September 4, 2015

Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington DC

Re: Release No. 34-75693, File No. SR-BATS-2015-57, Notice of Filing of a Proposed Rule Change, as modified by Amendment No. 1 Thereto, to Adopt New Rule 8.17 to Provide a Process for an Expedited Suspension Proceeding and Rule 12.15 to Prohibit Layering and Spoofing on BATS Exchange, Inc.

Dear Mr. Fields:

Thank you for the chance to comment on the above noted filing ("Filing"). My comments have to do with the definitions of "spoofing" and "layering" in the Filing's Rule 12.15 Interpretations and Policies. The definitions are much too narrow and are far more prescriptive than definitions of these abuses BATS provided in its Statement of Purpose for the Filing and in an enforcement action as recently as last April. It's also a mystery why BATS plans to expedite action against spoofers and layerers but not against customers engaged in other violative conduct like marking the close or wash trading. While there have been egregious cases of spoofing and layering in recent years, there have also been obvious and egregious cases of price manipulation.

Not only should we wonder why BATS suddenly needs authority for "prompt action" solely against spoofers and layerers, we should wonder why BATS defines these abuses as slenderly as it does. BATS writes "there are certain obvious and uncomplicated cases of disruptive and manipulative behavior or cases where the potential harm to investors is so large" it should be able to act quickly, which is surely also true for other violative conduct, but doesn't explain why it needs this authority exclusively for spoofing and layering or why it defines these abuses so paper-thin. Perversely, in being so specific, the definitions give spoofers and layerers a roadmap around exchange surveillance, and a near-perfect defense if they're somehow roped into an enforcement action. The filing is so helpful in this way scoundrels everywhere must be hoping for BATS to publish all its detailed surveillance specifications, so that not only will spoofers know how to avoid scrutiny, but anyone interested in marking the close, manipulating prices, and flooding markets with wash trades can join the fun. In those rare cases regulators pull the plug on an abusive trading practice, the industry's response so often is to keep doing whatever it's doing but to tweak its behavior to evade sanction. That is by and large what the financial services regulatory bar does. BATS seems determined to make it even easier.

And as time goes by, if any other exchanges adopt this language against spoofing and layering - there's good reason to believe they will - BATS will have written into law very narrow definitions of "spoofing" and "layering" without discussion. A skeptic might even wonder if that's the point. The press is already speculating NYSE and Nasdaq will follow suit with rule filings of their own, and no doubt they will adopt the same language.

Defining spoofing

In Dodd-Frank, Congress defines spoofing as:

> [B]idding or offering with the intent to cancel the bid or offer before execution

In the Hold Brothers order, the SEC defines spoofing as:

> [T]he use of non-bona fide orders, or orders that the trader does not intend to have executed, to induce others to buy or sell the security at a price not representative of actual supply and demand.

The CME defines spoofing as:

> A. No person shall enter or cause to be entered an order with the intent, at the time of order entry, to cancel the order before execution or to modify the order to avoid execution;
> B. No Person shall enter or cause to be entered an actionable or non-actionable message or messages with intent to mislead other market participants;

In April 2015 several exchanges, including BATS, issued enforcement settlements that define spoofing as follows:

> Generally, "spoofing" is a form of market manipulation that involves the market manipulator placing certain non-bona fide orders with the intention of cancelling those orders once they have triggered some type of market movement and/or response from other market participants, from which the market manipulator might benefit by trading certain other bona fide orders.

All these define spoofing or layering (collectively, "spoofing") as a matter of the spoofer's intent without detailing exactly where and how orders are placed or at what prices. But BATS upends these definitions and says spoofing is a very certain kind of act, apparently exclusive of any other act, and handily provides a step-by-step guide, a guide that almost certainly will be copied into other SRO rulebooks as well as into the defense counsel's arsenal of excuses.

Here's how BATS defines layering and spoofing in the Filing's Interpretations and Policies:

> .01 Layering. For purposes of this Rule, layering activity shall include a frequent pattern in which the following facts are present:
>
> > (a) a party enters multiple limit orders on one side of the market at various price levels (the “Layering Orders”); and
> >
> > (b) following the entry of the Layering Orders, the level of supply and demand for the security changes; and
> >
> > (c) the party enters one or more orders on the opposite side of the market of the Layering Orders (the “Contra-Side Orders”) that are subsequently executed; and

(d) following the execution of the Contra-Side Orders, the party cancels the Layering Orders.

.02 Spoofing. For purposes of this Rule, spoofing activity shall include a frequent pattern in which the following facts are present:

(a) a party narrows the spread for a security by placing an order inside the NBBO (the "Spoofing Order"); and

(b) the party then submits an order on the opposite side of the market ("Contra-Side Order") that executes against another market participant that joined the new inside market established by the Spoofing Order.

These are mostly remarkable for what they leave out. They exclude the case where a spoofer enters a single order priced away from the NBBO, and they exclude the case where a spoofer joins the current NBBO. One or both of these are tactics Navinder Singh Sarao deployed, which is pretty funny because BATS cites Sarao as one reason for its new rules. They also exclude the case where a spoofer sets a new inside bid or offer with size, the contra side fades, and the spoofer executes passively at the new contra price when other participants are spoofed into trading with him. Any of these tactics are "obvious and uncomplicated cases of disruptive and manipulative behavior" but the new rule leaves them out. We can only wonder why. Will spoofing now be defined as these two BATS use cases and only these two? As traders think up different ways to spoof the market, that's certainly what they or their counsel will argue if they're challenged. You can imagine the proceedings now - "In its rules, BATS *very specifically defines* spoofing as X, and my client didn't do X." But most important here, if BATS is serious about spoofing, it has much more work to do than offer up a few tropes, click send, and call it a day.

New information

Complaints about spoofing have intensified in recent years. A central narrative in Michael Lewis's *Flash Boys* is that spoofing is rampant in U.S. markets and regulators aren't doing enough to stop it. Critics say the high frequency trading market maker business model itself is little more than spoofing on a grand scale. A firm posts orders on multiple exchanges, and as soon as it's hit on one it races to cancel its orders on all the others. This is a recurrent storyline in *Flash Boys* and an admitted practice among HFT market makers. The market data and research firm Nanex documents it in exquisite detail.[1]

For an example of how commonly accepted the practice is among HFT firms, here's Remco Lenterman, at the time a senior executive of IMC[2] and the chairman of the FIA European Principal Traders Association ("FIA EPTA"), a lobby group:

[1] See the report "Perfect Pilfering," available on the Nanex website.

[2] IMC describes itself as "a leading market maker, active on over 100 exchanges, platforms and pools of liquidity around the world" and "a leading Designated Market Maker (DMM) on the New York Stock Exchange (NYSE) providing liquidity in over 600 NYSE listed securities."

The market makers say these practices help them avoid adverse selection, that when they're hit they've received some kind of "new information" that gives them license to cancel and re-price their orders on other exchanges. But the practice also leads to gross misjudgements of available liquidity in the lit markets, with investors, practitioners, and academics as victims.

Just what is the "new information" these HFT firms use to justify their business models? It's simply that one of their displayed orders has traded. Their argument seems to be that yes, of course, they have *bona fide* orders on all the exchanges they fully intend to trade, but whenever someone takes any of that liquidity they're shocked - *shocked!* - by the fact someone wants to take their displayed price and size they must speed to cancel their remaining orders. Of course it's completely predictable, and presumably desirable, someone will take their liquidity - that's why it's displayed in the first place, to attract a contra - so it's not clear at all what's *new* about the "new information" they receive when they trade at a price they say they're willing to trade at. It is, after all, something they presumably intend to happen, something they advertise to have happen, something they make money from, something they hope a contra will do, something at the heart of their business model. But when it happens it is apparently so surprising they must fly to cancel their outstanding quotes?

It's also a mystery how a firm can post *bona fide* orders on eight exchanges if it fully intends to cancel on seven of them when any one trades. That behavior sounds as if it easily falls within the spoofing definitions quoted earlier:

> [P]lacing certain non-bona fide orders with the intention of cancelling those orders once they have triggered some type of market movement and/or response from other market participants, from which the market manipulator might benefit by trading certain other bona fide orders.
>
> *or*
>
> [B]idding or offering with the intent to cancel the bid or offer before execution
>
> *or*
>
> [T]he use of non-bona fide orders, or orders that the trader does not intend to have executed, to induce others to buy or sell the security at a price not representative of actual supply and demand.
>
> *or*
>
> A. No person shall enter or cause to be entered an order with the intent, at the time of order entry, to cancel the order before execution or to modify the order to avoid execution;

At minimum, in this example the business model seems to bake in an 87.5% intention of cancelling any given order before it's executed. At what point does "market making" become spoofing in this model? We can likely agree any firm posting an order it is 100% certain to cancel is over the line. Now move that line to 99%. If I have as much as a 99-in-100 intent to cancel, is that a *bona fide* order? How about a 9-in-10 intent to cancel? How about 7-in-8? And how does anyone looking at an exchange's quote tell the difference? These strategies seem functionally indistinguishable from Sarao's "cancel-if-close" scheme Chicago prosecutors believe prove their case against him.

HFT market makers portray themselves as hapless victims of adverse selection, but it's only because they want to display size on multiple exchanges that they're at risk. There's nothing that compels these firms to post any particular size orders on eight or even ten exchanges at once. They do it because they've found it more profitable to post size on multiple exchanges, and then cancel and re-price when they're hit, than it is to post smaller size on those exchanges and honor their quotes. A firm might want to trade no more than 1,000 shares at a time, but it doesn't know where it will find a contra, and its eyes are bigger than its stomach. So it posts that 1,000 shares on as many as ten exchanges, making 10,000 shares at risk though it only wants to trade 1,000. If the firm's hit at any one of the them, it cancels the other quotes and reprices.

Nothing compels it to post 1,000 shares in ten different places. It could just as easily post 100 shares on each of those ten exchanges. It could post 1,000 shares on only one exchange. It could post 500 shares on each of two exchanges. It has any number of options but the one it chooses is likely its most profitable, and what so many firms choose to do is to post more liquidity than they are in fact willing to trade, planning beforehand to cancel everything they can if a contra appears, all in the hope of maximizing profits. It is a very deliberate strategy that misleads the market because it is by now long past obvious the aggregate displayed size in today's HFT marketplace is "not representative of actual supply and demand."

For market participants, this behavior is also profoundly anti-competitive. If all a firm wants to trade is 1,000 shares at a price, once again, the firm could post 100 shares on each of ten exchanges. If it posts only 100 shares at a market, though, a contra at that market is much more likely to exhaust the firm's quote and trade with its competitors. It could also post 1,000 shares on only one exchange, or 500 shares each on two exchanges. If the firm isn't on all exchanges at once, however, it might miss a contra, and that contra will trade with its competitors. So by posting the full 1,000 on every exchange the firm takes the biggest bite it can stomach and then rushes to fade everywhere else. Since fading successfully depends on speed, firms spend whatever it takes to be fast. The effect is that smaller competitors on any given market are squeezed out in the spoofing game, and the marketplace is soon dominated by a handful of large HFT firms with the resources to win the speed arms race.

As for market centers, on the other hand, we can wonder whether this behavior helps sustain market fragmentation. If HFT market makers posted no more than their *bona fide* interest and cut back where they traded as a result, perhaps we wouldn't have so many lit markets, and perhaps exchange groups like BATS would finally consolidate their order books. BATS has lectured the SEC why it believes Reg NMS contributes to market complexity, but BATS should consider instead how tolerating this kind of HFT behavior contributes to market complexity.

One go

Here's Remco Lenterman again, some months after that first tweet:

Michael Lewis couldn't have said it better.

The question for HFT market making firms is to distinguish what they do, "offer[ing] more liquidity than they're prepared to trade in one go," from spoofing. In the meantime, any attempt by the industry, or an exchange founded by and dependent on the industry, to preemptively define spoofing narrowly should be viewed very skeptically. This Filing will inevitably tie the hands of the government, explain carefully to miscreants just what it is they have to avoid, offer Navinder Singh Sarao a lovely defense against some of what he's been accused of doing, and validate business models that at best are under critical scrutiny by the public, academics, regulators, and market participants, and at worst are a continuing fraud on the markets.

A definition of spoofing must give regulators the flexibility to clamp down on any forms of that abusive trading practice as theory and experience reveal them. The BATS proposal, a purposely narrow and prescriptive approach to regulation, doesn't allow it. BATS should instead adopt principles-based language against spoofing. That would be in line with what BATS CEO Chris Concannon once said when he testified before Congress that "we believe the key concept to keep in mind is to apply modern regulatory concepts like the principles-based approach to regulation practiced successfully by ... regulators around the world."

Yes, of course, and here's your chance.

Sincerely,

R. T. Leuchtkafer