thing that has made American markets the envy of the world and why trillions of dollars come here, that people know it is open and on the level, would be gone.

So, I think we have to be careful, and I do not think we should be involved in this technology mania. We have to adapt to technology, no question. If we do not, we will lose. But at the same time, we have to be mindful that there are a lot of other benefits here that are part of the market.

I would just like to mention a few. Because of whatever it was, broken water main, I did not get a chance to make a few points, and then I will ask a question or two with the Chairman's indulgence.

Chairman SHELBY. Go ahead.

Senator SCHUMER. First, best price is still, if you had to pick one thing, speed or best price, you would want best price, and let us take a look at the small investor. My father is a small investor in stocks. He has been doing this for years. When I was a little kid, I remember all those little booklets, you know, things I never heard of, Buckby Meers coming to the house, and he would pour over them.

Senator SARBANES. I thought you read them all.

[Laughter.]

Senator SCHUMER. No. The amount of time he put in.

Senator CORZINE. Are you trying to think of the term "prospectus?"

Senator SCHUMER. Prospectus, that is it. It was not prospectus, no. They were the annual reports. That is what they were.

But in any case, the amount of time he put in compared to the amount of money he made, made it not a very good investment, I think. But he wants best price. I asked him the other day. He is 81. Knock wood, he is still doing this, still spends time, to my mother's chagrin, at the desk looking at all these reports and stuff and figuring out things. He does not care if it takes 3 seconds, 10 seconds, or 2 minutes. He wants best price, and I do not think we should abandon the small investor.

I understand that the big boys may want it another way, but as you so well put in the answer to Senator Sarbanes' question, for both many stocks and even for larger stocks, you have to be mindful of both. So that is one point I would make.

Then there is a more fundamental point. By the way, the AARP surveyed in their investors, and they found that two-thirds said that price, not balancing price with speed, was their number one priority when trading, and that is whether they are trading IBM or some tiny little stock.

Second, I greatly worry about fragmentation of the market, and the concomitant opacity. We could make a change here. No one can fully predict what will happen. Instead of one deep liquid market, you get six little markets. That could really lead first to a failure to get best price, but second, if each market is not so deep and so liquid—I understand capitalism. I know there are people in the audience who say: Give me my chance. But we have a greater good here, and the greater good is one deep, liquid market, and we could end up losing that to some other country. As somebody from New York, the financial center of the world, I hope we do not roll the dice in that regard, even though I know people are pushing. I have read all the stuff and heard all that from all these people who were pushing.

Fragmentation is my greatest worry, and again, that means moving with care. Competition is good and there is a tension between competition and depth in liquidity. Be careful.

Finally, again, I want to get to opacity. Senator Sarbanes mentioned that a specialist can take advantage. Sure, but you put it well. Is it the system or the individual specialist? A broker-dealer can also take advantage, and we are not hearing, because we have had charges against broker-dealers here and there, that we should get rid of that system. In fact, I would say in an open auction system rather than a closed system where things can be reported under the screen and much later, you have a greater chance for those scoundrels, if you want to call them that, to take advantage of the system.

I think again your approach has been great. I worry about opt out. I think opt out could undo all the things you are talking about here, all the things I am talking about. I know that some of the big boys want to opt out. I wonder if it is really speed they are after, Mr. Chairman. I think they want opacity. I think they want to hide their trades. Some of that is legitimate. I understand if you

are trading a huge amount you want to maximize what you can trade it at and not tip your hand. But with opacity comes the problem that more illicit things can happen, and comes the fact that people may be taken advantage of and not either get best price or quickest trade.

So, again, these are balances here, and the simple notion that I know that a few of the Commissioners have, just let a thousand flowers bloom, let everybody just do what they want. Well, in the 1890's that argument made sense, and we have had 100 years of history, maybe 200 and something since the buttonwood tree. I do not know when the buttonwood tree was. We have learned that the balance is important, the balance between technology and regulation, the balance between opacity and openness, the balance between all of these things. So, I just hope that you will be careful because I think the Opt Out Rule, is a little bit of a disguise here to undo a lot of the other things that you are trying to do. Fast market-slow market, that makes eminent sense to me, and I think you should have that, but you opt out and you have large players opt out, and you can end up with the fragmented market system that we have, and even worse, an opaque system where there is no ability to police, or there is policing after the action, et cetera. I believe you are right on trade-through in this Regulation NMS, and it is fine to have it for Nasdaq too, but not opt out. I would be really careful before going to opt out.

Maybe I will let you comment on what I had to say since it was a little longer, but I feel this issue quite passionately.

Chairman DONALDSON. There are several words that you use that are in my view right on; the word balance, the word protecting individual investors. We have a unique situation in this country as you all know, which is that we have more participation by individual investors than any other market in the world, and it is interesting to me how many institutional clients have told us in their filings how important it is to maintain the diversity of individual investors in a marketplace, and there is no other market in the world that has that the way we have it, no other industrialized society.

I think it is hard for small investors to feel like they are not up against it if a big institutional investor sweeps through the marketplace and bypasses the individual. I think we have to protect against that.

Having said that, the Commission's role here, as I see it, is to try and modify this marketplace so we get a combination that addresses some of the issues that you are saying, but also addresses some of the issues that come from large institutional investors of all sorts who claim that their ability to get to the best bid or offer is inhibited. By the time they get there, they cannot get their trade done because the bid is no longer there, all legitimate, in my view, complaints, and I think the bifurcated structure that maybe we are heading toward, where you have eliminated a lot of that by the electronic capability of some of our auction markets, but at the same time by signaling that some of those electronic bids do not qualify to be classified as electronic.

Senator SCHUMER. Right.

Chairman DONALDSON. You can designate this on the tape, and therefore, they go into the slow market mode for whatever reason, and then in the slow market you are able to get some of the benefits of the auction process. And I just want to assure you in terms of your comments that we are not wedded to any particular market structure. We are wedded to benefits the different market structures have, and ways of doing business and the different demands of institutional investors versus individual investors.

Senator SCHUMER. Do you worry about fragmentation?

Chairman DONALDSON. We are worried about fragmentation, and we worry about opt out too. The concept of opt out, again, I go back to asking the question that we are asking ourselves, which is if this electronic, instantaneous capability can be developed by the so-called "slow markets," then what do you have to opt out for?

Senator SCHUMER. Exactly.

Chairman DONALDSON. It is totally competitive with the electronic market.

Senator SCHUMER. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Corzine.

**STATEMENT OF SENATOR JON S. CORZINE**

Senator CORZINE. Thank you, Mr. Chairman. I appreciate you holding this hearing, and I must say, for someone that worked for more than a quarter of a century in this market, this is a tough issue. This is not the kind of thing that I think there is a how-to manual or obvious perfect solution. So, I compliment the Commission and the Chairman for the thoughtfulness and the dedication to fully exploring all of those elements of balance appropriately. I wish it were obvious exactly how this works.

I do have some questions that go at what is reality. Can we put together all of these various markets electronically now?

Is it technologically real, aside from the fact that we are going to start in a particular order that is designated for a slow market process. Is it something that actually can be done technologically now? Do we have the engineering capacity to put all of these markets together?

Chairman DONALDSON. To connect them electronically, yes, I believe this can be done. I think the technology is cascading. I think that one of the problems, on a trade-through thing, is the antiquated ITS system that does not connect the way it should.

On the other hand, I think there are new programs being written where bids and offers can be blasted to the best market electronically, and therefore the Government or the industry itself can solve some—the Government does not have to get involved, and the industry can get after the failings of the ITS system by privately linking in an instantaneous linking of these markets, so that orders go directly to the best-bid market and solving——

Senator CORZINE. So, if you put down a rule that said we are going to implement in 2 years, you could transition, on an engineering basis, to an appropriate technological response which, in many ways, deals with the fragmentation question, if I am not mistaken. In theory, if you can get all of these markets hooked into the same box, you all have to come in, you have to homogenize how they come into that box, but I presume that if you get all of those

things hooked together, you actually could have a common market and sort to the best bid, best price or best offer, best execution.

Chairman DONALDSON. You know, I do not want to overestimate the technology. I will say that it has been indicated by some of the so-called "slow markets" that they are able to create a fast market and can do it I think the quote was: "faster than we can pass a rule," and I think we are seeing movement now in the place of——

Senator CORZINE. I compliment those initiatives because, in fact, best price is an important piece, but it only goes to the amount of transaction that is executed at the best price. You also have to look at, if you want to sell a thousand shares, but you can only do 100 shares at the best price, and by the time you get the second 900 shares executed, you get a lousy price for the balance of those, you may not have gotten, in total, the best price on how this happens. Has the Commission examined whether you could show the full book of bids in price order so that people would understand the depth, as well as the speed, of how you get to best prices?

Chairman DONALDSON. I would not say that the Commission has devised it. I would say that the Commission has done its very best to talk to everyone that thinks they have devised that thing.

I think that there is a legitimate argument here for the institutional trader who says that, for me, the best price is not 100 shares that shows for me. It is the average price I get on executing a huge order, and therefore I have to go down until I get my whole order and that best execution is the average price I have on that whole order.

There is a lot of legitimacy to that point of view, and I think——

Senator CORZINE. By the way, a lot of those institutional investors actually represent retail investors through mutual funds and pension funds.

Chairman DONALDSON. Well, you did not let me get to that. But I have difficulty, even in that instance, thinking that that one 100-share order that had the courage to post it, post a limit order, does not get executed. And let us say it is Senator Schumer's father there who posted that order, and all of a sudden transactions take place, and he had the best bid and did not get it.

Senator CORZINE. But is that not a technological issue about how you queue up to execute to a certain price to a limit order to accomplish——

Chairman DONALDSON. Yes. It gets very technical as to how you do that, and I think we have the seeds of operating outside of the electronic automatic capability. I think we have the seeds of allowing people to go into that market, into the slow market, and get the benefits of it.

Senator CORZINE. But if I understand this right, the opt out rule is designed so that potentially Senator Schumer's father's 100-share order does not get executed. That is the end result of it. The go to the size execution.

Chairman DONALDSON. Well, let me say that the dangers of opt out are that at least two people get hurt. They get hurt, the people who had the best bid and offer and the transaction is not done, it is opted out, and it is not done at that price. You are leaving a best bid on the books of a place like the New York Stock Exchange. That person is hurt. You have two sides of the trade and, in effect,

to take it to back in days when I was active in the business, and when you were, you know, we used to talk about doing the trades in the closet, doing off-market in a closet and so forth.

Electronics has changed a lot of that, but there are serious—serious, in my view—aspects to a random opt out, and I think we have to, if we still need it—and I think on the electronic side we are not going to need it I think we have to think very hard about what, if any, parameters or limitations we put on that.

Senator CORZINE. I am trying to be agnostic here, although I think the opt out rule sounds unfortunate because I would rather see a rule that takes into account the queuing, both on time and size, so that you could execute a total order, which is essentially what a block trade would be, with somebody outside the market, they pick a price that they think they can execute the overall transaction back through those exchanges.

The opt out rule strikes me it has a lot of—I hate this term—unintended consequences about leaving out Chuck's father and not getting to the best price even for the institutional investor because you are leaving out some of those better-priced bids and offers in computing the average. You are going to wherever the size is, which would be a very hard thing to I think justify after the fact, at least on person's point of view.

So I think, again, fragmentation you believe we can accomplish by—I want to get this on—that the technological framework is there for the various marketplaces, people have to meet certain standards and questions about opt out, but acknowledging you need some balance with regard to the depth and size of markets. I am hearing the concern of the Commission with regard to making sure that depth is there as well.

Chairman DONALDSON. Again, what I was, I mean, it is possible now to send, as you know, to simultaneously deliver a whole batch of orders to the best markets all at once, electronically. The order delivery systems in many of the brokerage firms are such that they can blast multiple orders out electronically. And I think that solves a lot of the problems associated in a market trading system which is limping along.

Senator CORZINE. I know my time is up. Mr. Chairman, this is——

Chairman SHELBY. It is a very important issue.

Senator CORZINE. It absolutely is—tricky to a fault, though, because of sometimes best price and depth of execution are in conflict with each other, and we need both of those. When you asked about integrity——

Chairman SHELBY. Tell me, I know we have to vote, and the time is running—they are holding it for us—but the best price and execution and conflict, give us an example.

Senator CORZINE. Well, I go back to the thousand shares. The best price execution for a thousand shares might not reflect that. Chuck's father did not get the best execution on his 100 shares if you have opt out. So it strikes me that there is another algorithm that one wants to look for that takes in Chuck's father, but gets at the depth. Anyway. Good luck.

[Laughter.]

Chairman SHELBY. Mr. Chairman, thank you for your appearance here today. We have to vote. Our time is running. We thank you. We are going to recess for a few minutes, let us go vote, and we will go back on the second panel.

Thank you a lot.

Chairman DONALDSON. Glad to be here. Thank you.

Chairman SHELBY. We are in recess.

[Recess.]

Chairman SHELBY. The hearing will come back to order, and if the second panel will take your seats. Most of you know this is the way the Senate operates. We were slow getting started today and will be here all night probably, but I hope we will not be here all afternoon.

All of your written testimony will be made part of the record in its entirety. We have a lot of things going on in the Senate, as you know today, and everybody cannot be here, but their staffs will see and will review your testimony.

We will start with you is it "Greifeld?"

Mr. GREIFELD. Greifeld.

Chairman SHELBY. We will start with you, and if all of you could sum up your testimony in about 5 minutes or less, we would appreciate it very much. It will give us a chance to have a dialogue. Thank you.

Mr. Greifeld.

**STATEMENT OF ROBERT GREIFELD**
**PRESIDENT AND CHIEF EXECUTIVE OFFICER**
**NASDAQ STOCK MARKET, INC.**

Mr. GREIFELD. Thank you. I certainly have to go away from my prepared remarks because it says "Chairman Shelby and Members of the Committee." So, Chairman Shelby, I certainly appreciate the opportunity to be here today and thanks for the invitation.

Nasdaq is the pioneer of electronic trading. We started electronic trading 30 years ago. Today, the rest of the developed world has transitioned to the electronic model. The New York Stock Exchange is the only market that relies on the foot speed of its participants. I had a great opportunity to see the Olympic trials last weekend in Sacramento. The runners there were incredibly fast. I have been on the floor of the New York Stock Exchange. The brokers there are not so fast. The foot speed-based market exists because we have rules that have protected their monopoly position.

Through the good work of Chairman Donaldson and the Commission we have Reg NMS. This represents a bold attempt to move the U.S. markets forward. Nasdaq is the model that the rest of the world has copied. How is Nasdaq performing for investors in this country? Companies that come to market are choosing Nasdaq as their market of choice two-thirds of the time. Most notable is the choice that Google recently made to list on Nasdaq.

These companies have very good reasons to choose Nasdaq. In the S&P stocks, Nasdaq stocks have a spread of 1.17 cents compared to stocks on the New York Stock Exchange of 1.8. Our speed of execution is about 5 seconds versus theirs of 18. Our quality of execution, that is, how often we print at or inside the spread, is 92 percent compared to 82 percent. This data is derived from data

mandated by the Securities and Exchange Commission. In addition, large companies on the Nasdaq Stock Market experience reduced volatility, as compared to the New York Stock Exchange when you measure that volatility by the midpoint of the quoted spread, which is the proper way to do it.

Nasdaq is the standard that the world has copied, and we now see statements from New York that they also want to emulate our electronic market model.

Now, when we think about Nasdaq, we realize that we do not have a trade-through rule on the Nasdaq Stock Market. Investors have prospered as a result of that. In attempting to fix the problems of the New York Stock Exchange, we should not impose a trade-through rule on the trading of Nasdaq stocks. Let us not fix what is not broken. The intention of Reg NMS is to modernize the New York Stock Exchange.

As you read the comment letters of all of the interested parties, we see their arguments, their self-interests being elevated to the high moral ground. We also see clever turns of logic linking their institutions, their self-interests with the American flag.

We also hear very clever turns of phrase, where competition is distorted through negative terms, meaning fragmentation or internalization. In the Nasdaq market, we have competition. The competition has been good for individual investors and institutional investors. My competition is here at this table today—Jerry and Ed, representing Arca and Instinet. I do not consider that fragmentation. I consider that competition that has resulted in a good outcome for investors.

We also see during this debate self-interested parties adopting radical theories of how the sky will fall if their positions are not adopted. And as this Reg NMS process has gone on, we see increased self-importance from the commentators, we see increased aggression, and for those of us who were here at the last Congressional hearing in New York City, we see some general silliness that comes from the interested parties. Hopefully, we can all stay above that level today.

But, in fact, if you do separate the rhetoric, the posturing, and the hyperbole, the real message is that the parties essentially agree on what our responsibilities are to investors. We must encourage and protect limit orders. We must provide access to best price. We must provide certainty of execution that comes with speed. In fact, this destination is not in dispute, and the road that we have to take to get there is actually not in dispute. We all agree that on this road, limit order protection, best price, and certainty through speed is important.

We also agree that on this road there is a slow lane that investors can bypass by their choice. What we are really debating is whether investors in the middle lane of this three-lane highway have the right to decide if they can opt out and travel with the fast cars in the left lane.

When I think of this issue, I do not think of it in terms of trade-throughs or the opt out. I think of it in terms of a market-based approach or a rules-based approach, and I say that in the context of the fact that the SEC has complete and total regulatory control of our market. When we think about a rules-based approach, we

certainly see certain advantages, and when we think about a market-based approach we see other advantages.

I have formed my opinion on this question through basically the years of experience I had running a technology business. I had customers for 14 years that were the institutional and professional traders. All these traders were concerned with the speed of the service that I provided to them. They expressed that concern through contractual requirements: One was I had certain customers request immediate right to cancel the contract if they were not happy with the service. The other type of customer wanted to specify in great detail what service level they wanted from the services that I provided.

As I contemplated Reg NMS and this trade-through rule, I said how were my customers, over that 14-year period, best served? And it was clear to myself and everyone else involved, the customers that were best served were the customers that had the right to leave my service when they were dissatisfied with the service. The customers who had contractual protections were less covered by the contract since one can never contemplate every particular permutation or thing that might happen to impact that particular service.

And when I think about what happened with my customers, those that had the right to walk away, we operated with a philosophy that the customer is always right. Those customers that had a long and detailed contract, we operated by the letter of the rule of the contract. Clearly, it is our opinion we are better off operating when the customer is always right.

When I ran these technology businesses, I had responsibility for several hundred customers. Here, as the head of the Nasdaq Stock Market, we operate on a broader stage. It is of critical importance to millions of investors that we get this right.

I am probably alone in stating that we could adopt a rules-based approach or a market-based approach and get to the same destination to protect investors, for our fundamental job here, and we are chartered to this, is to find the best way to get there.

Clearly, a market-based approach results in a higher standard and really the key fact we have to look at is Nasdaq has served as that laboratory. We do not have a trade-rule in the Nasdaq Market, and because of market forces people do not trade through. The New York Stock Exchange has a trade-through rule, but it is written in the rules. And as a result of that, people find a way around that, and they do trade through.

A key point I also want to make is the time is long overdue. The electronic markets arrived in Europe and the Far East a decade ago. It is time for us to step forward and move forward with these decisions.

Thank you.

Chairman SHELBY. Mr. Harris.

**STATEMENT OF DAVID F. HARRIS**
**SENIOR VICE PRESIDENT, STRATEGIC PLANNING**
**AMERICAN STOCK EXCHANGE, LLC**

Mr. HARRIS. Thank you, Chairman Shelby, and thank you for inviting the American Stock Exchange to appear before you to present our views on the important issues raised by Regulation

NMS. Before I discuss our position on the SEC's trade-through proposal, let me briefly describe the unique place that the Amex holds in our equity markets.

The Amex is the premier auction-based market for small- and mid-cap companies. These companies are headquartered across the United States and are diverse not only in their line of business, but also on how actively their securities trade. For example, while some of our listed stocks trade actively in the millions of shares a day, the stock of many other Amex-listed companies trade far less frequently, with 50,000 shares being considered a busy day.

Over the last decade, the Amex has also created and nurtured many innovative financial products, including exchange-traded funds, commonly known as ETF's. An ETF is, in effect, a basket holding many securities which, while trading like an individual stock, is price-based on all of the underlying stocks in the basket. The Amex introduced the first ETF, known as the Spiders, 11 years ago, based on the S&P 500 Index. Since then, ETF's have become a whole new class of securities, growing to more than $166 billion in assets. More than 90 percent of all ETF's are listed on the Amex, including two of the most actively traded securities in the world—the Spiders and the QQQ, which is based on the Nasdaq 100 Index.

Why do small- and mid-cap companies and issuers of innovative financial products choose to list on the Amex? We believe, because of the level of service and support we provide to our issuers, as well as the unique benefits offered by our market structure, which, through our dedicated liquidity providers, is designed to maximize price discovery and a potential for price improvement.

Of equal importance are dedicated liquidity providers who minimize price volatility caused by temporary order imbalances, in other words, the lack of natural price liquidity, by buying, using their own capital when there are not enough buyers and selling from their own inventory when there are not enough sellers. Thus, these dedicated liquidity providers are traders of last resort that moderate price movements until a natural price equilibrium is reached, where once again buyers and sellers can meet.

Because of the diverse securities that list and trade on the Amex, some of which are actively traded, some of which are price based on underlying securities, but most of which are neither, we believe we can offer a unique perspective on market structure.

Now, let me turn to the most controversial of the proposals contained in Regulation NMS, the trade-through proposal.

For over 20 years, to facilitate best execution, provide nationwide price protection, and increase competition, securities listed on the Amex and the New York Stock Exchange have traded with a best-price guarantee. This is commonly known as trade-through protection. Trade-through protection simply prohibits one market from executing a trade at an inferior price when another market displays a better price for the same security.

The Amex supports a proposal to extend trade-through protection beyond exchange-listed securities to all national market system stocks. For exchange-listed stocks, trade-through protection currently guarantees that all investors, large and small, novice and sophisticated, all obtain the best price regardless of the market or where those orders are sent.

Equally important, trade-through protection encourages competitive price discovery across markets by ensuring that an investor who enters the national best-price limit order does not have his or her limit order ignored. Thus, we believe in a uniform trade-through rule, with the best price assurance it affords, provides critical investor protection and enhances investors' confidence in the fairness and integrity of the U.S. markets.

As part of Regulation NMS, in addition to establishing uniform trade-through rule, the SEC also proposes creating two new exceptions to the trade-through rule, the first of which turns on whether a particular market or its quotes are automatically accessible.

The SEC contends that this proposed exception is designed to reflect the comparative difficulty in accessing quotes from nonautomated markets and to adjust the trade-through requirements for those difficulties. We oppose the version of the exception that would allow all markets that are automatically accessible, so-called fast markets, to trade through better price quotations on markets that are not automatically accessible, referred to as slow markets.

Regardless of whether the particular quote at issue is, in fact, readily accessible, we believe that the fast market/slow market dichotomy is overbroad and not sufficiently tailored to address the concerns about inaccessible quotes. However, the alternative version of the exception, which focuses on individual quotes rather than entire markets, appears more appropriately gauged to address the concerns about inaccessible quotes across different markets.

Therefore, subject to an appropriate and responsible industry-wide roll-out through a pilot program, we support a quote-by-quote exception that would allow a market participant to trade through, up to certain limits, the better priced, but inaccessible quote, of another market.

We support a pilot program not only for public policy reasons, but also for practical considerations.

First, the quote-by-quote approach recognizes that securities with different characteristics trade differently. We at the Amex know firsthand that actively traded securities trade differently than inactively traded securities. Thus, we believe focusing on quotes, rather than entire markets, allows more flexibility for market centers to compete, notwithstanding the different market structures that cater to different types of listed companies and securities.

Second, the quote-by-quote approach lends itself more easily to responsible, industrywide roll-out, requiring immediate automatic accessibility of quotes as a precondition for trade-through protection is a dramatic industrywide change.

In some regards, developing and implementing the relevant technology is the easy part. The more difficult challenge is to create an effective hybrid model that responsibly integrates automatic execution functionality into different types of market models.

Further, one type of hybrid model may not be optimal for all equities. For example, the appropriate hybrid model for the most actively traded securities is unlikely to be the optimal model for the less-liquid securities which rely on price discovery. Therefore, we support phasing in the quote-by-quote exception, starting the most actively traded securities and progressively expanding the exemp-

tion to less-actively traded securities. Sequencing the implementation of a quote-by-quote exception provides two benefits:

First, sequencing allows all market participants to make required technological and business model changes which are very substantial in terms of time and money.

Second, of equal importance, industrywide phasing in of the exception would provide empirical evidence on whether the exception creates unintended consequences, such as increased spreads for illiquid securities, decreased execution quality or increased volatility and perceived disorder.

Armed with empirical data, while phasing in a pilot program, would allow the Securities and Exchange Commission to respond to and adjust for any unanticipated consequences that might undermine investor confidence, increase the cost of capital, or discourage the development of innovative products.

As to the second proposed exception to the trade-through rule, we have very serious concerns about and oppose the proposal to allow institutions and other traders to opt out of the best price protection offered by the trade-through rule. Under the current proposed opt out exception, institutions and traders wanting to sacrifice the best price for themselves or their customers could, but those trades would occur at the expense of other investors who, without their consent, would have had their better-priced limit orders passed over. Thus, in effect, the proposed opt out provision allows the interests of a small group of traders who prefer speed to trump the interests of the vast majority of investors who are most interested in receiving the best price.

In any event, if the quote-by-quote exception to the trade-through rule is adopted, we see no reason why anyone should be allowed to trade through an automatically accessible better price. To allow otherwise, risks creating a two-tiered, disorderly market, which we believe will undermine investors' confidence in our equity markets.

In the coming weeks and months as the debate on market structure and proposed Regulation NMS continues, we urge remembering that the important and unique role option markets and their dedicated liquidity providers play in facilitating capital formation for the small- and mid-cap companies and in nurturing innovative financial products. In our view, when it comes to market structure, one size does not fit all. And when in doubt, the best price for the ultimate investor must trump all else.

I will be honest. I am relatively new to the Amex, and so before I came I had never heard of the trade-through rule, and I found it very difficult conceptually to my hands around and understand what it is. So, for me, getting an example of what it actually means on an individual investor basis was critical. And so we picked a company that is listed on the Amex, which coincidentally is in Jasper, Alabama.

Pinnacle Bancshares, and Pinnacle is a small company in Jasper, Alabama, that extends mortgage loans to retail customers, and yesterday, it was trading at $15.75.

Chairman SHELBY. I own none of it.

[Laughter.]

Mr. HARRIS. Then I will be the owner.

Chairman SHELBY. Okay.

Mr. HARRIS. Let us say hypothetically, I have owned Pinnacle Bancshares for 5 years, and I think when the price reaches $17, it is time for me to sell. So I put in a limit order to sell Pinnacle Bancshares at $17. I am an ordinary person, so I am not watching my stocks every day. My limit order goes in, and lo and behold, Pinnacle Bancshares rises to $17, but I am not really paying attention.

Theoretically, at a given moment, I am the best price to buy Pinnacle Bancshares, because I am the lowest-price seller. At that very moment, there is a person who is interested in buying Pinnacle Bancshares. But if there is no trade-through rule, that person can get executed at $17.03, at a price worse than I am willing to sell, and my price goes unexecuted.

At the end of the day, when I log onto my computer, and I see the daily range for Pinnacle Bancshares, I think to myself, hey, it traded up to $17.03, and I should have been executed. So I go, and I check my brokerage account, and lo and behold, my limit order was not executed. And unfortunately for me, during the day, the price of Pinnacle fell back down to $16.75, so I missed out on my opportunity to trade, and I was a victim, because the trade-through rule did not protect me, and another person was cheated generally, because he paid more than he could have paid had there been a trade-through rule.

And that, for me, kind of crystallized the danger here, and I heard the exchange that, you know, institutions are representing the mutual funds, and mutual funds are representing the people, but the reality is 52 percent of all order flow comes from retail customers, so this is not an unsizeable group of people. And if this occurs even 20 percent of the time, you know, very quickly, lots of people will be disadvantaged.

Thank you.

Chairman SHELBY. Thank you.

Mr. Nicoll.

**STATEMENT OF EDWARD J. NICOLL**
**CEO, INSTINET GROUP, INC.**

Mr. NICOLL. Chairman Shelby, Ranking Member Sarbanes, thank you for having me.

My name is Ed Nicoll. I am the CEO of Instinet Group. Through our affiliates, we provide sophisticated electronic trading solutions that allow buyers and sellers worldwide to trade securities directly and anonymously with each other, interact with global securities markets, have the opportunity to gain price improvement of their trades, and lower their overall trading costs.

What I would like to do, if it is okay with the Committee, is to submit my original testimony to you in writing, and I would like to make some comments.

Chairman SHELBY. It will be made part of the record without objection, all of it.

Mr. NICOLL. Thank you very much, Mr. Chairman.

I just have to try and make a few comments about some of the points that have been made before me. I think it is extremely important to keep in the back of your mind that we do not have a trade-through rule in the Nasdaq marketplace. All of these parade

of horribles do not occur in the Nasdaq marketplace. Let us talk about retail investors. The majority of retail orders today are in the Nasdaq marketplace, yet there is no trade-through protection in the Nasdaq marketplace.

In the example that was just given by Mr. Harris, he supposes that somebody would deliberately pay more for an order than his offer. It is not in somebody's interest to pay more than his offer. As long as we have a rule which makes sure that his market is accessible and is transparent, and people see that there is an offer out there for $17, it does not make an awful lot of sense that somebody is going to pay $17.03 for an order when it is available to everybody at $17.

There has been an awful lot of talk about protections of limit orders, and the SEC here says that this is paramount in their thinking; that we need to protect limit orders; and that a trade-through rule protects limit orders. But they make no necessary connection between those two statements. One would think if a trade-through rule protects limit orders, that we would have a lot more limit orders on the New York Stock Exchange than we have in the Nasdaq.

Yet my facility, the INET Alternative Trading System, only accepts limit orders. That is it. We trade every day 25 percent of the Nasdaq. Today, we are the largest single pool of liquidity in Nasdaq. After Bob buys one of my competitors, we will be about the same size. But we only trade limit orders. I would think that the SEC, if they thought that the trade-through rule protected limit orders and therefore incentivized people to place more limit orders in a market with a trade-through rule than one without one that they would do some kind of empirical study to see how many limit orders are placed in the Nasdaq market versus how many limit orders are placed on the New York Stock Exchange.

I am not aware of any study that has been done. The SEC has the power to fairly quickly aggregate, for instance, the number of retail orders that are placed in both markets and the percentage of limit orders to market orders. We can do this work. We can see if, in fact, there is any correlation between a trade-through rule and the protection of limit orders.

If the logic is correct, ECN's should never have aggregated the volume that they did, because ECN's are limit order mechanisms. They aggregate limit orders; they display limit orders; and when they touch, they create a match and an execution in an ECN. ECN's advertise those limit orders within the Nasdaq marketplace, but there is no obligation for anybody to interact with those limit orders. Nobody has to come and take an order off of the INET ECN in Nasdaq. They can trade right through and go to a dealer if they want to, but they do not.

Why do they not? Because markets work. People act in their self-interest. They buy at the best price that they can and they sell at the best price that they can. We rely upon these market forces everywhere else; yet, it is ironic that my competitors, who are at the heart of capitalism, do not believe that these market forces will work in the securities markets.

And Nasdaq has shown that they do. We have evidence before us that we can look at, and we can see. The SEC's own mandated sta-

tistics show, as Bob just said, that Nasdaq markets actually have better statistics from the SEC's point of view than the listed marketplace. I am not here to say that one model is better than the other. In fact, our position is that the models should be free to compete. When you link these models together artificially; when you create a complex web of rules that is necessary to link these models together, they cannot compete. There is no reason to do that; there is every reason to believe that competition will shape the markets in accordance to the preferences of the consumers in the securities markets just like competition shapes markets elsewhere.

Thank you.

Chairman SHELBY. Mr. Putnam.

**STATEMENT OF GERALD D. PUTNAM CHAIRMAN AND CEO, ARCHIPELAGO HOLDINGS, LLC**

Mr. PUTNAM. Good afternoon, Chairman Shelby and Ranking Member Sarbanes. Thanks for having me here this afternoon.

I am Chairman and CEO of the Archipelago Exchange. We are an all-electronic stock exchange. And I think I would just like to start that there have been a couple of things that have been said here today, and I will echo some of what Bob and Ed just mentioned. But one, the idea that fragmentation is a potential problem in the listed world. In the over-the-counter world, there are three of us today who compete head-to-head. We have great linkage; we do not have a trade-through problem, and through that linkage and competition, we have no fragmentation.

The idea that liquidity is not as good on an electronic stock exchange as it is on a floor-based, manual exchange, the evidence simply is not there. There is actual proof to the contrary. When Enron announced its problems, the New York Stock Exchange stopped trading for about an hour and a half. The electronic markets continued to trade. There were not big gaps and spikes and distortions in the price of Enron stock; it continued to trade.

For the most part, when you compare the two marketplaces, the electronic world is mature enough now that we find the liquidity in stocks on either platform is about the same. There is not a huge difference; there are maybe small differences in some places but not enough, I think, to decide to eliminate them.

Finally, the idea that what happened on the New York Stock Exchange with its specialists could happen on ArcaEx, our exchange, is just simply untrue. That could not happen on our exchange. Somebody manipulating a stock order for their own benefit, it is not in the algorithm. You cannot stop it from trading to allow that to happen.

Chairman SHELBY. Why would it not happen?

Mr. PUTNAM. Excuse me?

Chairman SHELBY. Why would that not happen?

Mr. PUTNAM. Well, we have, as does Ed's system and also the Nasdaq Super Montage System, we have firm limit orders on our books. No one can actually get in the middle of the process, halt it with the intention or excuse of trying to find better prices, somehow inject themselves in front of the trade, put a piece of it in their own pocket, because it is a great trade at that moment in time, and then profit from it as the stock continues to trade.

You cannot do that in our system. You cannot stop the algorithm. It is built into the computer. You cannot stop the trouble to front-run it, interposition it, any of those things. So the idea that that could happen on our system is simply untrue. We would have to program the computer in such a manner to allow that to happen.

So, I think with that, the trade-through rule is certainly the big issue here. There are a couple of other things that are on the Reg NMS proposal that are worth mentioning. But as far as the trade-through proposal goes, I agree with my competitors on the OTC or Nasdaq trading world: We do not have one; things did not always work the way they did today in the OTC world, though. There were prices that were ignored. People backed away from quotes; they were not firm.

Those things changed through competition, and we are in a great position there today. In the listed world, we have one very large competitor who is looking to change their model to become more electronic to respond to some competition they are facing, which is basically customers saying if you do not change it, we are going to quit using you.

The New York Stock Exchange is basically, in my view, and I will let John speak, but I have read I think what is being proposed, and they have basically come around to our way of thinking. In 1997, we built a system that was designed to find customers the best price regardless of where that price existed, and that could have been in 300 different places in the Nasdaq world. Today, those things are all linked electronically, and we all, within our marketplace, obey one another's best prices.

And we are in agreement. We would be willing to sign up for that deal today. If the NYSE would make quotes firm, we will respect all of their firm quotes. When they are not firm, which is this hybrid model, we will give customers the choice of skipping those quotes that are not firm, and I think that will work fine for us, and we will sign up for that today.

There are two missing ingredients, however, from that proposal, and I think it addresses a lot of the concern that has been brought up in this room and that is the protection of customer limit orders beyond the NBBO. So in our world today, and actually, I have a chart, and these guys were making fun of me for bringing this chart along, but it may help.

Chairman SHELBY. Show it to us.

Mr. PUTNAM. This is an example of our book in Nokia yesterday.

Chairman SHELBY. Eyes are not that good.

Mr. PUTNAM. I am sorry.

Chairman SHELBY. Go ahead.

Mr. PUTNAM. Okay; at 62 cents, we had 2,000 shares. At 64 cents, 500; 10,000 at 65; and on up 6 cents. At up to 68 cents, there were a total of 35,000 shares here. The current trade-through rule protects the 62-cent offer on the 2,000 shares; then leaves our competitors free in the listed world to trade at higher prices and skip the other 33,000 shares up 6 cents.

Our proposal would be to take this concept of firm markets and that we will all respect one another's firm markets but also respect them beyond the NBBO. So when you take out that best price, and there is another price that is better just above it, well, respect that

one, too. All the quotes on our system are firm. What is going to happen here under this proposal is that best price is going to get taken out. Then, the specialist is going to go put a trade on 10 cents higher, ignore Senator Schumer's dad's order up a penny and the next one after that and the next one after that; stick it in their pocket for their own account; and then come back in and scoop those prices on our system.

And they will make that profit, the difference where that print went on and where the other prices were made available. Our view at Archipelago is to include all the firm prices, not just the one of 100 shares but the next one and the next one after that, and we would sign up for that deal today.

The second thing that I think is missing here, and John, you have come into this late in the game, but we have suffered through this for years. Someone go back to the floor of the New York Stock Exchange and ask those guys, since it is so critical to the business model, and it is so important that limit orders are protected, to quit trading through our electronic limit orders every day.

It happens every day. In the 30 years this rule has been around, I do not believe that the New York Stock Exchange has ever once punished a specialist for violating another market's best price. It happens to us about 1,100 times a day. So if someone would go back, go to the floor and say stop it, or we are going to fine you. I mean, it is like having the State trooper pull you over and saying, you know, because one of the excuses is that we are so busy, we cannot get to all those prices.

Well, it is like saying I was too busy driving my car 125 miles an hour to obey the 65-mile-an-hour speed limit. Enforce the rule and show that you really care about it, and then, we would accept this proposal as-is and move on with our business.

Thank you.

Chairman SHELBY. Mr. Thain.

## STATEMENT OF JOHN A. THAIN
## CEO, NEW YORK STOCK EXCHANGE, INC.

Mr. THAIN.Thank you. Chairman Shelby, Ranking Member Sarbanes, I appreciate the opportunity to present our views on proposed Reg NMS.

We believe that the SEC has done an excellent job in setting forth a comprehensive proposal. And Chairman Donaldson, I think, sets the right challenges for all of us in this panel by emphasizing protecting the public good and preserving the competitive strengths of our capital markets. Our goal should not be a victory for one market over another, but rather, we should find a way for competition among markets to create the best possible national market system for all investors, for issuers, and for our economy. A fractured market that betrays the interests of investors, that puts U.S. capital market leadership at risk, would not be a victory, and it would be a loss for America.

Building a better national market begins with core principles that have served the needs of all investors and have enabled the U.S. markets to become the world's best. The most important of these principles are that customers' interests must come before those of intermediaries and that every order should have the oppor-

tunity to receive the best price. For that reason, we are gratified that the SEC has maintained the trade-through rule or best price rule as the centerpiece of its proposed NMS.

Now, Chairman Shelby, you asked why is the trade-through rule so important? You have heard a little bit of this, but I will give you four reasons.

Chairman SHELBY. Sure.

Mr. THAIN. First, it protects investors by ensuring that they can continue to buy or sell their shares at the best price available in the national market system. Second, it ensures that investors who place limit orders in the market and continue to provide that liquidity to the marketplace will not be ignored. This means that the small investors, Chuck's father, can compete on an equal footing with large institutions. Third, it improves transparency and price discovery by ensuring that stocks are priced at their true value. And finally, because it deepens the liquidity, and it strengthens capital formation by increasing investor confidence in the fairness of the market, and confident investors are more likely to maintain and to increase their limit orders and their participation in the marketplace.

The trade-through rule and the continuous auction process also serves the interests of listed companies through reduced volatility. When the New York Stock Exchange surveyed the chief executives and the senior officers of 400 of our listed companies, by far the most important factor in choosing a trading venue was market quality. And by far the most important determinant of market quality was reduced volatility.

Over the past 2 years, 51 companies have moved their listing from Nasdaq to the New York Stock Exchange. The intra-day volatility of those companies' stocks fell, on average, by 50 percent. Now, while best price execution must remain the overriding principle, we recognize that speed is also important to certain customers, and we are listening to those customers. We will offer our customers the ability to trade electronically, quickly, and with anonymity.

As someone who has spent 25 years at the crossroads of technology and finance, I enthusiastically embrace opportunities to enhance the speed and the efficiency of trading. But at the same time, we want to retain for our customers the advantages of the auction market, where floor brokers and specialists add judgment, add liquidity, and improve prices moment to moment on the floor of the New York Stock Exchange.

The market capitalization of the companies traded on the New York Stock Exchange is over $17 trillion. The next-largest competitor is about $3 trillion. We trade on average 1.5 billion shares a day. We offer the most liquidity, the best prices in our listed stocks over 90 percent of the time and the lowest execution costs.

We believe the solution is to marry the best of both worlds, which is what we are intending to do. Once execution speeds are comparable, there is no justification for opting out, no justification for overcharging customers, no justification for giving every investor anything less than the best price. So the operating rule for investor protection should always be let the best price win.

The position we have articulated is one of sound public policy that has been endorsed by a wide range of investors and investor groups representing millions of investors and trillions of investable dollars. Just to cite a few, the AARP, as Senator Schumer said, whose members believed two to one that best price should be a top priority; CIEBA, the Committee on Investment of Employee Benefit Assets, which represents large corporate pension plans; ICI, the Investment Company Institute; and the CFA, the Consumer Federation of America.

Now, some have asserted that the trade-through rule is a barrier to competition. In fact, the opposite is true. Markets are more efficient, more robust, and more competitive today than they have ever been before. Over the last year, the average spread of the national best bid and best offer on the 93 New York Stock Exchange stocks listed on the S&P 100 Index has narrowed from about 5 cents to 2 cents.

Those who lobby to remove the investor protection provided by the trade-through rule are doing so because they have not been competitive in attracting order flow. They do not offer competitive prices. That is why they are asking the SEC to put their marketplace ahead of market principles. That is why they are asking to put their personal interests ahead of investor interests. It is imperative that the SEC not allow the best interests of investors to be ignored. The opt out exception contained in the SEC's proposal should be eliminated.

At a time when our Nation is tightening rules on mutual funds, late trading, market timing and corporate governance, intermediaries should not be permitted to run roughshod over longstanding rules that ensure fair and honest markets. To do so would be an invitation for future problems, to improper trading by intermediaries that harms investors, such as internalization; that harms competitiveness of U.S. markets through fragmentation; and ultimately would harm the health and well-being of our economy.

We can best serve the public good by strengthening competition among our markets to create a superior national market system that is based upon the standards of best price and putting the interests of investors first. These are the principles that have made the U.S. securities markets the largest, most liquid, and most vibrant in the world, and we at the New York Stock Exchange are committed to working with you and the SEC to ensure that U.S. markets continue to maintain their position in the 21st century.

Thank you.

Chairman SHELBY. Thank you.

We will start with you, Mr. Thain, from right to left. Just briefly, would you describe the most important attribute of the market structure under which your particular market center operates?

Mr. THAIN. We provide the most liquidity, the best prices, and the least volatility in the trading of our stocks and the most efficient trading in terms of lowest cost of trading impact.

Chairman SHELBY. Mr. Putnam, what is your strongest attribute of the market that you operate?

Mr. PUTNAM. We protect limit orders within our system, so all limit orders that sit in our system are available and accessible immediately and electronically without any human intervention.

Chairman SHELBY. Integrity, another one?

Mr. PUTNAM. I think that is integrity, right? I mean, integrity of the quote. Knowing that it is real when you see it. You know what you are going to get when you show up, because there is a computer program that executes an order the same way every single time. It is that certainty and speed at which we respond to the other customers' orders.

Chairman SHELBY. Mr. Nicoll, is it similar?

Mr. NICOLL. Yes, I would say it is transparency and fairness. In an electronic market, which everybody can see and have access to; everybody gets the same information at the same time and can interact with that information on an equal footing, whereas, in a floor-based market, the people down on the floor have an advantage over those who are upstairs.

Chairman SHELBY. Mr. Harris.

Mr. HARRIS. It is a market that cares to small- and mid-cap companies and innovative products. I would say price discovery and reduction of volatility.

Chairman SHELBY. Mr. Greifeld.

Mr. GREIFELD. Definitely choice and competition. If I can just read one quote from Bob Pisani, who was talking after the Martha Stewart announcement was made, and this was from CNBC, he said there was a small crowd of traders gathered around the site—this is on the floor of the New York Stock Exchange.

When you see floor brokers, that is a sign of institutional interest. The floor of the New York Stock Exchange, the basic fabric of that exchange 211 years ago, was built for the large person, for the large institutional investors. The Nasdaq model is about choice and competition, and individual investors are the beneficiary.

Chairman SHELBY. How does the Frankfurt exchange work, Mr. Putnam?

Mr. PUTNAM. It is all electronic.

Chairman SHELBY. I thought it was. Nothing else?

Mr. PUTNAM. No.

Chairman SHELBY. And how long has it been that way?

Mr. PUTNAM. Probably 5 or more years. I am not certain, between 5 and 10.

Chairman SHELBY. What about the London exchange?

Mr. PUTNAM. Same, but that is more recent than Frankfurt. That is probably in the last 6 or 7 years.

Chairman SHELBY. How will the SEC's proposed amendments to the trade-through impact your companies in our national securities markets? How will the opt out and fast market exceptions operate in the marketplace?

Mr. GREIFELD. Well, this is about introducing efficiency in the trading of stocks it lists. It is my personal opinion that 80 percent market share in any market whether it is soda or trading of stocks, is not healthy. And we certainly believe that the specialist scandal is a result of not having enough competition.

That lack of competition results in inefficiencies in the capital-raising process. And we need to make sure that this process is as efficient as possible and allow more investors to have a fair shake at investing in this country.

Chairman SHELBY. Mr. Harris.

Mr. HARRIS. Generally, most of the provisions in Regulation NMS are going to improve our market. We recognize the need, that our market, which is an auction-based market, needs to have quicker executions in an automated way. At the same time, we need to be very careful on how we meld the services that our liquidity providers provide without fully losing them in an electronic environment.

Chairman SHELBY. Mr. Nicoll.

Mr. NICOLL. I actually fear that many of the provisions of NMS are going to hamstring our ability to compete. We think what we need is to look at the models that exist today in both the listed and the Nasdaq environment and choose the best of those. And quite honestly, we think that if we are going to have a trade-through rule applying to Nasdaq that at the very least, we need an effective opt out in order to be competitive.

Chairman SHELBY. Mr. Putnam.

Mr. PUTNAM. I think with regards to the trade-through rule and the NYSE's proposal, we can live with that and actually do——

Chairman SHELBY. How about the fast quote proposal?

Mr. PUTNAM. Fast quote, and that is what I am speaking about, if they make fast quotes available and obvious to us, then, we have no problem with that. I do think you have to ask the question here today, though, when the New York Stock Exchange says it is all about protecting customer limit orders, do they intend to protect those limit orders that are at the next best price and the next best price?

This plan does not call for that, so a lot of passion exists over the concept of best price, but this plan does not take care of that. One other aspect of Reg NMS that we have an issue with is the market access fees, and our view there is that we do not need Government ratemaking. This is a rare instance where Instinet, Nasdaq, Arca, and the New York Stock Exchange all agree we do not need any Government ratemaking here, so we think that aspect of proposed regulation NMS should not be part of the final rule.

Chairman SHELBY. Let the market do it?

Mr. PUTNAM. You heard Chairman Donaldson talking earlier about how competitive the prices were and how pricing has come way down. I do not know why we need to throw a little ratemaking on top of that. We are already almost at zero.

Chairman SHELBY. Mr. Thain.

Mr. THAIN. We are supportive of the SEC's fast quote-slow quote proposal. We believe the opt out is not good public policy.

Chairman SHELBY. What about the SEC's proposal for reallocating market revenues? Is this a fair allocation formula? In other words, the fees that market centers charge for the data, how are these fees calculated? Who wants to take that?

Mr. GREIFELD. We believe that the Reg NMS proposal with respect to market data misses the mark. The issue is not really about reallocation; it is a question of how you determine the pool that gets shared. This pool was established by Nasdaq 20 years ago in the trading of our stocks, and the price for that pool is not set by any market forces. It is our position that we should minimize the data that is subject to this sharing pool, and it should be data that is clearly in the common good.

And that data would basically be the national best bid and offer. The rest of the data should be subject to competitive forces and let the market determine what the prices are. And when we talk about the allocation, that will obviously reduce the pool, but the allocation should be on shares traded, and that is the least gameable of the different points that you can choose to use as a formulation.

Chairman SHELBY. Mr. Thain, how do you respond to the contention that was made by Mr. Putnam that specialists trade through electronic orders, you know, 1,000 times or more a day?

Mr. THAIN. It requires an explanation of how the trade-through rule actually works. What the trade-through rule says is if you trade through a better bid or a better offer, you must satisfy the person who you traded through.

Chairman SHELBY. What does that mean, satisfy?

Mr. THAIN. Satisfy means that you have to make them good at the price that they were willing to buy or to sell. And so, there are trade-throughs that occur, primarily because the linkages between the markets are not sufficient. And the New York Stock Exchange has a policy and does, in fact, make good on any legitimate trade-throughs.

Chairman SHELBY. Mr. Putnam, you have a comment?

Mr. PUTNAM. Yes, the 1,000-plus trade-throughs that we complain about a day are ones that have not been satisfied and that did take into account the slowness of the NYSE's system. So we wait for 8 seconds before we—the order has been on our system for 8 seconds before we would look at it as a possible trade-through. It still has to be there 8 seconds after it was traded through. And then, once those two conditions are set—8 and 8 is a pretty good amount of time; even though systems can be slow, that is a pretty good amount of time.

Those orders are still traded through. The satisfaction only comes if you get on the telephone and spend 20 minutes arguing about it, and sometimes, the order shows up; other times, it does not. The way our system works is when we see a better price on the New York Stock Exchange than what our customer could find on our system, we send an order to the New York Stock Exchange at that best price and then move on and continue trading.

That is not the way it works at the New York Stock Exchange, and it is violated in excess of 1,000 times a day.

Chairman SHELBY. Senator Sarbanes.

Senator SARBANES. Mr. Chairman, I have another engagement, but I will just ask a couple of questions.

First, does anyone at the table disagree with the view that was expressed when Chairman Donaldson was here that the SEC has had a very open, forthcoming process for examining this issue, or does anyone feel that they have not done what they should have done in terms of gathering information and giving people an opportunity to be heard? Can I hear from each of you on that point?

Mr. THAIN. No, I think the SEC has done an excellent job.

Mr. PUTNAM. They have done a fabulous job. We have been heard, and we think everyone else has had a chance to be heard as well.

Mr. NICOLL. I certainly agree with that.

Mr. HARRIS. I do, too.

Mr. GREIFELD. The process has been fair and open.

Senator SARBANES. Okay; very good.

Mr. Thain, I would like to ask you, the New York Stock Exchange, I take it, is the first line of defense in dealing with the practices of the specialist firms. Am I correct in that regard?

Mr. THAIN. Yes.

Senator SARBANES. And the SEC is, as it were, a backup to that or an overseer to that, or how would you describe that relationship?

Mr. THAIN. Yes, the SEC has oversight of the New York Stock Exchange.

Senator SARBANES. Now, what changes has the New York Stock Exchange put into place following this March settlement of SEC enforcement actions for about a quarter of a billion dollars to prevent future abuses and to enhance the ability of its regulatory function to prevent misconduct?

Mr. THAIN. Thank you. There have been quite a number of changes at the New York Stock Exchange really over the last year. As everyone knows, we have a new chairman. We also have almost an entirely new board of directors. We also have a new structure, whereby the regulatory functions have been separated from the business functions of the exchange. I, as the CEO of the New York Stock Exchange, run the business side, and Rick Ketcham, who is new, who is our Chief Regulatory Officer, has the regulatory side. So we have separated the business of the Exchange from the regulatory functions of the Exchange.

Those regulatory functions run by Rick Ketcham report up to a subcommittee of the board of directors that is chaired by Marsh Carter which is also totally independent directors and then ultimately up to the board itself. This structure, the separation of the regulatory functions from the business of the exchange was approved unanimously by the SEC in December.

Senator SARBANES. Well, that describes the structure. But what substantive changes have been instituted to address this question with respect to the specialty firms that resulted in this major settlement?

Mr. THAIN. Besides a complete revamp of the leadership of the regulatory side and the replacement of those individuals responsible for the enforcement part of the Exchange's regulatory side, we have also invested substantially in the system's capability to monitor the behavior of the specialists. And so, the most egregious forms of behavior of the specialists, the computer systems no longer would allow to happen, and we are spending a substantial amount of funds both on the system side and on the people side to enhance the enforcement capability.

Just to give you an idea, of the 1,500 employees of the New York Stock Exchange, 500 work in the regulatory and enforcement side.

Senator SARBANES. I would say to the other members of the panel, Mr. Thain in his statement says this is no time to put personal interests ahead of investor interests. What is your response to that in terms of your activities, whether they, in fact, put personal interests ahead of investor interests? I mean, what do you make of that argument?

Mr. GREIFELD. I think Mr. Thain was taking a position as if we had substantial differences. As I said in my testimony, we certainly

believe that limit order protection is paramount. We believe individual investors have to be protected, and we believe that best price is of particular importance. Our difference is not on those items. Our difference is in how to get there. We fundamentally believe an opt out represents market forces that allow competitors to compete and make sure investors are well taken care of.

If you go with a rules-based approach, you are subject to gaming. We have very smart people at this table and very smart people in this industry. And if the rule is not perfectly cast, there are gaming opportunities that exist. If you have a market-based approach, you have to respect the customer's wishes. If you have a rules-based approach you have to figure out how to work within the construct of the rule.

Senator SARBANES. Does anyone else want to add?

Mr. PUTNAM. I would; I mean, certainly, our view is protection of investors and not personal interest, and no one else has asked the question, so I will: Does the New York Stock Exchange plan call for protecting limit orders on competitors' systems beyond the NBBO? Will the NYSE protect firm orders through depth of book under that plan and in a competitor's marketplace?

Mr. THAIN. As Mr. Putnam knows very well, there is no protection anywhere in the marketplace on anyone's system other than at the best bid or the best offer. So there is neither protection for better limit orders on the floor of the Exchange, which, of course, also exists, nor is there any protection in any of the market linkages.

Mr. NICOLL. If I can just add, we clearly have been consistent in our position. We believe in competition. Competition has been very difficult for Instinet. Instinet, through competition, has seen its revenue capture in its ECN go from $3 for every 1,000 shares that it trades 3 years ago to under 40 cents today.

The biggest beneficiaries of competition are always the consumers, not the producers, and we have seen rigorous competition in our marketplace to the detriment of our bottom line. But we very much believe that competition is in the best interests of the consumers. This debate that just played out, it is a very interesting one. There are lots of difficulties here in connecting these marketplaces in a way that is fair.

Only the best bid and offer is ever shown. So if we are going to require somebody go to the highest, best bid and offer, but we are not going to require them to honor the better priced limit orders beyond the best bid and offer, then, we are going to create enormous gaming opportunities for people to show small, little bids and offers at the highest price and the fill the balance of the orders at prices which are much worse than that which is shown.

We could have a system which Jerry is talking about where when we go to one exchange, and we hit the highest bid, we then stop the trading and look around and see, okay, now, who is the next-highest bid? Now, let me go out to Archipelago. Let me execute that portion of my order at Archipelago. Right now, the New York Stock Exchange is now the best bid; let me turn around and go back to the New York Stock Exchange.

These are very difficult questions. When you try and connect these markets through a rule-based approach, as Bob said, they are

very gameable; they are very complex. And as Senator Corzine said, it is a very difficult task. But there is actually an easy and a clean solution, and it is to rely upon competition. Competition works; it has played out in the Nasdaq marketplace to the consumer's benefit, to the investor's benefit.

I do not believe your offices or the SEC is getting enormous complaints from people in placing limit orders in the Nasdaq marketplace from being traded through. They are not. And with respect to fragmentation, if I can just one, your indulgence on one last point: Fragmentation is not the fact, does not occur because trading occurs in different venues. Fragmentation occurs when those different venues create inefficiencies because people trade at inferior prices in one venue, because they get trapped in one venue, and they cannot see that there is a better price in another venue.

When, through technology and communications, we can show all of the marketplaces simultaneously, and people can see where the liquidity is and where the best prices are, it does not matter that a third is traded in one place, and a third is traded in another place, as long as it is accessible, and the people can see those prices, and they can choose to go where the best price is.

So in a marketplace we have today, through technology, we can eliminate much of the down side of so-called "fragmentation," and we think that the better public policy is to let these markets compete. Investors and consumers will benefit from that competition.

Mr. GREIFELD. The one thing that I will add is when we compete, we are still under the watchful eye of the SEC. This is not unfettered market competition. We all are subject to their regulation, and we are well-regulated. So we want to compete within that construct.

Mr. NICOLL. I agree.

Senator SARBANES. Thank you, Mr. Chairman.

Chairman SHELBY. I want to thank all of you. I think this has been an interesting hearing. I am sorry it was delayed, and you had to go into the early afternoon. We learned something from the hearing.

Thank you. The hearing is adjourned.

[Whereupon, at 1:13 p.m., the hearing was adjourned.]

[Prepared statements, response to written questions, and additional material supplied for the record follow:]

## PREPARED STATEMENT OF SENATOR JIM BUNNING

I would like to welcome Chairman Donaldson and all of our witnesses here today. I applaud the Chairman Shelby for holding this very important hearing on the proposed new market structure or NMS rules that will govern our equities markets.

Our equities markets or the envy of the world. It is important we maintain our market superiority. Access to capital is one of the major reasons America has always been the land of opportunity. Our markets have been a big reason why American businesses can access capital. We cannot lose that.

But we also must ensure our markets move forward to compete in the global marketplace. We must incorporate new technology to ensure our markets are more efficient. The speed of trades is now becoming almost as important as price. And surety of execution might be more important than both speed and price. The importance of speed and execution have led to the tremendous in growth in our electronic markets. Our electronic markets, first with the Nasdaq and then with the ECN's have dramatically changed the landscape of investing. More and more individual investors are online checking their accounts. The competition in our electronic markets is intense and has brought down the cost per trade dramatically. Our auction markets, have not responded as quickly to change, but are now headed in that direction.

The rule the Commission has put out for comment is pretty controversial. I think it has upset all sides of this debate. That may not be a bad thing. I am not sure the NYSE, for instance, would be moving so aggressively to implement technology if it were not for your proposed rule. And that may have been the Commissions's intent.

I know you have received many comments on the NMS rule. I hope you will look at them fairly and open-mindedly. I do not believe you did so on the mutual fund rule. When you testified before us on the highly controversial mutual fund rule, a number of my colleagues on both sides of the aisle expressed their strong reservations to the independent chairman rule. But it was obvious, Mr. Chairman, that your mind was made up long before you came into the hearing. I hope will do not have a repeat of that on the NMS rule.

This is a very important rule before the Commission today. I look forward to hearing from all of our witnesses and getting their opinions and expertise on the question facing us.

Thank you Mr. Chairman.

## PREPARED STATEMENT OF WILLIAM H. DONALDSON

CHAIRMAN, U.S. SECURITIES AND EXCHANGE COMMISSION

JULY 21, 2004

Chairman Shelby, Ranking Member Sarbanes, and Members of the Committee, thank you for inviting me to testify today on proposals to modernize the national market system for equity securities. I welcome your continuing interest in an issue of such vital importance to investors and the economy. The national market system encompasses the stocks of more than 5,000 companies, which collectively represent more than $15 trillion in market capitalization. The Commission is committed to promoting the fairest and most efficient markets possible for these securities.

Since I appeared before you last October to discuss the state of the national market system, the Commission has made a great deal of progress. In February, we published for public comment Regulation NMS—a broad set of proposals designed to improve the regulatory structure of the U.S. equity markets. In April, we held public hearings on the proposals, then followed up in May by publishing a supplemental request for comment to reflect a number of important matters discussed at the public hearing. In addition, the comment period was extended until June 30 to give the public ample opportunity to prepare their views.

Consequently, this Committee's hearings on the national market system are particularly timely. Your consultation and oversight will make an indispensable contribution to the Commission's efforts as it moves forward in the rulemaking process. With your help, I am confident that we will succeed in our efforts to assure that the equity markets continue to meet the needs of investors and public companies.

### National Market System Principles

The Regulation NMS proposals encompass four substantive areas—trade-throughs, market access, sub-penny quoting, and market data. Today, I intend to give an overview of the proposals, as well as offer a few thoughts on the Commission's road forward. First, however, I would like to take a broader view of the mar-

ket structure issues facing the Commission, as well as the policy objectives that the proposals are intended to achieve.

When assessing the current state of the national market system, the starting point is to recognize just how well it works overall. The system needs to be modernized, but it is far from broken. The U.S. equity markets have never been more fair and efficient for such a broad spectrum of investors than they are today. Since the national market system was created, investor trading costs have steadily declined. Not surprisingly, as trading costs have declined, the volume of trading has climbed inexorably upward. Indeed, our markets now routinely handle trading volumes that would have been nearly unimaginable just a decade ago. These are telling indicators of markets that are vibrant and healthy.

With all this success, inevitably, come problems. In the past few years, in particular, a remarkable confluence of forces has strained the existing components of the national market system. These forces have included technology advances, of course, but also the arrival of entirely new securities products and trading strategies. These include derivative products such as exchange-traded funds, which generate enormous trading volumes, as well as program trading in large baskets of stocks and statistical arbitrage trading. Moreover, the commencement of decimal trading in 2001 further transformed the equity markets. The number of quote updates exploded, and the quoted size at any particular price level dropped. Investors adopted new tactics to deal with the changed trading environment and found that they needed new trading tools to implement these tactics. In particular, investors have adopted automated order routing strategies that require exceptionally fast execution and response times from the markets. Finally, a variety of new, electronic markets have arisen that offer innovative trading mechanisms designed to meet the needs of those using the new securities products and trading strategies.

The proliferation of fast, electronic markets simultaneously trading the same stocks as slower, manual floor-based exchanges has complicated the task of making sure that an investor order receives best execution. The Commission's challenge is to craft rules that reconcile different trading models without sacrificing the fundamental principle of assuring the best execution for investor orders. I believe this creates the conditions under which an investor can achieve the best available price.

In sum, the national market system needs to be modernized, not because it has failed investors, but because it has been so successful in promoting growth, efficiency, and innovation that many of its old rules now are outdated. Identifying and improving these outdated rules is the ultimate goal of the Regulation NMS proposals. To this end, the Commission has engaged in an exceptionally open and interactive process. It has actively sought out the views of a wide range of market participants. There are few areas of securities regulation in which the considered views of practitioners are more needed than market structure. When the Commission published the Regulation NMS proposals for public comment, it fully expected that the proposals would be revised and improved after hearing the views of commenters. Indeed, the public hearing on Regulation NMS in April produced such valuable suggestions for improvements that the Commission published a supplemental request for comment to incorporate these suggestions. This process is continuing. I fully expect that our review of the comment letters will promote additional improvements in the proposals as the Commission moves forward in the rulemaking process.

This process will be guided by those fundamental principles for the national market system that were established by Congress in 1975 and have guided the Commission over the years. Although the particular rules and facilities that implement these principles may be in need of updating, I believe that the principles themselves remain as valid as ever. In particular, the Commission has always sought to achieve the benefits of competition, while countering the negative effects of fragmentation from trading in multiple markets. The national market system has promoted the wide availability of market data so that investors can determine the best prices, ready access among markets to obtain those prices, protection of investor limit orders, and the duty of brokers to obtain best execution for their customer orders.

I particularly want to emphasize the importance of price protection and encouraging the display of investor limit orders. These orders typically represent the best displayed prices in a stock. They therefore are a critical source of public price discovery that is essential to the efficient operation of the markets. Competition among markets is a vital aspect of efficient markets, but we must also assure vigorous competition among the orders of buyers and sellers in a stock. If investor limit orders are neglected and trades occur at inferior prices without good reason, I believe that it harms both the particular investors involved and the integrity of the markets as a whole. Small investors justifiably may not understand why their order is bypassed by trading in other markets. But many of the largest institutional investors

also have stressed to the Commission that they believe enhanced protection of investor limit orders is one of the weaknesses in the current national market system that needs to be addressed. Each of the Regulation NMS proposals is intended in large part to achieve this vital objective.

**The Regulation NMS Proposals**

The Commission is in the midst of extensive rulemaking process for its Regulation NMS proposals. This process has included a public hearing, a supplemental request for comment to reflect the topics raised at the hearing, and the extension of an already long comment period. Even prior to publishing the specific rule proposals in February, the Commission repeatedly sought the views of market participants and the public. It held multiple public hearings and roundtables, established an Advisory Committee on market data, and issued four concept releases on a variety of NMS issues. The Commission used the information and data gathered by these steps to form the basis of its NMS proposals. These proposals encompass four substantive areas—trade-throughs, market access, sub-penny quoting, and market data.

*Trade-Through Proposal*

The trade-through proposal has thus far garnered the most attention. It would, for the first time, establish a uniform trade-through rule for all NMS stocks. The rule would protect the best displayed quotes in a stock from trades at inferior prices. It is intended to encourage the placement of investor limit orders, which often provide the best displayed prices, as well as to promote the best execution of investor orders. As a uniform rule, it would cover both exchange-listed stocks, which are governed by an existing SRO trade-through rule, and Nasdaq stocks, which have never been subject to a trade-through rule.

I will briefly review the proposal's application to each type of stock, but first want to emphasize a more general point. Some have debated the trade-through proposal as if it were a kind of referendum on the merits of exchange auction markets versus fully electronic markets. I do not approach the issue in these narrow terms. The Commission's goal is neither to reward nor punish any particular type of market mechanism. Instead, the trade-through proposal is intended to address potential weaknesses in—and thereby improve—the markets for both exchange-listed and Nasdaq stocks.

For exchange-listed stocks, the proposal would address a serious weakness in the existing ITS trade-through rule, which was established by the exchanges and approved by the Commission. This weakness is caused by the disparate degree of access to quotes displayed by manual markets and those displayed by automated markets. Manual markets—those with traditional trading floors on which human beings effect trades—generally take from 10 to 30 seconds to respond to incoming orders. Automated markets respond much more quickly. Notice that I use the word "respond." Some have confused speed of response with certainty of execution. Neither manual nor automated markets guarantee the execution of orders at their best displayed quotes. Such quotes, for example, may already have been executed against by previous incoming orders or have been withdrawn prior to order arrival. Indeed, according to Rule 11Ac1–5 execution quality reports from one active market center, even the fastest electronic markets generally have fill rates for marketable orders of approximately 60 percent to 75 percent in the most actively traded stocks.

Consequently, the problem that the trade-through proposal is intended to address for exchange-listed stocks is not differing certainty of execution, but differing speed of response and differing execution prices. With automated quotes, investors can know in less than a second whether their order has been executed and can adjust their trading strategy accordingly. With manual quotes, many traders—including large institutional investors seeking to trade in significant size—have emphasized that they may ultimately receive an inferior price if the manual quote turns out not to be available after waiting 10 to 30 seconds for a response. In such cases, some would prefer to send an order immediately to an automated market displaying an inferior price, rather than accept the risk of a slower response from a manual market and perhaps an execution at an even worse price.

As proposed, the trade-through rule would address the disparity of access between automated and manual quotes by providing an exception that would allow automated markets to trade-through manual markets up to a specified amount. Among the most interesting developments at our public hearing in April, however, were statements by representatives of exchanges with traditional trading floors that they were committed in the coming months to establishing auto-execution facilities for access to their quotes. In addition, other hearing participants noted that existing order routing technologies were capable of reacting, on a quote-by-quote basis, to in-

dications from a market that its quote was, or was not, accessible through automatic execution.

The capacity to identify individual quotes as automatic or manual potentially would give exchanges with trading floors the needed flexibility to integrate effectively a trading floor with an auto-execution facility. Rather than being lumped into a single regulatory classification as "fast" or "slow," markets would be allowed to offer choices to investors. In those particular contexts when a manual execution on a trading floor potentially could offer the most value—such as to generate additional liquidity for a large order or to offer price improvement on an order—the exchange could identify its quote as manual, thereby affording a brief period for human beings to participate in an auction. Such a manual quote would not, however, be entitled to trade-through protection. Investors therefore would have the freedom to send orders to markets with worse quotes if they believed they could obtain better executions in those markets. As I will note later, some believe that this freedom to bypass all manual quotes could eliminate the need for the proposed "opt out" exception to the trade-through rule.

The concept of an exception for manual quotes appears promising. One of the primary purposes of the Commission's supplemental request for comment in May was to give the public a full opportunity to express their views on this concept. Their views will play a vital role in determining the course of any final rulemaking.

Switching to the market for Nasdaq stocks, the practical effect of the trade-through proposal would be quite different. Nearly all quotes in Nasdaq stocks currently are accessible through automatic execution. Nasdaq stocks have never been covered by the ITS trade-through rule, and therefore have not been given trade-through protection. Commenters note, however, that brokers must fulfill their best execution obligations when routing customer orders. One of the most significant issues currently before the Commission is whether application of a trade-through rule to Nasdaq stocks would enhance protection of investor limit orders and promote improved public price discovery. We currently are evaluating the information and data submitted on this issue in the comment letters. An important part of our policy analysis will be to consider the potential benefits—as well as any negative impact—of trade-through protection for the more than 3,000 stocks of companies listed on Nasdaq, not just the relatively small number of stocks in the very top tier of trading volume.

The final issue regarding the trade-through proposal that I would like to discuss is the proposed opt out exception. This exception would allow one market to trade-through a superior price displayed on another market if the customer submitting an order consents to disregarding the superior price. One objective of the proposed exception was to give investors the freedom of choice to access quotes with inferior prices if they were not satisfied with the level of automation or service of a market displaying the best-priced quote. The proposing release noted, however, that the exception may be inconsistent with the principle of price protection for limit orders and could undermine investor confidence that their orders will receive the best available price.

In sum, the opt out exception as proposed presents a conflict between policy objectives. On the one hand, we want to promote competition among markets and freedom of choice for investors in choosing where to route orders. On the other hand, investors who post limit orders establishing the best prices contribute greatly to public price discovery. But these investors may not be rewarded for this contribution if their orders are by-passed by trades at inferior prices in other markets.

The comment letters have expressed strongly held views both for and against the opt out exception. A critically important issue will be to determine how best to reconcile the legitimate desire of investors to send their orders to the most accessible quotes with the policy objective of protecting limit orders. Panelists at the public hearing, for example, suggested that, if the only quotes that received trade-through protection were those that were truly accessible through automatic execution facilities, there would be no need to by-pass such quotes with an opt out. Other panelists believed that an opt out exception would remain necessary to discipline markets that fail to maintain truly automatic execution facilities.

Clearly, the Commission must work hard to evaluate the views of commenters and reach the best possible solution to this difficult issue. We are committed to the policy objective of strengthening public price discovery, without interfering with efficient operation of the markets.

*Market Access Proposal*

Discussion of the proposed opt out exception highlights the importance of the market access proposal. A trade-through requirement that orders be routed to the best available bid or offer would be entirely unworkable if all markets did not provide

fair and efficient access to their quotes. The market access proposal is designed to achieve this goal in two ways. First, to establish linkages between markets, the proposal would require quoting markets to allow nondiscriminatory access to their quotes through members or subscribers. The proposal therefore does not mandate that the markets establish inflexible, "hard" linkage facilities, such as the current ITS linkage facility. Second, the proposal would limit the fees that a market could charge for access to its quotes. Currently, some markets are permitted to charge these access fees and some are not. There also are significant variations in the amount of fees charged by different markets. The proposal would create a more level playing field. It also would establish an outer limit on the amount that could be charged to market participants when they route orders to other markets. This limit could be particularly important when orders are routed to meet regulatory responsibilities, such as to comply with a trade-through rule or to obtain best execution for customer orders.

Clearly, the proposed fee limitation is the most controversial aspect of the access proposal. One commenter noted that fee issues have "vexed" the industry for years. On the one hand, all markets obviously must be permitted to charge for their services, particularly agency markets such as ECN's that do not trade as principal and therefore cannot earn trading profits. On the other hand, these ECN's typically do not retain the bulk of the access fees that they collect. Instead, these fees mostly are paid out as rebates to customers who post limit orders with the ECN's. Consequently, two limit orders offering to sell the same stock at $10 per share posted in two different markets may in fact not represent equally priced quotes. One order may receive a rebate out of access fees charged by the posting market and therefore effectively is offering to sell, not at $10, but at $10 plus the rebated amount. The fee proposal would control the extent to which rebates detract from the comparability of orders with identical displayed prices. In this respect, it may be more accurate to view the proposal as a limitation, not on compensation to markets, but on the additional compensation paid to some traders beyond the price they place on their orders.

Some commenters have argued, however, that regulatory action is not needed to assure the comparability of public quotes because market forces alone will be sufficient to address the issue. The Commission will need to evaluate this view carefully, as well as the views of all commenters, to reach an appropriate resolution of what has been an intractable issue.

*Sub-Penny Quoting and Market Data Proposals*

The sub-penny quoting and market data proposals have not received as much attention as the other proposals, but are important parts of the proposed regulatory reform. Both are intended primarily to promote public price discovery. The sub-penny quoting proposal would prohibit markets from accepting or displaying quotes in price increments of less than a penny, except in stocks with prices of less than $1 per share. The proposal would help protect limit orders by addressing the practice of "stepping ahead" of displayed orders by economically insignificant amounts.

The market data proposal, among other things, would modify the current formulas for allocating revenues that are generated from fees for dissemination of the consolidated data stream. The revised formula would reward markets for the value of their quotes—those that reflect the best prices for the largest sizes and thereby contribute the most to public price discovery. In addition, the market data proposal would promote the public dissemination of market information beyond that which currently is provided through the consolidated data stream.

Many commenters on the market data proposal have suggested that the Commission should revisit the issue of the level of fees charged by the markets for the consolidated data stream. In particular, some believe that such fees are too high and that the Commission should adopt a cost-based approach for evaluating the reasonableness of fees. The Commission extensively addressed this issue in 1999 when it published a concept release on market data fees and information. The release specifically requested comment on the concept of a cost-based approach for evaluating fees. The responses to this concept reflected deep divisions in the securities industry. In an attempt to resolve these divisions and to obtain additional views, the Commission established an Advisory Committee on Market Regulation in 2000. The Committee included a diverse range of participants drawn from the securities and market data industries. It specifically considered whether the Commission should adopt a cost-based approach for evaluating fees, but rejected the idea as unworkable.

As evidenced by the comments on the Regulation NMS proposal, however, many continue to believe that some cost-based limitation on market data fees has merit. Separately from the Regulation NMS proposal, the Commission currently is review-

ing the governance and transparency standards that apply to SRO's. The level of market data fees is closely related to these issues because such fees represent a very significant source of SRO funding. The Commission will need to select the most appropriate forum in which to address continuing concerns about market data fees.

**The Road Forward**

I will conclude by offering a few thoughts on the future of the Regulation NMS rulemaking process. The comment period ended only a few weeks ago, and we continue to review the large number of comment letters. It therefore would be premature to predict how the Commission ultimately will resolve the many difficult issues raised by the proposals. I do want, however, to express my appreciation to the public, to the Members of Congress, and to market participants for the enormous effort and insight reflected in their comments. At the public hearing in April, I asked the participants temporarily to set aside their individual interests and to put on their public policy hats. I am very pleased that not just the hearing participants, but the public in general, have responded quite positively. The views expressed in their comment letters, though naturally reflecting differing perspectives and priorities, have almost uniformly focused their attention on the public welfare and on promoting the efficiency and fairness of the U.S. equity markets as a whole. The letters fully warrant close review, and their insights will be reflected in any final rulemaking.

Although I cannot predict the outcome of the Commission's proposed rulemaking, I do believe it is extremely important that there be an outcome, and that the outcome be reached in a timely manner. Many of the issues raised by the Regulation NMS proposals have lingered for many years and caused serious discord among market participants. These issues have been studied, 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 some 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 will conclude by emphasizing that the Commission 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 will work closely with the industry on the process needed to implement any new rules efficiently. This process clearly would include appropriate time periods for the industry to prepare before the new rules become effective.

Thank you again for inviting me to speak on behalf of the Commission. I would be happy to answer any questions that you might have.

---

## PREPARED STATEMENT OF ROBERT GREIFELD

CEO AND PRESIDENT, THE NASDAQ STOCK MARKET

JULY 21, 2004

Chairman Shelby, Ranking Member Sarbanes and Members of the Committee, thank you for inviting me to testify before you today on a subject of great importance to investors. I am here today as a strong and committed advocate for the elimination of the trade-through rule. The trade-through rule today is the primary obstacle to competition amongst our nation's equity markets, and competition is the driving force in making U.S. markets the strongest in the world, the best for investors large and small, and accountable to the public.

On February 26, 2004, the Securities and Exchange Commission (the SEC or Commission) published for public comment Regulation NMS, which proposes to reform the trade-through rule, and includes other critical reforms regarding market access, market data revenue allocation, and sub-penny trading. These proposals are designed to modernize U.S. market structure and increase competition in our markets. Yet, the question remains whether the Commission's actions will result in marginal change or the substantial reform that is necessary if we are to meet the needs of investors and maintain U.S. leadership in the global equity markets.

The complexity of the current rules and the nature of trading securities where practices have grown up over many decades mask a fundamental truth: Today, electronic trading is best for investors. Importantly, this truth is implicit in the SEC's proposal, which essentially forces floor-based auction markets to automate and migrate to a Nasdaq model.

One might ask why does the Government have to change the rules? The reason is that the business of running a floor-based auction market is currently protected from competition by a set of SEC-mandated rules. These rules, which are relics of our past, have provided an extraordinary dividend to the intermediaries participating in these floor-based markets. The investing public and the industry are eager for change.

In fact, in a recent survey completed by the Tabb Group in April 2004, 71 percent of all institutional traders interviewed named the "Specialist & NYSE Market Structure" as one of the greatest trading challenges facing them today.[1]

Despite the strong views of the investment community that meaningful change is long overdue, a powerful constituency with substantial resources to resist change has grown around these rules. Just as the candle making industry surely opposed Edison by citing job loss and safety risks to consumers, so too the floor exchange participants who benefit from the status quo have lobbied in the name of the individual investor to prevent change. We must see through these tired arguments.

The emergence of electronic trading in the United States has been limited, with only Nasdaq-listed securities enjoying the fairness and efficiencies of electronic trading. Internationally, electronic trading systems are the norm. Moreover, a number of established international exchanges clearly are in the process of launching efforts to compete with U.S. markets for listings and eventually for business supremacy in our capital markets. Surely if we do not take this opportunity, European markets are fully prepared to take the lead from the United States in providing investors with modern electronic markets. Trade-through reform is an important aspect of American competitiveness, because if we will not compete with one another, we will not be ready to compete with them.

We are at a critical point. Watered-down half measures often do more harm than good by facilitating the "gaming" of the rules. It is just this gaming that has generated so much of the frustration with the current state of affairs and that was the underlying message of many of the witnesses at the SEC's April hearing on Regulation NMS in New York City. The public is ready for and, in fact, invites real change.

The trade-through rule does not protect investors. Competition and rigorous, conflict-free regulation protects investors. Investors who are not shackled by, or can opt out of, the trade-through rule have a choice. The existence of that choice creates competition, whether or not the choice is exercised. Without choice, all investors are trapped in a closed system. With choice, all investors, both institutional and retail alike, are empowered to make the best investment choices.

The fact that most of the world's major equity exchanges are following Nasdaq's competitive electronic model confirms the wisdom of having the right structure and quality. It also underscores the need for stock markets to evolve and innovate.

**How the Nasdaq Stock Market Operates and why Repeal of the Trade-Through Rule is so Important**

*How the Nasdaq Stock Market Operates*

Nasdaq is the largest U.S. electronic stock market. With approximately 3,300 companies, it lists more companies and, on average, trades more shares per day than any other U.S. market. Nasdaq has built a market that brings buyers and sellers together efficiently and effectively, one that connects investors and capital with industry-leading companies, and champions and seeks to protect the interest of all investors. Investors come to Nasdaq because they get better execution of their trades in a more transparent environment.

Nasdaq has a decentralized structure of many competing market centers linked together—multiple dealers committing capital and competing for orders under the Nasdaq "big tent" which gives investors a healthy and liquid environment. Nasdaq's open and electronic trading environment allows an unlimited number of participants to trade a company's shares. Instead of representation by individual specialists (such as is the case with the NYSE model), over 300 market makers sponsor Nasdaq companies and trade Nasdaq stocks. An average of 20 cover each Nasdaq security, and as many as 100 or more make markets in some securities. Nasdaq also offers a high level of transparency that helps investors gauge trends and make more informed decisions.

Computerized trading systems lend themselves to open, efficient, and nearly frictionless markets. Nasdaq has been using advanced technology to operate its market for more than 30 years. By creating the right balance of man and machine, the human factor comes into play, but only where it *adds value.* The advantages of a

[1] The Tabb Group, April 2004, *Institutional Equity Trading in America: A Buy Side Perspective,* Larry Tabb at page 43.

technologically advanced market include the ability to continuously lower cost per transaction without sacrificing reliability. This raises the value delivered to investors.

Nasdaq is the home to category-defining companies that are leaders across all areas of business, including technology, retail, communications, financial services, transportation, media, and biotechnology. Companies list on the Nasdaq market because they support our model and believe it is the best means for them to access capital—and investors—to nurture and grow their innovative businesses and technologies, and to create new jobs. Nasdaq-listed companies have a committed interest in ensuring their investors get best execution. This means lower execution cost and higher speed, efficiency, and reliability are critical. That is another reason why we are so intensely focused on maintaining the quality of the Nasdaq market with the right and best technology and structure for all investors.

*Why Nasdaq Believes Repeal of the Trade-Through Rule is so Important*

First, Nasdaq has never had a trade-through rule. Instead, Nasdaq has relied on a combination of vigorous regulation and competitive forces to protect investors. In proposed Regulation NMS, the SEC is proposing to extend the trade-through rule to the Nasdaq market. We have grave concerns about the impact this rule could have on our market, and the SEC has expressed no need for the rule on our market other than that it would promote uniformity of regulation. Critically, the SEC has not analyzed or assessed the impact of the rule to the Nasdaq market, yet it seems prepared to dramatically alter the way our market works.

With regard to the application of the trade-through rule to NYSE-listed stocks, Nasdaq also has a strong interest. You see, Nasdaq is not just a market where companies list and investors trade those listed companies' stocks. Nasdaq is a trading execution platform for investors to trade all equities, not just those listed on Nasdaq. It comes as a surprise to many to learn that approximately 15 percent of the volume in NYSE-listed stocks trade today on Nasdaq.

But that number could be much higher. Investor demand for our trading platform is strong, yet the trade-through rule is an enormous impediment to investors wishing to exercise their choice of market as to where they can get the best execution of their trades. I am here today urging the repeal of the trade-through rule because I have customers—investors—who want to use the Nasdaq trading platform, but are prevented from doing so due to the trade-through rule. This rule hurts our business and it hurts investors.

In the next section of the testimony, I will address in more detail Nasdaq's position on the trade-through rule and why its repeal is important to markets and investors.

**Nasdaq Opposes a Trade-Through Rule for the Trading of Nasdaq-Listed Securities**

The trade-through rule is unnecessary for Nasdaq securities because the proposed rule's objectives have already been achieved in this market. The SEC itself provides a solid case against a trade-through rule for Nasdaq. At the time proposed Regulation NMS was released for comment, the Commission stated: "Even without a trade-through rule, the Nasdaq market does not appear to lack competitive quoting in the most actively traded securities."

Statistics derived from Rule 11Ac1–5 data clearly evidence the results of the competitiveness in the Nasdaq market. As the table below demonstrates, when compared to the NYSE, Nasdaq offers investors tighter quoted and effective spreads with greater speed and certainty of execution.[2] Our belief is that, in fact, there is substantial likelihood that applying the trade-through rule to the Nasdaq market will harm investors.

| | Effective Spreads (Cents) | |
|---|---|---|
| | Nasdaq | NYSE |
| S&P 500 Stocks | 1.17 | 1.82 |
| Dow Jones U.S. Large Cap Index Stocks | 1.18 | 1.79 |
| Russell 1000 Stocks | 1.37 | 1.97 |

[2] SEC Rule 11AC1–5 data, January 2004 marketable orders of all sizes under 10,000 shares, provided by Market Systems, Inc. See SEC Release No. 34–43590; File Sy–16–00 (November 17, 2000).

A trade-through rule imposed on the Nasdaq market could harm the quality executions and competition that exist in the Nasdaq market. The harm to investors may take many forms, including increasing the cost of trading due to the additional costs of complying with the rule. Whether the SEC adopts an automated market or automated quote approach for the trade-through rule, market participants will be required to make complex and expensive system changes to recognize when a market or quote is "nonautomated." The markets and market participants trading Nasdaq securities will bear a disproportionate amount of these costs because there is no trade-through rule today for Nasdaq securities. Finally, evidence indicates that these costs are unnecessary because the trade-through rate for Nasdaq-listed securities, without a trade-through rule, is lower than for listed securities, which trade under such a rule.

## Obeserved Trade-Through Rates using Last Sale Data

April 1–12, 2004

| Detection Rule Before/After (seconds) | NYSE-Listed (Avg. 1.95 MM Trades/day) | | Nasdaq-Listed (Avg. 3.49 MM Trades/day) | |
|---|---|---|---|---|
| | Trades (Percent) | Shares (Percent) | Trades (Percent) | Shares (Percent) |
| 0/0 | 4.2 | 10.2 | 7.7 | 11.5 |
| 5/2 | 2.0 | 6.9 | 1.6 | 5.1 |
| 10/5 | 1.5 | 5.3 | 0.9 | 3.5 |
| 25/10 | 1.0 | 3.6 | 0.5 | 2.0 |

In a larger sense, however, the current proposal has a fundamental flaw because it will nullify the improvements the SEC has implemented in the Nasdaq market over the past 10 years. During this period, the SEC has adopted a series of rules that use market forces to produce a structure that provides quality executions, freedom of choice, and cost savings to investors. These initiatives include the limit order display rule and Rules 11Ac1–5 and 11Ac1–6.

In adopting the limit order display rule, the SEC went beyond ensuring that limit orders are treated fairly and contribute to quote competition; the SEC created an environment where market forces and competition would flourish to the benefit of investors. Specifically, the SEC allowed market makers to continue to send limit orders to broker-dealer matching systems, known as electronic communications networks (ECN's), at a time when Nasdaq did not have its own limit order book. The result was that many ECN's entered the market and became the de facto limit order books for Nasdaq.

Nasdaq responded to this competition by creating its own electronic limit order book. Currently, over 65 percent of Nasdaq trading occurs on these limit order books. While the number of limit order book providers has decreased, the competition among those remaining continues and has led to a dramatic reduction in execution fees. Faster execution times are another result of this competition, as these market participants innovate and improve services to distinguish themselves from their competitors.

With competition firmly established, the SEC then adopted Rules 11Ac1–5 and 11Ac1–6 to assist investors in making informed decisions. Giving consumers accurate information upon which to evaluate competitors also enhances competition. Today, market participants can "shop" when deciding where to send their orders. Nasdaq understands that customers are using the execution quality statistics as benchmarks that their brokers must not only just meet, but also exceed.

Importantly, none of the SEC's initiatives constrained customer choice as to how their orders could be executed or how they should measure execution quality. For example, the SEC did not choose to mandate a central limit order book that would have limited choices and decreased competition. A trade-through rule has many of the same drawbacks as a central limit order book because of its exclusive focus on displayed price as the benchmark for defining execution quality. The SEC risks undoing a decade's worth of progress by adopting a trade-through rule for Nasdaq securities.

**Nasdaq Supports Repeal of the Trade-Through Rule; Nonetheless, Reform which Includes a Workable Opt Out Exception would Improve Execution Quality and Competition in the NYSE-Listed Environment**

*The Trade-Through Rule no Longer Serves a Purpose and should be Eliminated*

So that investors can realize the full benefits of a truly competitive market, the SEC should eliminate any trade-through restrictions for NYSE-listed securities. While the market for trading Nasdaq securities is better because of the SEC initiatives previously discussed, the market for trading NYSE-listed securities has been stuck in a time warp and has not seen the same benefits of competition. Nasdaq believes the different results can be traced to one major difference between the markets: The trade-through rule.

The trade-through rule is a vestige of an antiquated, manual, floor-based, single specialist market that has stifled competition in the trading of NYSE-listed securities and does not reward or recognize the speed and certainty of execution or other factors investors may consider when measuring best price. The trade-through rule creates a monopoly at the best posted *price,* a monopoly that favors slow, manual markets whose posted price *may not reflect the price available on the floor.* In this regard, electronic markets' participation in the listed market has been hobbled.

If the Commission adopts a trade-through rule without an opt out provision, basic trading choices that exist today will be eliminated, which could increase costs to investors. For example, investors seek to execute orders with minimal price impact. In fact, analyses of trading costs include measurement of market impact—how much did the market move in reaction to the existence of a large order.

Today, investors use many different means to lessen market impact, including utilizing the block-order exemption from the trade-through rule for NYSE securities. Of course, in the Nasdaq market these investors have the greatest degree of flexibility because there is no trade-through restriction. As a result, investors can execute sizable trades immediately with dealers or other investors through crossing mechanisms, without "tipping" the market about the pending large order by being forced to trade with the displayed price. Investors are willing to accept prices that are "away" from the prevailing "best" price because of the certainty and speed they obtain.

*If the SEC Chooses to Reform Rather than Repeal the Trade-Through Rule, a Workable Opt Out Provision is Critical*

A viable opt out provision will impose competitive discipline by allowing market participants to avoid a market center that routinely fails to provide timely executions at the price reflected in its quote. However, market participants will still have every incentive to seek the best *certain* price, and brokers that routinely fail to do so will be subject to disciplinary action and will lose business to competitors.

As proposed by Regulation NMS, however, the opt out exception may be unworkable. It will frustrate rather than enable freedom of choice for investors and limit rather than promote automated executions. In an unprecedented manner, the opt out exception imposes burdens on both the investor seeking to opt out and the broker-dealer handling opt out orders. Some aspects of the proposal impose the burden on both parties, while other aspects only affect the broker-dealer handling the opt out order. For example, the need for informed consent on an order-by-order basis imposes a burden on both parties. The broker-dealer handling the order must provide disclosure each time an order is received, and the entity opting out (for example, a customer or another broker-dealer) must affirmatively opt out each time it places an order. For some market participants, this exchange of information would be necessary hundreds or thousands of times per day. These exchanges will most certainly delay the execution of orders, while contributing little, if any, investor protection.

The opt out exception requirement to provide customers the best bid or offer that existed at the time their order was executed is a burden that will be imposed on broker-dealers directly, and possibly on customers indirectly if the costs of complying with this aspect of the rule are passed along to customers. Trading does not occur in a manner that allows each order to be matched easily with a particular execution or quote. In particular, large orders often are placed for multiple accounts, and the executing broker-dealer may not know to which account the trade should be allocated until after the order is fully executed. Broker-dealers will have to recreate the execution history of orders so that they can provide the best quote that existed at the time each portion of an order was executed. To provide this information for each of the thousands of orders executed each day, whether or not the customer wants the information, will impose a significant burden because firms will have no choice but to find some manner of automating the process.

Nasdaq has proposed two modifications that will make the opt out exception less burdensome, while not diminishing its investor protection elements. First, Nasdaq proposes that broker-dealers be required to disclose the best bid or offer at the time of execution to customers only upon request. This is the same approach the SEC adopted with respect to payment for order flow and other types of disclosure. Specifically, Rule 10b–10 permits broker-dealers to include a general statement concerning whether payment for order flow was accepted, and to disclose the source and nature of the compensation separately, upon receiving a written request from the customer. Similarly, a broker-dealer must provide its customer the identity of the contra party only after receiving a written request. Adopting this approach for the opt out exception will require broker-dealers to provide the information to those investors most interested, but not force them to undertake costly system modifications that would be necessary to provide the information to all customers—regardless of whether they want the information.

Second, to satisfy the informed consent obligation, Nasdaq proposes that broker-dealers be permitted to provide an annual statement disclosing the implications of opting out of the trade-through rule. The proposed order-by-order requirement will require the disclosure to be repeated hundreds or perhaps thousands of time per day. Therefore, broker-dealers are likely to provide summary statements about the rule. In contrast, an annual statement could result in a more fulsome disclosure, because it is not being delivered in the midst of a trading day. Requiring an annual statement is consistent with the disclosure obligations concerning margin trading, and is more conservative than the disclosure obligations concerning day trading and trading in penny stocks, which only require one disclosure.

*Nasdaq does not Believe the SEC Should Define what Constitutes a Fast Market; However, if the SEC does so, it must Establish Standards that are Sufficient and Enforceable*

Nasdaq maintains that an effective opt out exception eliminates the difficult task of defining "fast" because investors will be able to decide for themselves which markets are meeting their needs. No one wants to see an SEC enforcement officer sitting on the floor of an exchange with a stopwatch. The public will be best served by the SEC focusing its resources on matters other than mediating disputes over whether markets are responding to orders within the requisite number of milliseconds.

However, if the SEC believes it is necessary to define "fast" in order to ensure some minimum level of automation, Nasdaq supports a quote-by-quote distinction that requires markets to identify quotes that are slow. A market must identify "slow" quotes on all of its published feeds, and when its best bid-and-offer quotation is sent to the Securities Information Processor (SIP) for calculation and dissemination of the National Best Bid/Best Offer (NBBO). In addition, the SIP should be required to enhance its distribution of NBBO data by adding a flag to identify a national best bid or offer as "fast" or "slow," in addition to the market center associated with the bid and/or offer, so that investors will know whether the quote is subject to a trade-through restriction. Without this critical transparency, investors will become confused as to the trade-through treatment of each published quote/order. If investors see the NBBO being traded through, the flag will serve as a visible explanation for this occurrence.

Markets should be required to respond to a party submitting an order within 250 milliseconds. This automated response must indicate that the order was either executed (in full or partially) or rejected.

The automated response requirement also must apply to requests to cancel orders. This requirement will be particularly necessary if markets can alternate between automated and nonautomated. For example, a market participant sends its order to a market providing automated access; however, while the order is waiting to execute the market switches to manual execution in order to conduct an auction. Some market participants may not want to participate in a manual auction, but prefer instead to cancel the order and send it to a market that can provide a fast, automatic execution. If markets are not subject to a maximum response time requirement for cancellations, they can hold orders hostage. The maximum response time to process cancellation requests should not exceed 250 milliseconds.

Markets also should be required to update their quotes within 250 milliseconds of an execution. The benefits of automated access to quotes are defeated if markets are not required to automatically update their quotes. Market participants will be attempting to trade with quotes that are no longer available, which is a problem that exists today, and will just result in an increased number of rejected orders.

Nasdaq supports the requirement that markets make public available statistics showing how often they comply with the turnaround time requirement, and pro-

poses that markets make other similar information available. Specifically, if the SEC adopts such requirements, markets must be required to disclose how often they comply with the maximum response times for quote updates and order cancellation requests. Similarly, if the SEC adopts a rule that distinguishes between automated and nonautomated on a quote-by-quote basis, markets that do not provide automated access to their quotes at all times must disclose how often their quotes are not accessible on an automated basis. Requiring disclosure of the information discussed above will impose competitive pressures on markets to remain in compliance with the requirements.

**The Myth of "Best Price"**

Supporters of the trade-through rule disingenuously describe it as a "best price" rule that protects investors, rather than what it is—a rule to protect floor-based markets from competition.

Best price in today's trading world is a relative concept. With the change to decimal pricing 3 years ago, the amount of stock available for sale at a given price has gone down. This was an expected outcome as the minimum spread literally went from Spanish "pieces of eight" to one penny. Lowering the spreads between bid and offer from 12.5 cents (1/8ths) to 6.25 cents (1/16ths) to one penny had a profound impact on trading behavior. Simply put, investors no longer need nor want to slow down their orders to participate in an auction when the best they will get is a one-penny price improvement (and they could see price worsen, or even lose the order entirely). Finding liquidity has become a tougher proposition, so investors reward markets that help them find it, sometimes forgoing a penny or two in order to obtain their needed blocks of stock.

When one considers the effect of the trade-through rule on an actual trade, you can easily see that investors often receive inferior executions at inferior prices, even though their order was delivered to a market on the belief that they would get the "best" price. Quotes carry two bits of important information, the price and the amount of stock offered at that price. Many times, in part because of decimals, the best-priced quotes will only accommodate small amounts of stock. Thus, the trade-through rule can "lure" larger orders to the floor, resulting in the disclosure of vital and material trading information to the specialist. Prices change quickly, and orders end up costing more to an investor, than a one or two cent trade-through in another market would have cost. Last, remember that a trade sent to the floor under the trade-through rule carries no mandate for the specialist to actually fill the order at the posted quote. Furthermore, each order does not occur in a vacuum, so quotes can disappear after orders have been routed to the floor for execution. Traders seeking to fill orders are frustrated when they have to wait 30 seconds to learn that they did not get an execution.

With electronic markets, execution surety is a one or two second proposition. Search for liquidity is a point and click proposition. Thus, many investors believe they are getting the best price when they can trade without question, delay, or market impact. They are getting best price for their order.

It has also been suggested that institutional investors or brokers may trade-through to the detriment of those for whom they serve as fiduciaries. *These arguments are specious.* Brokers are judged by their clients and monitored by enforcement officials. Their clients look at the broker's ability and performance in meeting their needs. Brokers will lose customers and be subject to disciplinary action if they mistreat the customer orders. It is important to remember, brokers do not want trade-through reform because they want bad prices for their customers, they want reform because they cannot get good prices for their customers on an exchange floor. Their clients do not understand missed trading opportunities. In the point and click era, clients do not accept the manual uncertain methods of the floor exchanges.

Irrespective of the trade-through rule, both investors and intermediaries in the securities markets have fiduciary duties and economic incentives to seek the best price *when the best price is a real price* (that is, immediately accessible and tradable). The fundamental problem with the trade-through rule is it forces market participants to seek a "best" price that may have substantial uncertainty associated with it.

Officials responsible for investing State pension funds and other public monies clearly understand the importance of trade-through reform. Here is just a sample:

- Steve Westly, California's Chief Financial Officer and a board member of the State's pension funds CalPERS and CalSTRS: "[R]eforming trade through . . . allows [investors] . . . to consider factors that may be as important or even more

important than the 'best advertised price' proviso of the trade-through rule, including quality and speed of execution."[3]

- Patricia Anderson, the State Auditor of Minnesota: "The concept of 'best price' is an attractive one in principle. Unfortunately, in practice, it has too often become a justification for delayed trades and reduced flexibility. In fact, preliminary information suggests that the rule's mandate to seek the best price has instead often resulted in noticeably higher prices for investors."[4]
- Charlie Crist, the Attorney General of the State of Florida: "The trade-through rule effectively grants floor specialists monopoly power over trading in NYSE listed stocks. As a result, Florida investors (truly all investors) suffer from slower trade executions, increased transaction costs, and decreased competition."[5]
- Resolution of the Alabama State Senate: ". . . residents of the State of Alabama have large investments in the stock markets . . . the current trade-through provision is obsolete . . . proposed reforms will improve investor freedom and preserve investor protection . . . experience has shown that the most efficient markets are those that permit transparency and individual choice . . ."[6]
- Sean Harrigan, President, CalPERS Board of Administration: "It is our hope that the regulatory authorities will further improve the efficiency of the markets by eliminating the trade-through rule."[7]

In closing, the comments of Dr. Benn Steil, Andre Meyer Senior Fellow in International Economics, Council on Foreign Relations, before the House Financial Services Capital Markets Subcommittee, on May 18, 2004 are most instructive:

> Although the idea of having a simple, market-wide rule to ensure that investors always have access to the "best price" is an attractive one, in practice the trade-through rule has operated to force investor orders down to the floor of the New York Stock Exchange, irrespective of investor wishes. The rule therefore operates to discourage free and open competition among marketplaces and market structures; the type of free and open competition which has in Europe produced a new global standard for best practice both in trading technology and exchange governance. The trade-through rule should therefore be eliminated, as it serves neither to protect investors nor to encourage vital innovation in our marketplace.

**Repeal of the Trade-Through Rule Benefits all Investors, Including Retail Investors**

In the Nasdaq market, where no trade-through rule exists, investors get better prices with faster executions at lower execution costs then they do on the NYSE, where a trade-through rule exists. This is according to the SEC's own 11Ac1–5 data. These statistics demonstrate that the best execution standard imposed on brokers works for investors.

Retail investors are present in the markets in a number of forms. Some are directly buying securities for their own accounts. Many are accessing the markets as pension fund contributors—from States, businesses, and unions—and a vast majority of individual investors are in the markets through mutual fund share ownership. No matter what form they take, they are important and their trading needs may vary.

Like all consumers, retail investors benefit from competition. Nasdaq investors get better prices because average quoted spreads for Nasdaq-listed securities are tighter than the NYSE equivalents. If we look at Nasdaq in its most actively traded stocks, we have a spread of one penny. Our minimum price variation is one cent. We cannot do any better. These narrow spreads mean we have vigorous limit order competition in our market. Investors on Nasdaq are the beneficiaries of this competition.

Tighter quoted spreads benefit both traders and investors accessing liquidity. Furthermore, customers get their orders executed at the NBBO at a higher rate on Nasdaq than on the NYSE for all order sizes. According to the SEC's definition of

---

[3] Letter from State of California Controller Steve Westly to SEC Chairman Donaldson, January 30, 2004.

[4] Letter from State of Minnesota Auditor Patricia Anderson to SEC Chairman Donaldson, February 20, 2004.

[5] Letter from State of Florida Attorney General Charlie Crist to SEC Chairman Donaldson, February 12, 2004.

[6] Resolution of the Alabama State Senate "Urging support for Federal Security and Exchange Commission proposed rule No. S7–10–04, to allow for more electronic trading in the national securities market," adopted May 6, 2004.

[7] Press release from Sean Harrigan, CalPERS President, Board of Administration, January 14, 2004.

a trade-through, Nasdaq customers actually trade-through less than the rate on the floor of the NYSE.

In the securities markets, costs are represented by transaction costs as well as spreads. On Nasdaq, competition has lowered execution costs, as trading platforms have improved efficiencies and vied for order flow.

Finally, investors save money trading on Nasdaq because we are faster. Orders in Nasdaq-listed stocks receive faster executions than orders in comparable NYSE-listed stocks. Faster executions reduce investor uncertainty and decrease the likelihood of the market moving away from the investor's price.

Nasdaq is governed by the principle of best execution. Nasdaq is a better market because brokers have control of their customer's orders and follow best execution for their clients. In 1993, the SEC's payment-for-order-flow release defined best execution by terms in *addition* to price. Best execution says that one-size-does-not-fit-all. The Commission specified that liquidity, cost, price impact, accessibility, and certainty were other important factors in determining best execution.

Best execution may mean that for small orders, the best price is the customer's one and only priority. It may however mean that for larger orders other factors matter to the customer, like minimizing the impact of his order on the price of the security market-wide. Best execution may include remaining as an anonymous participant in the market or trading where the most stock is available within a certain price range to minimize the price of the entire basket of securities bought at a given time. The current trade-through rule ignores these trading concerns.

Regulation NMS should not be about rolling back carefully evolved principles. I do not want to see the concept of best execution placed in a straitjacket, as the floor markets want.

Supporters of the trade-through rule claim that it protects investors from self-serving brokers and puts the "little guy" on equal footing with the large investment firms and institutional investors. They argue that trade-through reform could be used to give investors inferior prices. But investor complaints and the need for market structure review did not originate based on broker misbehavior, this regimen of change originated on manual floors and complaints emerged from specialists' and floor brokers' misbehavior. These demagogic claims pray on the ignorance of investors and trouble policymakers. They irresponsibly undermine investor confidence. They also are patently false.

**Nasdaq Exchange Application is Important to Fair Competition**

Finally, I want to discuss one unresolved critical issue. For almost 4 years now, Nasdaq has awaited word from the SEC on our application to become an exchange. As an exchange, Nasdaq would have a legal structure that companies considering their listing decisions could not question. Currently, Nasdaq is frozen in a partially separated structure that complicates our corporate governance and confuses those looking at us. Many decisions approved by the Nasdaq board still have to be approved by the NASD board.

Nasdaq is a mature, well-developed, and highly efficient market. We trade more shares every day than any market in the world. We diligently protect investors. Our rules are fair and unbiased—and SEC approved.

Nasdaq is working with the SEC to address their remaining concerns. I appreciate the interest of many of the Members of this Committee in the status of our application and hope to report back to you soon about that progress.

Thank you again for this opportunity to testify. I would be happy to answer any questions you may have.

---

**PREPARED STATEMENT OF DAVID F. HARRIS**

SENIOR VICE PRESIDENT, STRATEGIC PLANNING

AMERICAN STOCK EXCHANGE, LLC

JULY 21, 2004

**Introduction**

Good morning, Chairman Shelby, Senator Sarbanes, and Members of the Committee. Thank you for inviting the American Stock Exchange LLC (Amex) to appear before you to present our observations and comments on the important issues raised by the four interrelated proposals contained within proposed Regulation NMS.

After a brief description of the Amex and its unique role in the U.S. equity markets, we discuss our views on each of the four substantive topics that make up Reg-

ulation NMS: (1) trade-through protection, (2) inter-market access, (3) market data, and (4) sub-penny pricing.

**Background**

The Amex has had a long history not only as the premier auction-based market for small- and mid-cap companies, but also as the creator and nurturer of innovative financial products. Companies choose to list on the Amex because of the unique benefits offered by our market structure, which is designed to maximize price discovery and the potential for price improvement, while minimizing volatility caused by temporary order imbalances or the lack of natural liquidity. Our market offers dedicated liquidity providers that enhance liquidity and stability through affirmative obligations to ensure continuous and orderly trading. These liquidity providers are required to maintain a continuous two-sided market (that is, a fair bid and offer). They are also required to moderate price changes between transactions and buy, using their own capital, when there are not enough buyers, and sell from their inventory when there are not enough sellers. Thus, these dedicated liquidity providers are traders of last resort that moderate price movements until natural price equilibrium is reached where, once again, buyers and sellers can meet directly without an intermediary.

For many of the same reasons companies list on the Amex, our market structure creates an environment that nurtures the growth of new and innovative financial products. These innovative financial products range from a vast array of structured products to exchange-traded funds (commonly known as ETF's). Eleven years ago, Amex pioneered the ETF with the introduction of an ETF based on the Standard & Poor's 500® Index, known as the Spiders (Amex: SPY). Since then, ETF's have become a whole new class of securities growing to more than $166 billion in assets. More than ninety-percent of all ETF's are listed on the Amex, including the two most actively traded securities in the world: The Spiders and the ETF based on the Nasdaq 100 Index (Amex: QQQ)). Since the beginning of the year, the Spiders and QQQ's on average have combined for daily trading volume in excess of 147 million shares. ETF's were not an instant, overnight success, but thrived, we believe, as a result of being listed and traded on a market with dedicated liquidity providers that have affirmative obligations to enhance liquidity.

**Trade-Through Protection**

UNIFORM TRADE-THROUGH RULE

In 1975, when Congress directed the Commission to facilitate the establishment of a national market system, Congress envisioned an eclectic, rather than single monolithic, system that would draw on the strengths of each type of marketplace.[1] Without specifying a structure, Congress articulated the basic tenets of the national market system as fostering efficiency, enhancing fair competition, increasing price transparency, achieving best execution, and facilitating direct interaction of investor orders, when consistent with the other four principles.[2] Then in 1981, to facilitate best execution, provide nationwide price protection, and to increase quote competition, the first "trade-through" rules were adopted for securities listed on the Amex and New York Stock Exchange. These rules generally prohibit one market from executing a trade for a security at an inferior price when another market displays a better price for the same security.[3]

The Amex supports the proposal in Regulation NMS to extend trade-through protection beyond exchange-listed securities to all national market system (NMS) stocks. For exchange-listed stocks, trade-through protection currently guarantees that investors—large and small, sophisticated and novice, trading for their own account or trading through a representative—all obtain the best price regardless of the market where those orders are sent. Equally important, trade-through protection encourages competitive price discovery across markets by ensuring that an investor that posts the national best-priced limit order does not have his or her order ignored. At its core, a trade-through rule provides essential customer protection by ensuring that investors always get the best price available for their trades. Such a rule also facilitates a fair and orderly market by decreasing the harmful effects of market fragmentation and the disorder caused by different groups of traders paying different prices for the same securities at the same, or virtually the same, time. Thus, we believe that a uniform trade-through rule, with the best-price assurance it affords, provides critical investor protection and enhances investors' confidence in

[1] Securities Exchange Act of 1934, § 11A(a)(2), 15 U.S.C. § 78k–1(a)(2)(2004)(added by the Securities Act Amendments of 1975, Pub. L. No. 94–29, § 7, 89 Stat. 111 (1975)).
[2] 15 U.S.C. § 11A(a)(1)(2004).
[3] E.g., Amex Rule 239, Amex Guide (CCH) ¶ 9359 (2004).

the fairness and integrity of the U.S. equity markets. This is the heart of the national market system.

PROPOSED EXCEPTIONS TO THE UNIFORM TRADE-THROUGH RULE

In addition to establishing a uniform trade-through rule, the Securities and Exchange Commission (SEC or the Commission) through Regulation NMS also proposes codifying a number of existing exceptions to the current trade-through rules as well as creating two new exceptions. One proposed new exception turns on whether a particular market or its quotes are automatically accessible. The other proposed new exception would allow "informed" investors to "opt out" of the best-price protection of the trade-through rule.

*Exception for Markets or Quotes that are not Automatically Accessible*

As to the exception related to whether a particular market or its quotes are automatically accessible, the SEC initially proposed allowing "automated execution facilities" (or so-called "fast" markets) to trade through, up to certain price limits, the better prices posted on nonautomated execution facilities (or so-called "slow" markets). The SEC maintains that this "exception is designed to reflect the comparative difficulty of accessing market quotes from nonautomated markets, and to adjust the trade-through requirements to these differences."[4] In its supplemental release, the Commission also requested comment on whether the proposed exception should apply to individual quotes, rather than entire markets.[5]

We oppose the version of the exception that would allow all "fast" markets to trade through better priced quotes of "slow" markets regardless of whether the particular quote at issue is, in fact, readily accessible. The "fast market-slow market" dichotomy is overbroad and not sufficiently tailored to address the Commission's articulated concern: Inaccessible quotes. In contrast, the alternative version of the exception, which focuses on individual quotes (the "quote-by-quote" exception) appears more appropriately gauged to address concerns regarding the inaccessibility of quotes and the related impact of that inaccessibility on effective and efficient integration of pools of liquidity across different markets. Therefore, subject to an appropriate and responsible industry-wide rollout through a pilot program, we support a quote-by-quote exception that would require all markets to indicate whether a particular quote is immediately accessible through an automated execution facility. If a quote is not designated as immediately accessible, then the party routing the order could trade through, up to certain limits, the better priced but inaccessible quote of another market.[6] Of course, the party routing an order that trades through another market pursuant to the quote-by-quote exception would still have to otherwise fulfill his or her best execution obligations.[7]

---

[4] Securities Exchange Act Release No. 49325, *Regulation NMS* (Feb. 26, 2004), 69 Fed. Reg. 11125, 11140 (Mar. 9, 2004).

[5] Securities Exchange Act Release No. 49749, *Regulation NMS: Supplemental Request for Comment* (May 20, 2004), 69 Fed. Reg. 30142, 30143 (May 26, 2004).

[6] For purposes of the quote-by-quote exception, we support defining an "automated execution facility" as one that provides an immediate, automated response (that is, a response without any human or manual intervention) to the router of an incoming order. For purposes of this exception, we believe a "response" should include either (1) an order execution (in full or in part) or (2) a reply that the order was not executed. However, we oppose the SEC dictating performance standards as part of this exception. We believe that rule-based performance standards (1) would set a floor, not a ceiling, (2) would rapidly become antiquated, (3) would lead to endless disputes and litigation even if meticulously drafted, and (4) would remove competitive incentives to innovate and differentiate based on speed. In our view, while aspirational industry standards may initially provide useful rules of thumb, only as a last resort should the Government mandate performance standards by rule. In any event, if the Commission determines to impose rule-based performance standards, we request the phasing in of such standards to give all market participants sufficient time to develop and implement technology to meet those standards.

[7] Any proposed exceptions to the trade-through rule would not provide a safe-harbor from broker-dealers otherwise fulfilling their fiduciary duty to obtain best execution for their customers. The duty of best execution predates the Federal securities laws and stems from common law agency obligations whereby an agent owes his or her principal undivided loyalty and reasonable care. *Newton* v. *Merrill, Lynch, Pierce, Fenner & Smith,* 135 F.3d 266, 270 (3d Cir. 1998) (Since it is understood by all that the client-principal seeks his own economic gain and the purpose of the agency is to help the client-principal achieve that objective, the broker-dealer, absent instructions to the contrary, is expected to use reasonable efforts to maximize the economic benefit to the client in each transaction.). Therefore, broker-dealers must continue to meet their basic best execution obligations to regularly and rigorously review the execution quality of markets to which they direct orders and must direct orders to the markets with the best execution quality. And, even with a quote-by-quote exception, we believe that broker-dealers would still have to regularly and rigorously assess the executions offered by markets whose quotes are not immediately accessible, in whole or in part.

We support a pilot program for the quote-by-quote exception not only for public policy reasons, but also for practical considerations. First, in addition to being more appropriately gauged to address concerns regarding the inaccessibility of quotes, the quote-by-quote approach implicitly recognizes that securities with different characteristics trade differently (for example, actively traded or derivatively priced securities trade differently from inactively traded securities). By focusing on quotes rather than entire markets, the SEC appropriately allows more flexibility for market centers to compete more fairly with one another notwithstanding different market structures that may cater to different types of listed companies and securities. Such an approach is also more consistent with Congress's mandate to the Commission to facilitate fair competition between and among markets.

Second, the quote-by-quote approach lends itself more easily to responsible industry-wide rollout. Requiring immediate, automatic accessibility of quotes as a precondition for trade-through protection is a dramatic industry-wide change. In some regards developing and implementing the relevant technology is the easy part. The more difficult challenge is to create an effective hybrid model that responsibly integrates automatic execution functionality into market models, like the Amex, that are designed to maximize price discovery and improvement, while minimizing price volatility. Further, one type of hybrid model may not be optimal for all securities. For example, the appropriate hybrid model for the most actively traded and derivatively priced securities is unlikely to be the optimal model for less liquid securities, which rely more heavily on price discovery and stability offered by dedicated liquidity providers.

Therefore, we propose phasing in the quote-by-quote exception through a pilot program, starting with the most actively traded securities and progressively expanding the exception, in traunches, to less actively traded securities.[8] Sequencing the implementation of the quote-by-quote exception provides two benefits. First, sequencing allows all market participants to make required technological and business model changes. Second, of equal importance, industry-wide phasing in of the exception through a pilot program would provide empirical evidence on whether the exception creates unintended consequences, such as increased spreads for illiquid securities, decreased execution quality, or increased volatility and perceived disorder. Armed with empirical data while phasing in a pilot program for the exception, the SEC would have the opportunity to respond to, and adjust for, any unanticipated consequences that might undermine investor confidence, increase the cost of capital for small- and mid-cap companies, or discourage the development of new, innovative products.

*Exception for "Informed" Investors to "Opt Out"*

As to the proposed exception for "informed" investors, we have serious concerns about, and oppose, the SEC's proposal to allow institutions and other traders to "opt out" trade-by-trade of the best-price protection provided by the trade-through rule. We believe that there is no justification to adopt this exception, especially if traders know (as they would with the adoption of the quote-by-quote exception) before an order is sent whether a displayed price is immediately accessible; and, once the order is sent would receive an immediate, automatic response as to whether the order was filled.

As the Commission concedes in its proposing release: "The price at which an order can be executed is of paramount importance for most investors . . . ."[9] In fact, the American Association of Retired Persons recently conducted a survey of investors aged 50 and over and found that nearly two thirds said that price—not the balancing of price with speed—was the number one priority when conducting transactions.[10] However, under the current proposed opt out exception, institutions and traders wanting to sacrifice the best price (for themselves or their ultimate customers) for idiosyncratic reasons could. And those trades would occur at the expense of other investors who, without their consent, would have their better-priced limit orders passed over.[11] Thus, in effect, the proposed opt out provision allows the inter-

[8] We propose starting with the most actively traded securities because they are generally less reliant on dedicated liquidity providers except at times of market stress; and, at least for actively traded ETF's, may rely on price discovery in the futures, rather than the securities, markets.

[9] *Regulation NMS Release at 11153.*

[10] AARP, *Investor Perceptions and Preferences Toward Selected Stock Market Conditions and Practices: An AARP Survey of Stock Owners Ages 50 and Older* (Mar. 2004).

[11] For example, suppose that you owned 200 shares of ABC Inc., which was trading at $15.25. And, let us assume that if ABC's stock price increases to $16.00 per share, you want to sell your 200 shares, so you place a limit order to sell at $16.00. Now, let us further suppose that the market for ABC stock increases and your order becomes the national best offer, meaning

ests of a small group of traders who prefer speed to trump the interests of the vast majority of investors who expect to receive the best price.

We also believe that the opt out exception would undermine market integrity and investor confidence by increasing disorder and confusion caused by disjoined groups of traders paying different prices for the same security at the same time. Thus, the opt out exception would undermine one of the fundamental purposes of the trade-through rule: To ensure that buyers and sellers in one market compete head-to-head, based on price with buyers and sellers in other markets. The proposal also creates an economic incentive for an unscrupulous broker to convince an investor to opt out so that the broker can fill the investor's order internally at an inferior price, pocketing the difference. Finally, if the Commission adopts the quote-by-quote exception to the trade-through rule, we see no reason why anyone should be allowed to trade through an automatically accessible better price. Simply stated, we think the proposed opt out is unnecessary if the quote-by-quote exception is adopted and wrong as a matter of public policy.

**Inter-Market Access**

Amex agrees with the Commission that fair access to the best prices available across competing market centers is essential to achieve an efficient, transparent national market system where markets vigorously compete and, as a result, investors' orders have the opportunity to interact directly and receive best execution. Essential to that competition is the ability for one market to see and have fair and efficient access to another market's best bids and offers. Hidden markets with hidden prices or undisclosed fees undermine fair competition and access. Thus, we agree with the Commission that even when quoted prices are not hidden, published quotes do not necessarily reflect the true price available to investors because of access fees charged by electronic communication networks (ECN's) to nonsubscribers. These types of access fees not only undermine transparency, but also—when used to fund liquidity rebate programs—degrade market quality by encouraging the locking and crossing of markets. Such behavior undermines the basic tenets of the national market system.

However, we believe that the Commission's proposed solution of placing a "de minimis" cap on access fees fails to address the fundamental problem with access fees imposed on nonsubscribers and is over-inclusive, as drafted. First, we question whether the Commission's proposed solution of fixing maximum rates for access to quotes moves us any closer to true fair access across markets. Instead, we believe that the proposal not only places the SEC in the unfamiliar role of rate maker, but also fails to directly address the fundamental problem: ECN's charging market participants, *with whom they have no contractual or other relationship,* a surcharge to access the ECN's' quotes. Then, pursuant to what these market participants perceive as their best execution obligations to their customers, they believe that they are, in effect, forced to access the ECN's' prices and pay any additional charges that the ECN's wish to impose. This is akin to a private entity placing a tollbooth on a public highway.

Second, rather than focusing on the questionable activity—imposing a surcharge on parties unilaterally—the proposed rule also appears to reach transaction and other fees charged by self-regulatory organizations (SRO's) and other market centers to their members and subscribers. Transaction and other fees charged by SRO's (or even access fees charged by ECN's to their subscribers) are fundamentally different from access fees ECN's charge to nonsubscribers. At the most basic level, transaction and other fees charged by SRO's and other market centers to their members and subscribers are consented to (that is, bi-lateral) and tied to services provided. For example, the Amex has a market structure and applicable rules designed to establish fair prices on open and close, facilitate single-priced auctions, manage market imbalances, reduce daily stock-price volatility, and provide dedicated liquidity. And unlike ECN's, SRO's like the Amex have obligations not only to ensure that their members comply with the Federal securities laws, but also to adopt and enforce rules to prevent fraudulent and manipulative acts and practices, promote just and equitable principles of trade, and protect investors and the public interest.

Thus, we believe it is fundamentally unfair to allow market centers to access the quotes of other market centers at prices set by the SEC—and not the marketplace itself—without commensurate obligations to provide dedicated liquidity and regulatory services. Such an approach fails to acknowledge that there are different levels

---

that you are offering to sell ABC stock at the cheapest price nationwide. However, without a trade-through rule, your order to sell could be ignored and a trade could be executed at, for example, $16.02. Thus, not only have you not been able to sell when your limit order represented the national best offer, but also the investor who bought paid more than necessary for the stock.

of service and responsibilities (regulatory and otherwise) provided by market centers for which members, subscribers, and investors are willing to pay.

As to the SEC's proposal related to Regulation ATS, we oppose merely lowering the fair access standard of Regulation ATS from 20 to 5 percent of trading volume. Instead, we believe that the first step in true fair access is to mandate fair access by all alternative trading systems (ATS's) regardless of the percentage of their trading volume. And, to minimize the cost to other market participants for obtaining access to ATS's with trading volume below 5 percent we propose requiring that those ATS's display and make available their quotes through an SRO. Finally, to facilitate fair access and enhance transparency, we urge the Commission to eliminate the loophole in Regulation ATS that allows an ATS to avoid disseminating its quotes into the national market system by "going dark" (that is, not even displaying subscribers' quotes to other subscribers). We believe that the above-described steps would advance the goal of eliminating hidden markets with hidden prices, which undermines fair competition between market centers and fair and efficient access to all best bids and offers.

**Market Data**

COLLECTING, CONSOLIDATING, AND DISSEMINATING MARKET DATA

One of the fundamental achievements of the national market system is widespread, public accessibility of reliable consolidated market information, including real-time access to the national best quotes for, and trades in, NMS stocks. Collecting, consolidating, and disseminating real-time market information across all market centers nationwide enhances transparency and competition. Of equal importance, real-time dissemination of market data arms investors with information essential to (1) make more informed decisions when placing limit orders, (2) monitor the quality of their trade executions, and (3) evaluate the performance of the market professionals executing trades on their behalf.

As such, we support codifying the requirement that all SRO's must participate in, and act together through, joint-industry plans that ensure the collection and dissemination of real-time "core" consolidated market information—the national best bid and offer (NBBO) and time and sale data—to the public through a single processor for each NMS stock. However, we oppose (1) reducing the type of information included in the consolidated display, (2) limiting the circumstances under which investors must receive consolidated market information, or (3) allowing market centers to sell duplicative core market data independent of the joint-industry plans. We believe that these three proposed changes will not enhance transparency for investors, but will increase the risk of disseminating incomplete, nonsequential market data that will confuse investors and complicate the management of market data for vendors and broker-dealers.

First, as to the proposed definition of "consolidated display," the SEC in Regulation NMS suggests eliminating the current requirement that the display must include a complete montage of quotes from all reporting market centers trading a particular security. We oppose this change because we believe that the complete montage provides valuable information to investors, especially in the era of decimalization. For example, two market centers could be quoting minimum depth at the NBBO, while a third market center is quoting substantial depth not at, but close to, the NBBO. An investor wanting to execute a large trade but only receiving information constituting the newly defined consolidated display would arguably lack the most significant piece of information to that investor: The substantial depth being offered close to the NBBO by the third market center. Thus, we believe requiring the consolidated display to include a complete montage of quotes from all reporting market centers provides essential transparency to investors and should continue.

Second, the Commission appears to have potentially narrowed the circumstances under which investors must receive the consolidated display to only situations "in which a trading or order-routing decision can be implemented." [12] In our view, any display of market data can lead to a trading decision (including a decision not to trade), and we believe that investors should make all trading decisions based on market information that is as complete as possible. Therefore, we are concerned that broker-dealers or others could unintentionally provide incomplete or skewed market data to investors upon which those investors may make preliminary investment decisions. And only when those investors actually access a system to place or route an order (if they are able to do so at a reasonable cost under this new regime) would the complete picture of the market come to light through the consolidated display.

[12] *Regulation NMS Release* at 11209.

Third, we support fostering innovation and competition between markets by allowing market centers to develop and independently sell ancillary, noncore information (such as their depth of book) with as little regulation as possible and without requiring dissemination through a specific consolidator. However, we are concerned that allowing market centers to independently sell duplicative core market data will diminish transparency for investors. For example, notwithstanding best intentions to the contrary, a risk exists that independently disseminated, unconsolidated quotes would not reach vendors simultaneously with the consolidated NBBO. As a result of mismatches between the NBBO and independently disseminated quotes, we believe that the appearance of a disorderly, incongruent market will increase as will investor confusion.

In addition, combining the proposed independent sale of core data with the narrowing of the definition of the consolidated display creates the risk of anticompetitive practices with respect to the joint-industry plan for Nasdaq securities. Unlike the plans for exchange-listed securities, the joint-industry plan for securities traded on Nasdaq allows subscribers to either purchase (1) the last sale and the NBBO (so-called "Level 1" service) or (2) the quotes of each market maker and exchange with unlisted trading privileges in addition to Level 1 data (Level 2 service). Thus, not requiring the quotes of other market centers as part of the consolidated display could lead to a scenario where Nasdaq charges little or nothing for the quotes of its market makers. This could create a strong economic incentive for subscribers to only purchase Level 1 data and obtain market maker quotes directly from Nasdaq. As a result, these subscribers would not obtain the quotes of exchanges with unlisted trading privileges. We believe that such an outcome would deprive investors of essential information from exchanges with unlisted trading privileges, such as substantial depth being offered close to the NBBO, and would lessen competition among markets in Nasdaq securities to the detriment of investors.[13]

GOVERNANCE OF MARKET DATA PLANS

The Amex supports the creation of nonvoting advisory committees to participate in network operating committee meetings. We believe that advisory committees will give a formal voice to the key constituencies that have historically provided informal input: Investors and their representatives, alternative trading venues, and data vendors. To make the advisory committees as effective as possible, we also support granting advisory committee members the ability to receive the same materials as operating committee members and to attend and participate in all operating committee meetings (with the exception of executive sessions).

DISTRIBUTION OF MARKET DATA REVENUE

As to the distribution of market data revenue, the Amex strongly endorses the Commission's goal of revising existing distribution formulas to remove or diminish economic incentives for trading practices that degrade the accuracy and usefulness of market data, confuse investors, and unnecessarily increase message traffic for all market participants. The current distribution formulas, with their myopic focus on trades alone, create incentives for "gaming" through fraudulent, deceptive, or market-distorting trading practices driven by the desire to capture data revenue.[14] Thus, we strongly support the Commission's proposed revisions to the distribution formula, with some minor adjustments, as a thoughtful, innovative mechanism to discourage deceptive and market-distorting trading practices while encouraging enhanced liquidity and price discovery.

We acknowledge that the proposed formula appears relatively complex. Nevertheless, the network processors already capture all of the essential data needed to implement the formula (except for the portion of the formula related to price improving quotes, which we recommend that the SEC not adopt). Likewise, the formula easily can be programmed into a computer without the component related to price improv-

[13] No similar problem exists for exchange-listed stocks because the joint-industry plans for these securities provide all subscribers with the same data (that is, last sale and all quotation information together) and the current governance structure of these plans make changes unlikely because unanimity of plan participants is required.

[14] Such practices include: "wash trading," "tape shredding," and "print facilities." Wash trading occurs when traders purchase and sell the same security at the same time or within a short period of time in non-bona-fide transactions to create the false or misleading appearance of active trading. Trade shredding occurs when a single order is divided into multiple, smaller orders to increase the allocation of market data revenue. And, a so-called "print facility" is an SRO that rebates a portion of its market data revenue to market makers and ATS's for reporting their trades through the SRO, but those entities otherwise have little or no relationship with the SRO and may even display quotes through a second SRO. Thus, print facilities not only confuse investors about the actual location of liquidity, but also complicate regulatory and surveillance efforts by obscuring where a trade actually occurred.

ing quotes. And, regardless of its perceived complexity, the only parties that need to deal directly with the formula are the network processors and the professionals auditing the calculation and distribution of market data revenue. What must not be lost in the debate on the details of the proposed formula is its most compelling attribute: The formula encourages market transparency and liquidity by rewarding quoting at the national best price.

**Sub-Penny Pricing**

Amex believes that the proposal in Regulation NMS that would prohibit market participants from ranking, displaying, or accepting orders, quotes, or indications of interest in sub-pennies does not go far enough. Sub-penny quoting diminishes market transparency and depth and degrades price priority by allowing orders offering economically meaningless price improvement to step in front of resting limit orders. Therefore, we believe that the prohibition against sub-penny quoting should extend to all NMS stocks, including stock trading below $1.00. We also believe that the Commission should ban trading in sub-pennies except for the reporting or "printing" of trades resulting from pricing mid-point, volume-weighted average, or other similar trades, so long as the trades do not otherwise violate the prohibition against quoting in sub-pennies.

In addition to banning sub-penny quoting and allowing sub-penny trading only under limited circumstances, we believe that the Commission should take this opportunity to reassess whether "one-size-fits-all" with respect to minimum tick size. Professor William Christie who, along with Professor Paul Schultz, in 1994 suggested that Nasdaq market makers were maintaining artificially wide spreads, is now suggesting reevaluating the penny tick size.[15] He contends, and we believe, that a penny creates such a small pricing increment that it destroys the critical roles played by price priority and limit orders. A penny tick size, like sub-penny quoting, encourages gaming whereby economically meaningless price improvement is used to step in front of existing limit orders. Professor Christie has suggested considering a minimum tick size of $0.05.[16] We agree, especially for appropriate, high-priced securities.

**Conclusion**

Thirty years ago when setting out the basic tenets of a national market system, Congress knew then—and it is equally applicable today—that when it comes to market structure "one-size-does-not-fit-all." In the coming weeks and months as the debate on market structure and Regulation NMS continues, we urge Congress and the Commission to turn back to these core principles and remember the important and unique role that auction markets and their dedicated liquidity providers play in facilitating capital formation for small- and mid-cap companies and in nurturing innovative financial products. Ultimately, investors, listed companies, and innovative financial products all benefit from vigorous but fair competition between diverse market centers offering value-added services.

Thank you again for providing the Amex with the opportunity to express our views on some of the key proposals contained within Regulation NMS. I would now be pleased to answer any questions you may have.

---

## PREPARED STATEMENT OF EDWARD J. NICOLL

CEO, INSTINET GROUP INCORPORATED

JULY 21, 2004

Chairman Shelby, Ranking Member Sarbanes, Members of the Committee, thank you for holding this hearing and for inviting me to speak before you today.

My name is Ed Nicoll and I am the CEO of Instinet Group Incorporated. Through our affiliates, we provide sophisticated electronic trading solutions that enable buyers and sellers worldwide to trade securities directly and anonymously with each other, interact with global securities markets, have the opportunity to gain price improvement for their trades, and lower their overall trading costs.

The U.S. Government today—in the form of the SEC, Reg. NMS, and the oversight provided by Congress—is basically debating whether or not to allow true competition between America's stock markets or to keep in place the status quo. Simply said, competition and openness will benefit investors more than the status quo or mere "window-dressing" reforms.

[15] William G. Christie, A Minimum Increment Solution, *Traders,* Nov. 2003, at 40.
[16] *Id.*

In 1975, Congress tasked the SEC to create the national market system (or NMS) and provided it with a roadmap for developing a market structure designed to preserve and strengthen our markets. But over the past three decades, new trading technologies have had an incredible impact on our financial markets. With these advancements, there is now general consensus that one of the key market rules, the trade-through rule, is outdated. Even those calling for minimal reforms are not arguing that no change is needed.

Despite the recognition that the rule is outdated and actually undermines market efficiency, many want to retain its core principles rather than eliminate it or provide an effective way to opt out of its prohibitions. Those arguing in favor of retaining the trade-through rule assert that trade throughs lead to investor confusion, fewer limit orders, reduced liquidity and, given the hyperbole of some, the collapse of our financial markets.

But we already know what happens in the absence of a trade-through rule. In particular, when we compare a market without a trade-through rule—the market for Nasdaq securities—to a market with a trade-through rule—the market for NYSE securities—we see that the Nasdaq market provides investors with execution quality that is as good as, and in many cases better than, that of the NYSE. This is borne out by the SEC's own mandated execution quality statistics, as well as other analyses that we submitted with our comments on Reg. NMS and which I ask be included in the record.*

Nevertheless, the SEC is currently considering adopting a new trade-through rule that would continue to prohibit market participants to trade through advertised prices of so-called "fast" markets. In short, the Government would designate an arbitrary speed limit for the marketplace. The NYSE is attempting to gather support for the "fast" market proposal by making its system just automated enough so that the SEC will designate it as a "fast" market. Ironically, these changes by the NYSE only serve to underscore the benefits of eliminating the trade-through rule or adopting an effective opt out provision.

But the issue with a trade-through rule is not related to speed. It is that the rule substitutes the judgment of the Federal Government for that of the marketplace—thereby distorting competition and inhibiting innovation. Many of the traditional market participants, with high cost structures, find themselves unable to compete with new, nimbler competitors who are able to adapt to consumer demands. In the face of declining trading profits, it is hardly surprising that they seek assistance from the Government to slow down the changes in the marketplace.

But do we really want to hamstring the most technologically advanced markets, with a proven track record of delivering increased value to investors, in order to protect the old way of doing things? The cost of any regulatory approach that inhibits new methods of trading efficiency will be borne by investors who will pay more when they buy and sell securities. The question becomes, will SEC rules foster technological growth or cling to an outdated regulatory structure that inhibits it?

We should also consider the limited proposal to reform the trade-through rule in the context of the other elements of proposed Regulation NMS such as: (1) fixing the prices a market can charge; (2) fixing the increments in which they can trade; (3) dictating terms of access; (4) establishing the terms and price for each market's data; and, (5) limiting transparency and information sharing in order to protect consumers from "confusing" bids and offers. I ask that the executive summary of our comment letter to the SEC, which discusses these issues, be included in the record.

On top of all this, effectively setting a speed limit for markets by defining "fast" could result in denying markets one of the last ways they have to compete against one another. I cannot imagine that we want to limit—rather than promote—competition in the most efficient, dynamic markets in the world. In fact, some might wonder whether Congress' call for a national market system is getting closer to a "nationalized" market system—and not the diverse system of competing markets that Congress originally envisioned. Our markets have long been the best and strongest in the world. We cannot bury them in regulatory mandates and micromanage their operations like we do the local power plant or phone company and not expect to eventually pay a price in terms of our global competitiveness.

The NYSE's publicly stated intent to reform its internal processes only underscores the benefits of eliminating the trade-through rule. It is no coincidence that the NYSE is considering ways to make its market more efficient and electronic at the same time that we are all here to discuss the fate of the trade-through rule. The NYSE's timing proves our point. If the trade-through rule were not in some way protecting its business, then the NYSE would not be making such an effort to defend it. But innovation cannot be limited to time periods when regulations are under

* Held in Committee files.

review. It must be continuous and spurred by competition. That is why we simply need to either eliminate the trade-through rule or adopt an effective opt out.

Anything less and we risk squandering both this opportunity for reform as well as our position as the preeminent capital market in the world.

Thank you for the opportunity to address you today and I look forward to answering any questions you might have.

---

## PREPARED STATEMENT OF GERALD D. PUTNAM

CHAIRMAN AND CHIEF EXECUTIVE OFFICER
ARCHIPELAGO HOLDINGS, LLC

JULY 21, 2004

Good morning Chairman Shelby, Ranking Member Sarbanes, and other distinguished Members of the Committee. As Chairman and CEO of the Archipelago Exchange (ArcaEx), it is a high privilege and great honor to be provided the opportunity to submit a written statement to and testify before the Committee on proposed Regulation NMS and developments in market structure.

**The History of ArcaEx**

ArcaEx's beginnings were sown in the immediate aftermath of the Nasdaq price-fixing scandal of the mid-1990's, which culminated in sanctions being brought by the Securities and Exchange (SEC) and the Department of Justice.[1] One of the chief reforms exacted on the OTC marketplace in response to the scandal was the introduction of the so-called "Order Handling Rules" in 1996.[2] These rules provided me with an opportunity to design a trade-execution business that, although seemingly very simple, was revolutionary for its time. It was "to do the right thing" by the customer by creating a level playing field for all investors in an industry traditionally filled with insiders and insider deals. With that, our credo has always been: No special(ist) handshakes, no "negative obligations," no "jaywalking," and no thirty-second free options; rather, all investors are given the opportunity to play on a level playing field. This has been and will continue to be one of our competitive advantages.

From day one, we branded our business as "best execution" by delivering to all of our customers: (1) access to full and timely market information; (2) fast electronic and anonymous executions; (3) sophisticated order types and other value-added functionality; and, (4) arguably our biggest contribution to market structure—algorithmic outbound routing to guarantee best price where that price did not reside in ArcaEx. This latter element was both a sizeable technological innovation and a manifestation of two primary goals articulated by Congress in the National Market System Amendments in 1975.[3] By establishing proprietary linkages among marketplaces, we were able to create a large virtual pool of liquidity where customers were given electronic access to best price, not only within ArcaEx's own system, but also at other (competitor) electronic marketplaces. Unlike the listed market,[4] the OTC market does not have a "trade-through" rule today. Thus, in lieu of Government fiat such as the ITS trade-through rule, getting "best price" for our customers was driven by a business idea, newly created customer demand, and our fiduciary obligation to achieve "best execution" for our customers.

In late 2001, ArcaEx was unanimously approved by the SEC to operate a fully automated electronic stock exchange regulated by the Pacific Stock Exchange.

---

[1] *See* Report Pursuant to Section 21(a) of the Securities Exchange Act of 1934 Regarding the NASD and the Nasdaq Market, SEC, August 8, 1996.

[2] Securities Exchange Act Release No. 37619A (September 6,1996), 61 FR 48290 (September 12, 1996) (File No. S7–30–95).

[3] National Market System Amendments of 1975 to the Securities Exchange Act of 1934; Pub. L. No. 94–29, 89 Stat. 97 (1975).

[4] The "listed marketplace" is defined as those national securities exchanges and self-regulatory organizations that trade NYSE- and AMEX-listed securities, as well as securities listed on their own markets, and include ArcaEx (as a facility of Pacific Stock Exchange), Boston Stock Exchange, Philadelphia Stock Exchange, National Stock Exchange, Chicago Stock Exchange, NASD (Nasdaq 3rd Market) and, of course, the NYSE and AMEX, themselves. These listed markets interface and interact with one another in accordance with intermarket regulations and rules governed by national market system committees—ITS and CQ/CTA—and by the SEC. In contrast, the "over-the-counter (OTC) marketplace" is defined as those national securities exchanges and self-regulatory organizations that trade Nasdaq securities and include many of the entities listed immediately above such as ArcaEx. The "OTC marketplace" is structured under a wholly different set of intermarket regulations, rules, and committees than the "listed market."

ArcaEx became operational to trade listed stocks in 2002, and OTC shares in 2003. ArcaEx is now available to execute trades in over 8,000 exchange-listed and OTC securities.

From literally zero volume as an ECN in 1997, ArcaEx now handles over 25 percent of the trading volume in OTC securities, over 19 percent of total trading volume in Amex-listed securities, and 1.6 percent of total trading volume in NYSE-listed securities.

**Big Doings in Market Structure Debate**

In the past, I have come before this Committee and other Congressional Subcommittees and expressed the significance and importance of the issues of that day. However, today's hearing is easily the most consequential since I first appeared before a Congressional Committee in 1999. The large number of executives from my industry and K-Street lobbyists walking these corridors over the last several months and the amount of letters generated by Members of Congress and the public certainly bears out the politically charged nature of Regulation NMS.

Regulation NMS is a big-impact proposal. As you know, it tackles weighty and sensitive issues—the "trade-through" rule, access fees, and market data fees—and is the SEC's most ambitious architectural transformation of our markets since the SEC created the national market system (NMS) in response to Congressional direction as part of the 1975 amendments to the Securities Exchange Act of 1934. The implementation of Regulation NMS, in current or modified form, could have colossal effects on the economics of this industry and the trading of equities, and could redefine long-standing investment relationships.

Competition has served the investing public in the OTC market and could in the listed market as well. Generally speaking, the OTC market was (re)built from the "bottom up" by entrepreneurs, among others, after the implementation of the Order Handling Rules in 1997. Competitive forces have compelled every legitimate OTC market center to provide firm quotes that are accessible by automatic execution with no human intervention or intermediation. This is true for not only the best bid and best offer (BBO) of each OTC market center, but also for their entire depth of book. If limit order protection is sacrosanct, then why stop at the BBO? Competitive forces in the OTC market have essentially caused all market centers to respect *all* limit orders, not just the BBO.

The listed market, on the other hand, was built from the "top down" where lots of rules exist and bureaucracy, with all of its interpretive complexity, reigns. The listed market could stand a good dose of competition. Adherence to the findings of Congress in 1975 would "kick down the door of monopoly" and sweep in the fresh air of competition. In this manner, services will grow, and the investing public will benefit.

Since a trade-through rule already exists, and has existed for decades, in the listed market, we understand why the SEC would continue to press for its existence, but in a reformed manner to make sure that investors can *really* receive the best price for their orders, and not just the best price for the specialist. "Best price" vs. "speed" is a false dichotomy. If the NYSE were providing "best price" to its customers than why the SEC fines of NYSE specialists for $250 million, public complaints by customers of the NYSE, and editorializing by leading newspapers for change at the NYSE?

**Regulation NMS**

In this winter and spring, the SEC proposed several market structure initiatives, including trade-through reform, new market access standards, and market data revenue-sharing reform. Although we have strong views on each of the SEC's proposals, and I will mention briefly the market data proposal, I will focus today, for the most part, on two of these items: The need for reform of the current trade-through rule and the no-need for Government ratemaking in our extremely competitive markets.

TRADE-THROUGH REFORM

Without question, the operation of the trade-through rule has been one of the most highly debated issues in the securities markets over the last several years. In its current form, it thwarts competition and impedes efficient execution. We believe that the solution to trade-through reform is simple: Allow markets with firm quotes to trade-through markets with nonfirm quotes, but not to trade-through markets with firm quotes.

The recent history of reform in the OTC market vividly displays the benefits of efficient market access and firm quotes. It is beyond question at this point that the business model of ArcaEx and our direct competitors has had a profoundly positive effect on the OTC marketplace that has benefited investors. Our early success in the OTC market was attributable to the ability of ArcaEx and its competitors to ac-

cess firm quotes on other markets to assure that investors always receive best execution.

Today, in the NYSE-listed marketplace, however, nonfirm quotes are rampant and preclude firm quotes from timely execution. The trade-through rule in NYSE-listed securities was designed to provide price protection and encourage display of aggressively priced limit orders. The rule sought to assure that better priced orders would not be circumvented by inferior executions in other markets. In an electronic environment, however, this means that orders must be transmitted to any market center with the best price, whether a manual or electronic market, even though that best price may no longer exist by the time that the order is received. Thus, there are few, if any, commentators today that question the desperate need to modernize this rule.

The current ITS trade-through rule was designed for a 1970's market structure when all exchanges were slow and manual and specialist-based ones. In today's electronic world, however, the rule limits customer choice and dumbs-down best execution to the lowest common denominator of the slowest market. It compels fast electronic markets, and their customers, to play at glacial speed. A broader effect of the trade-through rule is to thwart competition between electronic markets and the NYSE.

A modern trade-through rule must protect published prices that are firm quotes and that are immediately accessible and responded to instantaneously without human intervention.[5] If a market still wants to operate in a manual manner, however, then electronic markets should be able to trade-through those slow quotes.[6] Moreover, the rule must apply to all markets trading NYSE-listed securities—including those that internalize without reflecting their interest in the consolidated quote. The end result is that only true prices are protected and afforded the ability to instantaneously execute when at the best price. This concept was the cornerstone of the "Three Amigos" Proposal of 2002, which ArcaEx still stands behind strongly.

The existing trade-through rule protects the NYSE's market share by requiring orders to be funneled to the specialists at the NYSE when they display the best price. This provides the specialist with a virtual put option on the order and ensures that they, the specialist, obtains the best price.[7] The customer, on the other hand, may or may not get the best price and may have even lost the opportunity, through this process, to receive any execution at all, not only at the NYSE but also across all market centers.

We also want to caution that the SEC may have a difficult challenge in defining the concept of "fast" and "slow" markets, or even "automated" and "nonautomated" markets.[8] Definitions too often result in unnecessary complexity. For this reason, as well as others, we believe that investors must have the ability to bypass market centers where quotes are not firm, and this ability is critically important both in terms of enhancing market competition and in terms of maintaining market discipline.

*Trade-Through Reform Is Not Necessary in the OTC Market*

While we support reform of the current trade-through rule, we believe that a new trade-through rule is unnecessary in the OTC marketplace because competition already has driven the market to develop its own means of price protection. Importantly, we believe that a trade-through rule in OTC would damage a marketplace that has changed dramatically for the better since the implementation of the Order

---

[5] It is important to stress that accessibility includes the ability to enter and to exit a market center. Otherwise, some market centers will become "sticky" in an anticompetitive sense and will suck a market participant in with no ability to cancel and exit without an execution.

[6] ArcaEx supports the proposed rule for listed trade-throughs: Markets representing firm quotes may not trade-through markets representing firm quotes but may trade-through markets representing nonfirm quotes up to $.03; nonfirm quotes may not trade-through any other quote whether firm or nonfirm.

[7] Earlier this year, the NYSE's five largest specialist firms agreed to pay a total of about $240 million to settle SEC allegations that they short changed customers by trading for their own accounts. *See* "NYSE Traders Will Pay Fines Of $240 Million," *Wall Street Journal,* February 18, 2004. Some 5 months after these five large specialist firms paid nearly a quarter of a billion dollars to settle SEC trading ahead allegations, the NYSE's other two much smaller specialist firms paid roughly $5 million to resolve similar SEC charges. See "NYSE Small Specialists to Pay $5 Million in Cases on Trading," *Wall Street Journal,* July 9, 2004.

[8] ArcaEx is of the view that whether a quote is firm should not be determined on a quote-by-quote basis at the discretion of an intermediary, such as a specialist, because such a structure would represent a step backward to a time when intermediaries, such as market makers and specialists, could exercise individual discretion on when to turn on and to turn off automated systems. The potential for customer abuse, as well as customer confusion, in that environment is obvious and was well documented as such in the OTC market pre-Order Handling Rules.

Handling Rules. It makes little sense to us to pursue additional reform of the OTC market because of the recent mishaps of the NYSE. Execution speeds in OTC stocks are generally sub-second and currently surpass quote update speeds. Accordingly, introducing a trade-through rule in OTC would result in holding up executions while awaiting dissemination of quote updates, or worse yet, in instigating increased cancellation of orders. From a practical perspective, in OTC stocks where speed and certainty of execution are critical, the customer sending the order in an environment with a trade-through rule is disadvantaged because not only will it take longer to execute the order, but he or she may also receive a partial fill—or no fill at all. In other words, the OTC market is not broken so why fix it.

*The SEC Must Monitor and Enforce the Trade-Through Rules*

Our second proposal for trade-through reform is equally simple: The SEC must monitor and enforce whatever trade-through rules are in place. Industry insiders have known for years that the trade-through rule is the least enforced rule this side of the double nickel speed limit on America's highways. For example, despite the fact that there is a trade-through rule for NYSE-listed securities, ArcaEx quotes are traded through on average of over 2,000 times per day.[9] In fact, trade-through violations have actually risen most recently despite the glare of the regulator spotlight on the NYSE. On any given day, ArcaEx has a billion shares on or near the national best bid or offer. Yet, the NYSE sends only two million shares to ArcaEx over ITS when we have the best price.

Clearly, today's trade-through rule is not effectively enforced, other than to ensure that the NYSE specialists receive the best price.[10] Implementing a clear-cut rule with no exceptions will be essential to ensure that the rule is adhered to and enforced. Reform would enable investors to choose how they want their limit orders handled. They could then send them to electronic markets that provide instantaneous display and automatic executions against incoming orders. Or, investors could choose to send them to a manual market if they want to expose the orders to specialist and floor broker handling.

MARKET ACCESS PROPOSAL

A second important issue raised by the SEC relates to accessing quotations displayed through the national market system (Market Access Proposal). The Proposal establishes general principles designed to ensure all participants in the market have fair access to quoted prices—regardless of whether or not they are a member of the entity displaying the price. The Market Access Proposal also sets forth more specific regulations establishing fee caps for market centers and restrictions on a broker's ability to lock/cross the NBBO.

Our success is based on a business model in the OTC market that requires fair access. We are 100 percent in favor of a framework by which competitive proprietary intermarket linkages also can develop in the marketplace for NYSE-listed securities.[11] In our view, all market centers and linkages should benefit by "most favored nation" status requiring not only fair access, but also access on the same terms as afforded others.

At the same time, however, ArcaEx fervently opposes rash rulemaking proposed in the fee area that is designed to address problems that are either nonexistent or resolvable through less intrusive methods. In this hypercompetitive marketplace, why the need for command economy price-fixing? The SEC provided no data to support the need for this part of the proposal.

As a result of the SEC's Order Handling Rules that were designed to stimulate competition, the OTC marketplace has become fiercely competitive and highly efficient. Today, the OTC market consists of four major liquidity pools connected by

---

[9] ArcaEx runs software (aptly named whiner) that messages alerts when exchanges trade through an ArcaEx quote in violation of the ITS Plan. For the week of June 21, 2004, ArcaEx complained to other exchanges 11,816 times about being traded-through for an average of 2,363 complaints per day.

[10] It is difficult for a market participant to pursue enforcement of the current trade-through rule because it is an ITS rule and not an SEC rule. One has to go to the ITS Committee to complain before approaching the SEC. In addition, enforcement is after the fact so it is time-consuming and otherwise troublesome. Moreover, the existing rule is riddled with exceptions which has built up interpretive complexity over time.

[11] It also is worth noting that the establishment of a vibrant and dynamic competitive marketplace will positively impact our Nation's risk management which was exposed by the events of September 11, 2001. Certainly, a competitive network of multiple competitive market centers linked by robust linkages would appear to assuage this risk and avoid any single point of failure. A system of linked competitors is identical to the Internet model, originally designed to provide redundancy and avert such a single point of failure. It was precisely this decentralized model that proved unconditionally successful as a means of communication on September 11.

hundreds of private linkages. Not only are broker/dealers able to freely become members of any of these liquidity centers, but also should they not want to become members or establish connectivity to any one of the liquidity pools, hundreds of brokers stand ready to provide direct access to any or all markets for a small fee. All major liquidity pools in the OTC market utilize computer execution algorithms, meaning all participants attempting to interact with the liquidity pools receive equal execution treatment—members, nonmembers, and competitors. In addition, it is our understanding and experience that all members pay roughly equivalent transaction fees. This structure enables all market participants—brokers, institutions, and even retail investors—to directly access any published quote at the touch of a button regardless of whether they are direct members of the venue publishing the quote.

Standards of fair access are not commonplace, however, in the market for Amex- and NYSE-listed securities. As the Committee is well aware, markets are extremely efficient. Most ECN's were able to charge significant access fees only when participants were not technically able to avoid trading with them. Nasdaq—through SuperSOES and SuperMontage—did not provide members with the ability to avoid trading with auto-ex ECN's, even when they charged exorbitant access fees. However, with Nasdaq's self-imposed cap on ECN access fees, such excessive fees are no longer a significant issue. Moreover, the problem will not recur so long as OTC market participants are provided with the ability to choose not to trade with a market center that charges unreasonable fees. By virtue of market competition, fees have dropped well in excess of 80 percent since 1997. Competitors that did not reduce fees as a result of market forces found their market share and profits eroded.

We are very concerned, however, about the role of Government in regulating the amount of any fees. History has not been favorable to command economies, in which the Government places its judgment above that of the free market. In essence, by setting maximum access fees, the SEC would engage in ratemaking, substituting its views for that of the markets. Assuming that the SEC had the authority to engage in such actions, which is not clear to us in light of the 1975 Amendments, what would also prevent the SEC from regulating maximum advisory fees for mutual funds, setting the spreads for market makers, establishing fee caps for retail brokerage firms, or setting the maximum investment banking fees?

MARKET DATA PROPOSAL

Another aspect of Regulation NMS is a proposal to replace the existing market data revenue formula with a new allocation method that bases revenues on the data's theoretical information content. While we are not confident that we fully understand all of the ins and outs of this new proposed formula (read: it's really complicated!), we do see that it merely reconfigures the revenue for existing participants without injecting competition into the mix.

Any allocation formula maintained by plan cartels or by regulatory directives will always create unintended consequences and is suspect in our judgment. The better approach would be to let the marketplace make its own judgments about market data economics, and the best mechanism for doing so is a competitive consolidator model. Absent a competitive consolidator model which lets the market decide what the data is worth, the data plans should reflect the costs of producing the data; and they should also reflect the economic value of the data.

**Conclusion**

ArcaEx believes that a light regulatory touch is better than a heavy one; that targeted rulemaking is better than broad policymaking; and that simple is always better than complicated. We already have learned that when Government makes decisions that permit competition, the markets transform rapidly to increase efficiencies. This has clearly occurred on Nasdaq which causes us to question why the SEC desires to impose on the OTC marketplace a trade-through rule where there is none. However, we do agree with the SEC that the trade-through rule now existing in the listed area needs to be reformed and enforced to eliminate its anticompetitive effects that weigh heavily in favor of manual markets like the NYSE. This rule ensures the best price, but, alas, only for the specialist and not for the customer.

It is critical to any reform to preserve innovation and investor choice by maintaining an opportunity for automated exchanges to bypass manual ones. It is just as critical that reform not stop with the BBO. Competitive forces have compelled every legitimate OTC market center to provide firm quotes that are accessible by automatic execution with no human intervention or intermediation. This is true for not only the BBO of each OTC market center, but also for their entire depth of book, and such should be the case for the listed market as well. If one of the objectives

of Regulation NMS is to protect limit orders, then reform should not stop at the BBO. Again, competitive forces in the OTC market have essentially caused all market centers to respect all limit orders, not just the BBO, and that has to be the case in the listed market too for meaningful reform to be achieved.

While we also wholeheartedly endorse increased access as a means to encourage competition, we want to caution that rate setting in the form of caps on access fees does not represent sound policy. Markets should set rates, not Government.

Thank you for providing me this opportunity to testify, and I look forward to responding to your questions at the appropriate time.

---

## PREPARED STATEMENT OF JOHN A. THAIN

CHIEF EXECUTIVE OFFICER, NEW YORK STOCK EXCHANGE, INC.

JULY 21, 2004

### Introduction

Mr. Chairman, Members of the Committee, thank you for inviting me to present our views on proposed Regulation NMS. We appreciate your initiative as we collaborate on how best to modernize our national market system, (NMS). We applaud the SEC for its leadership in advancing a comprehensive proposal that serves as the basis for our discussions. The issues before us are complex in a time of rapidly advancing technologies and evolving market models. That is all the more reason to stay focused on our primary mission.

Our goal is not a victory for one market over another, but, rather, competition among markets to create the best possible national market system for all investors, with one deep pool of liquidity. This policy is both the fairest for all, and the surest way to keep the United States in the forefront of global competition. A fractured market that betrays the interests of investors and that puts our capital market leadership at risk would be a pyrrhic victory at best, and a major loss for America.

Long before I joined the New York Stock Exchange, I considered the NYSE a great American institution. Already, my brief tenure at the Exchange has reaffirmed that belief. However, after months of debate over the issues of market structure, I have also come to realize that our national market system is also a great American institution.

As we move forward, let us be guided by the principles designed to protect the public good, and that have enabled our national market system to become the world's best. Technology has changed since the national market system was created, and the trading choices available to investors are different. But these principles are every bit as valid, and as vital, today as they were at the origins of the NMS.

- *The Customer Comes First.* Our national market structure should require intermediaries to place their customers' interests ahead of their own;
- *Best Price.* Every order, regardless of the market to which it is sent, should have the opportunity to receive the best price available;
- *Protection of Limit Orders.* Limit orders provide liquidity to the market and accessible limit orders must be assured an execution before a trade occurs at an inferior price;
- *Choice.* Investors are best served when markets are free to compete and offer an array of execution options, including the opportunity for price improvement;
- *Reduced Volatility.* Greater intraday volatility raises the cost of capital for listed companies;
- *Speed.* Speed should be an option for those customers who want it, but not at a price of damaging the integrity of markets or introducing excessive volatility;
- *Transparency.* Investors should have widespread access to the market data of their choosing on an uninterrupted basis; and
- *Competition.* Commission ratemaking should always be a last resort. Competition typically does a better job than Government ratemaking in providing fairly priced services to investors.

These principles have served the Nation well. As Chairman Donaldson stated at the SEC's hearings in April, "Our markets are among the world's most competitive and efficient. Competition among markets has fostered technological innovation and the creation of trading platforms . . . that address the needs of all types of investors, regardless of size and sophistication. Investor participation in the markets has exploded in the last decade."

When individual markets have competed within the NMS to uphold these principles and add value for investors, their businesses have been rewarded. When mar-

kets have not done so, their customers have taken their business elsewhere. We are pleased that, for the most part, proposed Regulation NMS strives to defend those principles and to end practices that are contrary to them. However, certain proposals are inconsistent with our goal of protecting investors, and we believe they must be improved.

**Trade-Through Rule**

The best way to characterize the trade-through rule is to consider it the "best-price" rule, for that is what it guarantees to each investor. Approved by the SEC in 1981, its purpose is to ensure price protection for investors who post limit orders in any market participating in our national market system. The system envisioned a structure that would enable investors in any region to see the prices being bid and offered for listed stocks in all markets. The trade-through rule ensures that their limit orders will be protected at the best price.

The trade-through rule is the essence of good public policy for our markets. It is the heart of an honest market. And it is the beginning of a virtuous circle for investors. When investors are assured their orders will receive the best price, and that small investors can compete with large institutions, their confidence in the fairness and integrity of that market is bolstered. As investor confidence rises, they are more willing to maintain, or increase, their limit orders, and thus, liquidity is enhanced. A larger, deeper pool of liquidity serves, in turn, to decrease market volatility and to promote fair and orderly markets.

Nevertheless, the many virtues of best price are no guarantee of success. Today, the NYSE posts the best price in our listed securities over 90 percent of the time, yet nothing prevents investors from sending their orders elsewhere.

We compete tenaciously and tirelessly, and evidence of that competition can be seen in the price spread between bids and offers. Over the past year, the average spread of the National Best Bids and Offers on the 93 NYSE-listed stocks in the S&P 100 Index has narrowed from about 5 cents to 2 cents. A 2-cent spread is a fraction of the historic spread and illustrates that every market maker in NYSE shares competes aggressively for orders. Clearly, there is no monopoly in the financial marketplace.

As the trade-through rule serves the interests of individual investors, its role in reducing volatility is equally significant for listed companies. When the NYSE surveyed chief executives and senior officers of some 400 of our listed companies, their most important factor in choosing a trading venue was market quality. And, by far, the most important determinant of market quality was reduced volatility. That preference is also borne out by reality. Over the past 2 years, 51 companies moved their listings from the Nasdaq, where no trade-through rule is in effect, to the New York Stock Exchange. The intra-day volatility of those companies fell, on average, by 50 percent—a substantial decline.

The dynamics of best price that strengthen competition, reduce volatility, and narrow spreads create real dollars-and-cents-benefits. Companies benefit from reductions in their cost of capital. And, billions of dollars in savings flow through to investors to their individual investments, or investment accounts, such as 401K's, pension funds, and college education accounts.

The Congress, the Commission, and industry all understood the central importance of the trade-through rule. They considered its protections and advantages to be the foundation of good public policy. And, they embraced price-protection and best-price execution as the organizing principles of the NMS. Recognizing both benefits and beneficiaries, let us also be clear that bypassing, or trading through, a market's best price quotations creates four victims:

- The investor who buys or sells shares at a price inferior to the best price;
- The investor whose better-priced limit order is ignored;
- Market transparency and price discovery, since a stock is priced at something other than its true value; and,
- Liquidity and capital formation, since investors will lose confidence in the fairness of the market and will be less willing to submit limit orders knowing that they may be bypassed.

While price-protection and best-price execution must remain guiding principles, we recognize that speed is important to certain customers in the 21st century marketplace. Some of our customers have told us they can better serve investors by taking a price that is available immediately by automated execution, rather than exposing an order to the floor auction for potential price improvement. Our data shows that orders executed on our floor in the auction often receive better prices than orders that simply hit our quote.

Nevertheless, we understand why our customers have raised this issue. We are continuing to listen to our customers. We will continue to be responsive to them. And, we are determined to be competitive across the national market system.

Our commitment is to offer customers the ability to trade electronically, quickly, with certainty and anonymity. At the same time, we want to retain the advantages of the auction market, where floor brokers and specialists are adding value and competing to improve prices, moment-to-moment, on the floor of the New York Stock Exchange. As one who spent 25 years at the crossroads of technology and finance, I enthusiastically embrace opportunities to enhance the speed and efficiency of trading. However, there are many occasions, such as during an earnings surprise or outside event that disrupts the market, when the judgment and abilities embodied by the human factor are invaluable, if not indispensable. This is why we believe that the solution is to marry the best of both worlds by creating a hybrid market.

Last week, the New York Stock Exchange completed a draft of a filing to the SEC which represents a major step to leverage technology and offer more choices to investors and to all constituents of the Exchange. The filing will expand application of our electronic platform, known as Direct+. The hybrid platform will provide customers sub-second, automatic execution, as well as broader choice than any other market center, and the most flexible access to the world's deepest pool of equity liquidity. We are reviewing that draft with our various constituents who will be affected, and anticipate a formal filing with the SEC within the next few weeks.

**Opt Out Exception**

Proposed Regulation NMS acknowledges that nationwide price protection is a core feature of the national market system. As a result, the Commission is recommending extension of the application of the trade-through rule to Nasdaq stocks. Given this fact, we are concerned that the Commission has included a provision that would allow certain institutions to forego giving their customers the best price by simply ignoring—or, opting out—of the trade-through rule.

Permission to opt out would undermine the basic objectives of Regulation NMS, compromise the integrity of the marketplace and risk grave consequences to our national market system. The opt out provision amounts to nothing less than sanctioning the deliberate overcharging of millions of investors. In addition, by encouraging other harmful practices, such as internalization—where orders are never exposed to the market—the opt out provision would permit intermediaries to profit in other instances at the expense of unsuspecting investors.

Associations representing millions of investors have completed their due diligence on Regulation NMS and come out strongly opposed to the opt out provision. To cite three:

- The AARP has noted that its members, by more than two to one, believe that the "best available price" should be the "top priority" when engaging in a market transaction.
- CFA (Consumer Federation of America), states that the opt out provision would undermine the trade-through rule's objectives and would take away with one hand the benefits that it has given with another.
- CIEBA (Committee on Investment of Employee Benefit Assets) observes that its constituency is concerned with long-term growth and market stability, and that the ability to opt out could place those investors at a disadvantage, creating one set of rules for the small investor and another for large institutions.

These associations are keenly aware that their members would be the first casualties of best-price violations. But they would not be the last. As losses from patently bad public policy rippled through the NMS, they would trigger other negative repercussions. Seeing their orders bypassed, investors' confidence in the fairness and integrity of the market would be shaken. They would no longer be willing to maintain limit orders, which would result in reduced liquidity, wider spreads, and increased volatility. And, as intermediaries used the loophole of an opt out to create their own, private trading market, the NMS would become fragmented and less competitive—an unquestionable loss for investors, U.S. markets and U.S. competitiveness.

The operating rule should be, "Let the best price win."

To those who refuse to compete on the basis of best price, important questions need to be asked: Why do proponents of an opt out exception call for elimination of the requirement in the NMS proposal that investors be advised how much they lost by not receiving the best price?

Why do proponents of an opt out exception, who premise their lobbying on the concern about missing quotes because of a delay in execution, still insist on that premise when the SEC proposes to allow fast quotes to trade-through slow quotes?

The answer is economic self-interest. At whose expense? The unsophisticated investor. That is what these associations know, that is why they are gravely concerned about an opt out exemption. We believe you should be concerned, as well.

We strongly urge the SEC to eliminate the "opt out" provision in the final rule.

**Market Access**

The Commission has proposed a series of related rules to accomplish universal access to markets. We support the Commission's proposal to require all market centers to permit access to their quotes on terms that are not "unfairly discriminatory," as well as broader alternatives for intermarket access than the Intermarket Trading System currently provides.

*Access Fees*

We understand the Commission's desire to address hidden access fees charged when an ECN's quote is accessed through SuperMontage. However, we believe that the Commission's proposal to regulate by Commission rule the transaction charges imposed by every market in the United States is not an efficient way of dealing with what we consider an isolated problem.

Unfortunately, the Commission's proposal would deprive markets of the flexibility envisioned by the Exchange Act, thus forcing them to charge a standard fee to all users. We believe a more sensible solution would be to amend Regulation ATS and the Commission's quote rule, so that no market could publish a quotation that would include an additional fee not expressly agreed to by its members or subscribers. Thus, exchange and association member fees, and ECN subscriber fees—all agreed to in advance—would be permitted, but fees that are charged to the contra party to the trade without consent would be prohibited. In this way, quotations at stated prices would all have the same meaning and members of exchanges and associations, and subscribers to ECN's, can factor in those charges when making routing decisions.

**Market Data**

We recognize the Commission's need to address a number of objectionable practices that have arisen over the past decade, including the use of exchanges as print facilities, payment for order flow, wash sales, and tape shredding. We agree that these are serious issues, but we would prefer an approach that deals with them directly, rather than through market data revenue. For example, using markets as print facilities for transactions that occur elsewhere, thereby distorting perceptions of market liquidity and undermining price transparency, is a much bigger issue than is the market data revenue allocation. The Commission should simply ban the undesirable practices, and disband the CTA consortium at the heart of the economic inefficiencies producing such behavior.

**Conclusion**

In conclusion, we appreciate this opportunity to appear before your Committee. Regulation NMS represents the most far-reaching reform of the national market system since its creation 30 years ago. This is a pivotal moment. Investors across America are looking to their leaders, and trusting their leaders, to do the right thing. We should not let them down.

This is no time to put personal interests ahead of investor interests, to put the interests of individual markets ahead of market principles. It is important Government do the right thing by not allowing the best interests of investors to be ignored.

At a time when the Nation is tightening rules on mutual funds, late trading, market timing, and raising standards for corporate governance, it should not allow intermediaries to run roughshod over long-standing rules that ensure fair and honest markets. To do so will be an invitation to future problems—to improper trading that harms investors, harms the competitiveness of our markets, and harms the health and well-being of our economy.

We can best serve the public good by strengthening competition among markets to create a superior national market system that is based upon standards of best price and putting the interests of investors first. These are the principles have made the U.S. securities markets the largest, most liquid, and most vibrant in the world, and they can and must continue to do so in the 21st Century.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR ALLARD FROM WILLIAM H. DONALDSON**

**Q.1.** Could you briefly explain the CLOB concept, and whether or not the Commission revisited this concept?

**A.1.** The concept of a CLOB, or central limit order book, refers to the display of orders from all market centers through a single limit order book that would be fully transparent to all market participants, including the public. To encourage entry of limit orders, orders in the CLOB would be accorded strict price/time priority across markets. Thus, the order that was displayed first at the best price—across markets—would receive priority. While conceptually the CLOB itself would not be a market center, and execution of orders could still occur (through automatic execution) at the level of individual market centers, the simplest way of assuring strict time priority would be a single system for accessing the CLOB.

The concept of a CLOB has been discussed for many years. Most recently, the Commission requested comment on the desirability of a "virtual" CLOB in 2000 in the context of requesting comment on issues related to market fragmentation. In particular, the Commission requested comment on whether it would be advisable to mandate a CLOB.

**Q.2.** Would such an approach be appropriate for today's markets?

**A.2.** In response to its 2000 request for comment regarding a "virtual" CLOB, the Commission received a large number of comments opposed to a CLOB. These commenters opposed to the proposal believed that a CLOB would be anticompetitive, hinder innovation, and increase market volatility, and further noted that a single system linking the markets would create a single point of failure with no incentive to improve technology. These commenters believed that the CLOB would focus competition on a sole factor, namely, the first market to display a price, and require brokers to ignore other features of a trade and other costs in handling trades. Several commenters also pointed out that a CLOB was not likely to provide investors with price improvement. Commenters also believed that a CLOB would negatively impact the ability of brokers to achieve best execution by potentially reducing speed and certainty of execution. Other commenters, primarily institutional investors, supported the establishment of intermarket price/time priority in the belief that it would enhance price competition and increase transparency.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR BUNNING FROM WILLIAM H. DONALDSON**

**Q.1.** Do you believe an opt out on trade-through will lead to internalization? Could internalization disadvantage small investors? Or do you believe the 1940 Act has the safeguards to prevent that?

**A.1.** The Commission has received extensive public comment on the proposed opt out exception, both at the public hearings on Regulation NMS as well as in written comment letters. Some commenters have expressed a concern that the opt out exception would lead to increased opportunity for internalization and that internalization potentially could disadvantage investors if it resulted in investors receiving inferior executions.

In the Proposing Release for Regulation NMS, the Commission stated that an opt out exception would be inconsistent with the principle of price protection for limit orders because it would allow investors to choose to have their orders executed without regard to better prices that might be available on other markets. The Commission stated, however, that an opt out provision would not change the broker-dealers' duty of best execution with respect to customer orders and would not authorize a broker to give retail investors executions at prices inferior to the quote absent specific informed consent by the customer. The Commission continues to evaluate whether the proposed opt out exception is consistent with the goals of price priority and investor protection.

**Q.2.** Is the current trade-through rule ever violated, if so, how often?

**A.2.** Trade-throughs do occur today under the existing trade-through rules. The current trade-through rule uses an "avoidance" standard, combined with a procedure for satisfying quotes that were traded-through, on request. In addition, as the Commission noted in the Proposing Release for Regulation NMS, a certain amount of trades that appear to be trade-throughs likely will be unavoidable, given the speed with which quotes are updated and orders are executed in certain stocks. The Commission's Office of Economic Analysis is undertaking an analysis of trade-through data for purposes of analyzing proposed Regulation NMS.

**Q.3.** Does the Commission have an opinion on allowing institutional investors to "sweep the book" to ensure that they can make the large scale trades they are concerned they cannot always make?

**A.3.** The Commission generally is concerned with assuring that the interaction among the different markets in the United States develops in keeping with the objectives and requirements of the Federal securities laws, and in particular with the national market system objectives outlined in Section 11A of the Securities Exchange Act of 1934. The proposed trade-through rule in Regulation NMS is designed to enhance the principle of price protection across markets, an important national market system goal. The Commission requested comment on an "intermarket" sweep exception to the proposed trade-through rule in Regulation NMS that would allow market participants to continue the practice of sending orders to multiple markets simultaneously to attempt to execute against orders displayed in those markets—to, in effect, "sweep" displayed interest across markets. The Commission currently is evaluating the comments received in response to this request.

With respect to the internal operation of, and the services provided by, individual markets in the national market system, the Commission generally believes that each market should be free to determine its structure, within the parameters of the Federal securities laws. For instance, a market that provides an automatic execution functionality may choose whether or not to allow incoming orders to automatically execute through several price levels displayed at that market.

**Q.4.** With all the competition in the electronic markets, are investors already getting best price?

**A.4.** The current structure of our national market system, which incorporates price protection as a fundamental principal, has greatly contributed to investor confidence. A goal of proposed Regulation NMS is to enhance the existing structure to help further ensure that investors are able to obtain best execution of their orders. As noted above, trade-throughs occur today in which posted quotes are not executed when trades go off at worse prices. The Commission is conducting an analysis of trade-throughs in the current marketplace as it evaluates the comments received in response to proposed Regulation NMS.

**Q.5.** How many enforcement actions have been brought against NYSE members for trade-through violations?

**A.5.** The individual exchanges that trade NYSE- and Amex-listed securities have adopted their own trade-through rules; currently, there is no Commission trade-trade rule. The exchanges, as self-regulatory organizations, are responsible for surveillance and enforcement of their rules. The exchanges generally do not provide the Commission with detailed statistics on such matters. Based on information provided by the NYSE to the Commission's Office of Compliance Inspections and Examination, for calendar year 2003 the NYSE issued nine admonition letters and imposed eight summary fines, and to date in 2004 has issued eleven admonition letters and imposed 31 summary fines, in relation to its members' compliance with its trade-through rule.

**Q.6.** Any update on the Nasdaq Exchange application?

**A.6.** We continue to review Nasdaq's Exchange application. One topic of major discussion and one of the key issues that the Commission must resolve before acting on Nasdaq's application is whether a registered exchange must have market-wide rules that promote order interaction. Today, each of the registered exchanges in the United States has priority rules that are designed to promote order interaction, which facilitates the price discovery process. Nasdaq's application without such rules raises profound market structure issues that could have implications for all registered exchanges and, ultimately, investors in our markets. The Commission is dedicated to working with Nasdaq to resolve these and other remaining issues on its exchange application. However, the Commission must be assured that the rules approved for Nasdaq are consistent with the goals of a national market system. Further, the Commission must be assured that, if Nasdaq becomes an exchange, it can fulfill its statutory obligations as a separate self-regulatory organization.

## RESPONE OF WRITTEN QUESTIONS OF SENATOR BUNNING FROM JOHN A. THAIN

**Q.1.** Will the NYSE allow more transparency in the specialists' books?

**A.1.** Yes. The NYSE's OpenBook information product currently discloses the aggregate limit order interest at each price point. At present, it is refreshed on a five-second basis. Before year-end, we

anticipate that this data will be made available on a real time basis.

**Q.2.** Will the NYSE allow funds to "sweep the book" in order to get price surety of execution they need?

**A.2.** Yes. In our hybrid market initiative, investors will be able to sweep at and beyond the published bid and offer to the nearest full nickel, a range of five to nine cents outside the quote.

We are not allowing a full sweep of the book. We believe this would increase the volatility of our market and lead to higher trading costs for investors and higher costs of capital for listed companies. We are committed to maintaining the advantages of the continuous auction system over a purely electronic market, and dampened volatility is an important feature of our market.

**Q.3.** Is the current trade-through rule ever violated? How often?

**A.3.** Yes. We are committed to eliminating all trade-throughs. We are currently rolling out our new "fast commitment" software to speed up the sending of ITS commitments to multiple markets in fewer keystrokes. Going forward, as part of our Hybrid Market initiative, we will automatically send out a commitment to trade with another market if a trade would have resulted in trading-through that market.

Below are tables detailing the number of trade-throughs on the NYSE for 2003 and the first 6 months of 2004. The number of trade-throughs on the NYSE is dropping as a result of our initiatives.

**ITS Trade-Through Totals**

| Year | # of Trade-Throughs | # of Trades | % of Total Trades |
|---|---|---|---|
| 2003 | 716,986 | 339,416,458 | 0.21% |

| Month | # of Trade-Throughs | # of Trades | % of Total Trades |
|---|---|---|---|
| January 2004 | 56,505 | 32,298,346 | 0.18% |
| February 2004 | 43,088 | 30,002,973 | 0.14% |
| March 2004 | 47,483 | 37,748,970 | 0.13% |
| April 2004 | 41,473 | 35,774,228 | 0.12% |
| May 2004 | 30,806 | 36,281,515 | 0.08% |
| June 2004 | 27,663 | 34,168,074 | 0.08% |
| Total | 247,018 | 206,274,106 | 0.12% Avg |

According to our analysis of the market based on samples of trading in September 2003 and April 2004, trade-throughs as a percentage of total volume are dropping in all markets within the national market system. The percentage of trade-throughs is lower on the NYSE than in most other markets.

**Trade Throughs as a Percentage of Trades**

| Market | April '04* | Sept '03* |
|---|---|---|
| New York Stock Exchange | 0.05% | 0.10% |
| NASDAQ | 0.22% | 0.35% |
| Boston Stock Exchange | 0.20% | 0.38% |
| National Stock Exchange | 0.13% | 0.32% |
| Chicago Stock Exchange | 0.21% | 0.40% |
| Pacific Stock Exchange | 0.01% | 0.05% |
| Philadelphia Stock Exchange | 0.16% | 0.61% |
| American Stock Exchange | 0.04% | 0.21% |
| Average | 0.06% | 0.13% |

All Tape A and B Stocks for TTs against Quotes over 100 shares and 15+ seconds

* April '04 is April 28/29, and Sept '03 is Sept 15-19

**Q.4.** How many enforcement actions have been brought against NYSE members for trade-through rule violations?

**A.4.** The NYSE has issued 59 admonition letters and summary fines in the past 18 months. The current ITS trade-through rule does not prohibit trade-throughs. Rather, it states that trade-throughs should be avoided and provides a process of complaint and remedy when a trade-through occurs. Because of the speed of trading, many trades that appear to be trade throughs are not, and many trade-throughs do not evoke complaints because the party traded through no longer wishes to trade at that quoted price since the market has moved in his or her favor. The NYSE pursues the satisfaction of all valid trade-through complaints. However, when the Exchange identifies an inappropriate pattern of trade-throughs in a particular stock, regulatory actions are taken.

**ITS Trade-Through Regulatory Actions/Rule 15A**

| Year | Admonition Letters | Summary Fines | Total |
|---|---|---|---|
| 2003 | 9 | 8 | 17 |
| 1H2004 | 11 | 31 | 42 |
| Total | 20 | 39 | 59 |

# REGULATION NMS AND DEVELOPMENTS IN MARKET STRUCTURE

**THURSDAY, JULY 22, 2004**

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS,
*Washington, DC.*

The Committee met at 10:02 a.m., in room SD–538, Dirksen Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

## OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman SHELBY. The hearing shall come to order.

This morning, the Committee continues its examination of Regulation NMS. Yesterday, we heard testimony here from Chairman Donaldson and executives from several market centers. Today, we will hear from a broad array of industry and outside experts, who will share their insights and discuss the implications of Regulation NMS.

The witnesses on the panel today will be: Mr. David Colker, President and CEO, National Stock Exchange; Mr. Kevin Cronin, Senior Vice President and Head of Domestic Equity Trading, AIM Capital Management; Mr. Scott DeSano, Senior Vice President and Head of Equity Trading, Fidelity Investments; Ms. Phyllis Esposito, Executive Vice President and Chief Strategy Officer, Ameritrade; and Mr. Bernard Madoff, Chairman and CEO, Bernard L. Madoff Investment Securities; and Mr. Robert McCooey, President and CEO, the Griswold Company.

The witnesses on the second panel will be Mr. Kim Bang, Chairman and CEO, Bloomberg Tradebook; Ms. Davi D'Agostino, Director of Financial Markets and Community Investment, Government Accountability Office; Mr. Robert Fagenson, Vice Chairman, Van der Moolen Specialists; and Mr. John Giesea, President and CEO, Securities Traders Association; and Mr. Charles Leven, Vice President and Governance Board Chair, AARP.

Given the number of witnesses with us today on both panels, I hope you will limit your oral testimony to no more than 5 minutes. Your written testimony will be made a part of the hearing record in its entirety.

Chairman SHELBY. We welcome you here. We will start with you, Mr. Colker.

## STATEMENT OF DAVID COLKER
## PRESIDENT AND CEO, NATIONAL STOCK EXCHANGE

Mr. COLKER. Chairman Shelby, thank you for inviting me to testify today.

Publication of proposed Regulation NMS by the Securities and Exchange Commission has given our industry a unique opportunity for improvement. If we are committed enough to the idea of competition, then, we can reshape the regulatory environment in a way that will have significant positive benefits for the public investor. One opportunity for improvement is the Intermarket Trading Systems trade-through rule.

Originally, this rule was put in place to require the New York Stock Exchange to honor better prices that were being displayed on nonprimary markets. Unfortunately, the trade-through rule has now become an instrument for unfair protection of the New York's manually intensive monopoly.

Because of the trade-through rule, exchanges that provide automatic executions are required to send an order to a New York quote that, though it may appear to be the best price in the country, often is not available. Even if it is available, an automated market may have to wait up to 30 seconds to get an execution, which can cause market losses due to changes in valuation during that time.

And even worse, the New York's execution price is often inferior to their quoted price that induced the order to be sent to New York in the first place.

The SEC's own execution quality statistics clearly reveal that the trade-through rule is a major barrier to competition. The New York Stock Exchange-listed stocks which are subject to the trade-through rule have wider spreads; get slower executions, and impose higher costs on investors. In contrast, the Nasdaq-listed stocks, which have no trade-through rule, have faster executions, higher fill rates, and better-priced executions. In addition, experience with the SEC's exception to the trade-through rule for exchange-traded funds demonstrates that quote spreads narrowed and trading volume significantly grew after the trade-through rule was modified to allow trade-throughs in the top three ETF products.

The trade-through rule has become unnecessary and actually counterproductive, I believe, as a result of easy access to complete market data, technological advances in trading systems, the increase in market competitors, and the implementation of decimal trading. The obvious solution, then, is to eliminate the trade-through rule and let competition between exchanges drive best execution. It is time for the Government to stop telling the American public where they have to conduct their business.

A consensus is building about the necessity for a trade-through opt out for manual or slow markets. There are three reasons I think it is important to preserve that same opt out flexibility for fast markets as well. First, attempts to define what a fast market is will become a slippery slope that will force the SEC to regulate more and more aspects of market technology. Second, fiduciary duty and economic self-interest eliminate the need for such a distinction. If there really is no incentive to avoid a fast market, then a rule is not needed to require an investor to act in his own eco-

nomic self-interest. And third, as stated above, an opt out has worked for fast markets; it has worked well in Nasdaq for many years.

On the issue of market data, I would like to challenge the assumption in proposed Regulation NMS that the current system for market data revenue distribution needs to be changed. The current distribution method has worked well for over 25 years. It is fair, and easy to administer. It was first questioned 2 years ago by Nasdaq for competitive reasons, because the National Stock Exchange had captured significant order flow in Nasdaq-listed securities as a result of cost initiatives that involved the sharing of market data revenue with members.

The fact is that because of that competition, investors have been saving more than $100 million annually, and many broker-dealers can now offer investors free streaming quotes and automated price-improved executions for under $10. The premise that a trade-based formula creates economic distortions, regulatory distortions, or inappropriate incentives to engage in fraudulent behavior has not been sufficiently proven to warrant the proposed change to market data revenue distribution.

The SEC's proposed formula amendment is unnecessarily complex. It is misguided in its price discovery value judgment, and it is expensive to administer. The complexity of the formula has made it a poster child in the industry for the inherent limitations of regulation. In addition, all trade reports have price discovery value, not just those valued at $5,000 or more. Finally, in a world that is generating 18 million NBBO quote changes daily, imagine what the annual cost would be of determining how many thousands of quote credits each particular quote is due for each of the 23,400 seconds of each trading day.

So while NSX respects the desire of the Commission to encourage quote competition, we believe that the benefits of doing so through the proposed formula amendment simply do not come close to outweighing the new formula's administrative costs. For that reason, we do not believe the adoption of this market data reallocation formula would be sound public policy.

Thank you. I look forward to answering any questions that you may have.

Chairman SHELBY. Thank you.

Mr. Cronin.

**STATEMENT OF KEVIN CRONIN**
**SENIOR VICE PRESIDENT AND**
**DIRECTOR OF DOMESTIC EQUITY TRADING**
**AIM INVESTMENTS**

Mr. CRONIN. Good morning. My name is Kevin Cronin, and I am Senior Vice President and Director of Equity Trading at AIM Investments.

AIM Investments was founded in 1976 and had $148 billion in assets under management and approximately 11 million shareholders as of March 31, 2004. I want to thank Chairman Shelby for providing me the opportunity this morning to testify on the SEC's Regulation NMS proposal and developments in the structure of the U.S. securities markets.

While I am speaking today on behalf of AIM Investments, I am also speaking on behalf of the Investment Company Institute. I am a member of the Institute's Equity Markets Advisory Committee, which consists of approximately 80 senior traders from various large and small mutual funds. I currently serve as the Chairman of the New York Stock Exchange Institutional Traders' Advisory Committee, although I want to be clear that I am not here testifying on behalf of the New York Stock Exchange.

In the interests of time, I am going to focus my comments this morning on the Regulation NMS trade-through proposal, which arguably could have the most impact on the structure of the securities markets going forward. Before I discuss some of the specific issues relating to the trade-through proposal, however, I would like to take a minute to discuss why the issues raised by Regulation NMS and the debate over market structure is an important one to investors and as well to the mutual fund industry.

Increased efficiencies in the securities markets will significantly benefit mutual fund shareholders in the form of lower cost. Mutual funds, therefore, have a vested interest in ensuring that the securities markets are highly competitive, transparent, and efficient and that the regulatory structure that governs the securities markets encourages rather than impedes liquidity, transparency, and price discovery.

In order to create this optimal market structure for investors, investors, among other things, must be provided with incentive to publicly display their limit orders, which we believe are the cornerstone of efficient, liquid markets and as such should be afforded as much protection as possible. In order to provide investors such incentive, several changes must be made to the market structure. Most significantly, price and time priority should be provided for displayed limit orders across all markets. Strong linkages between markets should be created that make limit orders easily accessible to all investors, and standards relating to the execution of orders should be created that provide the opportunity for fast, automated executions at best available prices.

Although Regulation NMS and the trade-through rule proposal would not implement all of these components we believe necessary for a fully efficient market structure, we believe, if appropriately instituted and enforced, a uniform trade-through rule would increase investor confidence in the securities markets by helping to prevent an investor order executing at a price that is worse than a displayed quote. We therefore support the establishment of such a rule.

In order, however, for a trade-through rule to fully achieve its objectives, it is extremely important that only automated quotes be protected. It is for this reason that we support an exception to the trade-through rule that would permit an automated market to trade through a manual market for an unlimited amount, or, as has been recently proposed by the SEC, an automated quote to trade through a manual quote of an unlimited amount.

Such an exception would correctly focus the trade-through rule on providing protection only to those quotes that are truly firm and immediately accessible and not quotes that require manual execu-

tion and are, in effect, only indications of trading interest or difficult or slow to access.

While most trading venues provide the opportunity for true automated executions, certain exchanges still do not offer such a choice for institutional investors. The New York Stock Exchange has stated that they intend to provide automatic execution to at least the best bid and offer on the Exchange and has been discussing plans to transform their market into a hybrid market.

While we are encouraged by their stated intentions, it is imperative that any proposed automation on the New York Stock Exchange not be wrought with conditions and exceptions that would, in effect, make claims of automation folly. Too often, institutions have heard plans to automate New York Stock Exchange trading systems, only to find out after examining details of the plans that they did not go nearly far enough toward implementing the necessary automation.

We, therefore, urge the New York Stock Exchange to move expeditiously to implement true automation in its market that would provide investors much-needed automatic execution for their orders. Such changes should be implemented regardless of whether the SEC's Regulation NMS proposal is adopted. One thing, however, is certain: Until the New York Stock Exchange provides true automatic execution on its market, manual quotes on the New York Stock Exchange should not be afforded the protections of any trade-through rule adopted by the SEC.

The proposed trade-through rule also contains an opt out exception, which would permit a person for whose account an order is entered to opt out of the protections of the trade-through rule. We oppose the opt out exception. While there is no doubt that at times, investors may determine that speed and/or certainty is more important than price in executing an order, and while investors may be best served on a particular trade by opting out from executing against the best price placed in another market, we believe in the long-term, all investors will benefit by having a market structure where all limit orders are provided protection and incentives to place those orders into the markets.

We are therefore dubious of any regulation that would tacitly approve the pursuit of inferior prices to the detriment of those willing to display liquidity. I know I am going to run out of time here. Nevertheless, there is no consensus among market participants and even among some institutional investors on whether an opt out exception is necessary.

There does, however, seem to be agreement that the SEC, if it does not fully identify and define what automated markets are, automated quotes, then, we believe that some flexibility should be conferred upon the institutional investor to permit them to trade through markets that cannot provide the highest order of certainty and speed.

In such a case, we believe a block trade exception to the trade-through rule may be necessary in order for institutions to efficiently trade large amounts of stock. In any case, we believe a block trade exception would be preferable to an opt out exception to facilitate these types of transactions. Most significantly, a block

trade exception would be more limited in nature than an opt out and would be more feasible to employ.

Thank you again for providing me the opportunity this morning.

Chairman SHELBY. Thank you.

Mr. DESANO.

**STATEMENT OF SCOTT DESANO**
**HEAD OF EQUITY TRADING DESK**
**FIDELITY INVESTMENTS**

Mr. DESANO. Good morning. I am Scott DeSano, Head of Equity Trading at Fidelity Investments. I thank Chairman Shelby, Ranking Member Sarbanes, and other distinguished Members of this Committee for the opportunity to offer our views on proposed Reg NMS and its important implications for the future role of competition in this Nation's equity securities trading markets.

I am speaking for Fidelity as the investment manager and the fiduciary for its 190 mutual funds that invest in equity securities, which have aggregate assets of over $597 billion, 18 million investors, 60 percent of which is retirement money. Our call for trading reforms is solely motivated by our duty to meet fiduciary obligations to our mutual fund investors.

As a matter of fiduciary principle, reinforced by the provisions of the Investment Company Act of 1940, Fidelity does not trade as principal with its funds. On any given day, the trading by Fidelity Funds in New York Stock Exchange-listed and Nasdaq securities can account for 3 to 5 percent of the total trading volume of each market and has been, at times, 40 to 50 percent of an individual security.

By far, the most important rule proposal that the SEC has included in its proposed Reg NMS is the so-called "trade-through rule." The trade-through rule, absent an exception, would deny a willing buyer and willing seller the freedom to choose the marketplace at which to trade and the price at which they are willing to trade. You should note that the trade-through rule leaves untouched rules of markets such as the New York Stock Exchange that deny intramarket time priority for limit orders over later bids and offers at the same price from the trading crowd, and the trade-through rule also denies a willing buyer and seller the opportunity to sweep the limit order book even when the buyer or seller is willing to do so at the most favorable price.

The SEC has identified two cases where its proposed trade-through rule would not apply. First, the rule would not apply to buy and sell quotes on slow or nonautomated markets. The SEC recognizes that it is fundamentally unfair to force an investor to send his buy or sell order to a slow market, because there is a high risk that the supposedly better-quoted price may disappear by the time his order finally receives an execution on that slow market.

To protect investors from this unfair result, the SEC would allow an investor to disregard a slow market and the frequently unattainable prices quoted on that market. Under the SEC's proposed rule, the New York Stock Exchange is a slow market. Second, the SEC proposes to give investors the right to opt out. This would allow willing buyers and sellers in market A to trade with one another at an agreed upon price even though market B or market C

might be quoting a price that would be more favorable to the buyer or seller.

If this sounds like the American way, it is, for two very important reasons: It gives freedom of choice to investors to decide for themselves what is in their best interests, and it provides incentives to market centers to compete and to innovate.

Now, let me clearly state Fidelity's views on the proposed trade-through rule and the opt out right as we have set forth in our comment letter submitted to the SEC last month. First, we urge the SEC not to adopt the proposed trade-through rule because it will impede competition among market centers. The Government should permit market centers to compete based upon a wide range of factors that are important to investors and bear upon best execution, including efficiency, reliability, transaction and data costs, transparency, fairness, and innovative use of technology to lower costs to investors and, last but not least, something that this Committee cares a great deal about, the quality of the market center's program of self-regulation, which includes how well it monitors the trading activities of its members and its record for enforcing and disciplining its members that violate trading rules. These factors all bear upon best overall prices for investors, which are not necessarily achieved by walking a market up or down and, hence, best execution.

Second, a trade-through rule is not necessary to promote best execution in the equity markets. Order flow will naturally gravitate to market centers that respond to investors' needs. This is not a matter of conjecture or theory. It has been clearly shown by the vigorous competition that has been taking place for several years among different market centers trading in Nasdaq securities. Economic self-interest and fiduciary duty will lead investors to markets providing the best combination of low transactional and access costs, speed, reliability, liquidity, and innovation.

Third, if the SEC adopts a trade-through rule, we strongly urge retention of an opt out right. An opt out provision is crucial to allow investment managers, such as Fidelity, to perform their fiduciary responsibilities to the fullest extent in seeking best execution for the mutual funds or accounts under their management.

Fourth, to address unfairness that hurts investors large and small, we have urged the SEC to focus on reforming rules within the New York Stock Exchange's own market that confer informational and trading privileges on NYSE members solely by virtue of their physical presence on the floor. Today, investors are deterred from sending limit orders to the New York Stock Exchange specialist book, because these orders, under the New York's rules, are not given time priority over bids and offers made later in the day at the same price by brokers in the trading crowd or by the specialist trading for his own account.

Fifth, to avoid unfairness for investors, the SEC should also require changes to the New York's rules that prevent a willing buyer or seller from automatically sweeping the limit order book at prices that investors have already freely committed to accept. For example, assume that different investors have sent limit orders to the New York committing to sell stock of company A at prices ranging from $10 to $10.05 per share. The New York rules today do not

allow a willing buyer to sweep the specialist limit order book at one time and pay the highest price, $10.05, to all investors, price improving them all.

This is simply unfair to all investors, whether a mutual fund investor or a small retail investor who wants to sell and has committed to do so. It is also unfair to the buyer who is willing to pay the best price to all of them.

In conclusion, we have urged the SEC, and we urge this Committee, to allow competition to shape the future of our equity securities markets, buttressed by widely available and accessible quotes and other market data and reinforced by the fiduciary duties that investment managers, like Fidelity, owe to the millions who invest in mutual funds. Investors, including fiduciaries acting for their benefit, armed with real-time information on prices available in competing markets will seek out those markets that are most responsive to their needs and are best-suited to provide best all-end pricing for their trades. This will result in lower trading costs and better returns to mutual fund and public investors alike.

Thank you.

Chairman SHELBY. Ms. Esposito.

**STATEMENT OF PHYLLIS ESPOSITO**
**EXECUTIVE VICE PRESIDENT AND CHIEF STRATEGY OFFICER**
**AMERITRADE, HOLDING CORPORATION**

Ms. ESPOSITO. Chairman Shelby, Ranking Member Sarbanes, Members of the Committee, I am Phyllis Esposito. I am an Executive Vice President and Chief Strategy Officer at Ameritrade. Thank you for the invitation to testify today.

Ameritrade is a leading retail online broker, and we are ranked number one in number of retail online equity trades transacted in the marketplace on a daily basis. As of last quarter, our customers executed on average 164,000 trades each and every day. Those customers include 3.5 million accounts, representing all 50 States.

In less than a decade, online retail client accounts have grown to a total of 27 million in the United States. Ameritrade is a public company, and our business model and our financial interests are directly aligned with retail investor participation in the U.S. equity markets.

At yesterday's hearing, there was unanimous agreement on the need to protect the integrity of the capital markets and enhance their efficiency. I would like to give you the point of view of retail investors as to how, in fact, we can accomplish that. There has been much debate in the industry during these past few months over who is speaking for the retail investors, be they individuals or institutions.

Many of those firms and organizations do not actually deal directly with retail investors who are investing in the marketplace on a daily basis. We do. We not only interact daily with investing clients, but also those clients who phone our client call center; and email our client representatives—so we know their views well.

What exactly are retail online investors telling us today about what they want from the marketplace? Overwhelmingly, they seek the following: Number one, consistency of trade execution, whether those trades are in listed securities or whether they are in over-

the-counter securities. And what are the metrics? Speed, quality of execution, and a common, level playing field in how those orders are processed and executed.

Number two, firm quotes. When investors go to their online screens, and they see bids and offers, they want those quotes to be available and tradeable. They want them to be, number three, immediately executable. There has been quite a bit of discussion which is more important about speed versus best price, and let me be perfectly clear. Retail investors clearly prefer—first and foremost—best price. Speed is but a means to obtain the certainty of the price they see on the screen.

And finally, investors are interested in personal choice. Many of our retail clients are investing for their own retirement, their children's education, or to buy a home. They believe that they have the right to choose for themselves among the various market participants which market—in their opinion, based on their criteria—a trade will receive the best execution.

The over-the-counter marketplace today provides all these incentives and gives investors exactly what they are looking for, whereas the listed markets which have a trade-through rule do not. This is because the trade-through rule today protects best advertised price, not best available price. It protects the best displayed price. Our retail clients do not place much value on that, since it is not a tradeable quote.

This is what our clients are saying, but I believe that actions speak louder than words, I would like to tell you what our clients are actually doing. Ameritrade is an agency broker, meaning that we do not have proprietary trading accounts and we do not give advice, so we cannot suggest to our clients what to trade or how to trade. To the trades they place with us are their own trades, which they themselves directed.

What online retail investors are voicing in the marketplace is their preference for one market over another, and they are voting with their pocketbooks. Ameritrade clients today do 74 percent of their transactions on Nasdaq-listed securities. They do only 19 percent on New York Stock Exchange-listed securities, and only 7 percent on American Stock Exchange-listed securities.

Why is that? The Nasdaq marketplace gives them what they deem important: Firm quotes, transparency of those quotes; transparency and depth of book, and speed of execution, with the highest likelihood of executions at the quoted price or better.

That is actual market behavior. Is that market behavior rational? According to the SEC's own public numbers for May 2004, for retail orders of 100 to 2,000 shares, in the Nasdaq marketplace, 88 percent of the orders were executed or better than the quoted price and in only 3 seconds; whereas, on the New York Stock Exchange only 78 percent of the orders were executed at the quoted price or better and it took an average of 13 seconds.

The bottom line is the Nasdaq marketplace provides tighter spreads and faster executions. Let me clear up something that came up yesterday: There absolutely is, today, "price improvement" among the electronic markets. In fact, using that same SEC data for trades occuring in S&P 100 stocks, the New York Stock Exchange received price improvement for orders only 25 percent of

the time, whereas Ameritrade placing orders through regional exchanges and market makers received price improvement 37 percent of the time. Let me also say that the majority of our orders are limit orders, so we certainly want to encourage limit orders. Not only are the majority of our clients placing orders on Nasdaq, but they are placing limit orders.

Finally, I want to comment on a proposal for a hybrid system of fast and slow quotes that is gaining attention. This is not a panacea for retail investors. Clearly, professional participants in the marketplace will understand and recognize fast from slow quotes. But retail investors will be confused. Seeing both a fast and a slow quote, they will not easily be able to ascertain and distinguish between them. This will just add to confusion and a perceived lack of integrity in the markets.

In addtion, the "opt out" for professional in the hybrid plan will create a bifurcated market. We will be taking a step backward by not putting retail on a level playing field with other investors. A bifurcated market, also creates the opportunity for professional arbitrage, as those who can opt out begin to trade between the fast and slow markets at the expense of retail investors.

In conclusion, if the trade-through rule is maintained or extended, the only way to make it work is through the auto-execution alternative that the SEC proposed where all markets, all the time, are fast; there is consistency, among trades there is immediate execution, for all; and, firm quotes and personal choice.

Thank you.

Chairman SHELBY. Mr. Madoff.

## STATEMENT OF BERNARD MADOFF
## CHAIRMAN AND CEO
## BERNARD L. MADOFF INVESTMENT SECURITIES

Mr. MADOFF. Madoff Securities is pleased to participate in the Senate's hearing on Regulation NMS.

We applaud the SEC's proposal to address this complex set of issues. One of the great difficulties we face in addressing these issues is that so many of them are inextricably linked. In order to support a trade-through rule that would truly benefit investors, it is critical to implement a system that includes seamless linkages and a fee structure that does not interfere with price discovery.

Madoff Securities has long held the position that the integrity of the quote is instrumental to the efficient functioning of a national market system. Investors must be assured that regardless of where their orders are routed, they will be in a position to reap the benefits of a national market system. It is our belief that the foundation of this system should be publicly displayed quotes that are firm and accessible.

The best way to ensure this result would be to require all quoting market centers to employ an automated auto-execution facility for intermarket orders seeking to satisfy those quotes deemed to be firm and accessible and therefore eligible for inter- and intramarket price protection. A quote is deemed to be fair and accessible when it is subject to automatic and immediate execution or cancellation on a computer-to-computer basis with no human intervention for up to its total displayed size.

Accessibility of the quote is a critical component of the integrity of a national market system. The need for efficient linkages to assure accessibility is an absolute imperative in an NMS predicated on investor protection. Effective linkages, both public and private, must be in place, and price displayed must truly reflect the actual cost of trading. Market participants should only be allowed to be part of the national best bid or offer and receive price protection if those quotes are deemed firm and accessible through either a public or private linkage.

The Securities Exchange Commission must describe the scope and minimum standards for public intermarket linkages. Individual markets would also be free to define and enter into private linkages in order to the public linkage requirement. In the absence of a mandatory automated order execution facility for all quoting market centers, it is critical to the success of any trade-through rule proposal that those markets unwilling to implement such a mechanism be subject to an unfettered opt out for those quotes deemed to be nonautomated or inaccessible. The proposal requirement for such an opt out of nonautomated or inaccessible quotes should only be governed by the fiduciary requirements of best execution.

Thank you for allowing us an opportunity to contribute to this discussion.

Chairman SHELBY. Thank you.

Mr. McCooey.

**STATEMENT OF ROBERT H. MCCOOEY, JR.**
**PRESIDENT AND CEO, THE GRISWOLD COMPANY, INC.**

Mr. MCCOOEY. Good morning, Chairman Shelby. Thank you for inviting me here to testify in connection with your review of the capital markets here in the United States. My name is Bob McCooey. I am a proud member of the New York Stock Exchange, and I am honored to serve on the New York Stock Exchange Board of Executives.

In my primary job, I am President and Chief Executive Officer of a New York Stock Exchange member firm, the Griswold Company. Griswold is an agency broker, and we execute orders for institutional clients on the floor of the Stock Exchange. As an agency broker, we make trades on behalf of customers. We do not make markets or engage in proprietary trading. Our clients are some of the largest mutual and pension funds in the United States.

Chairman Shelby, I am also very happy that you chose to have John Thain testify in front of this Committee yesterday. I think it is clear to all that there has been a dramatic change at the New York Stock Exchange. The membership is hopeful that regulators and legislators will support the new changes to the continued benefit of all who trade at the New York Stock Exchange.

Mr. Chairman, I am truly a practitioner. I work orders on the floor every day on behalf of my customers. I may not be an Olympic-quality sprinter, but my customers are quite happy with my market knowledge and experience that I bring to their execution every day.

Increasingly, the goal for clients has been to find ways to gain efficiencies at the point of sale and get a best execution. Inde-

pendent agents, working on behalf of their customers, now furnish real-time market information coupled with tremendous cost savings to their institutional clients. These assets that are managed by my institutional clients are owned by the small retail customer: The pensioner, the parent saving for college, the worker funding their IRA, and all others that invest in equities traded here in the United States.

Today, we have an opportunity to do what is right for the marketplace and all the participants, and we must realize that the retail customer and the institutional customer are often one and the same. Floor brokers play an important role in the price discovery process. The competition between orders represented by brokers at the point of sale helps to ensure fair, orderly and liquid markets.

The floor broker serves as a point of accountability and information with flexibility to represent large orders over time at the point of sale, not found in dealer markets and ECN's, and employs the most advanced technology to support his or her professional judgment. The combination of best price and intelligent information is the backbone of the New York Stock Exchange.

Electronic execution is not new to us at the New York Stock Exchange. Direct+, our automatic execution facility, was introduced in the year 2000 and since then has grown from 1 percent to approximately 10 percent of our average daily volume. As I speak to my customers about the multiple marketplaces in which they trade, one theme about the NYSE is constantly voiced: Customers appreciate the fact that the floor-based NYSE provides the participants in that market with valuable information that aids them, aids the buyers and sellers, in making market entry and exit decisions. This results in natural buyers and natural sellers meeting over 80 percent of the time with minimal market impact. The kind of information is impossible in electronic markets.

Trading technologies have allowed both customers and broker-dealers to work more efficiently as the markets have grown. Occasionally, technology can have its problems. There have been several occasions over the past few months that illustrate the need for professionals working in concert with technology.

A number of months ago, a large NYSE-member firm initiated a program trade for a customer involving a large basket of big-cap stocks. Unfortunately, somebody added an extra zero at the end and the trade that was supposed to be a $40 million basket ballooned to a $400 million basket. On the floor, those trades were quickly identified as possible errors; the firm was contacted; the problem was realized, and the firm was able to cancel the vast majority of those trades before they were executed.

In another scenario, a member firm entered an order to sell 1 million shares of Xerox at the market. While preparing to trade the stock at the appropriate price where supply and demand met, the firm was contacted, and an error was again prevented. This order was supposed to be for only 1,000 shares.

This course of action could not happen in an electronic market, where there is no one designated to recognize a potential problem such as the ones I have described. More importantly, these trades could have been executed quickly, with the primary focus on speed that some have been asking for. But the outcome to the customer

would have been quite negative. Only through intervention and immediate dialogue between market participants were huge losses to investors prevented.

One of the four major areas for comment contained in Reg NMS was the trade-through rule. I believe the customers always deserve the best price. Price matters to my customers, and at the end of the day, they do not ask how long it took me to execute their order, but they do focus on the price that they received. The trade-through protects the best prices and rewards the market centers that post them.

Tremendous competition exists today between markets. Order competition as the critical factor in price discovery is based upon protecting those who display the best prices. This promotes the entry of limit orders, narrows spreads, and reduces execution costs. Eliminating the trade-through rule would produce inferior prices, increase costs, increase market volatility, reduce accountability and transparency.

We do not think that any marketplace should receive regulatory relief from a rule that accrues such tremendous benefits to investors. By ensuring that price is paramount to markets, customers, as well as the competitive nature of the U.S. securities markets, will be well-served.

At the New York Stock Exchange, we embrace change. Providing choices to our customers has been the hallmark of the NYSE for as long as I have been a member, and we are again addressing the needs of our customers who have asked us to provide more choice. In fact, one of the goals of Reg NMS was to provide competition among marketplaces in order to encourage innovation. The NYSE, in keeping with its pattern of innovations, committed to being a fast market with immediately accessible quotations, even before the release of Reg NMS. With that in mind, I support the Commission's suggestion, as articulated in the supplemental release, for a fast market to be designated on a security-by-security, quote-by-quote basis rather than as a whole.

At the NYSE, we will continue to change, adapt, and innovate to best serve our customers and fulfill our commitment to producing the highest levels of market quality. We continue to provide a fair and level playing field that investors want and expect from us. We will compete on the basis of discovering and delivering the best price coupled with highest levels of transparency.

The interaction of specialists and agency floor brokers creates a value proposition in which the NYSE delivers to its customers the best prices, deepest liquidity, narrowest spreads, and lowest volatility. This results in multimillion dollars of savings to your constituents each year. In all we do, we take pride in the fact that we always place the investor first.

Thank you.

Chairman SHELBY. I thank all of you.

During yesterday's hearing, witnesses discussed among other things problems associated with both the floor of the New York Stock Exchange, such as specialists trading ahead of customers, and problems associated with a dealer market such as payment for order flow. Will each of you just briefly address the criticisms aimed at the market structures in which you operate? How do we

ensure that intermediaries act in the best interests of their customers?

Mr. Colker, we will start with you.

Mr. COLKER. Well, I think as a beginning premise, certainly there should be an emphasis on allowing free competition and not assuming that the public investor is not a sophisticated, knowledgeable investor, and is not willing to make that choice, as Ms. Esposito so articulately expressed, based on their own package of expectations.

With respect to payment for order flow, that has been a common practice, really, on just about every exchange. Exchanges compete for order flow. This is what we do. But there is no compromise to the issue of best execution, and the public has available to it SEC information which shows the quality of those executions, and they can choose based on that where to send their order flow.

Chairman SHELBY. Mr. Cronin.

Mr. CRONIN. I would certainly concur that no system presently is perfect. There are problems with a floor; there are problems with a specialist system, and as Mr. DeSano touched on, certainly, some of the rules going forward at the New York Stock Exchange, at a minimum, should change.

The dealer market and internalization obviously is a problem as well that needs to be addressed. We think the best way to address a situation like this is to recognize that better protections for orders be provided to investors.

NMS is not perfect. We think time priority should be part of it, but it is not part of it. We will accept price priority as part of this. But to be sure, automation is also a critical part of the link between bridging the gaps between the current system and what is necessary going forward. There has to be automation.

It is interesting to hear the gentleman from the New York Stock Exchange talk about automation. We have been clamoring collectively as institutions and others for years for more automation, and while we are encouraged by their particular persuasion now to give us more automation, we want to make sure that the automation that we are given is true automation.

Turning on and off an automatic quote, for example, at the whim of a specialist or with some minimum amount of price variance, we do not believe constitutes a fast market. We do not believe a quote like that should be afforded the protection. If we really want to address these issues, I think that the central themes have to be let us provide protection for investors; let us provide automation and choice, and we think the attendant competition that will result from this will result in much greater and more efficient capital markets.

Chairman SHELBY. Mr. DeSano.

Mr. DESANO. My view on this is pretty simple, and we stated it in our testimony. We believe in competition, free, unfettered competition. That will allow for the marketplaces to compete on all levels at all times, and in the end, most of the stuff washes out.

We think that there are undue costs on the floor. When a specialist price-improves a seller, there is a buyer left behind who had a stated bid who is not getting filled. There is a cost associated with that that is not in anyone's numbers. We want free access to

go where we want, when we want, how we want, and we think it all works out in the end.

Chairman SHELBY. Ms. Esposito.

Ms. ESPOSITO. Mr. Chairman, Ameritrade is an agency broker, meaning that 100 percent of all of the orders that flow through Ameritrade are up for interaction in the marketplace. We have no preference as to what exchange, what ECN, or what market maker our orders flow to.

We certainly have a best ex responsibility, and we have a responsibility from a business point of view to serve our clients well. If there are markets where, in executing best execution, we, in fact, at the same price have two different venues, one willing to execute with payment for order flow and one unwilling to do that, then, we take that payment for order flow, because, as I mentioned before, we are an online discount broker, and we like to try to save money and pass it along to our clients. So we are very happy to participate on that basis.

Chairman SHELBY. Mr. Madoff.

Mr. MADOFF. Let me start from the beginning by saying that our firm does not pay for order flow and has not for the last 2 years. That being said, we have always defended the practice of payment for order flow, providing that the order was provided best execution. Interestingly enough, the SEC's own statistics, since they started producing these 11(a)(5)(c) statistics for a number of years have demonstrated that the marketcenters, whether they be exchanges or whether they be dealers that did pay for order flow had better execution quality provided to their clients than those that did not pay for order flow. It has not been demonstrated in any way over the years that payment for order flow disadvantages investors. I would take the position that it probably helps them.

And payment for order flow, as David Colker has said, has been going on for many years and takes various forms. That is not to say that certain types of payment for order flow may need to be addressed.

As to any abuses in the marketplace, this Committee, I believe, is dealing with Regulation NMS.

Chairman SHELBY. That is right.

Mr. MADOFF. And the trade-through rule in particular. As I said in my opening statements, as far as we are concerned, although we applaud the SEC's decision to try and address this issue, it is a complex issue, and I am not sure that a rule is necessary at this stage or certainly not necessary until you would link the markets.

In the linkage of the marketplaces, an automated execution is the solution to this problem. Now, the problem is forcing the participants to link the markets. I have been trading for 43 years, and I participated in the original formation of the ITS, which was the first attempt at a national market system to link markets. It is a very difficult situation.

The problem, I might add, is not necessarily the mechanics of the linkages. It is the governance of those linkages where everything breaks down. Unfortunately, the industry itself, as much as I would love to not have the SEC or any regulator interfere with how the markets operate and let the industry work this out itself, there

comes a time when the industry has to be pushed down the path to do what is best for the investor.

And I think that requiring markets to link and requiring them to have automatic execution is the issue that has to be addressed.

Chairman SHELBY. Thank you.

Mr. McCooey.

Mr. MCCOOEY. I think the question was dealing with some of the abuses in the marketplace, and I think Chairman Shelby, that there is a perfect market. There have been problems across all markets. Most recently, there was a significant Nasdaq market maker that was just fined about $60 million by the NASD for abuses in front-running.

So there is no perfect market, and we need a strong regulatory apparatus across all markets to make sure that they function correctly, and we make sure that investors are well-served.

Chairman SHELBY. Senator Sarbanes.

### STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Thank you very much, Mr. Chairman.

Mr. McCooey, you said we need a strong regulatory apparatus to make sure investors are well-served, correct?

Mr. MCCOOEY. Yes, sir.

Senator SARBANES. Does the rest of the panel agree with that?

Mr. MADOFF. Yes.

Mr. DESANO. Yes, sir.

Mr. CRONIN. Yes.

Mr. COLKER. Absolutely, yes, absolutely.

Senator SARBANES. Good; I just want to get that on the record. Thank you very much.

Now, the next question I want to askput is to all the panelist is, do you feel that the process that the SEC has been pursuing in considering proposed Regulation NMS has allowed you ample opportunity to present your views to the SEC and constitutes a fair and balanced process?

Mr. Colker.

Mr. COLKER. Senator, I believe that the process so far has been fair. I would just suggest that because new issues are coming up, particularly this fast versus slow distinction; this is a relatively new idea that if the SEC decides to do something formal on that that they should put that out for comment again.

Senator SARBANES. All right; Mr. Cronin.

Mr. CRONIN. Yes, sir, I think the SEC has been very fair in this process. I also think it is noteworthy that in Reg NMS, they do assert that the development of the national market system and what the role of the SEC is in that development is to facilitate, not to dictate, its form. It is a very difficult situation we find ourselves in with many disparate views, but I think the process has been very fair in general.

Senator SARBANES. Mr. DeSano.

Mr. DESANO. Yes, sir, I think thus far, we are quite happy with how it has gone, but there are other offerings that are being made out there and discussions going around with respect to hybrid markets and the like which could change the status of the New York with respect to it being a fast market. And should that become

more formalized, we would appreciate the opportunity for the SEC to allow us to comment on that as well.

Senator SARBANES. Ms. Esposito.

Ms. ESPOSITO. Senator, we do believe it has been a fair and open process. We applaud the SEC for looking into this. We support their opinion that the markets need to be modernized. We appreciate a seat at the table with the SEC and here today. Thank you.

Senator SARBANES. Good; Mr. Madoff.

Mr. MADOFF. Yes, I would second all of those. The SEC process has been a very involved and fair process on all their rulemaking proposals.

Senator SARBANES. Good, Mr. McCooey.

Mr. MCCOOEY. I believe the Commissioners as well as the staff have done an excellent job of engaging the market participants and soliciting their views, and I think the process has gone along very well, and I believe that they are going to continue a very deliberate and thoughtful process to create the best market structure possible.

Senator SARBANES. I might also note that the oversight hearings which Chairman Shelby is holding also contribute to this process and provide an opportunity to get the benefit of a range of views on these issues.

I would like to ask the question again to all members of the panel about the importance of the volatility factor as we look at market structure. It is asserted, of course, that things should be done a certain way because it helps to dampen down volatility; that it is a good thing to dampen down volatility, and then, we even had some testimony yesterday about some of the impact of that. I would like to hear from each of you on how you assess the volatility factor.

Mr. COLKER. I think the markets in general do a good job with that. I believe that the electronic markets have shown statistically that the competition between market makers has led to narrower volatility than in a single specialist model. I also worry to the extent, God forbid, we have another national disaster whether, you know, an exchange with a physical trading floor and no separate physical site could come up quickly enough to maintain the stability of the financial system.

Senator SARBANES. Mr. Cronin.

Mr. CRONIN. Volatility is obviously of interest to all of the investing public. We want to dampen as best we can that volatility, and again, we believe the best way to do that is to provide protections for limit orders to come back. Currently, we are in a situation where people are not given the proper incentive to put their limit orders on the various exchanges or market centers. We need more rules in place, and I do not mean to be overburdensome with these rules, but with time and price priority, that is not only the best price be protected, but also the person who is there displaying the best price first, those kinds of protections, I think, facilitate people's interest, engender confidence, and will likely result in greater liquidity being displayed. And ultimately, the attendant cost of that will be that there will be less volatility.

Senator SARBANES. Mr. DeSano.

Mr. DESANO. Yes, I am not sure that volatility is all that bad to begin with. Take a scenario; say a stock is trading at $20, and

some news comes out, and they are going to reduce—they lost a contract or something, and, you know, the stock is actually worth $15 when all is said and done and all the analysis is done. Then, that is what the stock is worth, and that is where the stock should trade.

Why should somebody walk it down in the interests of dampening volatility? What do you do to the individual investor who is buying it at $18 and $17 and $16 when it is really worth $15? You know, stocks are worth what they are worth. They are worth what the market thinks they should be worth, and that is who should price it.

Mr. CRONIN. Sir, just to be clear, if I might add: Volatility based on information is clearly a different concept than volatility based on inefficient markets. So we think that the inefficiencies of markets and the volatility that is commensurate with that is what needs to be addressed, not the volatility of the information-based trades.

Senator SARBANES. All right.

Ms. ESPOSITO. Sir, volatility is a characteristic that retail understands as part of investing in the marketplace. I would say that what the retail investor does not want to see is artificial dampening of volatility through the use of a specialist. One of the things that they look to and one of the preferences why they are in the over-the-counter market is that there is transparency and competition and that there is an immediate movement toward the equilibrium set by other investors like themselves in the bids and the offers that are quoted.

So, I would say that the artificial dampening of volatility is not good for the marketplace; is not good for the retail investor. A lack of a quote or a halt in trading is not good. It does not give them confidence in the market, but certainly, the transparency and the competitiveness in some of the automated markets with quotes coming from investors like themselves gives them credibility in the marketplace.

Mr. MADOFF. I do not believe that volatility has been demonstrated to be a problem. I think historically, if you look at volatility today, with the Dow over 10,000 as compared to what it was years ago at 1,000 or 2,000, and you compare a 100-point move to a 10-point move, I do not think there is much difference.

Number one, I do not think anyone can control or should attempt to control volatility. The best way to deal with volatility if you deem it to be a problem is just to link the markets. Markets will seek their own levels. The only time it is a problem is when orders cannot interact, and people cannot come into the marketplace efficiently to offset that volatility. Let buyers and sellers meet as efficiently and as quickly as possible, and volatility to itself goes away for the most part.

Mr. MCCOOEY. A significant number of companies have moved from Nasdaq to the New York Stock Exchange over the past few years, and one of the primary reasons that they have moved is because of reduced volatility. And we also have statistics that show that once they have moved to the agency auction market on the floor that the volatility in their stocks has been reduced by about 50 percent.

That is one of the major reasons why CEO's and CFO's, when they do their analysis, decide that they want to move to the New York Stock Exchange. One of the things I would just like to touch on is that when Mr. DeSano was talking about walking a book down when a stock may be trading at $20 and that people may get hurt if they buy it at $18 and $17 if the real price is $15. That kind of volatility is dampened by a regulatory process that we have at the New York Stock Exchange, which is the halt in trading, where we allow all investors to understand the news that has been disseminated about a company, and then, we reopen the stock at the appropriate price where buyers and sellers are able to aggregate their information.

And if the true price is $15, and that is where the price is, then, we will have one trade where all of the people who were bidding $18 and $17 will get $15, and we do not allow that kind of volatility to happen at the New York Stock Exchange.

Senator SARBANES. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bunning.

**STATEMENT OF SENATOR JIM BUNNING**

Senator BUNNING. Thank you very much.

It is very interesting to hear all of the diverse opinions about this, particularly people protecting their turf. Let me ask you a general question: Do you believe an opt out on trade-through will lead to internalization? Could internalization disadvantage small investors, or do you believe the 1940 Act has the safeguards to prevent that?

You can go right across.

Mr. COLKER. The Nasdaq marketplace is a 100 percent internalizing market, at least among the market makers. And if you look at, again, the empirical data, you see that, in fact, customers often get better executions than they do in a single specialist model. I do not think an opt out where people are given a choice is going to in any way disadvantage the quality of their service.

Mr. CRONIN. I think internalization is clearly an issue, and it is unclear what kind of impact opt out will have. What I would say is the general premise of an opt out is that it is antithetical to the proposition of orders that would protect limit orders, and I think again——

Senator BUNNING. In other words, if I put a limit order in all or nothing on 10,000 shares, I have protected myself.

Mr. CRONIN. You are opting in to the market by displaying your limit order, essentially.

Senator BUNNING. That is find, but you cannot trade it; no one can unless I get my price.

Mr. CRONIN. That is right.

Senator BUNNING. All or nothing.

Mr. CRONIN. If you are bidding $20 in this prior example for 10,000 shares, should it be fair for someone the trade it at $19.98 on a different exchange?

Senator BUNNING. If you cannot get all my 10,000 or 20,000 shares, yes; the answer is yes.

Mr. CRONIN. Right, so should the market structure allow a trade to take place at $19.98 when there is a superior bid displayed? An

opt out provision would give that ability to trade at $19.98. We think that is a dangerous slope to pursue. We understand it, and as my neighbor up the street can tell you——

Senator BUNNING. Yes, but I am protecting my own order.

Mr. CRONIN. That is right. In the interests of protecting your order and investors' interests in general, an opt out is a very difficult thing to accept as a proposition.

Senator BUNNING. There are many large institutional traders and many other traders that protect themselves with their own orders. Are you saying that is a bad thing?

Mr. CRONIN. No, sir, I am saying that putting your own order out there, by displaying your order, by opting into the marketplace, you should have some protection conferred upon you. Opt out basically takes that protection away from you.

Senator BUNNING. Okay; thank you.

Mr. DESANO. Back to internalization, I do not see opt out impacting that. Because of the 1940 Act, we are not allowed to trade with our funds as principal, and so, it has absolutely no effect on that.

Ms. ESPOSITO. Senator Bunning, we support the auto-execution alternative, which would largely eliminate the need for an opt out in the marketplace. We believe that all market centers, if they are required to display an automated quote, there will be no need for that. I should say that we also support that all orders be displayed before, in fact, they are internalized. This is good for price discovery, for transparency, and indeed for competition. We would not want to see an opt out where there was an opt out for the institutional market at the disadvantage of the retail investor.

Senator BUNNING. Yes, sir. Mr. Madoff.

Mr. MADOFF. Yes, sir. Senator Bunning, there are instances where an opt out is necessary. There must be limited opt outs, but certainly, I do not see any reason why someone should opt out of an automated, accessible market for most non-block size orders.

Mr. MCCOOEY. There are significant negative impacts to an opt out. I refer to opt out as trade-through lite, because it ends up with the same negative impacts to the marketplace, the same negative impacts to people that are displaying limit orders. It makes them feel like, if they are traded through that they are ignored. They will not come back into the marketplace, because they feel that they have no standing. That will reduce the number of limit orders. It will widen spreads. It will increase costs to companies to raise capital. There are significant negative impacts to an opt out.

Senator BUNNING. I strongly disagree with that, but that is okay.

Another question: Is the current trade-through rule ever violated? If so, how often?

Mr. COLKER. Senator, if you look closely, you will see that the marketplace that appears to most strongly support a trade-through rule and is most concerned about it going away is, in fact, the greatest violator of that. Probably thousands times a day, the primary market trades through other nonprimary markets.

Mr. CRONIN. Yes, sir, it does happen. I know the Exchange is aware of the problem and have said implemented some procedures to correct it. I guess what I would say is by conferring a trade-through to only automated markets, only those markets that provide immediate execution on firm bids and offers, much of that

problem can go away. ITS status and the commiserate trade-through rule that exists today is not really a true trade-through rule, because it is not being followed.

If a trade-through rule is established again for only automated markets, I think that much of this goes away.

Mr. DESANO. We get traded through fairly often. I have shared examples of that with Chairman Donaldson and with Chairman Thain. And to go back to the institution that is supporting the trade-through, which violates it, is also probably the largest internalizer in the world. When a market order comes into there, and there is a better bid away or a better offering away, they will match it as opposed to routing it to that location, so they are the largest internalizer in the market.

Senator BUNNING. In other words, the specialist on the floor——

Mr. DESANO. Yes, sir.

Senator BUNNING. —will take the——

Mr. DESANO. Yes, sir.

Senator BUNNING. Go ahead.

Ms. ESPOSITO. Yes, Senator, there are violations of the trade-through rule.

Senator BUNNING. Okay; thank you.

Mr. MADOFF. Yes.

[Laughter.]

Senator BUNNING. Yes, there are?

Mr. MADOFF. There are violations of the trade-through rule. However, there is a procedure in place in the listed market today where if another market center, trades through our market, which does happen regularly, we have the right to complain through ITS to correct that price, and in fact, when we do complain, which is most of the time, they do correct the price.

Mr. MCCOOEY. There are trade-throughs. There are trade-throughs in all markets. When Bob Greifeld sat here yesterday and said that there are no trade-throughs in Nasdaq, that is absolutely not correct. There are trade-throughs in Nasdaq; there are trade-throughs in New York Stock Exchange-listed issues. Every single valid complaint of a trade-through on the New York Stock Exchange, we honor, and we satisfy.

Senator BUNNING. One last question.

Chairman SHELBY. Go ahead, Senator.

Senator BUNNING. If the current trade-through rule is violated so often, why do we have it? Anyone? Why do we have it?

Mr. COLKER. We have it because inertia is a powerful force, you know. It has been there since 1982.

Senator BUNNING. Well, I know it has been there a long time.

Mr. COLKER. I think it served a useful purpose when it first came out. Conditions have changed to where it is an anachronism now.

Senator BUNNING. To look at it now in a different view would be the correct thing to do.

Mr. COLKER. Yes, in an electronic market, where you have complete market information at the customer level and multiple competitors and advanced trading systems, it is really an impediment rather than an advantage.

Senator BUNNING. Let me tell you: for people who are very up on being sophisticated investors, I think they can protect themselves from all of you.

[Laughter.]

And I say that as kindly as I can. If you know what you are doing when you are investing, you never get stuck with that. And when the trade is past your bid or your asking price, you understand that they could not fill your order because it was too big, and there were not enough shares bid, or there were not enough shares offered at your price. And so, trade-through and all these things are just extra things that are not presently necessary in the market, because I will tell you: You all trade an awful lot of stock, and you protect your investor. If you do not protect your investor, you have a big problem.

Thank you, Mr. Chairman.

Chairman SHELBY. Thank you, Senator Bunning.

Mr. DeSano, there seems to be a split within the mutual fund industry on Regulation NMS. How do these issues affect mutual fund investors? You are a trader for the biggest.

Mr. DESANO. Well, the split would be looking for price and time priority across markets, and we do not have it within the New York Stock Exchange to begin with. So if we could accomplish that, we can have the discussion about the across market issue. That is really the split.

Chairman SHELBY. Ms. Esposito, are you familiar with the Frankfurt Exchange?

Ms. ESPOSITO. I am.

Chairman SHELBY. Is that totally electronic?

Ms. ESPOSITO. Yes, to my knowledge, it is.

Chairman SHELBY. Just tell me in a second, how does that work compared to the New York Stock Exchange?

Ms. ESPOSITO. Well, I can only comment on the experience of our investors and that they prefer automated transactions, and I think that kind of a model is what, with their pocketbooks, they are voting for here in the United States for us to follow.

Chairman SHELBY. It works pretty well there, does it not?

Ms. ESPOSITO. Yes, sir.

Chairman SHELBY. How many years, how long have they been running it in Frankfurt?

Mr. DESANO. I believe it is about 5 years, sir.

Chairman SHELBY. It is a pretty good size market, is it not?

Mr. DESANO. Yes.

Ms. ESPOSITO. It is, Senator.

Mr. CRONIN. Mr. Chairman, if I might add real quick——

Chairman SHELBY. Sure.

Mr. CRONIN. —as another mutual fund participant, I think the split philosophically is not as wide, perhaps, as it is portrayed in the media. I think most mutual funds would agree that the ultimate outcome we would like for the market structure is for more efficiency, more price discovery, and above all the other things, competition, because competition will truly create the kind of innovation, the differentiation of product and, frankly, prove to investors what the different paradigms of tradings present in terms of

a value added process. And they are free to choose, should be free to choose, how they want to pursue their order flow.

Chairman SHELBY. We received notice that we have three stacked votes. We are going to try to get into the second panel. We appreciate your testimony. We appreciate what you are telling us, and we are listening. You can tell that.

Mr. CRONIN. Thank you.

Ms. ESPOSITO. Thank you very much.

Chairman SHELBY. We will call up the second panel, and we will try, because you are here, and you have waited patiently, to move it as fast as possible, because I do not know if we can get back here today.

Because we are so pressed for time on the floor with three stacked votes, what I will do is forego asking questions, submit my questions to you for the record. Your testimony has been made part of the record, and if each one of you will take a couple of minutes and just touch. You heard the first panel. I apologize for having to do this, but this is the Senate.

Mr. Bang, we will start with you. Just take a couple of minutes, if you would, because time is a problem.

## STATEMENT OF KIM BANG PRESIDENT AND CEO, BLOOMBERG TRADEBOOK, LLC

Mr. BANG. Mr. Chairman and Members of the Committee, my name is Kim Bang, and I am pleased to testify on behalf of Bloomberg Tradebook.

Let me state first that we do not see ourselves as a competitor of the New York Stock Exchange. We are basically liquidity-agnostic. Our challenge is to provide the best possible tools to our clients and empower them to find the best price in the marketplace, whether it is at the New York Stock Exchange or any other venue, including the 40 exchanges we route to globally.

Market participants and policymakers have often asked, why does the New York Stock Exchange control 80 percent of the trading volume of listed companies, when Nasdaq controls only about 20 percent of the volume of its listed companies, and the answer to us is simple: It is an anticompetitive, antiquated, and protectionist trade-through rule that we have today.

The Nasdaq price-fixing scandal of the mid-1990's resulted in the SEC's 1996 issuance of the order-handling rules, and those rules have enhanced transparency and competition in the Nasdaq, and we believe the same evolution should take place in the New York Exchange. We believe that the trade-through rule is protectionist, inefficient, and that essentially, it should be abolished.

Chairman SHELBY. Anti-market?

Mr. BANG. I am sorry?

Chairman SHELBY. Anti-market oriented, the trade-through rule? It is an impediment to the market?

Mr. BANG. It is an impediment to the national evolution of the market, yes.

If manual markets are to continue in New York when they do not exist anywhere else in the world, we think that they should earn that position and that right as the result of competition and investors' choice, choosing to go there. The rule should certainly not

be extended to the Nasdaq marketplace, because let us remember the depressing question here today and what drives Reg NMS is not how do we improve the Nasdaq market, but the question really is how do we go about modernizing the New York Stock Exchange?

Let us bring the New York Stock Exchange market into the 21st century and not impose, without empirical basis and evidence what we believe is a more antiquated and extremely costly proposal onto the Nasdaq market. Rather than introducing—I am going to skip through because of time—let me talk about market data for a moment.

I believe that market data is the oxygen of the markets and the public good created by every investor. Historically, the exchanges have exploited this Government-sponsored monopoly to overcharge investors a sum many times the actual cost of aggregation and disseminating of market data, which is forcing investors to subsidize other activities. The Securities Exchange Commission proposes a new, complicated formula for distributing these monopoly market data overcharges without really addressing the underlying question of how to effectively regulate this monopoly function.

And by contrast, in its 1999 concept release on market data, the Commission noted that market data should be for the benefit of the investing public and proposed a cost-based limit to market data. Okay; one other thing we believe regarding market data is we believe that more is better and that as a result of decimalization, which has been a watershed event, going to decimal trading has for sure been a boon to the retail investor.

But it has also been accompanied by drastically diminished depth of display and accessible liquidity. With 100 price points to a dollar instead of 8 or 16, the informational value and available liquidity at the best bid and offer have declined substantially. In response to decimalization, Congress should urge the Commission to restore lost transparency and liquidity by mandating greater real-time disclosure by market centers of liquidity, at least by penny above and below the best prices.

Given the incentive of a slow market such as the New York Stock Exchange to hide quotational information and block direct access to liquidity, the real-time disclosure of liquidity should not be left to market forces, which can work in this instance only if disclosure is mandated. This should restore the transparency lost as a result of decimalization.

Chairman SHELBY. You are over your time. I am sorry, because——

Mr. BANG. Let me make one more comment.

Chairman SHELBY. Otherwise nobody else will have a chance to say something.

Mr. BANG. All right.

Chairman SHELBY. Your written testimony is made part of the record.

Mr. BANG. Thank you.

Chairman SHELBY. Thank you.

Ms. D'Agostino.

## STATEMENT OF DAVI M. D'AGOSTINO DIRECTOR, FINANCIAL MARKETS AND COMMUNITY INVESTMENT U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Ms. D'AGOSTINO. Yes, I have a 5-minute oral summary. Would you like me to cut it back?

Chairman SHELBY. I would like you to cut it to 2.

Ms. D'AGOSTINO. Okay; I am pleased to be here today to discuss GAO's preliminary observations on subpenny pricing issues.

In its proposed changes to Reg NMS, SEC included a proposal to ban market participants from pricing stocks in increments of less than one penny, as some markets do today. Our preliminary observations are based on our work to date, including interviews with regulators and market participants and a limited review of comment letters to SEC.

First, although data across all of the markets are not routinely reported or readily available, the extent to which stocks are quoted in subpenny increments appears to be limited. Major markets do not allow subpenny quoting, and only some electronic trading venues do, and they have severely curtailed or cut back the number of stocks that they allow it in. Limited scope studies by regulators and one market center found that subpenny prices were used for 15 percent or less of trades.

A second point I would make is that some cited advantages, and some cited disadvantages of subpenny pricing. The advantages included getting order priority, price improvement, and more competitive and efficient markets. The disadvantages included the fact that mostly professional traders such as hedge funds have the systems that can display subpenny prices, and the general investing public do not have access to these.

Another disadvantage cited was that there is greater propensity to step in front of orders and thereby discouraging the submission of limit orders and reducing overall transparency. Others said that subpenny quotes reduced market transparency by spreading the available shares across more price points, which, in turn, makes it more difficult to fill large orders.

Finally, most of the participants we contacted so far and most commenting on SEC's proposal appear to support a ban on subpenny pricing for stocks priced above $1. Basically, those who oppose the ban say that it will reduce opportunities for traders to offer better prices and that although some ECN's support the ban, others said that it should be determined by market forces, and that as technology advances, more market participants will find it more useful to quote in subpennies.

Others have noted that banning subpenny quotes could stifle incentives to invest in better technology, and they noted that certain problems cited as being caused by subpennies will continue with trading in full pennies.

With that, I will end my oral statement.

Chairman SHELBY. I am sorry about the time. We have about 3 minutes before our vote, and we have three stacked votes. I have no control, so you have to be real quick. Just tell me your top points fast.

**STATEMENT OF ROBERT B. FAGENSON
VICE CHAIRMAN, VAN DER MOOLEN SPECIALISTS**

Mr. FAGENSON. Mr. Chairman, I am Robert Fagenson. I am a specialist; I have been for my whole career.

We support the trade-through rule because it is not antimarket; it is procustomer. And people who drag in here and whine about it because their business models do not work are seeking weaker regulation, and if they think they cannot get you to buy into this one, they will go for opt out, which really should be cop out. It is a way to distort and gut the entire system.

We listen to our customers; we believe in customer-driven markets. Mr. Thain told you what we are doing, what we are about. We are going to get there as sure as I am sitting in front of you with a minute to talk. We are going to get there for all the right reasons: Because our customers deserve no less, and the integrity and liquidity of our markets is a national treasure that deserves protection, and we believe in that: Not protectionism but protection.

You have to be the FAA here, Mr. Chairman. Yes, the plane will land, but it has to land safely, and we believe that the trade-through rule is an absolute essential for customer protection for my constituents and for your constituents.

Chairman SHELBY. Yes, sir.

**STATEMENT OF JOHN C. GIESEA
PRESIDENT AND CEO, SECURITY TRADERS ASSOCIATION**

Mr. GIESEA. John Giesea, President and CEO of Security Traders Association, which represents some 6,000 professionals involved in the purchase and sale of securities.

Chairman SHELBY. What is your view on this?

Mr. GIESEA. Very quickly, we have a phased approach——

Chairman SHELBY. Okay.

Mr. GIESEA. Which we think there are four corners to the foundation of NMS. Those four corners are full connectivity, access without fee, fully automatic transactions, and fully automatic refresh of quotes, which allow for continuous, automatic trading. You have those four things, and you go a period, and then, you will be in a position through experience to determine the importance or lack thereof of imposing any changes to the trade-through rule.

Chairman SHELBY. How long do you envision a phase-in?

Mr. GIESEA. Well, Mr. Thain has mentioned that before the NMS comes out, he can be in a position to have automatic transactions, so it would seem to me this could be perhaps a 6-month period where you could gain that experience.

Chairman SHELBY. Mr. Leven, you are last, but I am sorry again about the time.

**STATEMENT OF CHARLES LEVEN
VICE PRESIDENT, BOARD GOVERNANCE ANDCHAIR, BOARD
OF DIRECTORS, AARP**

Mr. LEVEN. Well, if I clear my throat, we will be done, right?

[Laughter.]

Chairman SHELBY. Yes, sir. Well, maybe. Just tell me how you feel about all this very quickly.

Mr. LEVEN. From an investor's point of view, an individual investor who has both mutual funds and individual investments, their concern mostly, primarily, is price. The second concern is the cost of the transaction: speed, confidentiality, while they are important, are not really significant to them.

The other thing that I think we should say, at least, is there is a definite negative perception of this industry. It runs through our entire survey. There is dishonesty, a lack of accountability, and a lack of consumer protection. The respondents feel there are big problems for the industry.

Chairman SHELBY. The integrity goes right to the central part of the market, does it not?

Mr. LEVEN. Yes, absolutely. And the other point is that they feel more Governmental supervision is necessary.

Chairman SHELBY. We appreciate all of your participation here, and we are going to continue our oversight on this, and I apologize again for having to run. Thank you. The hearing is adjourned.

[Whereupon, at 11:20 a.m., the hearing adjourned.]

[Prepared statements supplied for the record follow:]

**PREPARED STATEMENT OF DAVID COLKER**

CEO AND PRESIDENT, THE NATIONAL STOCK EXCHANGE

JULY 22, 2004

Chairman Shelby, Ranking Member Sarbanes, and other Members of the Committee, thank you for inviting me to testify before you today. I appreciate the opportunity to provide the Committee with my thoughts on important market structure issues.

The publication of proposed Regulation NMS by the Securities and Exchange Commission has given the securities industry a unique opportunity for improvement. If we are thoughtful enough, if we are committed enough to the idea of competition, then we can reshape the regulatory environment in a way that will have significant positive benefits for the public investor.

One such opportunity for improvement is the Intermarket Trading System's trade-through rule. Originally, this rule was put in place to require the New York Stock Exchange to honor better prices that were being displayed on nonprimary exchanges. Since the establishment of the trade-through rule in 1982, the nonprimary exchanges have led the way in automating the trading process, which has reduced trading costs, enhanced market efficiency, and created opportunities for new types of electronic participants. Because of these innovations, however, the trade-through rule has now become a barrier to competition, an unintended instrument for unfair Government protection of the NYSE's manually intensive monopoly. Because of the trade-through rule, exchanges that provide automatic executions are required to slow their service and send an order to an NYSE quote that, though it may appear to be the best price in the country, may not actually be available. Even if that NYSE quote is available, a more efficient marketplace may have to wait up to 30 seconds to get an NYSE execution, and that 30 second wait could result in losses due to changes in market valuations during that time. Even worse, the NYSE's execution price is often inferior to the NYSE quoted price that induced the order to be sent to New York in the first place.

The SEC's own execution quality statistics (Rule 11Ac1–5) clearly reveal that the trade-through rule is a major barrier to competition: NYSE-listed stocks subject to the trade-through rule have wider spreads, get slower executions, and impose higher costs on investors. In contrast, Nasdaq-listed stocks, which are not subject to the trade-through rule, provide investors with increased transparency, greater access to liquidity, faster executions, higher fill rates, and better-priced executions. In addition, experience with the SEC's exception to the trade-through rule for exchange-traded funds demonstrates that quote spreads narrowed and trade volume grew significantly after the trade-through rule was modified to allow trade throughs in the top three ETF products.

The trade-through rule has become unnecessary and counterproductive as a result of easy access to complete market data, technological advancements in trading systems, the increase in market competitors, and the implementation of decimal trading. The obvious solution, then, is to allow an investor to forego the trade-through rule and let competition between exchanges drive best execution. It is time for the Government to stop telling the American public where it has to conduct its business.

Although a consensus is building about the necessity for a trade through opt out for manual or "slow" markets, there is still a lot of debate about whether the choice of an investor to opt out of the trade-through rule should extend to automated or "fast" markets. For two reasons, I believe that it is important to preserve opt out flexibility for fast markets as well as slow markets. First, there are definitional concerns. The definition of "fast" will be arbitrarily determined based on the lowest common denominator solution that will be acceptable to the most politically powerful marketplace. Defining "fast" will become a slippery slope that will force the SEC to regulate more and more aspects of market technology. Second, fiduciary duty and economic self-interest obviate the need for any Government-imposed trading rules, and therefore the Commission does not need to condition the flexibility given by an opt out provision, even when a market is characterized as "fast" for regulatory purposes. If there really is no incentive to avoid a fast market, then a rule is not needed to require an investor to act in its economic self-interest. The SEC should allow exchanges and brokers the opportunity to compete, to operate without the constraints of intermarket order routing requirements, until it is empirically proven that the imposition of a trade-through rule is necessary.

If the Commission decides not to extend the trade-through rule to the Nasdaq market when it trades Nasdaq-listed securities, then, in order to ensure equal regulation, the SEC needs to grant exchanges the ability to trade Nasdaq-listed securities without intramarket or intermarket trade through requirements. To do oth-

erwise would be to allow Nasdaq to retain a significant regulatory advantage over its competitors. NSX has had for over 2 years a rule change proposal in front of the SEC—its "voluntary book" proposal—that would eliminate this regulatory advantage. Now is the time to either approve NSX's voluntary book filing or to eliminate the ability of broker-dealers to trade through better-priced orders in Nasdaq's marketplace. Only in this manner can the mandate of the Securities and Exchange Act of 1934 that self-regulatory organizations be subject to equal regulation be fulfilled.

On the issue of market data revenue, I would like to challenge the assumption in proposed Regulation NMS that the current system for market data revenue distribution needs to be changed, and I would like to caution the Commission against making a change that could prove to be far worse than any problem that exists today.

It is important to place the issue before us in historical context. The current market data revenue distribution method has been in place for over 25 years. For most of that time, the method has been perceived to be fair, easy to administer, and effective. It was first questioned 2 years ago by Nasdaq for competitive reasons because the National Stock Exchange had captured significant order flow in Nasdaq-listed securities as a result of NSX's cost initiatives that involved the sharing of market data revenue with members. The fact is that, because other market centers that trade Nasdaq and Amex-listed issues were forced by NSX's competitive initiative to share their market data revenue, investors have been saving over $100 million annually, and they now have the opportunity today to choose from multiple broker-dealers offering automated, price-improved executions for under $10. These benefits were created through competition, not regulatory mandate. If, as Regulation NMS suggests, the SEC is not going to address the explicit cost of market data by lowering the overall size of the market data revenue pool, then it is important that the SEC preserve a competitive environment among SRO's in order to continue to indirectly bring down the cost of market data for the brokerage community and the public investor.

The premise that a trade-based formula creates economic distortions, regulatory distortions, or inappropriate incentives to engage in fraudulent behavior has not been sufficiently proven to warrant the proposed change to market data revenue distribution. Even if one believes that fraudulent actions are encouraged by the current distribution model, such actions represent rule violations that are already being regulated by effective SRO enforcement programs. The potential for such malfeasance no more justifies the adoption of Regulation NMS's proposed costly solution than the potential for speeding justifies shutting down the highway system.

The proposed formula amendment is unnecessarily complex, misguided in its price discovery value judgment, and expensive to administer. The complexity of the formula has made it a poster child in the industry for the inherent limitations of regulation. The position that trades less than $5,000 have no price discovery value favors the exchange with the most block activity, and it defies logic. For example, the new formula includes a 100-share trade of a $56 stock like JNJ but excludes a 1,200-share trade of a $4 stock like SUNW, even if the SUNW trade creates a new high or low of the day. The fact is that all trades have price discovery value. Finally, in a world that is generating eighteen million NBBO quote changes daily across eight market centers, imagine the annual cost of determining how many thousands of quote credits each particular quote is due for each of the 23,400 seconds in every trading day. The calculation becomes particularly ludicrous if you consider that, in one example provided in the SEC release, a single quote that equaled the national best bid or offer for three seconds would be entitled to 12,000 credits. While NSX respects the desire of the Commission to encourage quote competition, the benefits of doing so through the proposed formula amendment simply do not come close to outweighing the new formula's administrative costs.

Given all of the reasons above, NSX does not believe that the adoption of Regulation NMS's proposed market data reallocation formula would be sound public policy.

Finally, whatever action the SEC ultimately takes, it is important to combine such action with changes that require NBBO and trade report market data to become real-time. This means that the Consolidated Quote Plan's 60-second quote update provision and the Consolidated Tape Plan's 90-second trade reporting provision must be significantly reduced. Given the electronic nature of the trading world today, real-time market information—which is the stated purpose of the CQ and CT Plans—means automatic execution, automatic quote updating, and automatic trade reporting. Therefore, no quotes or trades should be given credit for market data revenue unless they emanate from a "fast" automated market.

Thank you again for the opportunity to present my views on these important subjects. I look forward to answering any questions that you may have.

**PREPARED STATEMENT OF KEVIN CRONIN**

SENIOR VICE PRESIDENT AND DIRECTOR OF EQUITY TRADING
AIM INVESTMENTS

JULY 22, 2004

**Introduction**

My name is Kevin Cronin. I am Senior Vice President and Director of Equity Trading at AIM Investments in Houston, Texas. AIM Investments was founded in 1976 and had $148 billion in assets under management and approximately 11 million shareholders as of March 31, 2004. I would like to thank the Committee for providing me with the opportunity to testify on the SEC's Regulation NMS proposal and developments in the structure of the U.S. securities markets. While I am speaking today on behalf of AIM Investments, I am also expressing the views of the Investment Company Institute, the national association of the American investment company industry. I am a member of the Institute's Equity Markets Advisory Committee, which consists of approximately eighty senior traders at various large and small mutual fund firms. The Institute submitted a comment letter on the Regulation NMS proposal, which was the product of much discussion among Equity Markets Advisory Committee members and which expresses a consensus view of those members. I also currently serve as Chairman of the New York Stock Exchange's Institutional Traders Advisory Committee, which provides comment and recommendations to the Exchange on methods to improve its trading systems.

Although Regulation NMS consists of four substantive proposals addressing a wide variety of issues impacting the structure of the U.S. securities markets, I will focus my comments on Regulation NMS's trade-through proposal, which arguably could have the most impact on the structure of the securities markets going forward. Before I discuss some of the specific issues relating to the trade-through proposal, however, I would like to discuss why the issues raised by Regulation NMS and the debate over market structure is important to investors and, in particular, the mutual fund industry. Increased efficiencies in the markets will significantly benefit mutual fund shareholders in the form of lower costs. Mutual funds, therefore, have a vested interest in ensuring that the securities markets are highly competitive, transparent and efficient, and that the regulatory structure that governs the securities markets encourages, rather than impedes, liquidity, transparency, and price discovery.

How do we create the optimal market structure for investors? We believe the SEC must focus its efforts on the principles of a national market system that Congress itself found appropriate over 30y years ago for the protection of investors and the maintenance of a fair and orderly market—efficiency, competition, price transparency, and the direct interaction of investor orders. As the SEC noted in the Regulation NMS proposing release, possibly the most serious weakness of the national market system is the relative inability of all investor buying and selling interest in a particular security to interact directly in a highly efficient manner. This weakness, in turn, creates a disincentive to investors to publicly display their limit orders, which are the cornerstone of efficient, liquid markets and, as such, should be afforded as much protection as possible.

In order to provide investors with the incentive to publicly display their orders and to create a market structure in which these orders can effectively interact, several changes must be made to the structure of the securities markets. Most significantly, price and time priority should be provided for displayed limit orders across all markets; strong linkages between markets should be created that make limit orders easily accessible to investors; and standards relating to the execution of orders should be created that provide the opportunity for fast, automated executions at the best available prices.

It is important to note that problems surrounding the lack of order interaction, its causes, and its impact on the securities markets are not new. Mutual funds have, for many years, recommended changes to the structure of the securities markets to facilitate greater order interaction and, in turn, more efficient trading. While much has been made about how various industry participants may or may not have aligned themselves with various competing market centers in the market structure debate, I want to make one point clear. AIM's and ICI's sole interest in this discussion is in ensuring that proposed market structure changes promote competition, efficiency and transparency for the benefit of all market participants and not for a particular market center or exchange. Market centers should compete on the basis of innovation, differentiation of services, and ultimately on the value their paradigm of trading presents to investors.

**Trade-Through Proposal**

Although Regulation NMS and the trade-through proposal would not implement all of the components we believe necessary for investors' orders to fully interact in an efficient manner, a uniform trade-through rule would be a significant step forward in providing protection for limit orders and, by affirming the principle of price priority, should encourage the display of limit orders. We believe, if appropriately instituted and enforced, a uniform trade-through rule also would increase investor confidence in the securities markets by helping to prevent an investor's order executing at a price worse than the displayed quote. We therefore support the establishment of such a rule.

In order for a trade-through rule to fully achieve its objectives, it is extremely important that only "automated" quotes, that is, quotes that can be executed against automatically and promptly without any manual intervention, be protected and that markets provide prompt automatic updates of those quotes. It is for this reason that we support an exception to the trade-through rule that would permit an automated market to trade through a manual market for an unlimited amount or, as has been discussed recently by the SEC, an automated quote to trade through a manual quote for an unlimited amount. Such an exception would correctly focus the trade-through rule on providing protection only to those quotes that are truly firm and immediately accessible and not quotes that require manual execution and are, in effect, only "maybe" quotes or difficult or slow to access. We also support the creation of strong standards to accompany such an exception, which would delineate when an "automated" quote would be permitted to move into a manual execution mode and then back again to an automatic execution mode. We believe an exchange should only be permitted to "turn off" the automation feature of its quote, if at all, in extremely limited circumstances and only in critical situations.

While most trading venues provide the opportunity for true automatic execution, certain exchanges still do not offer such a choice for institutional investors. The New York Stock Exchange has stated recently that they intend to provide automatic execution to at least the best bid and offer on the Exchange and has been discussing plans to transform their market into a "hybrid" market. It is important, however, that any automation on the NYSE not be wrought with exceptions that would, in effect, make claims of automation folly. Too often, institutions have heard plans to automate NYSE trading systems only to find out, after examining details of those plans, that they did not go nearly far enough toward implementing the necessary automation on the Exchange. We therefore urge the NYSE to move expeditiously to implement true automation in its market that would provide investors with much needed automatic execution of their orders. Such changes should be implemented regardless of whether the SEC's Regulation NMS proposal is adopted. One thing, however, is certain. Until the NYSE provides true automatic execution on its market, manual quotes on the New York Stock Exchange should not receive the protections of any trade-through rule adopted by the SEC.

The proposed trade-through rule also contains another exception, the "opt out" exception, which would permit a person for whose account an order is entered to opt out of the protections of the trade-through rule by providing informed consent to the execution of their orders in one market without regard to the possibility of obtaining a better price in another market. We oppose the opt out exception. In principle, the SEC's proposal to allow an exception to the trade-through rule in the form of an opt out seems antithetical to the proposition of providing greater protection for limit orders. Institutions and other informed investors opting out would undermine the display of liquidity, which would likely result in less efficient markets. Therefore, we believe that protecting the integrity of the trade-through rule outweighs any flexibility an opt out provision would provide. While there is no doubt that, at times, investors may determine that speed and/or certainty is more important than price in executing an order, and while investors may be best served on a particular trade by opting out from executing against the best price placed in another market, we believe that in the long-term, all investors will benefit by having a market structure where all limit orders are protected and investors are provided with an incentive to place those orders into the markets. We are therefore dubious of any regulation that would tacitly approve the pursuit of "inferior" prices to the detriment of those who are willing to display best prices.

While there is clearly no consensus among market participants, and even among some institutional investors, on whether an opt out exception is necessary, there does seem to be agreement that if the SEC does not restrict trade-through protection to only automated markets or automated quotes, and does not create a strong definition of what would be considered "automated," some flexibility should be provided to investors to permit them to trade through markets that cannot provide the highest order of certainty and speed. In such a case, we believe a block trade excep-

tion to the trade-through rule may be necessary in order for institutional investors to efficiently trade large amounts of stocks. In any case, we believe that a block trade exception would be preferable to an opt out exception to facilitate these types of transactions. Most significantly, a block trade exception would be more limited in nature than an opt out exception and would be more feasible to employ.

**Market Linkages**

It is important that another key aspect of improving the structure of the U.S. securities markets be considered in the debate over the proposed trade-through rule. In particular, we believe that in order for a uniform trade-through rule to operate effectively, strong linkages and minimum access standards must first be put into place. Otherwise, we are concerned that it will be an exercise in futility to require that a market send an order to another market to execute against a better priced order on that market if that better priced order cannot be accessed easily and with certainty. We therefore believe that prior to implementing the proposed trade-through rule, the SEC should ensure that effective linkages and minimum access standards between markets are in place to support such a rule.

**Conclusion**

It is noteworthy that the SEC reaffirms, through statements in Regulation NMS, that its role is to facilitate the development of the national market system and not dictate its form. We believe that competition should largely define the structure of the capital markets. In the end, such competition will promote innovation and differentiation, which will benefit shareholders of all sizes. Also, it will ensure that the U.S. capital markets retain their rightful place as the most liquid, transparent, and efficient markets in the world.

Thank you again for providing me with the opportunity to share my thoughts on Regulation NMS and the trade-through proposal. I would be happy to answer any questions that you may have.

---

**PREPARED STATEMENT OF SCOTT DESANO***

HEAD OF EQUITY TRADING DESK, FIDELITY INVESTMENTS

JULY 22, 2004

I am Scott DeSano, Head of the Equity Trading Desk of Fidelity Investments. I thank Chairman Shelby, Ranking Member Sarbanes, and the other distinguished Members of this Committee for the opportunity to offer our views regarding proposed rulemaking at the SEC that has important implications for the future role of competition in this Nation's equity securities trading markets. I am speaking for Fidelity as the investment manager and fiduciary for its 190 mutual funds that invest in equity securities, which have aggregate assets of over $597 billion. Our call for trading reforms is motivated solely by our duty to meet our fiduciary obligation to our mutual fund investors. As a matter of fiduciary principle, reinforced by the provisions of the Investment Company Act of 1940, Fidelity does not trade as principal with its funds. On any given trading day, the trading by the Fidelity funds in NYSE-listed and Nasdaq securities can account for 3–5 percent of the total trading volume of each market center and at times has been 40–50 percent of an individual security.

By far the most important rule proposal that the SEC has included in its proposed Regulation NMS is the socalled "trade-through" rule. The trade-through rule, absent an exception, would deny a willing buyer and willing seller the freedom to choose the marketplace at which to trade and the price at which they are willing to trade.

The SEC has identified two cases where its proposed trade-through rule would not apply. First, the rule would not apply to buy and sell quotes on a "slow" or nonautomated market. The SEC recognizes that it is fundamentally unfair to force an investor to send his buy or sell order to a slow market because there is a high risk that the supposedly better quoted price may disappear by the time his order finally receives an execution on that slow market. To protect investors from this unfair result, the SEC would allow an investor to disregard the slow market and the frequently illusory prices quoted on that market. Under the SEC's proposed rule, the NYSE is a slow market.

Second, the SEC proposes to give investors an "opt out" right. This would allow informed and willing buyers and sellers in Market A to trade with one another at

* All attachments included with the witness's statement are held in Committee files.

an agreed-upon price even though Market B or Market C might be quoting a higher offer to buy or a lower offer to sell. If this sounds like the American way, it is—for two very important reasons. It gives freedom of choice to investors to decide for themselves what is in their best interests and it provides incentives to market centers to compete and to innovate to attract order flow.

**Fidelity's Positions**

Let me clearly state the positions of Fidelity Investments on the proposed trade-through rule and the opt out right, as we have set forth in our comment letter submitted last month (Attachment I) to the SEC:

- We urge the SEC not to adopt the proposed trade-through rule because it will impede competition among market centers. The Government should permit market centers to compete based upon a wide range of factors that are important to investors and bear upon best execution, including efficiency, reliability, transaction and data costs, transparency, quality of market self-regulation, fairness, and innovative use of technology to lower costs to investors. These factors all bear upon best overall prices for investors and hence "best execution."
- A trade-through rule is not necessary to promote best execution in the equity markets. Order flow will naturally gravitate to market centers that respond to investors' needs. This is not a matter of conjecture or theory. It has been clearly shown by the vigorous competition that has been taking place for several years among different market centers trading in Nasdaq securities. Economic self-interest and fiduciary duty will lead investors to the markets providing the best combination of low transactional and access costs, speed, reliability, liquidity, and innovation.
- If the SEC adopts the trade-through rule, we strongly urge retention of the "opt out" right that the SEC has proposed. An opt out provision is crucial to allow investment managers, such as Fidelity, to perform their fiduciary duties to the fullest extent in seeking best execution for the mutual funds or other accounts under their management.
- To address unfairness that hurts investors large and small, we have urged the SEC to focus on reforming rules within the NYSE's own market that confer informational and trading privileges on NYSE members solely by virtue of their physical presence on the trading floor. Today, investors are deterred from sending limit orders to the NYSE's specialist book because these orders under the NYSE's rules are not given time priority over bids and offers made later in the day at the same price by brokers in the trading crowd or by the specialist trading for his own account.
- To avoid unfairness for investors, the SEC should also require changes to the NYSE's rules that today prevent a willing buyer or seller from automatically "sweeping" the limit order book at prices that the investors who placed the limit orders already freely committed to accept. Let us say, for example, that different investors have sent limit orders to the NYSE committing to sell the stock of Company A at prices ranging from $10 per share to $10.25 per share. The NYSE's rules today do not allow a willing buyer to sweep the specialist's limit order book at one time and pay the highest price—$10.25 per share—to all investors. This is simply unfair to the investors who want to sell and have committed to do so. It is also unfair to the buyer who is willing to pay the best price to all of them.

**Why the Trade-through Rule Should Not Be Adopted**

Those who advocate a trade-through rule raise the specter of "fragmentation." This is a value-laden word, because it suggests that something is broken and needs to be fixed. But on its face, fragmentation does not tell the interested observer anything that helps him or her to come to an informed judgment. What is meant by fragmentation? Often it is short-hand for the supposition that trading of the same security in separate markets is an unhealthy thing because it leads to wider spreads between buy and sell quotes, which in turn supposedly leads to greater volatility and less liquidity in that stock.

There is nothing in the laws of economics or the way that markets work that compels that result. Let us bear in mind that competition among broker-dealer firms acting as market makers in stocks leads to greater liquidity and narrower spreads. This competition is not achievable on the NYSE, because its business model calls for the award of a monopoly right to a single broker-dealer member firm to act as the sole market maker on the NYSE floor. So, for competition among market-makers to take place in NYSE-listed stocks, it is a necessary condition market makers in other market centers trade in those stocks. Fragmentation of markets in that sense is necessary to counter the monopoly of the NYSE specialist. That is a good thing.

Trading in Nasdaq securities among competing market centers demonstrates that so-called fragmentation need not, and should not, lead to inefficient pricing or less liquidity. Quite the contrary is true. Given the widespread and timely disclosure of quoted bids and offers in competing equities markets, a trade-through rule is simply not necessary. Fragmentation is a problem only when prices are hidden from public view, not when they are widely disclosed and all market participants can make informed decisions about the prices at which they are willing to trade and are able quickly and easily to reach those prices.

Another argument made by supporters of a trade-through rule is that such a rule is necessary to prevent mutual fund managers and pension fund managers from somehow taking advantage of captive order flow by "internalizing" their funds' trades, that is, by taking the other side of those trades for their own account. This is simply incorrect. The Investment Company Act flatly prohibits a mutual fund adviser from selling securities to or buying securities from any mutual fund under its management. The same is true for any affiliate, including any brokerdealer of the fund adviser. ERISA imposes the same prohibitions on pension fund managers.

We are urging the SEC to drop its proposed trade-through rule—or at least to keep the full opt out right it has proposed if a trade-through rule is adopted—in the name not only of fairness but also best execution as well. We understand that market centers with a vested interest in preserving their market share of trading volume may contend that support for an opt out provision is antithetical to the goal of best execution. The argument is that by supporting a rule that allows us to choose among competing market centers, we somehow favor speed or certainty of execution at the expense of best price. We categorically reject this contention. Speaking for Fidelity, let me make one thing clear: In seeking best execution in trades for our funds (which consist of millions of small investors), we have one objective—and only one objective in mind. That objective is to obtain the best overall price for our funds' trades. Best execution, that is, best all-in pricing, takes into account a number of factors that an investor would be denied the opportunity to consider if the SEC were to adopt a trade-through rule without an opt out right. For example:

- 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? In making these assessments, we place little weight on a market center's press releases or public relations campaigns. Rather, we place weight on a market center's record of self-regulation, reinforced by our first-hand experience based upon trading in competing market centers every day.
- What are the out-of-pocket costs that a market center imposes on investors? These include brokerage expenses, access fees, transaction fees, and market data fees. From the investor's standpoint, best execution involves not only the price at which a security is bought or sold but also other costs which investors must pay to enter into and clear their trades. It is important to note that SEC rules allow funds under common management to buy and sell stocks from each other rather than send all their orders to an external market. This allows the funds to avoid paying brokerage commissions—a cost saving for both the buying fund and selling fund.
- 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 investors view this market as offering liquidity comparable to that of another market center that discloses the depth of its quotations for no fee or lower fees?
- 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 and report 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 or reports 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.

Investors should be free to take these and other factors into account in seeking best execution, rewarding market centers that promote best execution and disciplining those that do not.

**Why an Opt-Out Rh!ht Is Essential if a Trade-Through Rule is Adopted**

We strongly believe that an opt out right is crucial to enable us to serve as a fiduciary to the mutual funds under our management. An opt out right ensures that we will remain free to reach our own informed judgment regarding the market center where our funds' trades are to be executed. That right is particularly important when delay may open the way for exchange floor members and others to exploit an informational advantage, one that arises not from their greater investment or trading acumen but merely from their privileged presence on the physical trading floor. This is true regardless of whether competing markets are "fast" or "slow."

I must emphasize that support for an opt out provision in no way contradicts the goal of best execution. The argument is made by those who oppose an opt out right that we somehow favor speed or certainty of execution *at the expense of best price.* We categorically reject this contention. In seeking best execution in trades for our funds we have one objective—and only one objective—in mind. That objective is to obtain the best overall price for our funds' trades. We view speed and certainty of execution as means to an end, and that end is overall best price.

Experience has taught us a very clear lesson. Given the dynamics of our trading markets and the rapid and sudden shifts in stock prices, the overall best price for the purchase or sale of stocks for our funds often depends upon our ability to lock in a price at a given moment for all or a significant part of our trade. If we are compelled, against our better judgment, to break up our orders and execute them over an extended period of time, in many cases this will lead to inferior all-in prices for our funds. The opt out provision the SEC has proposed will not subordinate best price to certainty or speed of execution. We value certainty and speed of execution precisely because these factors play an indispensable role in obtaining best price for our funds' trades.

**The SEC Should Focus on Reforming the NYSE's Own Trading Rules**

Those who advocate an intermarket trade-through rule presuppose that such a rule will strengthen protection for limit orders and thereby encourage more investors to place limit orders in market centers competing with the NYSE. That supposition, however, overlooks trading rules *within* the NYSE's own market which deny time priority to limit orders against later orders from the floor or the specialist at the same price.

For example, under the NYSE's rules, a limit order entered at 10:30 a.m. to buy 500 shares at $20 per share does not have time priority over a bid to buy 500 shares from a floor broker first made at 2:30 in the afternoon at the same price. If a sell order for 500 shares at $20 arrives at the NYSE at 2:30, the investor who has entered the limit order 4 hours earlier is not entitled to buy all 500 shares. The investor will receive only 250 shares and the floor broker will be allowed to buy the other 250 shares.

It is widely assumed, by those not fully aware of how the NYSE's trading rules operate, that the NYSE's trading market is built upon strict price and time priority for all orders. This is simply not the case. Rather, limit orders on the NYSE's specialist book are given second-class status under the NYSE's "auction" rules. If the SEC seeks to encourage the placing of limit orders by investors, including institutional investors, the most effective way to do so would be to reform the trading rules of the NYSE to provide *within the NYSE's own market* time priority for limit orders over later bids and offers by floor brokers and specialists at the same price.

Our experience tells us very clearly that an intermarket trade-through rule will not encourage investors to place limit orders either on the NYSE or on markets seeking to compete with the NYSE. In the absence of intermarket time priority, the NYSE specialist effectively has a right of first refusal before any order is sent from the NYSE to another market which was first in time to quote a superior bid or offer. Also, as noted above, the trade-through rule leaves untouched rules of markets, such as the NYSE, that deny *intramarket* time priority for limit orders over later bids and offers at the same price from the trading crowd. (Attachment II to this testimony illustrates the second-class treatment of limit orders on the NYSE).

The NYSE's trading rules also deny a willing buyer or seller the ability to "sweep" the limit order book, even when the buyer or seller is willing to sweep all limit orders at the same, most favorable price. Finally, limit orders are not protected against "pennying" by specialists, who take advantage of their physical presence on the floor. For every "penny jumping" trade by a specialist that "price improves" one side of a trade, another investor, whose limit order has been bypassed, has been denied a trade because the specialist has taken advantage of his physical presence on the trading floor to grant himself a right of first refusal.

Nasdaq has never been subject to a trade-through rule and we are not aware of any significant incidents of trade-throughs in that market. While Nasdaq technology

has had some shortcomings, Nasdaq is basically an automated market and, in general, there is little incentive to trade through the competing market makers' quoted prices.

The efficiencies introduced by the ECN's have driven all the Nasdaq market makers to increase their speed of response. The effects have been salutary. Trading in Nasdaq's fast market is driven by competition for order flow among market makers and the best execution obligation among order-entry firms. Those two factors have combined to provide greater benefits for investors in Nasdaq securities than the ITS trade-through rule provides for investors in NYSE-listed securities. In the absence of a trade-through rule, Nasdaq has operated efficiently and well.

**Conclusion**

In conclusion, we have urged the SEC, and we urge this Committee, to allow competition to shape the future of our equity securities markets, buttressed by widely available and accessible quotes and other market data and reinforced by the fiduciary duties that investment managers, like Fidelity, owe to the funds and accounts that they manage. Investors, including fiduciaries acting for their managed funds, armed with real-time information on prices available in competing markets, will seek out those markets that are most responsive to their needs and are best suited to provide best all-in pricing for their trades. This results in lower trading costs and better returns to mutual fund and public investors generally.

## PREPARED STATEMENT OF PHYLIS M. ESPOSITO

EXECUTIVE VICE PRESIDENT AND CHIEF STRATEGY OFFICER
AMERITRADE HOLDING CORPORATION

JULY 22, 2004

**Introduction**

Chairman Shelby, Ranking Member Sarbanes, Members of the Committee, my name is Phylis Esposito. I am Executive Vice President and Chief Strategy Officer at Ameritrade Holding Corporation, an online discount broker based in Omaha, Nebraska.

At the outset, Ameritrade would like to commend Chairman Richard Shelby and the entire Senate Banking Committee for conducting a thorough, deliberate examination of Regulation NMS and market structure issues.

Ameritrade Holding Corporation (Ameritrade Holding) has a 29-year history of providing financial services to self-directed investors. Ameritrade Holding's wholly owned subsidiary, Ameritrade, acts as a self-directed broker serving an investor base comprised of approximately 3.5 million client accounts. Ameritrade does not solicit orders, make discretionary investments on behalf of our clients, or provide proprietary research or advice regarding securities. Rather, Ameritrade empowers individual investors by providing them with tools they need to make their own investment decisions. In exchange for a low commission, we accept and deliver the order to buy or sell securities to the appropriate exchange, market maker, electronic communications network (ECN), or other alternative market for execution. In addition, we provide our clients with the ability to route their orders to certain market destinations that they can choose. Ameritrade does not trade for its own account or make a market in any security.

Ameritrade is an advocate for the retail investor. Ameritrade brings a unique perspective to the current debate concerning market structure in that we are one of the largest broker-dealers that does not internalize order flow. As a result, Ameritrade's position as a pure agency broker allows us to comment on the Securities and Exchange Commission's (SEC) proposals without concern for how today's proposals may impact an affiliated market maker or ECN. We believe this business model positions Ameritrade as qualified to speak with unwavering dedication for the clients that we serve and retail investors as a whole.

Ameritrade believes in a market structure that treats all investors fairly. We believe that both the largest institutional investor and the average retail investor deserve a market structure that enables orders to be filled in their entirety, as fast as possible, at the price they are quoted upon order entry, or better. Ameritrade opposes the creation of a bifurcated national market system of fast and slow markets or quotes in which institutional investors trade with privilege, while retail investors trade at a disadvantage. Ameritrade believes a bifurcated market could lead to investor confusion and cause investors to lose faith in the integrity of the market. It is Ameritrade's belief that orders should interact on a level playing field where

quotes are real, costs are transparent, and liquidity is accessible. Such a market structure requires that investor orders drive price discovery, rather than having manual systems interfere with the workings of the marketplace.

### Ameritrade's Positions on Regulation NMS

TRADE-THROUGH PROPOSAL

As evidenced by the competitiveness of the Nasdaq marketplace, Ameritrade does not believe a trade-through rule is necessary and, in fact, such a rule creates impediments to competition and market efficiency. Ameritrade believes that market center competition combined with a broker's duty of best execution result in a national market system providing the best combination of efficient pricing, low costs, and liquidity.

If a trade-through rule is adopted, Ameritrade believes investors are best served by a rule that requires market centers to provide automated execution of their quotes. In the national market system of the 21st century, "quoting should be synonymous with trading." If a market center aggressively quotes, market participants must have the ability to access these quotes. A quote that is unavailable undermines the integrity of the marketplace and leads to investor confusion and frustration. As a result, Ameritrade strongly supports the "Automated Execution Alternative," which would require all market centers to always provide automated access to their quotes.

Ameritrade also believes that to promote a greater level of order interaction and transparency to the investor, the SEC should require the display of internalized orders before execution.

NON-DISCRIMINATORY ACCESS AND ACCESS FEES

Ameritrade supports requiring nondiscriminatory access for market participants, as it will further the goal of ensuring that investors can access displayed quotes. Ameritrade further believes that requiring market centers to provide automated execution to their quotes and banning sub-penny quoting will alleviate the need for the SEC to act as a rate setter in regard to access fees.

SUB-PENNY QUOTING

Ameritrade supports banning sub-penny quoting as the Firm believes retail investors are harmed by professional traders who step ahead of competing limit orders for an insignificant amount to gain execution priority and arbitrage opportunities.

MARKET DATA

Ameritrade's position on market data is that the SEC should take steps to ensure that the costs of providing market data to investors are transparent and the revenues collected are reasonably related to the cost of producing the data. Ameritrade believes that transparency could be achieved by requiring self-regulatory organizations (SRO's) to disclose publicly audited financials detailing the cost of market data. It is the Firm's belief that aligning costs and revenues ultimately will result in reduced fees to investors.

Ameritrade also believes that in a decimal trading environment where liquidity may exist beyond the best-displayed prices, investors should have low-cost access to both the NBBO and the depth-of-book (for example, Level II quotes).

### Discussion

TRADE-THROUGH PROPOSAL

Ameritrade agrees that the current national market structure is in need of reform and that maintaining the status quo is unacceptable. In particular, we strongly believe the current ITS trade-through rule is antiquated and must be significantly revamped or repealed. Briefly, the ITS trade-through rule is unfair in that it requires advanced electronic systems to compete with manual, floor-based exchanges on the exchange's terms—the speed at which orders can be handled with human intervention. The ITS trade-through rule simply has no place in the modern national market system.

As with the Nasdaq market, we believe the listed market can operate efficiently without the presence of a trade-through rule. We believe that repeal of the trade-through rule would lead to greater intermarket competition, increased connectivity and transparency, which would propel the listed market to greater efficiency, all to the benefit of the investing public.

The manner in which our clients trade necessarily informs our position. When placing their orders, our clients consistently tell us that they expect three things: (1) *Firm Quotes:* Our clients want the price they see; (2) *Immediate Execution:* So they get the price they see; and (3) *Personal Choice:* The right to choose for them-

selves the market where they trade (opt out). In addition, our clients' actions speak for themselves—74 percent of Ameritrade client trades are in Nasdaq securities. As a result, we believe that our clients are clearly stating their preference for a market that trades without a trade-through rule in which quotes are firm, executions are fast, and competition is intense.

The SEC has proposed and requested comment on three alternatives regarding the proposed trade-through rule:

- *Fast Market/Slow Markets:* Market centers would be considered either "fast markets" or "slow markets." Fast markets would be allowed to trade through slow markets in certain limited situations. In addition, investors could "opt out" of trade through protection, on an order-by-order basis to obtain the certainty of a fast execution. There also would be an exception for *"de minimis"* trade throughs.
- *Automated Execution Alternative:* This Alternative would require all market centers to provide an automated response to electronic orders at their quote.
- *Fast Quotes/Slow Quotes:* Market centers would be allowed to identify which quotes are automated or "fast" and which ones are nonautomated or "slow." Market centers would be allowed on a quote-by-quote basis to trade through "slow quotes."

We believe it is important to emphasize that the debate over the trade-through rule has wrongly been simplified as the choice between fast executions versus slower executions at better prices. Rather, the debate should focus on the fact that better prices may or may not be available by the time the order is filled. As a result, it does not necessarily follow that the slower execution always gets the better price, and the fast execution gets the worse price—the pursuit of fast executions is a means to achieve a higher degree of certainty of execution at a specific price.

If an intermarket trade-through rule is adopted, Ameritrade's position is as follows:

- First, Ameritrade strongly supports the Automated Execution Alternative proposal that would require market centers to provide an automated response to electronic orders at their quote. Ameritrade believes that requiring market centers to provide automated trading access to their quotes will resolve many difficult issues such as the opt out and *de minimis* exceptions, and will eliminate the necessity of defining what qualifies as a "fast" market. The goal should be to create a national market system in which "quoting is synonymous with trading." In addition, access and protection should be expanded to the entire book, not just the best bid or offer.
- Second, Ameritrade believes that the trade-through proposal must preempt existing anticompetitive rules such as the ITS trade-through rule, and clarify that SRO's shall not adopt varying standards.
- Third, if the Automated Execution Alternative is not adopted, the SEC should consider revising the opt out exception to allow consent on a global basis and eliminate the *de minimis* exception.
- Finally, Ameritrade believes that to promote a greater level of order interaction and transparency to the investor, the SEC should require the display of internalized orders before execution.

*Automated Execution Alternative*

As part of the trade-through proposal, the SEC requested comment on an Automated Execution Alternative, whereby "all market centers would be required to provide an automated response to electronic orders at their quote." Ameritrade strongly believes this Alternative is in the best interests of the investing public, and at the same time, resolves many difficult issues surrounding the trade-through proposal.

As noted, our experience is that many investors demand the certainty of fast execution at the specified price, over the possibility of a delayed execution at a better or, for that matter, worse price. Ameritrade believes that retail investors would be best served by a rule that requires market centers to provide automated execution of electronic orders at their quote. If such an approach were adopted, market centers would be required to either execute an electronic order at its quote, or if the market center's quote is not at the best price, route the order to a market center that was displaying the best price. In this way, Ameritrade believes retail investors will be more likely to receive the price displayed at the time they submitted their order.

As the SEC notes, the Automated Execution Alternative also resolves potential flaws contained in its proposal. Requiring market centers to provide an automated execution facility largely would eliminate the necessity of having the "opt out" and *"de minimis"* exceptions. If a market center was required to fill an order at its quote, or route it to another market center displaying the best price, there would be less need for investors to opt out and executions away from the best price would

be less likely. We submit that if the Automated Execution Alternative were adopted, there would remain the need to opt out for those investors who choose to directly route orders to specific market destinations (for example, direct access trading).

In addition, requiring automated access to quotes would allow the SEC to avoid determining what qualifies as a "fast" versus a "slow" market, which could lead to definitional gamesmanship. Moreover, creating the fast/slow market continuum would necessarily create a marketplace for arbitrageurs who will seek to profit from the pricing discrepancies that will occur between the two markets.

In response to the April 21 hearing, the SEC requested comment on an additional alternative whereby market centers would be required to designate automated and nonautomated quotes and to allow for the trade through of nonautomated quotes. Ameritrade does not believe that the SEC's proposed "fast quote/slow quote" alternative is the panacea that other participants have proposed. Rather, Ameritrade believes the fast quote/slow quote proposal, is simply a refinement of the flawed fast market/slow market approach. That is, the fast quote/slow quote approach will create bifurcated markets and necessarily require a determination of what qualifies as "fast" and "slow." In addition, Ameritrade believes the fast quote/slow quote approach would be confusing to investors. For example, what happens if both the best bid and offer are slow quotes? In such a case investors accessing the NBBO will see two manual quotes that may not be available. Moreover, as noted above, it is Ameritrade's experience that clients expect to receive the price that is displayed to them when they submit their order—they will not appreciate that the quote they saw was a "manual" one and unavailable at the time of order routing.

The use of fast and slow quotes seemingly would allow market centers to decide when to turn off their automated fast quote execution as the markets became more volatile—which, in turn, likely would increase volatility. Moreover, the Firm believes such an approach would allow market participants the ability to trade at the detriment of retail order flow (for example, front-running).

Ameritrade believes that market centers offering automated executions would compete with each other on all measures of best execution, including, but not limited to, speed of execution, price, and liquidity. It is Ameritrade's position that such a market structure would lead to greater intermarket competition, transparency and price discovery—all to the benefit of the investing public.

In requiring automated markets, our position is that the SEC should not disadvantage new technology and faster markets, as what may be a fast response time today may be slow tomorrow. Currently, Ameritrade believes a one second response time is appropriate. At the same time, Ameritrade believes the SEC should consider requiring that market centers include response time with their Rule 11Ac1–5 disclosures. Such disclosure would provide order routing firms another data point by which to compare market centers when completing "regular and rigorous" best execution reviews. The SEC also could utilize the data to revise performance standards as technology evolves. Finally, the SEC's examination staff could examine market centers to ensure that their response times are consistent with required standards.

The SEC also requested comment on whether the scope of the proposed trade-through rule should include protection beyond the best-displayed bid or offer. In the post-decimalization world where there often is a lack of size quoted at the top-of-book, we believe it is in the best interests of investors for the SEC to require access to the entire book or, at the very least, to a certain depth beyond the best prices.

*Existing SRO Rules*

The SEC's proposal would allow SRO's to maintain more restrictive trade-through plans, such as the current ITS plan. Ameritrade believes that, if a trade-through rule is extended to all markets, the SEC should abrogate existing trade-through rules in order to create a uniform rule. Allowing different trade-through rules, even if participants can withdraw from them, will result in uneven regulation and regulatory arbitrage. Moreover, the existence of different trade-through rules will most certainly result in investor confusion over what standard applies.

*Opt Out and De Minimis Exceptions*

Ameritrade believes that requiring market centers to provide automated execution of electronic orders largely will eliminate the need to have opt out and *de minimis* exceptions. If the SEC, however, decides to adopt the trade-through proposal, Ameritrade strongly believes that the proposed opt out should be amended and the *de minimis* exception should be eliminated.

Ameritrade believes the proposed opt out is flawed because it is intended for institutional investors, and not retail investors. We are proud of our business model of providing services to retail investors that historically were only available to institutional investors. We are concerned that the opt out, as proposed, turns back toward

the provision of services in the old two-tiered manner. Ameritrade believes it is inherently unfair to limit the opt out in this way.

Ameritrade has extensive experience in providing investors with the ability to decide how they want their orders executed. Ameritrade currently offers its clients the ability to directly route their trades to certain market destinations. "Direct access" routing, while utilized by only a small percentage of Ameritrade clients, is important to these investors. Before an Ameritrade client may directly route orders to a market destination, the client must execute a standing consent to terms and conditions that address the SEC's concerns, including disclosure that they might not receive the best possible price and that the speed of execution might be worse than they would otherwise experience if they used Ameritrade's auto-routing.

Once a client agrees to the terms and conditions of direct access routing, he or she can use Ameritrade's electronic order ticket to send orders to certain market destinations. The SEC's proposal of imposing an order-by-order informed consent requirement on direct access clients would effectively emasculate this offering. That is, requiring client consent on an order-by-order basis, and imposing on the broker that it "must be confident that the customer fully understands this disclosure and the nature of the consent," would unnecessarily complicate seamless electronic trading systems offered by brokers, and place an impossible standard on brokers to know whether a client actually understands the disclosure that he or she is reading. Ameritrade's experience is that investors use direct access routing in order to display their limit orders on ECN's. Ameritrade submits that the SEC should promote, not prohibit, such activity. Moreover, Ameritrade believes that clients understand the risks of direct access routing, and we note that it has not been the subject of customer complaints. We urge the SEC to clarify how, as a practical matter, the order-by-order decisionmaking process could be implemented to enable electronic retail investors to utilize the opt out.

In addition, Ameritrade questions whether the benefits of requiring brokers to disclose the NBBO at the time of execution for those clients who have opted-out justify the costs of the exception. First, it is unclear what purpose such a disclosure serves as the NBBO at the time of the trade may or may not be available. In many ways the disclosure is tantamount to saying to investors, "there was possibly a better price out there at the time of execution which we may or may not have been able to access on your behalf." Ameritrade submits that such disclosure is of little relevance if a quote is inaccessible. Second, the SEC estimates that this disclosure will result in a one-time cost of $193 million, with an annual cost of $148 million. Given the size of these numbers, which may even be understated, we strongly encourage the SEC to carefully consider whether the benefits outweigh the significant costs to be imposed on the securities industry, which in turn could be transferred to the retail client in the form of higher fees.

Ameritrade does not oppose requiring additional disclosure along with a global consent approach whereby clients would consent once before using direct access routing, as Ameritrade does today. The SEC also could supplement this approach with a mandatory annual notice being sent to clients in much the same way privacy policy notices are annually required.

If a trade-through rule is adopted, Ameritrade believes the SEC should not adopt the proposed *de minimis* exception. Ameritrade opposes the SEC's proposed *de minimis* exception, as it will result in artificial spreads and investor confusion. That is, if "fast" markets are allowed to trade through "slow" markets by 1 to 5 cents, these *de minimis* amounts will necessarily act to widen the spread. Moreover, as occurs today, professional traders will attempt to arbitrage by selling at a higher price, and buying to cover in a market displaying the best price—at the expense of retail investors.

As proposed, we also believe the *de minimis* exception will be unduly complicated and result in investor confusion. Retail investors demanding executions at specified prices generally do not appreciate rules that allow market centers to fill their orders as long as they are "close" to the best price. Moreover these investors may not be receiving the executions at the price they are quoted, as demonstrated by published 11Ac1–5 data, which shows that since the *de minimis* program began, quoted spreads have narrowed while trading spreads have widened.[1] The *de minimis* exception, as proposed by the SEC, adds a further layer of confusion by establishing a range of permissible trade throughs based on the price of the security. Overall, Ameritrade believes that the proposed *de minimis exception* will harm price trans-

[1]Source: Public SEC 11Ac1–5 data comparing effective/quoted spreads prior to the de minimis and after the implementation of the *de minimis* pilot program on the QQQ security.

parency and discovery. As a result, if the trade-through rule is adopted, the SEC should not adopt the *de minimis* exception.

*Internalization and Limit Order Display*

Although not part of Regulation NMS, Ameritrade strongly believes that true price transparency and discovery will not be achieved until internalized orders are subject to public display and available for interaction prior to execution. Requiring firms that internalize order flow to publicly display those orders and to make them available for interaction with other orders prior to execution would increase transparency for all investors. The benefits would be twofold: (1) investors using a broker that internalizes order flow will be ensured that these orders will interact with the market as a whole; and (2) other investors will have the opportunity to interact with these orders. Ameritrade believes that extending limit order protection in this way will greatly increase order interaction, again, to the ultimate benefit of the investing public.

This principle has been used in the options markets for many years, and is easily applied in an electronic trading environment. For example, the newest approved exchange, the Boston Options Exchange, or BOX, requires the display of an order for 3 seconds prior to internalization. Ameritrade strongly encourages the SEC to consider adopting a similar rule in the equities markets.

NON-DISCRIMINATORY ACCESS AND ACCESS FEES

Ameritrade supports the proposal to require market centers to provide non-discriminatory access to market participants. As noted earlier, Ameritrade strongly believes that all market centers should be required to provide electronic access to allow participants to trade at the price they are being quoted. If a market center aggressively quotes, market participants must have the ability to access these quotes. A quote that is unavailable undermines the integrity of the marketplace and leads to investor confusion and frustration. In addition, market centers presumably will be less able to cherry-pick uninformed order flow, while avoiding aggressive limit orders.

As for access fees, Ameritrade believes that if the SEC requires market centers to provide automated executions to their quotes and bans sub-penny quoting, free competition among market centers will eliminate the need for the capping of fees. That is, if free competition is allowed, order flow will naturally gravitate to the automated market centers that provide the best combination of speed, reliability, costs, and liquidity.

SUB-PENNY QUOTING

We applaud the proposal to prohibit market participants from accepting, ranking or displaying orders, quotes or indications of interest in increments less than a penny. Given the evidence that sub-penny quoting is being used by professional traders at the expense of the investing public, we believe that the elimination of sub-penny quoting can help to further restore investor confidence in the market and result in increased transparency and higher liquidity. Furthermore, participants at the April 21 hearing noted almost universal support for such a proposal.

As for the proposed exception for securities trading under $1.00, Ameritrade's experience is that most of the sub-penny quoting occurs in those exact securities. We note that the answer to this problem is for the NYSE and Nasdaq markets to uniformly enforce listing standards, which generally require a security to trade above $1.00. Ameritrade also urges the SEC to act quickly on this aspect of Regulation NMS.

MARKET DATA

Four years have passed since the SEC issued its Concept Release concerning market data structure, and the SEC has not moved any closer to addressing the central issue—whether the costs imposed by the current system are justified. In this regard, Ameritrade is disappointed that: (1) the SEC did not use Regulation NMS to address market data and related revenues in a comprehensive fashion; and (2) the SEC has failed to take the step of requiring transparency by requiring SRO's to disclose publicly the cost of providing market data to the public. By comparative example, Rules 11Ac1–5 and 11Ac1–6 have contributed greatly to transparency and competition in the order flow arena. Similar market data transparency would increase competition and potentially reduce costs for end users.

Ameritrade is interested in first gaining an understanding of the costs associated with providing market data, and then determining the appropriate structure to allow for either a return of excess revenues back to investors, or a model in which market data revenues simply equal the costs of providing such information to the investing public.

Not only are market participants forced to pay the costs of the very data they provide, but also the participants do not know whether the fees are reasonable given that there is no transparency concerning the costs that the SRO's incur in providing this vital service to investors. We note that such an approach enjoys wide support as evidenced by the Securities Industry Association (SIA) comment letter, which is being submitted to the SEC at the same time.

Any broker or vendor who conducts business in the current environment will tell you that the structure is costly, complicated, and burdensome. For retail brokers like Ameritrade, the administration of market data contracts is onerous and costly. SRO's require detailed information about how a firm will use market data, the type of services the firm provides, the firm's use of technology and how a firm monitors its users. Ultimately, brokers must share confidential and competitively sensitive materials with the SRO's.

SRO's also require individual investors to consent to an agreement that requires the payment of discriminatory fees and is replete with legalese and confusing terms and conditions. Ameritrade spends an inordinate amount of time and money simply complying with the administrative burdens of tracking market data use by its customers, and maintaining two separate systems, one for real-time data and one for delayed data. The SEC's proposal does nothing to address these issues.

Under the current system, the SRO's are granted monopoly powers, and wield these powers at will both in terms of the fees charged and the control over the dissemination of the data. Moreover, market data fees are imposed in an entirely discriminatory fashion. First and foremost, investors accessing real-time quotes through an account executive by telephone, from devices in branch offices, and from media distributors do not incur market data fees. If the same investor, however, uses an online brokerage account to access real-time quotes, market data fees are charged based on each instance a real-time quote is accessed. In this case, either the brokerage firm pays the fee, or passes the cost onto the investor. Either way, costs to investors are higher.

The SEC notes that out of the $424 million in revenues derived from market data fees, $386 million was distributed to SRO participants. Unfortunately, although the SEC previously has said, "the total amount of market information revenues should remain reasonably related to the cost of market information,"[2] there is no transparency to determine whether it actually costs anywhere near $424 million to provide the data to investors.

This issue is vitally important to both Ameritrade and its retail clients. Ameritrade currently is paying approximately $1.44 million per month for market data, or an estimated $17 million for the current year. These fees are paid by investors directly in the form of charges for quotes, or indirectly, in the form of commissions or other fees.

Ameritrade submits that the only way to determine whether there has been an equitable and reasonable allocation of costs is to require each SRO to publicly provide audited financials regarding the costs of providing market data to end users. Ameritrade recommends that these financial statements should be made available to the investing public through the SEC's (or particular SRO's) website. Given that investors ultimately pay these fees, either directly or indirectly, we clearly believe requiring the transparency of such information is in the public's best interest. Only then can such cost data be analyzed and act as the basis and direction for future market data reform, both in terms of pricing and, ultimately, in the distribution of such revenues.

As evidenced by the SIA comment letter, Ameritrade believes there is widespread support for the SEC requiring that market revenues be reasonably related to the costs of providing the data. Moreover, Nasdaq, which receives approximately 25 percent of its total revenues[3] in the form of market data fees, agrees with the brokerage industry that market data costs are too high. Robert Greifeld, CEO and President of Nasdaq, has stated that the cost to professional traders could be reduced approximately 75 percent (from $20 to $5–7 per month).

Ameritrade applauds Mr. Greifeld's statement and joins Nasdaq in seeking to reduce market data revenues so that such revenues are reasonably related to the costs of providing the data to investors. We strongly support reductions in market data costs across the board, not just specific to those investors who are deemed professional. We think it is important that both the revenues related to not only the NBBO, but also the depth-of-book (for example, Level II quotes), be reasonably related to the actual costs. Ameritrade believes that market data revenue reductions

[2] "Regulation of Market Information Fees and Revenues," SEA Rel. No. 42208 (Dec. 9, 1999).

[3] *See* The Nasdaq Stock Market, Inc. Annual Report (Form 10–K) for the period ended December 31, 2003.

will clearly inure to the benefit of retail investors, as retail brokers compete aggressively on the ultimate costs charged to investors.[4]

Given the widespread support within the industry and by Nasdaq, one of the very recipients of market data revenue, Ameritrade believes that it is clearly in the public interest for the SEC to take steps to ensure that investors are receiving what they are paying for and to ensure that the costs of market data are reasonably related to their costs.

Finally, we note that the SIA is commenting that multiple securities information processors (SIP's) compound market data inefficiencies and that a consolidated SIP would result in considerable cost and timesavings at no risk to the investor. Although Ameritrade agrees that multiple SIP's utilizing nonstandard technologies result in considerable additional costs to the industry, the Firm has concerns regarding the creation of a consolidated SIP. First, Ameritrade believes that before a single SIP is considered, the SEC must address the fact that such an organization would represent a single point of failure for all market data provided by the markets. Second, we question granting monopoly powers to such an organization and thereby removing the ability for price comparison and the innate drive to innovate. We support, however, the standardization of technologies across SIP's.

**Conclusion**

In conclusion, Ameritrade opposes any trade-through rule as an unnecessary impediment to competition. Ameritrade is, however, a strong advocate for the Automated Execution Alternative whereby all market centers would be required to provide an automated response to electronic orders at their quote. Furthermore, Ameritrade supports the SEC's efforts to address market access and sub-penny quoting. Finally, the Firm strongly believes that the SEC should not focus on market data revenue allocation, but rather, on whether market data revenues are reasonably related to the actual costs to produce such data.

Ameritrade believes that the adoption of a comprehensive Regulation NMS requiring automated markets that provide nondiscriminatory access, quotations in penny increments, and a transparent market data structure will be a tremendous improvement to the current national market system, with retail investors reaping the ultimate benefits.

Thank you for the opportunity to share my ideas on behalf of Ameritrade and its clients. I would be pleased to answer your questions at the appropriate time.

---

## PREPARED STATEMENT OF BERNARD MADOFF

CHAIRMAN AND CEO, BERNARD L. MADOFF INVESTMENT SECURITIES

JULY 22, 2004

Bernard L. Madoff Investment Securities is pleased to participate in the Senate's hearing on Regulation NMS. We applaud the SEC's proposal to address this complex set of issues. One of the great difficulties we face in addressing these issues is that so many of them are inextricably linked. In order to support a trade-through rule that would truly benefit investors, it is critical to implement a system that includes seamless linkages and a fee structure that does not interfere with price discovery.

Madoff Securities has long held the position that the integrity of the quote is instrumental to the efficient functioning of a national market system (NMS). Investors must be assured that regardless of where their orders are routed, they will be in a position to reap the benefits of the NMS. It is our belief that the foundation of this system should be publicly displayed quotes that are firm and accessible.

The best way to insure this result would be to require all "quoting" market centers to employ an automated order execution facility for "intermarket" orders seeking to satisfy those "quotes" deemed to be firm and accessible and, therefore, eligible for intramarket and intermarket price protection. A quote is deemed to be firm and accessible when it is subject to automatic and immediate execution or cancellation on a computer-to-computer basis with no human intervention for up to its total displayed size.

[4] This is especially true for the online brokerage industry that focuses heavily on the value of the product offered to investors. Ameritrade prides itself on being a leading low-cost provider. We note that reduced costs due to competition are often passed directly onto investors. For example, over the past few years increasing competition in the options market have led online brokers to reduce commissions charged to investors.

Accessibility of the quote is a critical component to the integrity of an NMS. The need for efficient linkages to assure accessibility is an absolute imperative in an NMS predicated on investor protection. Effective linkages, both public and private, must be in place and the price displayed must truly reflect the actual cost of trading. Market participants should only be allowed to be part of the National Best Bid or Offer (NBBO) and receive price protection if those quotes are deemed firm and accessible through either a public or private linkage. *The SEC must define the scope and minimum standards for a public intermarket linkage.* Individual markets would also be free to define and enter into private linkages in addition to the public linkage requirement.

In the absence of a mandatory automated order execution facility for all "quoting market centers", it is critical to the success of any "trade-through" proposal that those markets unwilling to implement such a mechanism be subject to an unfettered "opt out" for those quotes deemed to be nonautomated or inaccessible. The proposed requirements for such an "opt out" of nonautomated or inaccessible quotes should only be governed by the fiduciary requirements of "best execution."

Thank you for allowing us the opportunity to contribute to the discussion.

## PREPARED STATEMENT OF ROBERT H. McCOOEY, JR.

PRESIDENT AND CHIEF EXECUTIVE OFFICER
THE GRISWOLD COMPANY, INCORPORATED

JULY 22, 2004

Chairman Shelby, Ranking Member Sarbanes, and Members of the Committee, thank you for inviting me here today to testify in connection with your review of the capital markets structure here in the United States. My name is Robert McCooey. I am a proud Member of the New York Stock Exchange (NYSE) and am honored to serve as one of the three agent representatives from the Floor to the NYSE's Board of Executives. In my primary job, I am President and Chief Executive Officer of a New York Stock Exchange member firm, The Griswold Company, Incorporated. Griswold is an agency broker executing orders for institutional clients on the Floor of the NYSE. As an agency broker, we execute trades on behalf of our customers. We do not make markets in securities or engage in proprietary trading. Our clients include some of the largest mutual and pension funds in the United States.

Chairman Shelby, I am also very pleased that you chose John Thain, to address the Committee yesterday. Six short months ago, John joined an organization that was desperate for new leadership to implement change and address important customer needs. What John has accomplished in just this short period of time coupled with the work of Chairman John Reed is nothing short of remarkable. I think that it is clear to all that there has been a dramatic change at the NYSE. The membership is hopeful that regulators and legislators will support these new changes for the continued benefit of all who trade at the New York Stock Exchange.

My focus today will be on the major market structure issues that are currently under review by the Securities and Exchange Commission articulated in Release No. 34–49325, Regulation NMS (Reg NMS). The discussions that we engage in today should focus on how to *enhance* the national market system for the benefit of all investors. In the process of answering that charge, we should also promote the aspects of the current national market system that provide positive results in the execution of investors' orders. I would contend that the agency-auction market model at the New York Stock Exchange is one of these important competitive aspects of the national market system. I also believe that it would be most helpful for the Committee to focus on the future and not dwell on the miscues of the past. We cannot change what has happened but with new leadership at the NYSE coupled with a dedicated Floor willing to embrace change for the benefit of our clients, the time is ripe for a new beginning.

As an agent on the Floor of the NYSE for the past 16 years, I have seen the evolution of the responsibilities of Floor brokers from providing outsourced executions for the major broker-dealer firms to establishing themselves as strategic partners for institutional clients. Increasingly, the goal for clients has been to find ways to gain efficiencies in the execution process by getting closer to the point-of-sale. Independent agents working on behalf of these customers now furnish real time market information coupled with tremendous costs savings to these institutional customers. The assets that are managed by my institutional customers are owned by the small retail customer: The pensioner, the parent saving for college, the worker funding their IRA, and all the others who invest in equities traded here in America. Today

in the United States, when we talk about doing what is right for the marketplace and the participants in that market, we must realize that the retail customer and the institutional customer are often one in the same.

Floor brokers play an important role in the price discovery process. The competition between orders represented by brokers at the point-of-sale on the Floor of the NYSE helps to ensure fair, orderly, and liquid markets. It is the Floor broker who will seek out contra side liquidity for an order as well as make decisions based upon rapidly changing market dynamics. The Floor broker serves as a point of accountability and information, with the flexibility to represent large orders over time at the point of sale—not found in dealer markets and ECN's—and employs the most advanced technology to support his or her professional judgment. The interaction between the Floor broker and the specialist provides the flow of information necessary to keep customers informed about changing market conditions. That information flow is more often than not the catalyst that provides incentives for traders to provide liquidity in a way that reduces execution costs. The combination of best price and intelligent information flow is the backbone of the NYSE. This makes for fair and orderly markets.

Superior technology will continue to be the NYSE's advantage. During the past decade, the NYSE has invested billions of dollars in technology for our trading floor, data centers, and new product and service development. Over 98 percent of all orders sent to the NYSE are delivered electronically to the point-of-sale every day. Brokers no longer write on little slips of paper and have "pages" transport the information from point-of-sale to a phone clerk for relay to our clients. The agent relies upon a digital handheld communication device, which receives the order, transmits the reports directly to the customer, and engages in an ongoing dialogue with the client through the use of digital images. We are electronically connected to our customers all over the world. All of this is accomplished without ever leaving the trading crowd.

Electronic execution options are also not new to us at the NYSE. Direct+, our automatic execution product, was introduced in 2000 and since then has grown from 1 percent to approximately 10 percent of the average daily volume.

Allow me to speak briefly about the important role of the other participant in the agency-auction model at the NYSE—the specialist. As an agent on the Floor of the NYSE, I have seen the role of the specialist evolve over my 16 years. A fundamental principle is to place the interests of the customer first and provide each customer with the best experience trading at the New York Stock Exchange. The specific value that accrues to investors can be broken down into two major categories: Information as an important part of a specialist's catalyst function and liquidity provided to the marketplace.

As I speak with my customers about the multiple marketplaces in which they trade, one theme about the NYSE is consistently voiced. Customers appreciate the fact that the floor based NYSE provides the participants in that market with valuable information that aids buyers and sellers in making market entry and exit decisions. Through this information, specialists act as catalysts, proactively bringing buyers and sellers together thus creating trades that otherwise would not have occurred. Responding to a buyer for example, a specialist may recall selling interest on the part of a particular agent and call that agent to the crowd to help effect a trade. The buyer can then negotiate directly with the agent representing the seller. This results in natural buyers meeting natural sellers over 80 percent of the time with minimal market impact. Without the specialist as the catalyst for providing that information, the trade may have occurred at the wrong price or worse, never happened at all. This kind of information flow is impossible in electronic markets. Furthermore, the information gathered from the specialist at the point of sale is available impartially to all who ask.

The second and equally important function to customers is the liquidity that the accountable specialist adds to the marketplace. It is important to remember that specialists do not set the price for stocks. At the NYSE, that pricing function is reserved for the buyers and sellers. The important role of the specialist is to provide the liquidity necessary to the market to assist agents, like myself, in getting orders executed correctly for their clients. What specialists do is risk their capital to add market depth and stabilize prices. They inject liquidity by bridging temporary gaps in supply and demand. Each of these trades for the specialist is a one-sided risk transaction. The best method for me to explain the value that accrues to customers is to give you an example:

> The market is \$28 bid for 25,000 shares and 18,000 shares offered at \$28.05. My customer entrusts me with an order to purchase 25,000 shares—this may be all the customer wants to purchase or the beginning of a much larger order. My goal is always to execute that order at the best

possible price with the minimum of market impact. I want to purchase all my stock at $28.05, the whole 25,000 shares. That outcome will be in my client's best interest. The only way for this to happen is if the specialist is there to add the necessary liquidity—the other 7,000 to make 25,000—to complete my client's order. In the absence of a specialist, my natural buyer customer would have to reach to the next price point where that liquidity was available to purchase those shares. For the sake of the argument, let us assume that the customer would have had to pay $28.10 to purchase those shares. Without the capital that the specialist injected into the market to complete my client's order, the cost to that institution (and the hard working investors in that fund) would have been an additional $350. That may seem like a very small amount but multiply that savings by the thousands of times that it happens daily and the millions of dollars add up very quickly. These are savings that accrue to investors—your constituents.

Trading technology has allowed people at both the customer and broker-dealer level to work more efficiently as the markets have grown. From the late 1980's, when an average trading day's volume was 100 million shares, today we trade well over 1.5 billion shares on a regular basis. Occasionally, technology can have its' problems. There have been several occasions over the past few months that illustrate the need for professionals working in concert with the technology. A number of months ago, a large NYSE member firm initiated a "program trade" for a customer involving a basket of large cap stocks. Unfortunately, someone added an extra zero to the dollar amount of the trade and what was supposed to be a $40 million basket ballooned to $400 million. On the Floor, those trades were quickly identified as possible errors and the firm was contacted. Realizing the problem, the firm was able to cancel the vast majority of those trades before execution. In another scenario, another member firm entered an order to sell 1 million shares of XRX. While preparing to trade the stock at the appropriate price in the market where demand met this supply, the firm was contacted and an error was again prevented. The order was supposed to be for 1,000 shares only. This course of action could not occur in an electronic market where there is no one designated to recognize a potential problem such as the ones I described. More importantly, these trades could have been executed quickly—with the primary focus on speed that some have been asking for—but the outcome to the customer would have been quite negative. Only through human intervention and immediate dialogue between market participants were huge losses to investors prevented.

Alternatively, in competing markets, we have recently seen examples of how electronic markets function in the face of stress or incorrect order entry. In early December 2003, the stock of Corinthian Colleges Inc. (COCO) plummeted 19 points in just a matter of minutes. The full details surrounding that event, the halting of the stock, trading in other markets and the canceling of trades made in good faith by investors are still unclear. Recognizing that different market models yield different results, I believe that in this case human participation through an agent or specialist would have prevented such a precipitous decline.

Finally, this past February we observed the trading in the stock of Imclone (IMCL). In three minutes, the stock dropped more than 20 percent from $42 to $33.50 for no apparent reason before being halted. After a 2 hour and 40 minute halt, IMCL finally reopened electronically at 4:20 p.m.—20 minutes after the Nasdaq closed. In after hours trading, Imclone immediately rose 35 percent, back to the levels prior to its' decline and halt. However, this market serves and benefits only institutions—not individual investors.

One of the four major areas for comment contained in Regulation NMS was the "trade-through" rule. I believe that customers always deserve the best price. *Price matters to my customers and at the end of the day, they do not ask how long it took me to execute their trade but they do focus on the price that they received.* The "trade-through" rule protects the best prices and rewards the market centers that post them.

The "trade-through" rule was designed to convert multiple competing markets into a national market system. The rule turns each market into a gateway to every other market and ensures that investors will not be disadvantaged by virtue of having bids or offers displayed in one market versus another.

When trading is allowed to occur outside of the National Best Bid and Offer (NBBO), two investors are being disadvantaged—the bid or offer that has been posted as well as the buyer or seller who received an inferior price to the NBBO. To amplify this, I would like to offer the following example: A buyer posts a bid of $49.05 to buy 5,000 shares of XYZ, the stock is offered at $49.10. In the absence of a "trade-through" rule, a trade of 5,000 shares might occur at $49.00. In this in-

stance, two investors are not being afforded the full protection that they deserve in the marketplace. The seller who sold stock at $49.00 did not receive the highest price that was bid for those shares in the market. Further, the buyer with the $49.05 bid is left unfilled. This investor posted the best bid in the marketplace and was ignored. In a time of skepticism and as we try to restore confidence in our markets, I do not believe that this is the message that we want to disseminate to the investing public.

There are other parts of the trade-through equation that are overlooked. Trade-throughs cause the mis-pricing of equity securities in the marketplace. When a trade is allowed or sanctioned to occur outside of the NBBO, the rest of the market becomes unsure as to the true price at that moment in time. Investors are now worried about what might be "going on" as a trade takes place away from the best bids and offers. That broker-dealer may now engage in a riskless principal transaction, through the use of sophisticated technology and market intelligence undisclosed to that fiduciary's ultimate customer, to not only accrue a commission but also to profit in the firm's principal trading account. The firm will buy outside of the NBBO and then hit the bid or take the offer at the NBBO on the NYSE or another market to offset their position. This activity denies customer the opportunity to engage in the full price discovery process. Moreover, the riskless trading by broker-dealers disrupts the markets and damages the overall pricing mechanism. One of the guiding principles from the SEC is that customer orders should interact without unnecessary dealer interference. I agree.

The most important starting point for any trade-through discussion must be the facts, and how the facts impact every investor. Some proponents of weakening or eliminating the trade-through rule do so out of self-interest, not with the interests of all investors in mind. Simply stated, the facts do not support their contention that investor protection provided by the rule stifles competition. At the New York Stock Exchange we welcome competition. However, that competition must be one that ends with the execution of a customer's order at the best price available in the marketplace. The reality is that the NYSE posts the best price well over 90 percent of the time in our listed securities. We think that competition should be based upon price. This is not an artificial barrier to competition. Other markets can compete by simply matching or bettering our prices. Certainly, our customers agree with that value proposition every day as we receive approximately 80 percent of the volume in NYSE listed securities. *We do not think that any marketplace should receive regulatory relief from a rule that benefits investors.* By ensuring that best price is paramount to markets, customers as well as the competitiveness of the U.S. securities markets will be well served.

Tremendous competition between markets exists today. Order competition, as the critical factor in price discovery, is based upon protecting those who display best prices. This process promotes the entry of limit orders that narrow quote spreads and reduce execution costs. Eliminating the trade-through rule would produce inferior prices and increased costs, increase market volatility, and reduce accountability and transparency. This is not the way to promote investor trust and confidence.

At the New York Stock Exchange, we embrace change. Providing *choices* to our customers has been the hallmark of the New York Stock Exchange for as long as I have been a member and we are again addressing the needs of our customers who have asked us to provide more choice. If fact, one of the goals of Regulation NMS was to promote competition among marketplaces in order to encourage innovation.

The New York Stock Exchange, in keeping with its pattern of market improvements, committed to being a "fast" market with immediately accessible quotations even before the release of Regulation NMS. With that in mind, I support the Commission's suggestion as articulated in the Supplemental Release (No. 34–49749) for a "fast" market to be designated on a security-by-security basis rather than as a whole.

Some customers have asked for the ability to immediately, anonymously access the liquidity that they see displayed in the quotation. Currently, customers can only access Direct+ for 1,099 shares or less and are constrained by a rule that prohibits multiple orders within a 30 second window. We have proposed the removal of those restrictions so that customers have the ability to access all of the displayed liquidity. The NYSE will also continue to provide the choice of price improvement for those who avail themselves of that option. We recognize that the market is not a "one-size-fits-all" proposition and we look forward to working with the SEC and Congress to make the New York Stock Exchange the best possible market for all participants.

At the NYSE, we will continue to change, adapt, and innovate to best serve our customers and to fulfill our commitment to producing the highest levels of market quality. We will continue to provide the fair and level playing field that investors want and expect from us. We will compete on the basis of discovering and delivering

the best price coupled with the highest levels of transparency. The interaction of specialists and agency Floor brokers creates a value proposition in which the NYSE delivers to its customers the best prices, the deepest liquidity, the narrowest quote spreads, and the lowest volatility. That results in multimillions of dollars of savings to your constituents each year. In all that we do, we take pride in the fact that we always place the investor first.

Thank you. I will be happy to answer any questions that you may have.

## PREPARED STATEMENT OF KIM BANG

PRESIDENT AND CHIEF EXECUTIVE OFFICER

BLOOMBERG TRADEBOOK, LLC

JULY 22, 2004

Mr. Chairman and Members of the Committee, my name is Kim Bang, and I am pleased to testify on behalf of Bloomberg Tradebook regarding "Regulation NMS and Developments in Market Structure." The topic is both important and timely.

Bloomberg Tradebook is owned by Bloomberg L.P. and is located in New York City. Bloomberg L.P. provides multimedia, analytical, and news services to more than 200,000 terminals used by 250,000 financial professionals in 100 countries worldwide. Bloomberg tracks more than 135,000 equity securities in 85 countries, more than 50,000 companies trading on 82 exchanges and more than 406,000 corporate bonds. Bloomberg news is syndicated in over 350 newspapers, and on 550 radio and television stations worldwide. Bloomberg publishes magazines and books on financial subjects for the investment professional and nonprofessional reader.

Bloomberg Tradebook is a global electronic agency broker serving institutions and other broker-dealers. We count among our clients many of the Nation's largest institutional investors representing—through pension funds, mutual funds, and other vehicles—the savings of millions of ordinary Americans.

Bloomberg Tradebook specializes in consolidating what has been a fragmented market by increasing transparency and access to liquidity. Our clients have rewarded our creativity and our service by trusting us with their business, enabling us to regularly trade more than 150 million shares a day.

### The Underlying Issue Driving Regulation NMS is the Near Monopoly the NYSE Enjoys Over the Trading Volume in its Listed Securities

The Senate Banking Committee has long understood how seemingly abstract market structure issues have a direct bearing on the efficiency and competitiveness of our markets and the interests of investors. The Committee's interest in the SEC's Regulation NMS proposal is welcome and warranted.

Proposed Regulation NMS is an ambitious effort to engage policymakers, market participants, and the public in a debate over how best to promote the long overdue modernization of the U.S. equity markets.

Market participants and policymakers have often asked "why does the NYSE control 80 percent of the trading volume of its listed companies when Nasdaq controls only about 20 percent of the volume of its listed companies?" The answer is simple—regulatory barriers to competition.

### The OTC Market as a Model for a Competitive Market

The Nasdaq market since 1996 presents the opposite picture—it is a market into which regulation introduced and encouraged competition. The Nasdaq price-fixing scandal of the mid-1990's resulted in the SEC's 1996 issuance of the order-handling rules. Those rules enhanced transparency and competition in the Nasdaq market and permitted electronic communications networks—ECN's—to compete for order flow, benefiting investors and enhancing the quality of the market.

Indeed, the increased transparency promoted by the SEC's order-handling rules and the subsequent integration of ECN's into the national quotation montage narrowed Nasdaq spreads by nearly 30 percent in the first year following adoption of the order-handling rules. These, and subsequent reductions in transactional costs, constitute significant savings that are now available for investment that fuels business expansion and job creation.

The question confronting the SEC and the Congress is whether our markets in listed securities can be reformed to bring the same benefits to the NYSE investor as they have to the Nasdaq investor. Now that the NYSE has been forced to give up its Rule 390 (restricting order flow to the OTC market) and Rule 500 (restricting the ability of listed companies to delist), the existing trade-through rule remains the foremost impediment to that reform.

**The Trade-Through Rule is Protectionist Regulation**

The 20-year-old trade-through provision of the intermarket trading system plan states that when the specialist or market maker receives an order, it cannot execute it at a price inferior to any found on another market without giving a "fill" to the better-priced order. But there is a gap between the rule's principle and its practice. Under the rule, orders are not protected so much as they are held hostage.

Consider, for example, the American Stock Exchange. Bloomberg Tradebook does not send orders in Nasdaq stocks to the Amex even though they are traded there. It takes at least 10 to 15 seconds before we get a response from the Amex. That is just too slow. In today's electronic markets, in which markets move in milliseconds, a delay of 10 to 15 seconds is an eternity. We face the same problem with the NYSE when it displays the best price. An order sent to NYSE is routinely delayed for 22 seconds while the specialist decides whether to expose the order to the trading floor for price improvement. In the meantime, the market moves. And the wait for price improvement, if any, is a lost opportunity investors can ill afford. The clear disadvantage to investors is not only in having their orders held up on Amex or the NYSE, but also in being deprived of pricing opportunities represented in other markets.

**The Trade-Through Rule does not Protect Limit Orders**

Currently, the intermarket trading system trade-through rule protects inefficient markets by mandating that investors pursue the advertised theoretical "best price" instead of the best available firm—immediately executable—price.

Both the existing rule—and the SEC's proposed rule—fail to protect limit orders in at least three ways:

- They do not accord time priority to limit orders that have already been placed—even limit orders placed on the NYSE. That is like a restaurant where you stand patiently in line for a table but you have no priority over patrons who come in after you do. In the securities markets, in addition to being annoying, there is an economic cost. Not having time priority denies limit order entrants the reward they should get for, in effect, having granted the market free "options" (puts in the case of a limit order to buy, calls in the case of a limit order to sell).
- Also, there is no intermarket time priority. The trade-through rules permit another market center to "match" preexisting limit orders entered in another market. That permits exchanges such as the NYSE to match and then internalize orders rather than to ship them to other market centers offering better prices—again the limit order entrant is denied a reward.
- Limit orders are not protected against "pennying"—by which NYSE specialists and other floor members jump ahead of orders by trivial amounts—a penny or two. This is one of the negative fallouts of the move to decimal markets.

**A Trade-Through Rule: Protecting Investors or Protecting the NYSE Floor?**

We share with sincere proponents of trade-through rules a vision of a national market system that promotes order interaction and treats all orders and all investors fairly. We embrace wholeheartedly a market structure that protects all participants, large and small. Were a trade-through rule effective and necessary to achieve these ends, we would support it without reservation.

The reality, however, is that the existing trade-through rule does not provide any meaningful investor protection. It is, instead, an impediment to achieving best execution. It has stood in the way of innovative technology and competition and has deterred investors from obtaining direct access to market data and liquidity. As Archipelago's Gerald Putnam has testified:

> 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 in-

vestors," then 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.[1]

The trade-through rule in practice has been a one-way street, with the NYSE itself as the heavy-handed traffic cop. To be sure, the NYSE goes after its own members that trade through NYSE prices. Nonetheless, the NYSE's specialists routinely trade through better prices on other markets and, as a practical matter, they do so with impunity. Their own routine violations of the trade-through rule, which to our knowledge have never been thoroughly investigated or prosecuted, have surely cost investors millions of dollars.

For their part, the regional market centers tend to comply with the current trade-through rule while at the same time they are not able to protect their client limit orders from being traded through by the primary market. They are further disadvantaged because they are not permitted to execute incoming orders routed for execution against their customer limit orders when those orders are displayed and available, but away from the best quoted prices.

**What Hybrid Market?**

We now read press reports about a new market wrinkle the NYSE is devising. The original Regulation NMS proposal envisioned a system of fast and slow markets, that is, auto-execution and manual markets, and proposed an opt out that would permit "fast" markets to trade through "slow" markets within a set range of increments. In response, the NYSE apparently has been closeted with the Commission, discussing an as-yet-nonpublic proposal for a market that would qualify as "fast" but still preserve the manual operations that are at the core of the NYSE's profitability—and its near monopoly.

In its supplemental release, the Commission has proposed, and the NYSE has embraced, replacing the fast versus slow market with fast versus slow quotations as the basis for the proposed trade-through rule. Under the revised proposal, quotes would be designated fast or slow and fast quotes could trade through slow quotes. The resulting rule, if adopted, would not expose the NYSE to competition so much as to continue sheltering it.

Neither we nor anyone else is privy to the private discussions between the Commission and the NYSE, even though they are central to the shape any final NYSE rule will take and therefore essential to informed public discussion and debate.

An outcome that would once again protect the NYSE from real competition from outside would be against the public interest and would not protect investors. If manual markets are to continue to be a significant part of our market system, they must earn that position as the result of competition, not because of regulations that protect them from competition.

We suspect from reading the AARP's recently published report on investor preferences that the NYSE sold the AARP a bill of goods. The AARP based the questionnaire used in its study on the notion that the 30-second delay investors experience in getting orders executed on the NYSE is designed "to increase the chance that the buyer or seller will get the best possible listed price."

Of course, people in the know understand that is just not the case. The NYSE slows down executions to give its floor members a chance to trade alongside investors' orders and to keep everyone not on the exchange floor in the dark as to what is going on. The NYSE's stealth market—which is the essence of the privileged time-and-place advantages its floor members enjoy is the opposite of transparency and openness that an investor-friendly market would provide. By assuming that investors benefit from the NYSE's 30-second delay, which the SEC is pressuring the NYSE to give up, the AARP drew its members to a false conclusion. We think entities like CalPER, CalSTERS, Ameritrade, Schwab, and Fidelity are closer to the mark as to where the interests of small investors reside.

**The Markets would be Better Served if the Trade-Through Rule were Eliminated**

In the case of Nasdaq-listed stocks, we at Bloomberg Tradebook have plenty of practical experience with how and when our clients choose to trade through published prices. In our experience, the only market centers our clients regularly choose to trade through or around are the Amex and certain ECN's. Our clients trade

[1] Written statement of Gerald Dean Putnam, Chairman & Chief Operating Officer, Archipelago Holdings, L.L.C., concerning "Market Structure III: The Role of the Specialist in the Evolving Modern Marketplace" before Committee on Financial Services—Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises, U.S. House of Representatives, 108th Cong., 2d Sess., February 20, 2004, at p.6.

around the Amex because the Amex posts indicative quotations and is slow to respond to orders. Some of our clients trade around one or two smaller ECN's that charge exorbitant access fees.

Experience with Nasdaq provides convincing evidence that a trade-through rule is not necessary to protect investors. The Commission provides no evidence in support of extending a trade-through rule to the OTC market. The proposed rule is not only unnecessary, but also would impose significant costs upon the markets and ultimately upon investors. Indeed, the Commission's own preliminary estimates of the securities industry's costs of compliance with the proposed trade-through rule are eye-popping. Start-up costs are projected to exceed $540 million, while annual, ongoing costs of compliance are projected at nearly $224 million.

The NYSE has tried to persuade its listed companies that they benefit from lower volatility. The NYSE has argued that volatility is perceived to be greater in Nasdaq-listed stocks than in NYSE-listed stocks and that the elimination of the trade-through rule would increase volatility.

I would suggest that the greater volatility perceived in the Nasdaq market, as contrasted with the NYSE market, may be the consequence of Nasdaq's not having floor members to dampen volatility by using their time-and-place advantages to jump ahead of public limit orders by a penny or joining limit orders on behalf of orders the floor members hold for others.

One question that should be asked in that regard is whether volatility per se is good or bad. It may well be the case that slowing the market down, as a floor-based system does, dampens volatility because it gives the specialist the opportunity to find the other side, which a fast market cannot as readily do. Assuming that to be the case, the question is whether slowing the market down is appropriate at all, even if it does reduce volatility. If greater volatility, which may look more substantial in a decimalized market than it did in an eighth-point or sixteenth-point market, naturally results in a market that is not artificially slowed down, that may be an economically acceptable or even beneficial result.

What the NYSE really is up to is preserving investor cost, measured by the profits the NYSE floor members extract from the market. The public pays a dear price for the NYSE specialists' affirmative obligation, which may well be a code word for jumping ahead of public investors to take advantage of superior market information known only to those on the NYSE floor. The operating ratios of the specialists in most years is evidence enough of their privileged positions. The market, if suffused with greater competition, would quickly eliminate these excessive returns.

If the trade-through rule were abolished for stocks listed on the NYSE, we expect our clients would preference the fast-market venues (firm quotations), but would not ignore slow markets (indicative quotations) to the extent they afford available liquidity. Fast markets would automatically execute against their limit order books and refresh their quotations immediately and thereby earn proportionately more order flow over time. Orders residing on the slow markets beyond the top-of-file and hidden orders in the crowd would be traded through, and rightly so. If the trade-through rule were eliminated, the option that specialists currently enjoy, which is both riskless and free, to intercept incoming orders, to jump ahead by a penny or to "go along" with institutional orders, would be diminished. Specialists would then have to compete on a more even basis with other market participants to satisfy investors' demands for best execution.

Removing the trade-through rule would allow investors to choose the markets in which they wish to trade which would, in turn, promote competition and benefit investors. The results would be greater transparency, greater efficiency, greater liquidity and less intermediation in the national market system, which are precisely the goals of the Securities Acts Amendments of 1975.

There is no empirical evidence to suggest that extending the trade-through rule to Nasdaq securities is needed or would be useful. Indeed, it might well generate many of the ills that currently affect the NYSE market.

**There is an Alternative—the Commission could Launch a Pilot Program Exempting Stocks from the Existing Trade-Through Rule**

This is no evidence to support the imposition of a trade-through rule. Rather than introducing a complex and expensive new trade-through rule that would be difficult to enforce, we suggest launching a pilot program similar to the ETF de minimis exemption from the trade through for a cross section of listed stocks, with no trade-through restrictions. The Commission could then monitor and measure the results

of free competitive forces.[2] it would determine whether there is a problem and whether a trade-through rule would address the problem.

Such a program would simply involve exempting a class of securities from the existing intermarket trading system trade-through rule, to see what happens. The stocks to be selected could be, for example, 200 or 250 of the listed stocks in the S&P 500 stocks, as in the Commission's Regulation SHO pilot program, where one-third of the Russell 3,000 stocks are to be exempted from short-sale regulation. Frankly, particularly given the uneven enforcement of the existing rule, we doubt granting such an exception would do anything measurable except to improve the quality of the markets in those securities as a result of subjecting the NYSE specialists to real competition in the affected securities. All the negative prophesies some have advanced about the absence of a trade-through rule would be tested and, we believe, exploded.

In any event, particularly given the remarkable absence of any demonstrated purpose or need for the market-wide rule the Commission has proposed, a pilot-program exemption for 1,000 of the Russell 3,000 stocks would provide a real test case, one that would demonstrate the wisdom of what many of the thoughtful commenters on the Commission's proposal are saying, that the trade-through rule provides illusory benefits and should be rescinded, not expanded.

**If There is to be a Trade-Through Rule, It should Apply only to Immediately Touchable Quotations and there should Continue to be a Block Exception**

If the Commission nevertheless continues to proceed toward adopting a market-wide trade-through rule, the rule should apply only to quotations that are immediately, electronically "touchable," that is, accessible and executable without any delay at all. Quotations that involve a delay in execution, or that cannot be immediately accessed and taken, with confirmation that a trade has occurred being simultaneously relayed to the order entrant, should not have standing. The NYSE and the Amex may wish to continue the old ways, but those old ways should no longer hold anyone or any order hostage.

If the Commission adopts a market-wide trade-through rule, it should not adopt the opt out provisions it proposed but should simply retain the existing block exception in the intermarket trading system rule.[3] the block exception has been around for a long time. The sky has not fallen as a result of that exception. A block trading exception would not relieve institutional investors or their brokers of the duty of best execution, but it would avoid limiting their choices, which a trade-through rule without such an exception would do.

This is not a question of favoring one group of investors over another—such as institutions over the "small investor." If it were, one might well question which group the Government should favor—the wealthy stock picker or corporate executive or doctor who puts individual trades into the market or the fireman, policeman, school teacher, or factory worker whose State or union pension fund, or mutual fund, is invested by CalPERS or another institutional manager.

But in fact that is *not* the question. The Government need not make that choice. Instead it should choose to let investors make their own choices as to how to execute blocks without governmental compulsion. In the case of institutions, we doubt their duties of best execution will cause them to bypass readily accessible and immediately executable prices as a routine matter. In any event, we are not aware of any evidence that the existing block exception has been deleterious.

If the Commission were instead to provide only its fast-to-slow opt out from a trade-through rule not having a block exception, we think the result would be to force investors to choose between speed and price. That would run exactly counter to the Commission's notion of what best execution is all about. The alternative opt out provision, for fast markets opting out of slow markets within a stated price band, raises substantial implementation and compliance issues. Just as the short sale rule presents practical problems in a decimalized market characterized by flickering quotes, we believe the fast-to-slow opt out would present an even greater prob-

---

[2] See Hendershott and Jones, "trade-through prohibitions and market quality," unpublished working paper (April 8, 2004) at p.8, available at *http://faculty.haas.berkeley.edu/hender/* ("there is no evidence that market quality worsens when the trade-through rule is relaxed. In fact, overall effective spreads actually fall for all three ETF's, and the fall is statistically significant for DIA and QQQ.) The Commission would be able to monitor the execution quality from filings under Rule 11ac1–5.

[3] See, for example, NYSE Rule 15a(e): "this Rule shall not apply to . . .(2) any 'block trade' as defined in the Exchange's its block trade policy." Consideration should be given to whether the exchange's ITS block trade policy should be carried over into an SEC Rule. It may well be that a simpler exemption, based solely on a trade's being of block size, would suffice.

lem of implementation. The sliding scale of permissible trade-through pricing is just too complicated, particularly as it would present multiple moving targets and invite all sorts of gamesmanship. A market-driven determination might well rely on competition among market centers to embrace technology in place of a Government mandate.

**The Market Data Proposals**

Market data is the "oxygen" of the markets. Ensuring that market data is available in a fashion where it is both affordable to retail investors and where market participants have the widest possible latitude to add value to that data are high priorities.

Before the 1970's, no statute or rule required self-regulatory organizations (SRO's) to disseminate market information to the public or to consolidate information with information from other market centers. Indeed, the NYSE, which operated the largest stock market, claimed an ownership interest in market data, severely restricting access to market information. Markets and investors suffered from this lack of transparency.

At the urging of the SEC, Congress responded by enacting the Securities Acts Amendments of 1975. These Amendments empowered the SEC to facilitate the creation of a national market system for securities, with market participants required to provide—immediately and without compensation—information for each security that would then be consolidated into a single stream of information.

At the time, the Congress clearly recognized the dangers of data-processing monopolies. The report accompanying the 1975 Amendments expressly warns that:

> Provision must be made to insure that this central processor is not under the control or dominion 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.[4]

**Current Fees for Market Data are Excessive—They should be Cost-Based**

Even as not-for-profit entities, SRO's historically have exploited the opportunity to subsidize other costs (for example, executive compensation, cost of market operation, market regulation, market surveillance, member regulation) through their Government sponsored monopoly on market information fees. While this subsidy is troubling enough, the incentive to exploit this monopoly position will be even stronger as SRO's contemplate for-profit futures and new lines of business.

In its 1999 concept release on market data, the Commission noted that market data should be for the benefit of the investing public. Indeed, market data originates with specialists, market makers, broker-dealers, and investors. The exchanges and the Nasdaq marketplace are not the sources of market data, but rather the facilities through which market data are collected and disseminated. In that 1999 release, the SEC proposed a cost-based limit to market data revenues. We believe the SEC was closer to the mark in 1999 when it proposed making market data revenues cost-based, than in its Regulation NMS proposal, which sets forth a new formula for dispensing market data revenue without addressing the underlying question of how to effectively regulate this monopoly function.

Every investor who buys and sells stocks has a legitimate claim to the ownership of the data and liquidity he or she provides to market centers. Funneling exclusive liquidity information to exchange members and funneling market data revenues to exchanges and Nasdaq and not to investors shifts the rewards from those who trade to those who facilitate trading. The benefits should be conferred upon the public.

Under the current system, market data revenues provide SRO's with funds to compete with other execution centers. For example, Archipelago Holdings recently filed an IPO registration statement with the Commission in which it reported some $23 million for 2003 revenue from market data. This was net of $7.5 million paid to the Pacific Stock Exchange for market regulation services. Archipelago further stated that it uses this revenue to compete with Nasdaq, the NYSE and ECN's, such as Bloomberg Tradebook. That is, the market data revenues Archipelago receives as an exchange are, in effect, Government sanctioned subsidies that confer a special—and we believe unfair—competitive advantage on Archipelago and similarly situated SRO's.

The Commission's proposal with respect to market data would perpetuate the exclusive and lucrative franchise SRO's enjoy over the collection, dissemination, and sale of market data. As such, the Commission has a statutory duty to engage in

[4] Report of the Senate Committee on Banking, Housing, and Urban Affairs to accompany S. 249, S. Rep.no. 94–75, 94th Cong., 1st Sess. 11 (1975).

ratemaking proceedings with respect to these Government sanctioned monopolies. It is truly necessary for the Commission to assess the fairness and reasonableness of the NYSE and Nasdaq market data fees—fees for what are essentially monopoly services. If those fees are excessive or poorly structured, they may have created market distortions and allowed those entities to extract monopoly rents from the investing public for over a generation.

Significantly, Nasdaq's Robert Greifeld candidly admitted at the Commission's Regulation NMS hearing on April 21 that the existing data fees are too high:

> [w]e believe the Government should only be involved where the Government must be involved. So we must limit the monopoly to the data that is part of the public good, and provide it at a low cost . . .
>
> With the current structure . . . Data is not provided at a low enough cost and it does create . . . Unintended results and distortions in our market. The market centers today are the beneficiaries of that excessive rent . . . .[5]

**Mandatory Market Data should be Expanded**

In addition to questions regarding who owns market data and who shares in the revenue and the size of data fees, we believe the Commission ought also to revisit how much market data should be made available to investors. Here, decimalization has been the watershed event. Going to decimal trading has been a boon to retail investors. It has been accompanied, however, by drastically diminished depth of displayed and accessible liquidity. With a hundred price points to the dollar, instead of eight or sixteen, the informational value and available liquidity at the best bid and offer have declined substantially.

Particularly given the effects of decimalization, allowing the NYSE, for example, to hold market data and liquidity back for the benefit of its floor members is against the public interest. The Commission has heard complaints before about the NYSE auction procedures that allow hidden agency and specialist orders held in the crowd to have price-time priority over orders displayed via the public quotation system. These floor procedures give NYSE members an unfair opportunity to jump ahead of, or to "penny," publicly displayed limit orders and to "go along," or hitch a ride, on large institutional marketable orders.

In response to decimalization, the Commission should restore lost transparency and liquidity by mandating greater real-time disclosure by market centers of liquidity at least five cents above and below the best prices. Given the incentives of a slow market such as the NYSE to hide quotation information and to block direct access to liquidity, the real-time disclosure of liquidity should not be left to "market forces," which can work in this instance only if disclosure is mandated. This would restore the transparency and direct access investors had before the advent of decimalization.

We remain concerned that the promise of decimalization will be frustrated if the NYSE is granted greater rights to data that represents trading interest in a decimalized environment—in the context of market data fees, access fees, or control of uses of information—than the NYSE enjoyed when trading interest was expressed in eighths and sixteenths.

**Access Fees should be Abolished**

There are two basic issues in the debate over access fees, how they affect quotations and how they are paid. The access fee debate could be resolved with two simple measures: (1) adjust quotations to reflect access fees, and (2) do not automatically route orders to venues that force payment of hidden access fees. If these conditions were met, there would be no reason to regulate access fees. Free markets would find appropriate fee levels. Current SEC regulation does not adequately address the issue and although the Commission takes positive steps in the Regulation NMS proposal, it misses an opportunity to fully address the issue.

Because of their distorting affects upon the markets, Bloomberg Tradebook has long believed that access fees should be abolished for all securities and all markets. While we applaud the SEC's efforts to reduce access fees, we are concerned that the complexities inherent in curtailing these fees without eliminating them are likely to create an uneven playing field.

We are also concerned that the proposed limitations on access fees in Regulation NMS apply only to the top of the file, that is, to the best bid and offer. While ECN's' fees will be limited by the amount permitted under their current no-action letters,

[5] statement by Robert Greifeld, President and CEO of the Nasdaq Stock Market, Inc. At SEC hearings on Regulation NMS (April 21, 2004), available at *http://www.sec.gov/spotlight/regnms/nmstrans042104.txt* (pp. 223–4).

by contrast, the Commission's access fee proposal does not apply to access fees for quotes beyond the NBBO.

Normally, we would be totally in favor of letting a business determine its own pricing without governmental interference—with some obvious exceptions such as public utilities and others who enjoy monopolies of one sort or another. In the case of ECN access fees, however, there are two important factors—first, an important question is at what point should an ECN have to adjust its published quotations to reflect the access fees it will tack on to investors' trades. That is important to avoid bait-and-switch problems arising from hidden charges. The second is a related question. With SuperMontage, brokerage firms entering orders have them executed against the best reported quotation—which may be an ECN that charges access fees. In effect, they are forced to pay the fees even if they would have chosen not to. It is like being forced to eat at a luncheonette where you do not like the prices. Those two factors justify capping and indeed prohibiting access fees outright.

We suggest that, in any event, it makes little sense to expand the universe of market participants who can charge access fees. With the exception of one ECN—iNET—we are not aware of any significant support for the continuation of access fees. Broker-dealers, exchanges, ECN's, SRO's should all compete on the basis of the merit of their service, not on the basis of access fees. Access fees encourage internalization of orders, undisplayed orders, and payment for order flow. The Commission should look to stamp them out.

**Subpenny Quoting**

The Commission clearly opted for the right choice in proposing to ban subpenny quoting. The virtually universal consensus among commenters applauded that move. Subpenny quoting would further reduce transparency and encourage jumping ahead of orders.

**Conclusion**

This Committee has been in the forefront of the market structure debate and I appreciate the opportunity to discuss how these seemingly abstract issues have a concrete real-world impact on investors.

Regulation NMS is a bold step to bring our markets into the 21st century. The SEC is to be commended for prompting what has already been a productive debate. In an effort to accommodate a diverse array of interests, however, we believe there is a risk that Regulation NMS may reshuffle, rather than eliminate, current impediments to market efficiency.

Elimination of the trade-through rule, elimination of access fees, and greater efforts to enhance the transparency and control the costs of market data would help promote a 21st century equity market that best serves investors.

United States Government Accountability Office

GAO

Testimony

Before the U.S. Senate Committee on Banking, Housing, and Urban Affairs

For Release on Delivery
Expected at 10:00 a.m. EDT
Thursday, July 22, 2004

# SECURITIES MARKETS

## Preliminary Observations on the Use of Subpenny Pricing

Statement of Davi M. D'Agostino, Director
Financial Markets and Community Investment

GAO-04-968T

GAO
Accountability • Integrity • Reliability

# Highlights

Highlights of GAO-04-968T, a report to Committee on Banking, Housing, and Urban Affairs

July 22, 2004

# SECURITIES MARKETS

## Preliminary Observations on Subpenny Pricing

### Why GAO Did This Study

In 2001, U.S. stock and options markets, which had previously quoted prices in fractions, began quoting in decimals. Since then, various positive and negative effects have been attributed to the transition to decimal pricing. As part of this transition, the major stock markets chose one penny ($.01) as the minimum price variation for quoting prices for orders to buy or sell. However, some electronic trading systems allowed their customers to quote in increments of less than a penny (such as $.001). The use of subpenny prices for securities trades has proved controversial and the Securities and Exchange Commission (SEC) has proposed a ban against subpenny quoting for stocks priced above one dollar across all U.S. markets.

As part of ongoing work that examines a range of issues relating to decimal pricing, GAO reviewed (1) how widely subpenny prices are used and by whom, (2) the advantages and disadvantages of subpenny pricing cited by market participants, and (3) market participants' reactions to SEC's proposed ban.

www.gao.gov/cgi-bin/getrpt?GAO-04-968T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Davi D'Agostino at (202) 512-8678 or dagostinod@gao.gov.

### What GAO Found

Data on the extent to which market participants are quoting in subpenny increments across all U.S. equity markets are not routinely reported or readily available. However, studies of limited scope conducted by regulators and one market found that subpenny prices were not widely used. For example, a study done by the Nasdaq Stock Market in 2001 of Nasdaq stocks found that subpenny increments were used in less than 15 percent of the orders that specified a price (limit orders). Currently, the major markets do not allow subpenny quoting but a few electronic trading systems that match customer orders do.

On electronic trading systems, professional traders (such as those employed by hedge funds) use subpenny quotes to gain a competitive price advantage over other orders. However, many market participants GAO interviewed cited numerous disadvantages to the use of subpenny quoting. They argued that subpenny quotes primarily benefit the professional traders who subscribe to market data systems displaying subpenny prices and who use fast systems to transmit their orders to take advantage of such prices. As a result, most investors do not benefit from subpenny quotes because they do not use these systems and because many broker-dealers do not accept orders from their customers in subpenny increments. In addition, participants said that subpenny quotes allow some traders to step ahead of others' orders for an economically insignificant amount. They said this discourages other traders from submitting limit orders and reduces overall transparency and liquidity in the markets.

Based on the work GAO has conducted to date, including a limited review of comments on SEC's proposal to ban subpenny quoting, most market participants support SEC's proposed action. However, some organizations opposed to the ban said that it could reduce the ability of traders to offer better prices and stifle technological innovation and reduce market participants' incentive to invest in better systems. Although some electronic trading systems supported the ban, others indicated that the decision to use subpenny quotes should be left to market participants who, as technology advances, may increasingly find subpenny quotes more useful than they do today.

In addition to reviewing subpenny pricing, GAO continues to review the broader impacts of decimal pricing on markets, securities firms, and investors. As part of this work, we plan to conduct original analysis using a comprehensive database of trades and quotes from U.S. markets to identify trends in quoted spreads, clustering of quotes and trades across certain prices, and other potential changes since decimal pricing was introduced.

Mr. Chairman and Members of the Committee:

It is a pleasure to be here today to participate in this important hearing on market structure issues. As you requested, my statement today will focus on the use of subpenny quotes in the securities markets. I also will describe the work we are conducting for this Committee's Subcommittee on Securities and Investment as part of our ongoing broader study of the impact of decimal pricing on the securities markets, firms, and investors.

Many changes have occurred since the U.S. markets transitioned from pricing stocks and options in fractions of a dollar to using decimal prices. Many participants cite decimal pricing as providing benefits to small investors, but others argue that it has contributed to lower liquidity and reduced the willingness and ability of securities firms to execute their customers' orders. As part of the transition to decimal prices, the major stock markets chose one penny as the minimum price variation (MPV), which is the minimum increment in which the prices of stocks on these markets are allowed to be quoted. However, some electronic trading systems allow their customers to quote in increments of less than a penny. The use of subpenny prices for stock trades has proven controversial, and the Securities and Exchange Commission (SEC) has proposed a ban against subpenny quoting for stocks priced above one dollar across all U.S. markets.[1]

Today, I will discuss the preliminary results of our review of subpenny pricing issues, including:

- how widely subpenny pricing is used and who uses it,
- the advantages and disadvantages of subpenny pricing, as reported by market participants, and
- the reactions of market participants to SEC's proposed ban on subpenny quoting.

To address these issues, we interviewed a variety of market participants, including regulators, markets, electronic trading systems, broker-dealers, industry associations, trade analysis firms, and institutional investors. We

[1]Securities Exchange Act Release No. 49325 (February 26, 2004), 69 FR 11126 (March 9, 2004).

also reviewed relevant studies, testimonies, and comment letters on SEC's regulatory proposal. Our work is ongoing, and we expect to report on the broader range of decimal pricing issues later this year.

In summary:

Although data on the extent to which market participants are quoting in subpenny increments are not routinely reported or readily available, the use of subpenny quotes in U.S. equity markets appears to be limited. Currently, the major markets do not allow subpenny quoting but a few electronic trading systems that match customer orders do. Professional traders using those electronic trading systems have used subpenny quotes to gain a competitive price advantage over other orders. The general investing public does not use such systems and can usually see prices only in penny increments.

Although some market participants saw benefits to subpenny pricing, most cited various disadvantages to the use of subpenny quotes. The advantages market participants cited included gaining order priority, price improvement, and more competitive and efficient markets. However, other market participants cited disadvantages. For example, subpenny quotes primarily benefit professional traders who subscribe to market data systems displaying subpenny prices and who use fast order routing systems to access prices. These prices are usually not available to the general investing public. In addition, market participants noted subpenny quotes allow some traders to step ahead of others' orders for an economically insignificant amount. Finally, they argued that this stepping ahead discourages other traders from submitting limit orders, which reduces overall transparency and liquidity in the markets.[2]

Based on the work we have conducted to date and a limited review of some of the comments on SEC's proposal to ban subpenny quoting, most market participants appear to support SEC's proposed action. However, some organizations opposed to the ban said that it could reduce the ability of traders to offer better prices and stifle technological innovation and reduce market participants' incentive to invest in better systems. Although some electronic trading systems supported the ban, other

[2]A limit order is a request to buy or sell stock at a specific price. In contrast, a market order does not set a specific price but is executed at the best price quoted at the time the order is received by the executing market.

electronic trading systems indicated that the decision to use subpenny quotes should be left to market participants who, as technology advances, may increasingly find subpenny quotes more useful than they do today. We are also continuing to review the broader impacts of decimal pricing on markets, securities firms, and investors. As part of this work, we also plan to conduct original analysis using a database of trades and quotes occurring on U.S. markets to identify trends in quoted spreads, clustering of quotes and trades across certain prices, and other potential changes since decimal pricing was introduced.

## Background

In 2000, in response to calls from Congress, SEC directed U.S. stock and options markets to change from quoting equity securities and options in fractions of a dollar, such as 1/16th, to quoting in decimals. Proponents of this change believed decimal pricing would make stock prices easier for investors to understand, align U.S. markets with other major stock markets of the world, and lower investors' trading costs by narrowing spreads to as little as one penny.[3] At the time of SEC's order, U.S. markets were the only major securities markets in the world still trading in fractions. After a phase-in period of several months, the major exchanges and Nasdaq began using decimal pricing for all quotes on equity securities and options on April 9, 2001. The national securities markets, including the New York Stock Exchange (NYSE) and Nasdaq, chose to allow quoting on their markets with an MPV, or tick size, of one penny. The MPV is the minimum increment in which stock prices on these markets are allowed to be quoted.[4] However, even before the transition to decimal pricing, some stocks were trading in increments of less than the MPV, such as 1/256th of a dollar.

[3]The spread is the difference between the lowest price at which an investor is willing to sell stock and the highest price another investor will pay for it. This spread represents a trading cost to investors, since in a hypothetical round-trip trade in which an investor buys the stock and then immediately sells it, the price paid exceeds the price received. Narrowing the spread can lower purchase prices and raise sale prices, reducing trading costs.

[4]Securities Exchange Act Release No. 46280 (July 29, 2002), 67 FR 50739 (August 5, 2002).

## Professional Traders on Electronic Markets Are the Primary Users of Subpenny Quotations

Since U.S. markets converted to decimal pricing, professional traders trading outside the national securities markets have been the primary users of subpenny prices. Although the national securities markets set their MPVs at one penny, several electronic trading systems—known as electronic communication networks (ECNs)—display quotes and execute orders entered by their customers in subpennies and allow traders to quote prices and trade in subpenny increments.[5] When quotes from these proprietary systems are displayed to traders outside the proprietary systems, the quotes are rounded to the nearest full penny increment—specifically, down for buy orders and up for sell orders—to comply with the required one-penny MPV of the national securities markets. In such instances, orders executed against these quotes receive the subpenny price. According to SEC staff and others, although several ECNs initially allowed quoting in subpennies, some have curtailed the use of such quotes. At the time we prepared this statement, we were aware of only two ECNs that allowed quoting in subpennies—Instinet's INET and Brut ECN—for a few selected stocks.

The extent to which stocks are quoted in subpenny increments appears to be limited. According to SEC staff, data on the extent to which subpenny increments are used to quote securities across all U.S. equity markets are not routinely reported or readily available. However, a 2001 Nasdaq report to SEC that reviewed trading in stocks listed on its market showed that less than 15 percent of limit orders were submitted in subpennies after decimals were introduced.[6] A vast majority of the subpenny limit orders cited in the 2001 Nasdaq report were handled by a single ECN. SEC staff also conducted a study of the use of subpennies in trading that took place between April 21 and 25, 2003, and found that subpenny trades accounted for about 13 percent of trades in Nasdaq stocks, 10 percent of trades in American Stock Exchange stocks, and 1 percent of the trades in NYSE stocks. These trade execution data, however, do not directly demonstrate the extent of subpenny quoting, because trades may be executed using the subpenny increment for other reasons. For example, some institutional investors may ask their broker-dealers to execute orders at the weighted

[5]ECNs are a type of alternative trading system that use electronic systems to match their customers' orders to buy or sell securities at specified prices. ECNs register with SEC as broker-dealers.

[6]The Nasdaq Stock Market, Inc., *Final Report to the SEC, The Impact of Decimalization on the Nasdaq Stock Market* (New York, New York: June 11, 2001).

average price at which a stock traded on a particular day. This weighted average price can be carried out to several decimal places.

Representatives of one ECN told us that it allowed traders to quote certain stocks in subpennies because its customers wanted to be able to quote in these increments. They also said that this use of subpenny quotes was a way to differentiate their business from that of their competitors. In addition, these ECN representatives said that subpenny quoting enhanced the efficiency of trading in certain actively traded securities, such as the Nasdaq 100 Index Tracking Stock (QQQ). According to SEC staff and market participants with whom we spoke, subpenny quotes are used primarily by professional traders, such as day traders or traders for hedge funds, to gain a competitive price advantage over other traders.[7] However, some ECNs that were allowing their customers to use subpenny quoting more widely have significantly curtailed the number of stocks that could be quoted in subpennies. According to a representative at one ECN, its share of the total trading volumes of these stocks increased rather than declined after it stopped quoting in subpennies.

## Market Participants Cited Advantages and Disadvantages to Subpenny Pricing

Although some market participants saw benefits to subpenny pricing, most cited various disadvantages to the use of subpenny quotes. Some market participants said subpenny quoting allowed traders to raise the priority of their orders. For example, a representative of one ECN told us that when a large number of traders were all quoting the same full penny price, one trader could increase the chances of executing a trade by improving the price by a subpenny increment. This representative also said that the customers on the other side of the trade also benefited from the subpenny increment, as their orders were executed at slightly better prices. ECNs we contacted also told us that subpenny pricing allowed for more efficient and competitive markets. For example, a one-cent MPV could act as an artificial constraint on pricing for stocks that trade actively. According to representatives of one ECN, allowing such actively traded stocks to trade in increments of less than a penny allows buyers and sellers to discover a stock's true market price.

[7] Day traders use a trading strategy that involves making multiple purchases and sales of the same securities throughout the day in an attempt to profit from short-term price movements via direct access to securities markets. Although there is no statutory definition of hedge funds, it is the term commonly used to describe private investment vehicles that often engage in active trading of various types of securities and commodities.

However, most of the market participants we contacted mainly cited disadvantages to subpenny quoting. First, many participants told us that the benefits of subpenny pricing accrue to professional traders but not to the general investing public. Representatives of one firm with whom we spoke told us that quotes in subpenny increments were available to professional traders who pay to access proprietary trading systems the ECNs operate. Through these proprietary systems, professional traders can use fast order routing systems to obtain the subpenny prices, which may be better than those that are publicly displayed on other markets that use one-cent MPVs. According to market participants, many broker-dealers do not accept orders from their customers in subpenny increments, and so the average investor generally cannot access the subpenny quotes. A representative of a large broker-dealer stated at an April 2004 SEC hearing that his firm had stopped allowing clients to submit orders priced in subpenny increments for this reason. Further, representatives at one securities market argued that the integrity of the securities markets was reduced when some traders have advantages over others.

Many of the market participants we contacted told us that quoting in subpenny increments also resulted in more instances of traders "stepping ahead" of large limit orders. According to some market participants, reduced MPVs that accompanied decimal pricing have negatively affected traders displaying large orders at one price. These traders find that their orders go unexecuted or have to be resubmitted when other traders step ahead of them by quoting a better price in increasingly small amounts. These participants argued that at higher MPVs, which were previously 1/8$^{th}$ or 1/16$^{th}$ of a dollar per share, traders stepping ahead of other orders were taking a greater financial risk if their orders were executed and prices then moved against them. However, market participants with whom we spoke said subpenny increments were generally an economically insignificant amount and that traders using them faced much lower financial risk. Recent SEC and Nasdaq studies of subpenny trading found that most trades executed in subpenny increments clustered at prices 1/10$^{th}$ of a cent above and below the next full penny increment, suggesting that subpenny quotes were primarily being used to gain priority over other orders and were not otherwise the result of natural trading activities. Market participants also told us that the more likely it is that a trader can step ahead of other orders—as they can by using subpenny quotes—the less likely traders are to enter their limit orders, which are an important source of liquidity. This reduced incentive to enter limit orders also reduces the number of shares displayed for sale and potentially affects liquidity and market efficiency.

Furthermore, some market participants also saw subpenny quoting as reducing market transparency for retail investors and depth for institutional investors. When the MPV decreases, for example to subpennies, the number of potential prices at which shares can be quoted—called price points—increases, because displayed liquidity is spread over more price points. For example, subpenny quotes using 1/10th of a penny ($.001) increase the number of price points to 1,000 per dollar. This affects retail investors, because fewer shares are generally quoted at the only prices visible to them—the current best prices for purchase or sale. This affects institutional investors, because the more price points that must be considered, the more difficult it becomes to determine whether sufficient shares are available to fill larger orders. Market participants said that quotes in a subpenny pricing environment change more rapidly (a phenomenon known as quote flickering) and make determining the actual prices at which shares are available more difficult. Quote flickering reduces broker-dealers' ability to determine whether the trades they have conducted satisfy their regulatory responsibility to obtain the best execution price for their clients. Finally, some market participants told us that subpenny pricing has the potential to greatly increase the processing and transmission capacity requirements for the market data systems that transmit price and trade information, causing firms to expend resources to redesign electronic systems.

## SEC's Proposal to Ban Subpenny Quoting Appears to Have Widespread Support

SEC's proposed rule to prohibit market participants from pricing stocks in increments of less than one penny appears to be widely supported. As part of its proposed rule changes to Regulation NMS, SEC has proposed establishing a uniform pricing standard for stocks that trade in all market centers, which SEC defines as exchanges, over-the-counter market makers, specialists, and ECNs. Specifically, SEC proposes to prohibit market participants from accepting, ranking, or displaying orders, quotes, or indications of interest in a pricing increment finer than a penny in any stock, unless the stock has a share price of less than one dollar. The proposed rule would not prohibit executing trades in increments of less than one penny, which most markets currently permit, because there are instances when subpenny trading is appropriate—for example, when the trade's price is based on some averaging mechanism. According to SEC staff, this change would address differences in pricing that exist across markets and that benefit some investors at the expense of the general investing public. According to the staff, banning subpenny pricing should also reduce the extent to which limit orders lose priority because of subpenny pricing, thereby preserving incentives to display limit orders, which are an important source of liquidity for the markets.

Most market participants we have contacted to date and most commenting on SEC's proposal appear to support a ban on subpenny pricing for stocks priced at more than one dollar. Of the over 500 comment letters available on SEC's Web site as of July 16, 2004, we determined that about 50 provided comments on the proposed ban. Of these, 86 percent of the commenters supported banning subpenny quoting. According to NYSE and Nasdaq representatives with whom we spoke, the current existence of quotes that not all investors can access is a significant reason for their support of SEC's proposed subpenny prohibition. Nasdaq's support for banning subpenny quoting comes despite filing for a proposed rule change with SEC in 2003 that would permit Nasdaq to adopt an MPV of $1/10^{th}$ of one cent for its listed securities. According to the Nasdaq representatives, if SEC does not prohibit subpenny quoting, Nasdaq would want SEC approval to begin quoting in subpennies in order to compete with ECNs. Nasdaq subsequently withdrew its propsed rule change, presumably because SEC is proposing to ban subpennies in its proposed changes to Regulation NMS. Representatives at several institutional investors and broker-dealer firms also agreed that quoting in subpenny increments should be prohibited. In its June 30, 2004, comment letter to SEC, the Investment Company Institute (which represents the interests of the $7 trillion mutual fund industry) stated that quoting in subpennies eliminates many of the benefits brought by decimal pricing and exacerbates many of the unintended consequences that have arisen in the securities markets since its implementation that have proven harmful to mutual funds and their shareholders.

However, other market participants and other commenters opposed SEC's proposal to ban subpenny quoting. Several of the organizations that opposed a ban said that subpenny quotes allow traders more ability to improve the prices they offer to others. A group of 10 academic researchers that commented to SEC argued that the impacts of subpenny quoting on market transparency could be resolved with technology. For example, data vendors can choose to update quotes only when there are meaningful changes. A letter from a university regulatory research center noted that banning subpenny quoting could stifle innovation in the way that quotes are displayed to investors. For example, graphical displays could replace flickering quotes with fluid motion and use patterns and shapes to help investors recognize changes. A ban could also reduce incentives for other market participants to invest in innovative technologies.

Opinions among some ECNs were mixed, with roughly an equal number supporting and opposing SEC's proposal to ban subpenny quoting.

Representatives of two ECNs indicated that SEC should not enact a ban, arguing that tick size is best determined by demand in the marketplace. Furthermore, representatives of two ECNs noted that stocks that trade at a spread of a penny benefit from the increased efficiency afforded by subpenny increments; one representative noted that a penny MPV artificially constrains price discovery for these stocks. In addition, this representative said that stocks with low share prices should be quoted in subpenny increments because subpennies become economically significant when the share price is a few dollars or less. Finally, these representatives said that as more traders and firms upgrade their trading technology, they may find more advantages from quoting in subpennies and that a regulatory ban enacted now might become an unpopular constraint in the future. One of the ECNs is supporting SEC's proposal to ban subpenny quoting because its customers preferred not to have subpennies used on that ECN's system. At the time we prepared this statement, we had not yet talked to entities that are reported to be key users of subpenny quotes and who may be opposed to SEC's proposal, such as day traders, hedge funds, or entities whose sole business is computer-enabled trading.

## GAO's Review of the Impacts of Decimal Pricing Is Ongoing

At the request of this Committee's Subcommittee on Securities and Investment, we are conducting additional work to review the impact of decimal pricing on the securities markets, securities firms, and retail and institutional investors. To conduct this work, we are reviewing relevant regulatory, academic, and industry studies that address decimal pricing impacts. We are also interviewing and obtaining information from market participants, including:

- regulators;
- securities markets, including stock and options markets;
- ECNs;
- securities firms, including broker-dealers that conduct large-block trading, market makers, and exchange specialists;
- industry associations, including those representing securities traders, broker-dealers, and mutual funds;
- trade analysis firms;

- institutional investors, including pension and mutual fund investment managers; and

- academic researchers who have studied trading and decimal pricing.

To identify trends and changes since decimal pricing was introduced, we are also attempting to collect and analyze data on the characteristics of markets, firms, and investors and the impact of decimalization on these entities (table 1).

**Table 1: Data Being Collected on Decimal Impact Review**

| Area affected | Examples of data |
|---|---|
| Markets | • spreads<br>• market liquidity<br>• trading volumes<br>• price volatility |
| Securities firms | • number of active market makers<br>• number of market makers per stock<br>• firm profitability |
| Investors | • trading costs |

Source: GAO.

In addition, we plan to conduct research and analysis using a comprehensive electronic database of quotes and trades that have occurred on U.S. stock markets. The Trade and Quote (TAQ) database offered by NYSE consolidates all quotes and trades that have occurred on NYSE, Nasdaq, the American Stock Exchange, and the regional exchanges. As part of this research, we plan to expand and extend analysis done for a recently published study on the impact of decimal pricing on trade execution costs and market quality, including volatility and liquidity.[6]

[6]Hendrik Bessembinder, "Trade Execution Costs and Market Quality after Decimalization," *Journal of Financial and Quantitative Analysis*, vol. 38, no. 4 (December 2003), pp. 747-77. This study looks at 300 NYSE and 300 Nasdaq stocks from the second week of January 2001 through August 2001. The TAQ database is a collection of intraday trades and quotes for all securities listed on NYSE, the American Stock Exchange and Nasdaq. TAQ data do not contain information on orders.

Among the types of information we plan to analyze using this database are:

- quoted spreads,
- quotation sizes (i.e., number of shares being quoted),
- the percentage of trades and shares executed at prices less or greater than the best quoted price prevailing at the time of executions, and
- the volatility of returns from investing.

We plan to use this analysis to shed light on how trade execution costs and market quality may have changed in transitioning from a fractional to a decimal pricing environment. In addition to the variables considered in the published study, we plan to gather data on trade size and the numbers of trades and quotes that may provide evidence on changes in trading behavior. We also plan to analyze the TAQ data to identify whether and to what extent clustering occurs when quotes or trade executions occur more frequently than would be expected at particular price points (e.g., multiples of 5 cents and 10 cents) despite the existence of the one-cent tick.

## Observations

Because we are continuing to review issues relating to decimal pricing, we do not have definitive conclusions on subpenny pricing at this time. Our work to date has shown that subpenny quoting can provide advantages to some traders but can also create disadvantages to others and potentially impair incentives to display liquidity. A significant majority of market participants appear to support SEC's proposed ban on quoting in subpennies, but little information is available on the impact of using these quotes. On the one hand, given that such quotes are currently used only in a few trading venues and for a limited range of stocks, SEC's proposed ban would probably not result in a significant change for the overall markets or most investors. On the other hand, if SEC did not ban subpenny quotes, it is possible that exchanges and more markets would want to quote in subpennies—a change that could have a significant impact on U.S. equity markets. Still, a ban would take away the ability of individual markets and investors to choose whether to use subpenny quotes if they decide their use would be advantageous. Subsequent changes in market structure, technology, and investor needs could require SEC to reconsider whether the use of subpenny quotes would be appropriate at some future date.

Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions that you or Members of the Committee may have.

## GAO Contacts and Staff Acknowledgement

For questions concerning this testimony, please contact Cody Goebel at (202) 512-8678 or goebelc@gao.gov. Other key contributors to this statement were Jordan Corey, Emily Chalmers, Joe Hunter, Kathryn Supinski, and Richard Vagnoni.

**PREPARED STATEMENT OF ROBERT B. FAGENSON**

VICE CHAIRMAN, VAN DER MOOLEN SPECIALISTS

JULY 22, 2004

I am Robert B. Fagenson, Vice Chairman of Van der Moolen Specialists, the fourth largest specialist firm on the New York Stock Exchange (NYSE). I also served as a Floor Official and later Floor Governor of the NYSE from 1985 through 1993, on the Board of Directors of the NYSE from 1993 through 1999, and as the Board's Chairman in 1998 and 1999. After a 4-year absence, I was reelected to the NYSE Board in 2003, but resigned upon reconstitution of that Board to consist solely of public Directors. I currently serve on the NYSE's Technology Planning and Oversight Committee.

I appear today on behalf of my firm and on behalf of The Specialist Association (Association), of which my firm is a member and which I have served for over a decade, currently as Chairman.

The Securities and Exchange Commission, in its proposed Regulation NMS release (Release) and supplemental release (Supplemental Release), attempts to address and solve a number of complex, inter-related problems affecting our markets—problems, that, in my view, stem primarily from technological change in a regulatory environment that was created for a slower world. The Release attempts to provide solutions to virtually all of these problems in an integrated way. The SEC and its staff are to be congratulated for this timely and important effort.

As I see it, at the heart of the regulatory proposals advanced in the Release and Supplemental Release are three issues. First, now that technology has advanced to the point where it is truly possible to ensure that no investor's displayed order to buy or sell at a price better than any other price shown in our markets can be ignored, are we nevertheless going to permit transactions at a worse prices to occur without filling or at least matching that better price? Second, is there something about the speed with which transactions, as a technological matter, can occur that matters enough to override the basic principle in our markets that trades always should occur at the best available price? Third, are we going to compel each market that wishes to have its own buying and selling interest be protected by an anti trade-through rule to trade exclusively on the basis of bids and offers displayed in the consolidated quotation system (CQS) that can be filled or taken instantaneously by electronic means? Or will investors who wish to seek a better price, as an alternative to buying or selling at displayed prices, still be permitted, as they are today, to participate in an auction process like that on the NYSE that discovers and provides a better price much of the time?

What has brought these issues to the forefront? Primarily, in my view, three factors:

- The growth of electronic markets—so-called alternative trading systems or ATS's, electronic communications networks or ECN's, and in-house electronic order crossing systems of large brokerage firms. These electronic markets insist, for purely competitive reasons, that there are customer constituencies who value speed of execution over best price and that those constituencies should be permitted to trade without regard to other markets and other market participants that offer, at the time of trade, better prices.
- The failure to ensure, before now, that each market affords fair access by all market participants to the best bid and offer prices available in that market and to do so on a basis that is as efficient as today's technology permits.
- The need to reaffirm and adapt antitrade-through principles to the faster markets of today in a way that makes it feasible to insist, unequivocally, that all markets and all market participants must trade at all times in a manner consistent with those principles.

The most important proposal in the Release and Supplemental Release, in my view, is a rule that would require all markets, including electronic trading markets, to adopt and enforce their own antitrade-through rules. Each market's antitrade-through rule would have to prevent trade-throughs from occurring in that market at prices inferior to any price displayed in the CQS and made available by another market on an immediately accessible basis (which I shall refer to as a "fast quoting" market), with very limited exceptions. In this regard, the SEC is to be especially commended for modifying its original proposal to recognize that within each market some quotes will be "fast" while others may not be, and that quotes in the same stock may be "fast" much of the time, but at others "slow." The SEC has proposed that all "fast quoting" markets should receive the full protection provided by antitrade-through rules for all of its "fast" quotes. (Originally, the SEC had proposed that each market as a whole would be categorized as either "fast" or "slow," with

only the former being entitled to absolute trade-through protection.) A companion rule proposal would ensure fair access by all markets and market participants to all quotations displayed in the CQS. The SEC also proposes an "opt out" exemption from its antitrade-through rule that would permit any broker-dealer and any consenting customer to decide, ostensibly on a trade-by-trade basis, to forego the protections of the trade-through rule—that is, to trade without regard to better-priced bids or offers displayed from any market.

The NYSE and the Association have submitted comment letters responding to most of the issues and proposals discussed in the Release and the Supplemental Release, including those that I have described. I agree with the positions articulated in those letters and commend them to your attention. Today, I will limit my testimony to what I regard as the three primary issues described above.

I am mostly concerned about what is at risk in the debate begun by self-interested electronic markets concerning the value of speed of execution compared to the value of price of execution. In particular, I am alarmed by the prospect of what would be lost from today's markets if fascination with what is technologically possible in terms of execution speed were to be permitted to reshape the regulatory landscape, diminishing or even eliminating the idea that best price and order interaction between customers without the intervention of a dealer should continue to be dominant factors in the regulation of our markets. In simple terms, just because we can do something does not necessarily mean we should. My view is that regulation should take into account both developments in technology and the continuing need for the exercise of human judgment in the trading process. That is, regulatory policy should not imagine that technology alone can support the genius and vitality of our trading markets.

The NYSE has made it plain that it intends to provide customers with a choice of a "fast quoting" market. The NYSE even now has begun modifications to its systems and rules to ensure that result, and will continue to do so as the SEC moves to adoption in final form of the Regulation NMS rules. In this regard, my primary concern is that the SEC must make sure that whatever "fast quoting" market standard it ultimately adopts permits the NYSE to continue its traditional auction trading process for those who wish to avail themselves of that process to obtain better prices rather than woodenly accepting whatever prices happen to be displayed in the CQS at the time of the trade.

I also believe that the SEC would make a great mistake if it were to adopt any variation of the "opt out" exemption. Adoption of that exception, in my view, could undermine or even destroy a trading process that continues to be the envy of the world because it provides enormous liquidity, day after day, in a fair and orderly manner. What adoption of such an exemption would not do is improve the markets in any respect.

**Speed of Execution Is Not a Paramount Value**

It is well-known that the NYSE today enjoys a market share of approximately 80 percent in the trading of its listed stocks. Lately, we have heard with regularity that the NYSE's market share is the result of the anticompetitive effects of the trade-through rule. The trade-through rule, we are told, impedes electronic markets from realizing their full potential as markets and stands between at least some investors and their preference as to execution quality (that is, achievement of an immediate execution rather than one at the best price). In short, the electronic markets seek to persuade us that trade-through rules are old-fashioned and must go. To help them realize their potential, the electronic markets argue, the basic rules of the road in our markets should be changed to acknowledge the special importance of their only real product—speed. If done properly, which means to these electronic markets eliminating the trade-through rule altogether, they then could offer something more—the ability to trade in isolation, free from interaction with other market participants.

While the NYSE does have 80 percent of the trades in its listed stocks (understandable to me since the NYSE shows the best quotes in its listed issues more than 90 percent of the time), it should be noted that its competitors have succeeded in attracting the remaining 20 percent of those trades. Further, they have done so notwithstanding the NYSE's acknowledged quality as a marketplace and the existence of the trade-through rule. This has occurred in an environment where the goal of obtaining the best price governs the conduct of brokers, and the market that provides the best prices is rewarded with trades. That is, the NYSE's competitors know how to offer what securities customers want, and have been rewarded by customers when they do, in terms of efficiency, economical access, and best price. They have not needed regulatory change to do these things. Just because someone's business model is not working does not entitle them to regulatory relief.

Second, I ask you to consider just who is demanding increased speed of execution and why. That is, can any set of investors be identified to whom it matters whether an execution takes place in one second or a nano-second—and to whom it matters enough to sacrifice a penny or more in the price paid or accepted on the trade? I do not believe that there is any such set. There are, however, electronic markets and sponsors of electronic trading who have little else to offer besides their execution speed. They would prefer being spared costs that attend operation in today's markets where order interaction and best price are prized and fostered by current regulatory policy and rules. Finally, they realize that, if they could avoid interacting with other markets and trade for their own accounts without regard to better prices offered by others, new opportunities to profit would present themselves. These markets, I suspect, are the only real advocates of the speed factor.

The SEC's proposed Regulation NMS would do a great deal to modernize the existing regulatory regime by addressing the need for fair and efficient access to displayed quotations and could, if the proposed trade-through rule is adopted in appropriate form without the "opt out" exemption, go far in realizing the objective of stopping intermarket trade-throughs of better prices. The SEC's new trade-through rule, however, does not and should not be changed to elevate speed of execution over other values now embedded in our regulatory system, the most important of which, in my view, is that no trade should occur at a price inferior to the best price displayed in the CQS.

**The "Opt-Out" Exemption**

The proposed "opt out" exemption from the trade-through rule would swallow the rule itself. Adoption of such an exemption would destroy rather than advance intermarket price protection in our markets. To do that would be an incalculable error and inflict more harm on investors than those who support such action seem capable of imagining.

Adoption of the "opt out" exemption would permit trading by broker-dealers for their own accounts and for customers without regard to the existence at the time of their trades of better bid or offer prices displayed in the CQS. In such an environment, not only would one side of the trade receive a worse price than a better price known to the broker-dealer handling their order or trading with it as principal at the time of the trade—namely, the customer side of the trade—but also such trades would leave stranded and unexecuted the better bids or offers made by others. This would be so even though those better prices would have to be accessible "immediately" and on fair terms if the rules contemplated by proposed Regulation NMS were adopted. That the SEC would suggest such an apparent step backward, in light of the formidable reasons mounted in the Release for proposing adoption of a universal trade-through rule for all markets, is confusing.

Two principles tend to force intermarket price protection today: "Best execution" in the case of orders of a size that reasonably can be expected to be executed at the best displayed bid or offer price or better; and, in the case of listed securities, self-regulatory organization trade-through rules (even where the size of the trade is such that the prices of displayed bids and offers do not necessarily establish a sound guide to what "best execution" requires under the circumstances). The "opt out" exemption would overthrow both principles and, in so doing, threaten to capsize fairness and orderly trading in our markets. In our markets to permit the kind of conduct that adoption of the "opt out" exemption would endorse would, in my judgment, snuff out public confidence in the fairness and integrity of our markets, confidence on which our capital raising process depends.

Public confidence in our markets exists today because those markets operate fairly as to the most basic and important element of a securities transaction—price. This is so without regard to the size or influence of the buyer or seller. The rule at all times should be that the best price gets the trade. The "opt out" exemption would turn this on its head. Instead, the SEC (and thus our markets) would tell the world that the biggest player gets what he wants regardless of price and regardless of the little guy and any better price at which he is willing to buy or sell. This is the opposite of the message that has made our markets the best and the most trusted in the world.

The "opt out" exemption is a terrible idea and the SEC should disown it.

**"Fast Quoting" Market Status: Effects on the Auction Process and Price Discovery**

Today, the NYSE executes virtually all orders submitted within a very few seconds after submission. This includes, most of the time, responding to commitments to trade submitted through the admittedly antiquated Intermarket Trading System. Some trades, however, take longer.

Sometimes, this is because adverse news affecting the issuer of a particular stock is released. In other cases, it is merely the coincidental confluence of a lage number of orders on one side of the market at the same moment. In such cases, after exhaustion of the existing displayed bids, the bid-ask spread is likely to be widened to forestall sequential short sales at successively lower ticks (when the occasional up-tick occurs) and to discover the new price at which buyers and long sellers generally, after absorbing the news, believe is appropriate for that stock.

In certain instances, the specialist may be aware of contra-side interest in a stock that a customer seeks to buy or sell. By quickly reaching out to such interest, and bringing it to the post. The trade then can achieve a price better than any displayed bid or offer price. Through this process of price discovery orders presented for execution often receive price improvement, but not instantaneously.

In other cases, customers may wish to establish or dispose of very large positions—something that will occur at a negotiated price away from the level of the currently displayed bid or offer. Strictly speaking, the interest in assembling such a trade does not take the form of a market or other type of executable order. The conduct and completion of both a search for contra-side interest in a trade of size and negotiations between the prospective parties to such a trade as to price depends on stability of the bid or offer price for a brief period to permit that to occur. The NYSE auction process accommodates such pending transactions today without triggering trading halts and by including rather than excluding all trading interest at the time of the transaction. I believe that doing so performs a valuable service to the markets as a whole.

The ability to perform in the foregoing ways—to adjust to bad news, provide price improvement, and permit the negotiation and smooth execution of very substantial trades—could be lost if, as the price of winning characterization as a "fast quoting" market under the new SEC trade-through rule, the NYSE must give up entirely its existing auction/agency process. The NYSE is addressing this challenge and working toward the objective of assuring that the virtues of our existing trading system and the benefits that they confer on market participants can be preserved side by side with making available to other markets the bid and offer prices on the NYSE displayed in the CQS that are immediately accessible and assuring that no transaction occurs on the NYSE that trades through a better price displayed in the CQS by another "fast quoting" market. I hope and expect that the definition of what constitutes a "fast quoting" market under the trade-through rule ultimately adopted by the SEC will accommodate the NYSE's effort.

I appreciate the opportunity to express these views and would be pleased to respond to any questions that you might have.

## PREPARED STATEMENT OF JOHN C. GIESEA

PRESIDENT AND CEO, SECURITY TRADERS ASSOCIATION

JULY 22, 2004

Chairman Shelby, Ranking Member Sarbanes, and Members of the Committee, on behalf of the Security Traders Association (STA) thank you for the opportunity to testify regarding the structure of the U.S. equities markets, and more specifically the Securities and Exchange Commission's (SEC) proposed Regulation NMS.

### Security Traders Association

The STA is a worldwide professional trade organization that works to improve the ethics, business standards, and working environment for our members. We have approximately 6,000 members, all engaged in the buying, selling, and trading of securities. Our members participate in STA through 28 national and international affiliate organizations and represent the interests of the trading community and institutional investors. The STA provides a forum for our traders, representing institutions, broker dealers, ECN's, and floor brokers to share their unique perspectives on issues facing the securities markets as they work together to promote their shared interests in efficient, liquid markets as well as investor protection.

Given the disciplines represented by the STA, one would expect that they often have differing perspectives on market structure issues. We have diligently worked through the issues presented by the Commission in proposed Regulation NMS, and have in most instances reached consensus on recommendations that we believe are beneficial for the market as a whole, not the individual interests of our constituencies. I request that the STA's comment letter on Regulation NMS be included as part of the hearing record.

**STA White Paper**

The Securities Acts Amendments of 1975 direct the facilitation of a national market system and set forth objectives for the "protection of investors and the maintenance of fair and orderly markets." [1] Technological advancements and innovations, and the dramatic increase of individual investor participation, continue to transform the US equities markets.

The STA has consistently called for SEC action to address these and other developments in the markets. In August 2003, we issued a White Paper entitled "Fulfilling the Promise of the National Market System," in which the STA made three key recommendations:

- Improve intermarket linkages and trading rules.
- Require consistency of core trading rules across markets.
- Eliminate access fees.

The White Paper discussed in detail the STA's views on the current state of the U.S. markets and the issues it felt must be dealt with in order to make those markets stronger and more liquid. While not a one-for-one parallel with the Commission's Regulation NMS proposal, our concerns are remarkably similar to those addressed by the Commission in the Proposing Release. At that time, we expressed the view that the new environment led to issues for market structure that met at the fulcrum of technology and access. Similarly, the four proposals promulgated in Regulation NMS and the supplemental release deal with various facets of a fundamental problem: Inadequate access to the best priced quotes of all market centers, on market neutral terms.

**Proposed Regulation NMS**

The STA commends the Commission for its efforts in addressing these structural problems. The White Paper addresses many of the same issues discussed in Proposed Regulation NMS, and we believe the SEC's proposal is an important and positive step toward advancing the objectives of the national market system as envisioned by Congress in 1975. Since we see the current problems as arising from access to quotes on market neutral terms, I will address those issues first, followed by the various issues related to sub-penny quoting, trade through, and market data.

*Access Fees Should be Eliminated*

*Best execution obligations are negatively impacted by access fees.* Since access fees are not included in the quotations that ECN's display in the consolidated quotes through an SRO trading facility, they undermine transparency of prices and represent hidden costs. Access fees distort the true price offered through that SRO facility and complicate a nonsubscriber broker-dealer's best execution obligations.

*Access fees for nonsubscribers do not provide choice.* It is important to understand the differences between access fees charged to subscribers of ECN systems and nonsubscribers attempting to access a quotation displayed in the consolidated quotes. Subscribers to an ECN have affirmatively chosen to pay the access fees for access to the system. Conversely, nonsubscribers have not chosen to pay for such a service, but may instead be required, in order to fulfill best execution obligations, to interact with an ECN quote and pay an access fee.

*The STA has consistently maintained that access fees for nonsubscribers of ECN systems should be eliminated.* An ECN should be limited to charging fees to its subscribers just as a market maker may only charge fees to its customers. Elimination of access fees would end the rebate schemes and economic incentives causing locked and crossed markets.

*The Commission's proposal to permit all markets to charge access fees would only serve to exacerbate the problems.* While we appreciate the thoughtfulness behind the Commission's proposal to permit all markets to charge access fees, we believe that this will exacerbate the problem rather than lessen it. We believe a far more effective approach would be to simply ban ECN's from imposing access fees when their best priced quotes are traded through an SRO execution facility such as Nasdaq's SuperMontage. At the same time, the STA believes it is unnecessary for the Commission to ban or restrict the access fees that an ECN may charge its subscribers for providing them with direct trading access to its quotations, including depth of book displays.

[1] Securities Exchange Act of 1934, Section 11A(a); (15 U.S.C. 78k–1)

*Ban Sub-penny Quotations*

*The STA fully supports the Commission's proposal to eliminate sub-penny quotations.* It is important that the Commission act now to prevent the negative impacts of sub-penny quoting.

The STA has consistently called for the elimination of sub-penny quoting. One of the principal benefits of the transition to decimals was clarity and simplicity in the market information provided to public investors. Further, the international decimal standard provided a reference and comparison standard for investors both in the United States and abroad. These goals have been achieved, and the Commission's mandate to switch to decimals has, after some adjustment by participants, been recognized overall as a positive development. A move to sub-penny quoting will substantially undermine the benefits of decimals, and will not improve markets, but will lead to greater inefficiency and confusion.

We concur with the Commission's description of the problems of sub-penny quoting. Among the negative impacts, sub-penny quoting results in a decrease in market depth at the NBBO and incentives to step ahead of limit orders. For example, an SEC staff study concluded that sub-penny trades cluster at the $0.001 and $0.009 price points, suggesting stepping ahead behavior.[2] In addition, sub-penny trading increases the number of price points available, resulting in less liquidity at each price point and negating any perceived benefits to investors.

*Trade-Through and Best Execution*

Based on our analysis and understanding of the current problems in the market structure, and the Congressional mandate that we move toward a true NMS, our view is, as we recommended in the White Paper, that we achieve " . . . adequate, efficient, and appropriate connectivity between, and access to all market centers and their platforms . . . ." We believe that if traders have access to all quotes with immediate execution and refresh capability, the problem of trading-through might simply go away.

In light of that, our recommendations are as follows:

Phased Approach: The Commission should adopt a phased implementation schedule for the proposal. We have, and continue to assert that access lies at the heart of achieving an NMS.

Specifically, in Phase One, the STA recommends that the SEC adopt a rule requiring all market centers to provide automated access to their publicly displayed quotes. This should include standards for automated execution, access on economically efficient terms (including the elimination of access fees), and automated quote refresh capabilities. These standards of connectivity, access, and immediate execution are key components to achieving the objectives of the national market system.

After this Phase is fully implemented and the empirical evidence of the effects are analyzed, the Commission will be in a position to determine whether a uniform trade-through rule is necessary. Finally, a phased approach would provide greater opportunity to identify whether adjustments to the proposal are necessary, and in doing so, would reduce the potential for unintended consequences.

Exclusion of manual quotes: The rule should exclude manual, or slow, quotes from the consolidated national best bid and offer (NBBO).

Since manual quotes would not support automatic execution capabilities, excluding them from the NBBO would provide an incentive for markets to become fully automatic. But to encourage consistent behavior, it is important that the Commission limit the ability of a market from switching between manual and automated quotes.

As discussed above, the trade-through rule should not be extended to other markets unless it determines, based upon empirical evidence, that connectivity and automation are insufficient to protect against inferior trades.

Safe Harbor: Adoption of a safe harbor would recognize that a broker-dealer may, consistent with its best execution duties, trade through a quote that is not accessible for automated execution.

SEC policy on best execution is consistent with this standard as it recognizes that factors other than price may be considered when evaluating best execution. Certain State regulators and the NASD; however, have sometimes focused on price as the only measure of compliance, ignoring the fact that some quotes may not have neutral economic or access terms. For example, certain transactions may appear to be executed at something other than the "best price." However, if a quote at the NBBO is not immediately accessible, it is unfair to have standards that would require a broker-dealer to execute against such a quote. Such a safe harbor would protect a

[2] Securities Exchange Act Release No. 49325 (February 26, 2004) 69 FR 11126.

broker against best execution liability under State law in situations permissible by the Commission.

Trade-Through Exemptions: If the Commission determines that a trade-through rule is necessary, the STA supports, to varying degrees, the automated order execution, flickering quote, and limited opt out exemptions.

The automated order execution exemption, without limitation, is desirable to provide an incentive for slow markets to become more fully automated. The SEC's Supplemental Release questions whether the exemption should distinguish between automated and manual quotes (rather than markets as initially proposed). Such an approach could be acceptable, but only if manual quotes are excluded from the NBBO, as discussed above.

Some stocks display quotes that change at such a rapid pace that they "flicker." As such, a flickering quote exemption should be adopted, recognizing that an apparent trade-through of such quotes is not an actual trade-through (but rather a "false" trade-through).

If the SEC requires connectivity and automated execution, an opt out becomes less necessary. The STA cautiously favors a limited opt out exemption if the Commission moves forward with a trade-through rule. In this case, there may be certain instances that require an opt out for specific types of trades, such as large block or volume weighted average price (VWAP) trades.

Importantly, rather than the proposed varying de minimis amount at which a trade-through can occur, there should be no limit placed on trading through a manual market.

*Market Data*

There are substantial problems regarding the allocation of market data revenues that need to be addressed. While we are not in a position to comment on the details of the precise formula proposed for distribution of market data revenues, the STA supports the allocation of market data revenues to reward providing quality quotes that are tradable and improve price discovery and the NBBO. The formula should only reward automated quotes accessible for trading, rather than inaccessible quotes of manual markets. In addition, the formula should not reward a market's quote-related revenue share if it has a high ratio of quote changes to actual prints. We recommend that the Commission reconsider its proposed market data revenue formula, possibly by creating an industry working group, to take into account these and other factors to reward price discovery.

**Conclusion**

Proposed Regulation NMS, with appropriate modifications, is a much needed step toward achieving the objectives of the national market system set forth by Congress in 1975. The STA recommends a phased implementation of a connectivity-based approach mandating automated access to quotations on market neutral terms. Only then should the Commission proceed with a trade-through rule across all markets.

The STA appreciates the Committee's oversight role and interest in promoting efficient, competitive and fair U.S. markets. On behalf of the individual members of the STA, I thank you for the opportunity to participate in this important dialogue.

---

## PREPARED STATEMENT OF CHARLES LEVEN

VICE PRESIDENT, BOARD GOVERNANCE

CHAIR, BOARD OF DIRECTORS, AARP

JULY 22, 2004

Good morning Chairman Shelby, Ranking Member Sarbanes, and Members of the Committee on Banking, Housing and Urban Affairs. My name is Charles Leven. I am AARP Vice President for Board Governance and Chair of our Board of Directors. I appreciate this opportunity to testify on our shared interest in, and concern for, the maintenance of a "fair and orderly" national equity marketplace.

Since the creation of the national market system (NMS) in 1975, registered exchanges and national associations have been required to publish immediately the details of almost all trades, and also the best quotes, for most securities.[1] Over the

[1] The national market system (NMS) came into existence in the United States as an explicit public policy objective in the form of a 1975 set of Amendments to the Securities Exchange Act (SEA) of 1934. The NMS Amendments established as a purpose of the SEA the need to "remove impediments to and perfect the mechanisms of a national market system for securities," and

years this policy has been extended, by enlarging the range of securities for which transparency is obligatory, and by widening the types of trading systems required to publish price and quote information. Full price and quote transparency is fundamental to effectively regulating exchanges and markets, enhancing investor protection, competition, fairness, market efficiency, liquidity, market integrity, and investor confidence.[2] We believe that when ordinary investors think or speak of the stock market it is the NMS that is being assumed, if not directly referenced or understood.[3]

Clearly, the securities markets are an important national asset which must be preserved and strengthened. The proposals under consideration by the U.S. Securities and Exchange Commission (SEC) to enhance and modernize the regulatory structure of the NMS are both important and fundamental.[4] And we believe that a stable but robust NMS is fundamental to our national economy, the financial well-being and economic security of the investing public, as well as for the business vitality of the market.

**Survey Findings**

My remarks today summarize the views collected from a 2004 AARP survey of individual investors toward selected stock market conditions and practices.[5] It was conducted to examine investor perceptions of selected securities industry practices, the stock market, and financial services professionals. This survey did not attempt to focus on the technical aspects of NMS rules and institutions that have been created to deliver and maintain an operational national market system.

*Best Available Price vs. Speed*

We understand the importance of the debate over the fate of the so-called "trade-through" rule.[6] The challenge of finding a market mechanism that will maximize the probability that the NMS will secure the best available price per transaction (for the individual as well as for the institutional investor) in a given time frame is a difficult one. Credible arguments and research have been advanced that call for no change, an opt out provision, or total elimination of the existing rule. We believe most stakeholders in the issue will agree that—however the "trade-through" conundrum is addressed—it will likely have a profound financial impact on the different market centers. Ultimately, it will also have an impact on public confidence, based upon perceptions of market credibility and fairness.

Our 2004 investor survey did not ask respondents to assess the role that the concept of "certainty" would play in their determination of what would be the best price

---

directed the Securities and Exchange Commission (SEC) to "facilitate the establishment of that system."

[2] Core expectations for the mandatory transparency called for by the NMS are outlined in SEC (1/1/94: IV–1 to IV–5), and release No. 34–37619 (29/8/1996).

[3] The 1975 NMS Amendments directs the SEC, "having due regard for the public interest, the protection of investors, and the maintenance of fair and orderly markets, to use its authority . . . to facilitate the establishment of a national market system for securities." The SEC identified in 1978 a number of market reforms necessary for the establishment of the NMS and has subsequently promulgated a number of rules and developed key institutions to implement the NMS goals.

Among the key rules are those that relate to: Dissemination of price and quote information; improving the handling and execution of customer orders by broker and dealers; and displaying price and volume data of the most recent transaction from all reporting market centers.

Three key institutions were developed to bring about the NMS: The Consolidated Quotation System (CSQ), that is a mechanism for making available to data vendors information about the bid and offer quotations and associated volumes; the Consolidated Tape Association (CTA), that was established to consolidate the last sale reporting of all trades in exchange listed securities; and the Intermarket Trading System (ITS), that is an intermarket communications linkage.

[4] See the proposed rule for regulation of NMS, U.S. Securities and Exchange Commission [Release No. 34–49325; File No. S7–10–04]. The Commission is proposing changes that would affect NMS participant trade-throughs, market access to quotations and execution orders, minimum market pricing increments, and plans for disseminating market information to the public.

[5] A copy of the full report, "Investor Perceptions and Preferences Toward Selected Stock Market Conditions and Practices: An AARP Survey of Stock Owners Ages 50 and Older", published March 2004, is available at: *http://research.aarp.org.* See Appendices A and B: Conducted from February 13 to February 20, 2004, the survey was fielded to panel members who met each of the following criteria: (i) are age 50 or older, (ii) own stocks, either as individual stocks or in mutual funds, and (iii) have primary or joint responsibility for making household financial investment decisions. A total of 1,917 households participated in the survey.

[6] Technically, a "trade-through" occurs when a participant either buys a security at a higher price than the lowest offer quoted among participating markets, or sells a security at a lower price than the highest bid quoted amount the participating markets. The SEC is proposing a uniform trade-through rule for both exchange (for example, NYSE) listed and Nasdaq-listed securities.

available. However, we did ask respondents to weigh their preference for obtaining best price against circumstances that might warrant consideration of other trading criteria and options, that is, speed, fees, and confidentiality.

When presented with two opposing views related to the importance of obtaining the best available stock price versus the importance of other issues *such as speed* of transaction, approximately two-thirds (66 percent) of respondents indicated that they agreed with the view stating that best available price should be the top priority when conducting transactions.

### Best Available Price vs. Speed

(n=1,917)

| | |
|---|---|
| View A: Best available price should be top priority | 66 percent |
| View B: Important to balance need for price with speed and other issues | 31 percent |
| Refused to answer | 3 percent |

Certain individuals, such as those who conduct few transactions per year, women, those who are older, those with lower incomes, and those with less education were more likely to feel that best available price should be a top priority. Likelihood to agree with View A (best price) did not vary based on any of the other demographic variables tested, including race, employment status, and martial status.

When asked how strongly they agreed with their selection, close to three in four (74 percent) respondents indicated that they *somewhat* agreed. Approximately one in four (26 percent) indicated that they *strongly* agreed. Those who felt that best price should be the top priority ("View A" supporters) and those who felt that the need for best price should be balanced with speed and other issues ("View B" supporters) were equally likely to indicate that they *strongly* agreed with their respective viewpoints. Specifically, among View A supporters, 74 percent indicated that they *somewhat* agreed with View A, while only 26 percent indicated that they *strongly* agreed. Similarly, among View B supporters, 74 percent indicated that they *somewhat* agreed with View B, while only 26 percent *strongly* agreed with View B.

When those respondents who selected View A were asked if there were any circumstances under which best available price would not be their highest priority, almost half (48 percent) said that best available price would not be their top priority if obtaining the best price meant that they would have to pay high fees. Another 41 percent pointed to the need to conduct transactions quickly. Close to one in six (17 percent) reported that best available price would always be their highest priority.

### When Price Would Not Be the Top Priority for "View A" Supporters

(n=1,274)

| | |
|---|---|
| If getting the best available price meant I would have to pay high fees | 48 percent |
| If I needed to buy or sell shares quickly | 41 percent |
| If I wanted to complete the transaction on the Internet rather than go through a stockbroker | 11 percent |
| Other (specify) | 2 percent |
| Under no circumstances | 17 percent |

Of all respondents, more than eight in ten (86 percent) agreed that their stock broker or mutual fund manager should notify them before completing a transaction in which best available price is not the top priority.

*Important Considerations When Investing in Mutual Funds or Individual Stocks*

When respondents were asked to rate the importance of price, fees, speed, and confidentiality, the cost-related issues of price and fees received significantly more *very important* ratings than did speed and confidentiality. Between 70 percent and 80 percent of respondents perceived price and fees to be *very important* in both mutual fund transactions and individual stock transactions. Approximately 60 percent

perceived confidentiality to be *very important,* while fewer than 30 percent perceived speed to be *very important.*

*Confidence in Financial Services Professionals*

The majority of respondents (74 percent) reported that they prefer to have others manage their investments for them, although they do like to be involved in major investment decisions. In fact, close to two in three (66 percent) indicated that they rely on either a personal broker/financial advisor, an employer-sponsored broker/financial advisor, or a banker when making investment decisions.

## Confidence in Financial Services Professionals

(n=1,917)

| | Strongly agree (percent) | Somewhat agree (percent) | Strongly or Somewhat agree (percent) |
|---|---|---|---|
| I am confident that the financial institutions that handle my money manage my accounts according to what is in my best interests .............................. | 24 | 52 | 76 |
| I have more confidence in the abilities of mutual fund managers than I have in my ability ............ | 32 | 44 | 76 |
| I prefer to have others manage my investments for me, but I like to be involved in major .................. | 35 | 39 | 74 |
| I have more confidence in the abilities of stock brokers than I have in my ability to buy and sell individual stocks on my own .................................... | 30 | 42 | 72 |
| I prefer to make investment decisions on my own without the assistance of others ........................... | 9 | 28 | 37 |
| I am confident in my ability to buy and sell individual stocks without the assistance of stock brokers .......................................................................... | 9 | 24 | 33 |

While investor reliance on financial services professionals may stem in part from a desire to reduce demands on their own time, most investors appear to lack confidence in their ability to conduct trades and make investment decisions without the assistance of financial services professionals. Specifically, close to three in four respondents (72–76 percent) have more confidence in the abilities of mutual fund managers or stock brokers to conduct transactions for them than they have in their own abilities to conduct transactions. In contrast, only one in three (33 percent) are confident in their own ability to buy and sell individual stocks without the assistance of stock brokers.

Subsequent sections of the survey reveal widespread concerns about the securities industry on issues such as a lack of ethics and a lack of accountability, although most respondents (76 percent) indicate that they are at least somewhat confident (only 24 percent are strongly confident) that "the financial institutions that handle my money manage my accounts according to what is in my best interest." This apparent contradiction may reflect differences in interpretations of the terms "financial institutions" and "securities industry" as it is likely that the term "securities industry" brings to mind entities, such as brokerage firms, mutual fund firms, and stock exchanges, whose primary functions involve trading stocks. In contrast, it is likely that respondents interpret "financial institutions" more broadly to include banks, which are likely to be perceived as separate from the securities industry. Another possibility is that respondents are more confident about their *own* banks and investment firms than they are about the industry as a whole, which may contribute to this relatively high level of confidence in institutions that "handle my money."

*Concerns and Worries About the Stock Market*

Fear of losing money (63 percent), lack of ethics (61 percent), and general concerns about the state of the economy (55 percent) top the list of respondent concerns about the stock market. More than half of respondents selected these items when asked to select from a list of eight possible concerns. In contrast, fewer than one

in three (29 percent) are concerned about the impact of future terrorist attacks on the stock market.

## Concerns and Worries About the Stock Market *

(n=1,917)

| | |
|---|---|
| Fear of losing money | 63 percent |
| Lack of ethics in the marketplace | 61 percent |
| The state of the economy | 55 percent |
| Significant stock market declines | 46 percent |
| Accuracy of published financial statements | 38 percent |
| Lack of confidence in the stock market generally | 31 percent |
| Fear that future terrorist attacks may cause | 39 percent |
| No concerns | 4 percent |
| Other (specify) | 3 percent |

* Multiple responses accepted.

*Problems for the Securities Industry*

Negative perceptions of the industry run wide and deep. Dishonesty (62 percent), lack of accountability (62 percent), and lack of consumer protection and means of recourse for harmed investors (60 percent) are those issues respondents are most likely to view as "big problems" for the industry. Over half view insider trading (57 percent) and lack of internal controls and checks (52 percent) as "big problems."

## Problems for the Securities Industry

(n=1,917)

| | Big problem (percent) | Small problem (percent) | Not a problem (percent) | Don't know/Refused (percent) |
|---|---|---|---|---|
| Dishonesty | 62 | 28 | 2 | 8 |
| Lack of accountability | 62 | 25 | 3 | 10 |
| Lack of consumer protection and means of recourse for harmed investors | 60 | 27 | 3 | 11 |
| Insider trading | 57 | 30 | 2 | 11 |
| Lack of internal controls and checks | 52 | 28 | 4 | 15 |
| The poor economy | 47 | 33 | 11 | 8 |
| Insufficient disclosure of risks to investors | 46 | 33 | 9 | 12 |
| Lack of confidence from the public | 44 | 39 | 6 | 12 |
| Incompetent fund managers | 44 | 39 | 5 | 12 |
| Incompetent brokers | 42 | 41 | 4 | 13 |

## Problems for the Securities Industry—Continued

(n=1,917)

| | Big problem (percent) | Small problem (percent) | Not a problem (percent) | Don't know/Refused (percent) |
|---|---|---|---|---|
| Conflict of interest between fund managers and fund shareholders ............ | 42 | 34 | 6 | 18 |
| Transaction fees that are too high ............. | 42 | 40 | 7 | 13 |
| Conflict of interest between brokers and shareholders ............ | 40 | 37 | 7 | 21 |
| Conflict of interest between fund board of directors and fund managers ................. | 40 | 32 | 5 | 23 |
| Market volatility ......... | 31 | 43 | 13 | 13 |

*Need for Changes in Regulations*

Of all respondents, close to eight in ten (78 percent) feel that the regulation of the securities industry should be stronger than it is today. One in three (33 percent) feel that it should be *much* stronger, while 45 percent feel that it should be *somewhat* stronger. Only 1 percent feel that it should be looser. Approximately one in five (21 percent) report that they *do not know* whether regulation of the industry should be stronger or looser than it is today.

## Should Regulation of the Securities Industry be . . . ?

(n=1,917)

| | |
|---|---|
| Much stronger ........................................................................................................ | 33 percent |
| Somewhat stronger ................................................................................................ | 45 percent |
| Somewhat looser .................................................................................................... | 1 percent |
| Much looser ............................................................................................................ | 0 percent |
| Don't know ............................................................................................................. | 21 percent |
| Refused ................................................................................................................... | 1 percent |

**Conclusion**

Our 2004 survey of 50 and older investors was conducted in order to examine perceptions of selected securities industry practices, the stock market, and financial services professionals. Our survey reveals that most investors feel that the cost-related issues of price per share and fees are more important in stock transactions than are other issues such as speed of transaction. Findings also reveal widespread concerns among investors related to dishonesty in the securities industry, lack of ethics, lack of accountability, and lack of consumer protection, suggesting that much remains to be done to restore investor confidence.

As difficult as it is to enact and promulgate corrective legislation and regulation, it will take additional time to arrest investor anxiety, to restore public confidence in the industry, and to measure the consequences of efforts to modernize the NMS structure. We believe that the SEC has taken a number of concrete steps to address a range of market performance issues that had been neglected in recent years. But additional prudent steps are clearly needed.

I would be happy to answer any questions you may have.