

INTERACTIVE BROKERS GROUP
ONE PICKWICK PLAZA
GREENWICH, CONNECTICUT 06830
TEL (203) 61(1-5800 • FAX: (203)61B-7731

Thomas Peterffy
Chairman

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Via Email & Federal Express

Stephen Luparello
Director, Division of Trading and Markets
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

**Re: Interactive Brokers Group Proposal to Address High Frequency
Trading**

Dear Mr. Luparello:

At Interactive Brokers we feel that the controversy regarding High Frequency Trading ("HFT") and market structure is generating mistrust in the markets and reducing participation by public investors. It is critical that the Commission resolve the issue quickly.

Whether HFTs abuse markets or strengthen them is an impossible question to answer because HFTs do both. A solution is required that both retains HFT participation to the extent it is productive (i.e., to the extent it adds liquidity and facilitates price discovery) but yet eliminates abusive HFT trading. We must end the unproductive technology arms race, which both discourages market participation and increases costs for investors. To make markets more stable and liquid, the Commission should encourage investors and liquidity providers and discourage abusive ultra-short term strategies that are based solely on the ability to get an order to a market a few milliseconds faster than others.

We would like to recommend that all U.S. equity and option trading venues be mandated to hold any order that would remove liquidity for a random period of time lasting between 10 and 200 milliseconds before releasing it to the matching engine.

Why a Minimum 10 Millisecond Delay in Processing Liquidity-Removing Orders?

Slowing down liquidity-removing orders for a minimum of 10 milliseconds would reduce the occurrence of price spikes, "mini-crashes" and runaway markets, because liquidity-

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providing systems would have more opportunity to intercede. More importantly, a minimum 10 millisecond delay would encourage the providers of liquidity to do so because they would know that they will have time to adjust their quotes following sudden events. Accordingly, they could provide liquidity in much greater size with less chance of getting scalped by HFTs.

Why Randomize the Delay?

If the delay in processing liquidity-taking orders was not randomized (e.g., if it were fixed at 80 milliseconds or some other duration), the first person sending out an order would trade first, no matter how long the delay is. Thus HFTs would still have all the advantages that they currently have compared to other liquidity takers.

On the other hand, with a *random* delay of 10 to 200 milliseconds, ultra-fast HFTs could not with any certainty rely on being able to hit or lift displayed bids or offers faster than somewhat slower participants, and therefore HFTs would have much less incentive to engage in strategies that have no investment purpose except to jump ahead of others by a few milliseconds.

Why Should the Random Delay Range from 10 to 200 Milliseconds?

200 milliseconds is one fifth of a second -- half the blink of an eye -- and about the longest time still not noticeable by humans. Thus, liquidity-removing orders could be delayed randomly for between 10 and 200 milliseconds without an evident slowing of the markets. And since the delay would be at most 200 milliseconds, brokerage firms and liquidity providers would still have to maintain reasonably fast and technologically up-to-date systems. *ie.*, the markets would retain the speed and efficiency that they have gained from electronic trading (and the protection from manual handling errors and fraud) and yet the millisecond-level gaming of the system would cease.¹

If HFT "A" is faster than Mutual Fund "B" by X milliseconds, it is possible to calculate how likely it is for A to trade before B under the existing system and under the above proposal:

¹The rule implementing this proposal would also need to include a requirement that exchanges and broker-dealers implement surveillance programs to detect and prevent customers from sending in multiple, duplicative liquidity-removing orders for the sole purpose of trying to get an advantageous position in the randomized execution queue (*e.g.*, an HFT wishing to trade 1000 shares sends in 500 orders of 100 shares each so that a few of the orders end up at the front of the random queue. After execution of 10 orders for 100 shares each, the HFT cancels the remaining 490).

Milliseconds by Which HFT A's Systems are Faster than Mutual Fund B's Systems (or B's Broker's Systems)	Percentage of Time HFT A Will Trade Ahead of Mutual Fund B Under Current Market Structure	Percentage of Time HFT A Will Trade Ahead of Mutual Fund B if Both Orders Are Randomly Delayed from 10 ms. to 200 ms.
1 ms. faster	100%	50.5%
2 ms. faster	100%	51%
3 ms. faster	100%	51.6%
4 ms. faster	100%	52.1%
5 ms. faster	100%	52.6%
10 ms. faster	100%	55.1%
50 ms. faster	100%	72.9
190 ms. faster	100%	100%

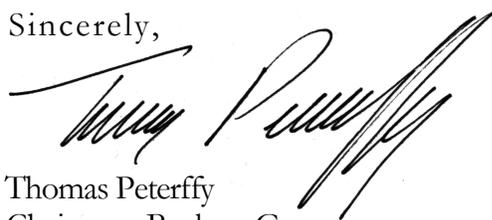
As the table above illustrates, with a random delay in processing liquidity-taking orders there will still be a slight advantage to having faster systems but it will be greatly reduced and HFT front-running strategies will be seriously impaired. Spending enormous sums of money to gain a 2 or 3 millisecond advantage would be eliminated. For example, even if an HFT's systems were 10 milliseconds faster than a mutual fund trying to do the same trade, the HFT would only trade ahead of the mutual fund around 55% of the time (rather than 100% of the time as in the current market structure). Under the proposal set forth herein, brokers for retail and institutional customers will simply have to make sure that their systems are within 10 or 20 milliseconds as fast as HFT systems. This is already the case and it is reasonable to expect this going forward (the fastest systems can go no lower than 0).

* * *

A delay in processing liquidity-taking orders from 10 to 200 milliseconds would protect liquidity providers from abuse and encourage them to quote in greater size, it would eliminate or reduce price spikes and mini-crashes, and it would restore investor confidence that their orders are not being front run by hyper-fast HFT systems. It would also eliminate the costly technology arms race, in which hundreds of millions of dollars are spent to gain a few milliseconds of speed. Those technology costs are borne by investors in the form of wider spreads, execution price slippage and higher commissions.

I would be happy to discuss this proposal with you at your convenience if that is helpful.

Sincerely,



Thomas Peterffy
Chairman, Brokers Group

cc: Mary Jo White, Chair
Luis A. Aguilar, Commissioner
Daniel M. Gallagher, Commissioner
Kara M. Stein, Commissioner
Michael S. Piwowar, Commissioner