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Mr. Jonathan G. Katz, Secretary
Securities and Exchange Commission
450 Fifth Street NW
Washington, DC 20549-0609
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File No. S7-10-04

Dear Mr. Katz:

Here are my comments on the repropoed Regulation NMS. As I have already commented twice on this proposal, I will keep my comments short. In brief:

- The proposed rule is still extremely vague. No one really knows what the impact will be because it is so vague. It will take years of multiple rule filings and a lot of Commission resources to sort out the details.
- The one-second standard implied in the release is way too long for one market to stop and wait for a response from another market.
- The Commission is basing its proposal on a flawed estimation of the current rate of trade-throughs and their economic impact.
- If you MUST impose such a new rule, then follow the Commission's excellent example from Reg SHO and do it with a one-year pilot with well-chosen controls. Then examine the results of the pilot to see if it is worth continuing the new rule.
- Not allowing an opt-out subverts the basic economic freedom to choose one's trading partners and may stifle future innovation in trading systems that use different technologies from the limit-order market envisioned in the release.
- The limit on access fees is better than we have now, but you should have just banned them entirely.
- Banning sub-pennies is a good idea. However, the \$.0001 minimum tick for stocks less than \$1.00 might be too large for some very low priced stocks.

My detailed comments are attached.

Sincerely,

James J. Angel

Comments on the repropoed rules by

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Trade-through rule

Well, the Commission and its staff mean well. From a distance, the trade-through rule seems to make intuitive sense. Who could be against a rule that says that all investors have to get the “best” price? However, upon closer examination, the rule as proposed will do little, if any, to improve the quality of trade execution in the U.S. The costs of implementation and the stifling of future innovations in trading systems far outweigh any potential benefits.

The proposed trade-through rule is still vague.

The repropoed rule calls upon competing SROs to develop rules to “reasonably” prevent trade-throughs. Although the discussion implies a system that would require routing of orders to other markets, this is not explicitly stated in the rule language itself. Given that the intent of this proposal is to make competing SROs work together to come up with a set of procedures, there is still a great deal of fleshing out to do. This rule could result in a gentle and innocuous practice in which the SRO rules require participants to check other automatic quotes before submitting an order, or it could result in a Rube Goldberg mess with all of the inflexibility and fragility of a hard CLOB.

As proposed, the rule will require numerous rule filings from the SROs, and years of intense fighting over the details. It is likely that the Commission staff will end up making numerous important decisions on the important micro-details of market structure with lots of unintended consequences that will take decades to understand and fix.

While the Commission may think that it has cleverly bypassed the issue of how long is too long for one market to respond another market’s order, the issue will not go away. The one second time limit discussed in the repropoed is far too long for a market to wait for another slow market to respond in today’s nanosecond markets. Given that orders often come one after another, a one second rule could effectively shut down the entire market for many seconds or even minutes at a time as each order that arrives is routed out and waits for a response.

The justification for the rule is weak.

It should be noted that this rule made it onto the regulatory agenda not because of an investor outcry against trade throughs, but mainly because the ECNs felt the old trade-through rule stifled competition. I find it odd that the result is a proposal to extend an outdated rule into areas where it is not needed.

One justification for the rule is the allegedly high rate of trade-throughs that are presently occurring. However, I believe that the reproposal's analysis of the current rate of trade throughs is misleading for several reasons. The first is that the discussion in the reproposing release focuses on trade-through rates that include trades larger than the quoted size. This is clearly in error. Even in a hard CLOB environment, orders larger than the inside quote would still "trade through" the inside quote in effect at the time the order was received.

Second, the reproposing release relies upon statistics generated in today's market with manual markets and stale quotes. When stale quotes continue to be disseminated, other traders rightly trade right through them. Although the staff rightly excluded the manual quotes from the Amex, which are a major source of pseudo-trade throughs, practitioners often complain about stale and inaccessible quotes from other markets as well. If the Commission staff had been able to study only trade-throughs of truly accessible quotes, it would undoubtedly have found a much lower rate of trade-throughs. Indeed, the staff analysis points out that ArcaEx, which goes to great lengths to avoid trade throughs, still has a significant trade-through rate when measured using the staff's methodology. I think that this demonstrates the weakness of the staff's methodology more than a weakness with ArcaEx.

The third reason the analysis may be flawed is the flickering quote problem to which the reproposal itself also refers. **With multiple quote updates per second, it is often impossible with current available data to tell with certainty what the best quote really was at a given time and location in the past.** Current NASD clock synchronization rules only require clocks to be within 3 seconds of a standard time source. Current trade reporting rules permit up to 90 seconds to report trades. Communication systems add a variable lag on top of that. Thus, one usually cannot definitively prove that a given trade was inferior to the best quote information available in a market at the particular time the trade was actually executed.

Indeed, it is well known among microstructure academics that in the past there have been major clock synchronization problems in the TAQ and NASTRAQ data. This is the source of data that the staff used for the study. The trade and quote data are usually generated from different clocks that in the past have been out of synch with each other. Indeed, the staff notes that on some occasions the reported trade time occurred after the time the trade report was received! The Commission staff valiantly tries to deal with this problem by looking at various time windows of up to eight seconds around trades. However, most of the tables look only at a three second window. Even an eight second

window is too small given clock synchronization errors, queues that occur when computer and communication systems are running at capacity, and trade reporting lags of up to 90 seconds.

The fourth reason that the analysis may be flawed involves the seemingly high rate of trade-throughs for large block trades. Many large block trades are assembled over time and then printed to the tape at an average price when the block has been assembled. This price could well look like a trade-through, even all of the pieces of the trade were within the BBO when they were originally made.

Another reason to believe that the Commission is overestimating the extent of the trade-through problem is that, under the current trade-through rule for exchange-listed stocks, investors who have been traded through can complain and get their order filled at the correct price. While unsophisticated retail investors might not be expected to complain, large blocks (which represent the bulk of the alleged trade-throughs) are presumably traded by sophisticated investors who complain quickly and loudly if they get a bad fill. One would expect to hear much more howling within the ITS system on a daily basis from institutional investors if the real trade-through rate were as high as alleged in the reproposing release.

Failing to correct for inaccessible stale quotes, clock synchronization problems, and trade reporting practices would lead to a significant overestimation of the extent of trade-throughs that would occur in fully automated markets, and thus a significant overestimation of the benefits of the proposed rule.

The analysis in the proposal of benefits also overstates the benefits of eliminating alleged trade throughs by estimating a reduction in trading costs that would occur. However, trading is for the most part a zero-sum game. If a trade through affects the price by one cent (the typical size of the trade-through in the study), the change in price is random noise that sometimes benefits and sometimes disadvantages a particular investor. If a mutual fund's order on one automatic market is traded through by another mutual fund's order on another automatic market, one cannot say that mutual fund investors as a whole have been harmed by the trade through. It is only if one class of investors systematically loses out to another class as a result of trade-throughs that there is a problem, and there has been no evidence thus far that this is actually occurring.

The reproposing release implies that some broker-dealers may not be living up to their duty of best execution. *If this is the case, then the Commission should take enforcement actions against such broker-dealers rather than impose an unwieldy and unnecessary rule on the entire market.*

The rule lacks a dispute resolution mechanism.

This rule as proposed absolutely needs a real-time dispute resolution structure which is currently lacking. Competing markets will be quick to blame other markets for alleged

trade throughs. Since many of the markets are SROs in their own right, there needs to be a fast and efficient process to resolve disputes between SROs.

Opt-out elimination may stifle innovation.

The proposal does not adequately justify why investors should not be able to opt out of the rule. Indeed, if we existed in a world where the market mechanism was only an electronic limit order book, no one would ever want to opt out. However, trading -- and especially institutional trading -- is far more complex than just matching traditional limit orders. In recent years a number of new trading systems have been introduced. Some have succeeded, and some have not. Many more are under development. Indeed, such development is badly needed because generic limit order matching systems are often rather inadequate for meeting the needs of block traders. While it is not possible to contemplate all of the possible future trading technologies that could be developed, such technologies could be hampered if market participants were not allowed to opt out of older trading systems.

By adding inflexible rules that prohibit investors from trading (or not trading) as they see fit, the opt-out elimination could stifle future innovation in trading systems.

Something this complex needs a pilot experiment.

However, if the Commission MUST impose such an unnecessary rule with potentially far reaching side effects, at least it should have the common sense to do a pilot experiment first and then analyze the results. The Commission did an excellent job designing the SHO pilot, and should do a similar pilot on stocks to be included under the new trade-through rule for the proposed NMS.

Access fees should be replaced with a “chooser pays” rule.

The limit of \$.003 in the reproposal is not as good as the *de minimis* limit in the original proposal. The basic problem with access fees is that the investor who accesses a posted quote has no power to choose the trading venue or negotiate over the size of the access fee. Indeed, investors are not even allowed to opt out of trading with a particular system under the reproposal!

It is the party that puts the original order into the system that is choosing the execution venue. A system that charges higher than needed fees to those who access a posted quote on that system and then rebates part of that to the entity that posted the quote creates perverse incentives for trading platforms to charge extremely high fees.

As such, it is economically efficient for the chooser to pay the fee for the operation of the system. A “chooser pays” rule should replace access fees.

The \$.0001 tick size for penny stocks may be too big for some subpenny stocks.

Finally, I have a technical comment on the proposal on subpennies. Banning subpennies is a good idea for all the reasons previously described. However, the wording of the proposed rule also imposes a minimum tick size of \$.0001 on stocks less than \$1.00. (The rule is unclear whether the \$1.00 is a bid price, last trade, or other price.) While it is not clear to me whether OTCBB stocks will be covered under these rules at this time, they may well be at some time in the future. There are many “subpenny” stocks on the OTCBB that trade at prices close to or less than \$.0001. Imposing a high minimum tick for stocks in this price category may adversely affect trading in those stocks. I suggest leaving the \$.0001 out of the rule and leaving it up to the operator of the OTCBB to determine what tick rules should apply for subpenny stocks.