Exploring the Hidden Costs of Price Improvement

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Many "marketable" retail orders receive price improvement from OTC market makers and indeed, retail commissions are substantially lower than they were 10 years ago. Still, I'm not so sure the retail investor is better off. Hidden costs associated with price improvement and cheap commissions add up quickly and can wipe out any gains.

The question of how the retail investor is faring in today's marketplace emerged on TabbForum recently when Michael Masone, Legal Counsel - Equities Division at Citigroup, wrote about the Securities and Exchange Commission's concept "Trade-at" rule, in his article "Trade-at Rule: A Breadline on Restaurant Row? (http://www.tabbforum.com/opinions/trade-at-rule-a-breadline-on-restaurant-row)".

In the piece, Masone discusses how the trade-at rule would harm retail investors as fewer of their orders would receive price improvement and the rule would subject retail brokers to paying access fees that are attached to orders displayed on the exchanges. This could possibly drive commissions higher. So why would we want to impose such a rule? He argues that it has never been better to be a retail order, and why would we want to jeopardize that? To be sure the retail investor is better off, let's explore these hidden costs in a little more detail.

Many OTC market makers provide price improvement to "marketable" orders that are routed to them. This price improvement added up to $238 million in 2010 according to Masone. But this $238 million - a substantial total - was spread out over billions of shares. When calculated on a per-share basis, the price improvement adds up to only fractions of a cent. But Masone argues that fractions of a cent is better than no price improvement at all. I beg to differ.

Many times, OTC market makers will improve the price by only $.0001/share. In this instance, some simple math shows that an investor buying 100 shares of a $25 stock will receive price improvement of only 1 cent on their $2,500 order. Instead of paying $2,500, they pay $2,499.99. But this is quantifiable price improvement, and Masone argues that all these pennies add up. But at what expense?

The problem is when an OTC market maker is allowed to step in front of a displayed quotation to provide this nominal price improvement, a displayed liquidity providing participant does not receive a fill. So what if that retail investor decided to place a passive limit order instead of a market order? Are they still better off? This is where the problems begin.

Let's assume an investor places 99 market orders for 100 shares each, and receives that $.0001/share price improvement on 99 separate occasions. This is a total savings of $0.99 on his 99-100 share orders. But on the 100th order, the investor decides to place a passive limit order which rests on the exchange. In this instance the investor's order is not executed because an OTC market maker stepped in front of their order and provided

the $.0001 price improvement to the contra-side marketable order that would have executed against the investor's passive limit order. In this case, the retail investor has an unquantifiable loss, the loss of missing the execution.

As a professional trader, I know the loss from lack of execution is partially quantifiable because I could adjust my order and pay the spread when I see the sub-penny trade transact in front of me on the consolidated tape. If the spread is the minimum price variance (MPV) of $0.01, I have a quantifiable loss of $1.00 on this one single trade, from being forced to pay the spread.

But let's assume for argument's sake that this retail investor was savvy and realized that they too needed to pay the spread. Again, if the spread is the MPV of $0.01, the retail investor has a quantifiable loss of $1.00 on this one single trade. So to sum up, the investor placed 100 orders, 99 times they received price improvement and one time they placed a passive limit order, missing an execution, and in this one instance they lose the entire gain they made on the other 99 orders that they were price improved on. So they are still worse off, and that's assuming the displayed spread is only $0.01!

Unfortunately not all retail investors are that savvy. I mean can we really expect a retail investor with a regular 9-5 job, to log onto their trading platform, watch the consolidated tape and adjust their passive orders every time an OTC market maker steps in front of them? That is unrealistic. So in many cases this loss is unquantifiable as they may never get filled. What's worse is the retail investor may never even know that they could have been filled!

So maybe, that $.0001 price improvement does not justify the unquantifiable cost to that retail investor that places passive limit orders and misses the odd execution. This is what the trade-at rule tries to address. If the trade-at rule was imposed, there would be a minimum amount of acceptable price improvement for an OTC market maker to internalize an order. The CFTC-SEC Joint Advisory Committee made a recommendation of $.005. In this case the savings to the retail investor placing market orders is a bit more substantive. Is it enough to justify the unquantifiable loss to the displayed liquidity provider from lack of execution? I'm not sure, but it's better than $.0001, or nothing at all.

But there's another part to the equation: access fees. Most passive limit orders resting on an exchange have access fees attached to them. If a retail broker such as TD Ameritrade was forced to route more of their marketable order flow to these exchanges, they would be forced to pay more access fees, which could drive commissions higher. That's why the trade-at rule should only apply to quotations that have no access fees, or inverted maker/taker models.

Several exchanges already offer an inverted structure, including CBSX and Nasdaq's Boston exchange. So it would be just a simple matter of applying the trade-at protection to these trading centers. Some will argue over who will provide liquidity on these exchanges when they have to actually pay to provide? Three hundred traders in our firm

would argue that paying $.0018 to be executed on the bid or offer is better than paying a full cent when you have to pay the spread.

But the underlying question remains: Is a trade-at rule really necessary? I mean May 6th aside, spreads have never been tighter and liquidity never deeper, right? This may be true of the most highly traded US securities, typically stocks making up the S&P 500 index. But there are more than 10,000 other listed issues and many of these stocks have large bid-ask spreads. We would argue that the spreads on many of these issues are actually widening. Is the fact that internalization rates are higher than 50% on many of these issues a coincidence? Let's consider another real life example.

Imagine going to an auction, and being the highest bidder. The auctioneer says "SOLD", you go up to claim your item, and the auctioneer informs you, "I'm sorry, but we have the right to match or beat any price, and we chose in this instance to beat your winning $100 bid by one cent. The seller received an extra penny."

What do you think would happen in that auction room? After a few items were auctioned off, everyone would leave. They would realize the only time they would get the item was when they over-paid, or the auctioneer didn't want it. What incentive is there to bid for an item when there is a privileged participant that can beat your price at the moment it's about to be sold to you. You don't even get a chance to beat them back. If everyone leaves, the auctioneer can now bid whatever they want and they could get some really sweet deals. But is that really good for the seller?

This is what our equity markets are starting to become. Nobody is willing to display orders when an OTC market maker can simply match their price or beat it by a few sub-pennies at the moment their order is about to be executed. As more and more displayed liquidity providers become discouraged from this lack of execution, they place less passive limit orders. With less passive limit orders we become susceptible to liquidity crises like we had on May 6th.

So perhaps we shouldn't jump at the conclusion that the trade-at rule would harm the retail investor. Perhaps the hurdles to impose such a rule aren't as high as some commenters (with serious conflicts of interest) would like us to believe. Perhaps we should explore this rule that would give execution priority back to the NBBO, putting it on a first-come, first-served basis. I always thought auctions worked best when the item went to a participant who actually participated in the auction. Is that really bad for the retail investor?