High frequency trading has more enemies than friends, but the key question is what are the costs of reform. Attorney General Schneider’s pending suit against Barclays PLC for allegedly misrepresenting that its dark pool (known as “LX”) was “safe” from high frequency traders, when in fact it appears to have been a hotbed of “predatory” trading, shows two things: First, it underlines that the market, itself, does not really understand the microstructure of equity trading, because trading at LX fell by 37% the week after the suit revealed unsuspected practices. But LX may not stand alone, and other dark pools may (or may not) behave similarly. We simply do not know. Second, a familiar pattern, dating back at least to Attorneys General Spitzer and Cuomo, is persisting: If the SEC slumbers long enough, refusing to face a problem, sooner or later another regulator (usually one based in New York) will step in. Eventually, an embarrassed SEC will be forced to follow. Competition among regulators thus appears desirable.

A decade ago, the SEC was overburdened with Enron and WorldCom and so repressed the massive conflicts of interest surrounding securities analysts, which Attorney General Spitzer revealed in graphic detail (and then engineered a global settlement in which the SEC was largely a tag-along participant). Today, the SEC has studied high frequency trading at length, but seems unable to do much more than re-arrange the deck chairs on the Titanic. What explains its inaction? Some will allege that the SEC has been “captured,” but that charge seems misplaced in this context, because the industry is itself intensely divided. The exchanges are doubtful about the “maker/taker” system that has become dominant in the wake of Regulation NMS, and the Securities Industry and Financial Markets Association (“SIFMA”), the industry trade group, wants major reforms. But the dark pools are largely owned by major banks, who have a different agenda.

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Thus, the SEC’s inactivity seems better explained by two factors: (1) the SEC has been
overextended by the demands of implementing Dodd-Frank and thus avoids issues that it can sidestep;
and (2) in the field of market regulation, the SEC’s staff tends to worship at the Shrine of the Status Quo.
Whatever practices have become prevalent are assumed to be efficient. But trading has evolved very
rapidly since the adoption of Regulation NMS in 2007, and it is far from clear that any natural
equilibrium has been reached.

If the SEC seems unlikely to act in the short-term, from where then are the next initiatives likely
to come? Two obvious candidates are Attorney General Schneiderman and the plaintiff’s bar. Assuming
the Attorney General’s charges were accurate, one must conclude not only that Barclays deceived its
clients, but, more significantly, that it subordinated their interests to those of high frequency traders. That
alone is surprising and a historic reversal. Dark pools originally developed to protect institutional
investors from such traders and the much feared practice of “front running.” The contemporary “dark
pool” traces back to Instinet and the “fourth market,” which arose in the 1970s as a network on which
institutions could trade with each other in private to prevent brokers from frontrunning them. Thus, the
interests of “dark pools” were naturally aligned with anonymity-seeking institutional investors. That
some dark pools (apparently including Barclays) decided to breach that alliance and shift their allegiance
instead to high frequency traders suggests either that (1) dark pools are dependent on high frequency
traders to provide liquidity and must accommodate them, or (2) hefty sums have been paid to the dark
pools by the traders favored by them.

How did high frequency traders secure the loyalty of the dark pools? Was it just the fees paid to
the dark pool for co-location and private data feeds? Or were there other side payments? This is where
the Schneiderman inquiry should next focus. Conceivably, payments might have been paid to dark pools
to learn the liquidity lurking within them or even the identity of traders. At this point, the scandal would
intensify. Equally important, if dark pools were induced to switch sides and align themselves with high
frequency traders (who once were excluded from the leading such trading venues), the same could also have happened at the exchanges (who are equally dependent on high frequency traders).

When one turns over a large rock in a field, one sometimes finds strange things crawling beneath it. But the SEC may prefer not to look. That leaves the plaintiff’s bar, which can sometimes discover facts that regulators do not want to confront. Since the publication of Michael Lewis’s FLASH BOYS earlier this year, several lawsuits have been filed in response, and some plaintiff’s firms have virtually plagiarized Mr. Lewis’s book in writing their complaints. But one suit is distinctively different. *Lanier v. BATS Exchange, Inc.*, a nationwide class action filed in May in the Southern District of New York, raises no federal claims, relies entirely on state law (and primarily on the law of contracts), and makes a novel factual assertion: namely, that the exchanges actually transmit market data to their high frequency trading clients before they send the same data to the securities information processor (who then aggregates the data and disseminates it to the subscribers who pay the exchanges for market data). Specifically, plaintiffs allege that on average market data “is received by the Processor approximately 1,499 microseconds after” the high frequency traders receive it. No view is here expressed about whether this factual allegation can be proven, but it is specifically plead in detail, and it provides a very different picture than the conventional story about the advantages that high frequency traders enjoy.

The conventional understanding is that high frequency traders purchase two advantages from exchanges: (1) they arrange for co-location services under which they place their computer servers a few feet from each exchange’s servers (which are largely located in the New Jersey swamps), and (2) they buy private feeds of market data from the exchanges, which data is released to them at the same time as the securities information processor releases the data for public dissemination. Debatable as these practices are, releasing the market data to one’s preferred (and high paying) customers before it goes to the securities information processor and one’s other customers seems far worse and inherently discriminatory. The *Lanier* complaint alleges that preferred customers “can receive the data in as little as
one microsecond,” whereas it takes 1,500 microseconds for the data to reach the processor (and then additional time for the data to be transmitted by the processor to ordinary customers).  

To explain the legal significance of this advance disclosure, it is necessary to take a step back and outline the basic institutional structure surrounding market data. Market data in the United States is disseminated to customers who purchase this data through four consolidated information collection and dissemination systems: the Consolidated Quotation System (“CQS”), the Consolidated Tape System (“CTA”), the NASDAQ System, and the OPRA System. In each, a securities information processor collects, processes and distributes the market data collected from the exchanges for the applicable system. Each of these systems operates pursuant to a Transaction Reporting Plan, which the exchange must file with the SEC pursuant to Rule 601 of Regulation NMS.

Next, Rule 603(a)(2) of Regulation NMS requires that any exchange “that distributes information with respect to quotations for, or transactions in, an NMS stock to a securities information processor . . . shall do so on terms that are not unreasonably discriminatory.” In addition, under the express language of the CQS and CTA Plans, the exchanges must furnish market data to the Processor “as promptly as possible” for dissemination to subscribers. The CQS Plan also obligates the exchanges to “have as an objective the reduction of the time period for furnishing quotation information to the Processor.” Finally, Rule 608(c) of Regulation NMS requires each exchange “to comply with the terms of any effective national market system plan . . . [and] to enforce compliance with any such plan by its members and persons associated with its members.”

The bottom line then is that the Regulation NMS (1) requires compliance by exchanges with each Plan (and some such Plans mandate that the exchanges furnish the data “as promptly as possible”) and (2) prohibits “unreasonable discrimination.” Advance disclosure by exchanges to high frequency traders before they give the same information to the securities information processor would seem to violate both these norms.
This does not mean that Regulation NMS gives rise to a private cause of action. Almost certainly, it does not. But Regulation NMS’s obligation to provide information “as quickly as possible” can be read as an implied term in the contract between the exchanger and the subscriber (or so the Lanier complaint argues). Arguably, advance disclosure to some preferred customers violates both Regulation NMS and the contracts with subscribers.

The Lanier action faces significant procedural obstacles. It is a class action based on the contract law of the fifty states, and any variations in state law may mean that the plaintiffs cannot satisfy the “predominance” requirement of Rule 23(b)(3). The Lanier plaintiffs understand this and in anticipation of that problem seek partial certification as an alternative. But “partial” or “issue certification” also faces obstacles. Of course, this claim that Regulation NMS was violated by an advance release of market information by the exchange can be enforced by public enforcers. Obviously, the SEC could sue, but so could Attorney General Schneiderman under the Martin Act. In states other than New York (such as New Jersey where the information release actually occurs), Blue Sky regulators also have jurisdiction, and a private cause of action might be maintainable based on that state’s Blue Sky statute. Here, serious issues will arise under the Securities Litigation Uniform Standards Act (“SLUSA”), but arguably they could be sidestepped through adroit pleading.

Can a suit be brought against exchanges or dark pools under Rule 10b-5? This seems doubtful, at least insofar as a class action is concerned. The damages to plaintiffs are highly variable, as receiving stale information affects different investors differently. The Supreme Court’s recent decision in Comcast Corp. v. Behrend may require a single damages model applicable to all plaintiffs. Yet, this is no bar to public enforcement, which can assert that the dark pool or exchange failed to disclose material information and falsely presented stale information as current information. Lurking in the background is the even more ominous possibility that, if a dark pool leaked information to a preferred, high frequency trader about the liquidity in its pool, then an insider trading violation may have occurred. Material
information would have been passed by the dark pool to the high frequency trader, arguably in return for high fees paid by the trader. That would satisfy even a conservative definition of insider trading.

To this point, we have been ducking the larger issue and focusing only on whether Regulation NMS was violated. But should co-location and private data feeds from exchanges to preferred shareholders be permissible? Should the law require the securities information processor to release the data simultaneously to all commercial distributors (i.e., Reuters and Bloomberg) and its high frequency traders, with no time advantages to anyone? Admittedly, even such a structure would still leave the high frequency traders with a substantial advantage, as there would be a further delay before market data released to commercial distributors reached the end user (basically, institutional investors). High frequency traders could also afford to position themselves sufficiently close to the securities information processor’s server that they would obtain at least several micro-seconds of advantage. Finally, because they trade more, high frequency traders can afford to pay more for higher speed, more technologically advanced access.

As it currently is written, Regulation NMS would not seem to have been violated so long as market data is released by the exchanges to the securities information processor and the world at the same time. Once that happens, the race will inevitably go to the swift. But Regulation NMS may be inadequate, and the Securities and Exchange Act of 1934 probably gives the SEC much more authority than it has utilized in adopting Regulation NMS.

Specifically, Section 11A(c) of the 1934 Act authorizes the SEC to adopt such rules relating to the “distribution or publication” of “any information with respect to quotations for, or transactions in, any security” that are applicable to exchanges, securities information processors, or brokers and dealer as “the Commission shall prescribe as necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of this title to” meet certain specified goals.11 Among the statutory goals of Section 11A(c) are:
A. to “prevent the use, distribution, or publication of fraudulent, deceptive, or manipulative
information with respect to quotations for and transactions in such securities;

B. to “assure the prompt, accurate, reliable and fair collection, processing, distribution and
publication of information . . . and the fairness and usefulness of the form and content of such
information;”

C. to “assure that all securities information processors may, for purposes of distribution and
publication, obtain on fair and reasonable terms such information . . . ;

D. to “assure that all exchange members, brokers, dealers, securities information processors, and
. . . all other persons may obtain on terms which are not unreasonably discriminatory such
information . . . as is published or distributed by any self-regulatory organization or securities
information processor; or

E. [omitted]; or

F. to “assure equal regulation of all markets . . . and all exchange members, brokers and dealers
effecting transactions in such securities.”

Each of these clauses needs to be parsed closely, but several emphasize fairness, not simply
efficiency, and Clause B above focuses on the “fairness and usefulness of the form and content” of the
information so released. On this basis, the SEC could adopt an updated Regulation NMS that recognized
that the release of stale market information was not “useful” or “fair” and could be “deceptive.” That is,
by the time the ultimate end user learns the quotations in a security, those quotations may have changed
or been exhausted because the high frequency trader has acted (either by changing its own quotation or
taking the quoted liquidity). From that starting point, the revised Regulation NMS should prohibit
exchanges (and brokers in the case of dark pools) and securities information processors from releasing
information to anyone before they all release it to the world together. This would effectively preclude
exchanges from selling private feeds to high frequency traders.

At this point, controversy would erupt, because private feeds are a major source of revenue to
exchanges. In response, high frequency traders will argue that, if they could not purchase their current
trading advantages, they would be less willing to intervene aggressively in equity markets to narrow the spreads. The cost of reform thus might be wider spreads. This is not false, but the advantages of their aggressive intervention may be exaggerated. The social benefits from high frequency trading are uncertain and possibly illusory. The “maker/taker” model at the heart of contemporary exchanges depends upon traders posting limit orders. These “makers” of liquidity are paid a rebate by the exchange when their posted limit order is hit by a “taker”; that rebate comes from (and constitutes the majority of) the fee paid to the exchange by the taker of the liquidity. Thus, if high frequency traders lost the special advantages of private feeds and co-location, the exchanges might have to compensate them with higher rebates and thus would be compelled to raise the fees charged to the taker of liquidity. In short, the costs of trading might go up marginally (at least if we assume that current market structure approaches perfect competition).

Today, high frequency traders are compensated by two forms of compensation: (1) rebates (at least when they “make” liquidity), and (2) trading advantages. That second form of compensation may be very costly, but currently it cannot be computed or even estimated. All we know for certain is that some high frequency traders have made enormous profits that resemble economic rents. Virtu Financial, a major high frequency trader, disclosed in 2013 that, over the past five years, it only lost money on one day, and industry observers estimate that high frequency trading earns about $1 billion per year in just the United States. In a reformed world, without special trading advantages, high frequency traders would receive the former benefit (rebates), but not the latter (trading advantages). Under the current system, we have very narrow spreads, but often these spreads are illusory (because, as Michael Lewis stressed over and over in FLASH BOYS, these spreads disappear when any institutional trader attempts to hit them). A market with razor thin, but illusory, spreads seems far from optimal. If the spreads widened by a small margin (say a third of a cent) because of reforms, but these spreads were reliable (in the sense that they could withstand some volume), many market participants might prefer this structure.

Also, such a market would have greater integrity—an intangible characteristic but one too quickly disregarded by many economists. To be sure, under any market structure, the intermediaries will have to
be paid for providing liquidity, but today the total payment is hidden, opaque, and probably excessive, because we do not know just how much high frequency traders make from their trading advantages.

This proposal that private feeds to favored traders (whether from exchanges, dark pools, or securities information processors) should be precluded may sound like academic radicalism that can never be translated into policy. Yet, this is one of the principal reforms that have recently been proposed by a SIFMA task force.\textsuperscript{13} Everywhere (except possibly at an overworked SEC), the recognition is growing that the institutional structure of equity trading needs to be rethought.

Lastly, the issue of “co-location” presents about the same tradeoff. At first glance, co-location may seem less objectionable than private data feeds because geographic advantages are inevitable. If the exchange could not house the high frequency trader’s server pursuant to a co-location agreement, the trader would predictably set up an outpost one hundred feet away and gain almost the same advantage. Economically, that may be true, but this response ignores the political consequences of co-location. If co-location has become a major source of revenue for the exchanges, it may make the exchanges dependent on high frequency traders and willing to interpret its rules in their favor. Here, we are again in the dark because we do not know how much exchanges receive (as a proportion of their revenues) for co-location services. Greater transparency here would be a first step toward reform (or at least an informed public debate).

The transition to dark pools, high frequency trading, and the maker/taker model has come since the adoption of Regulation NMS in 2007. Although Regulation NMS is one cause, it is not the deepest cause. With the privatization of securities markets, markets are no longer self regulators in any meaningful sense, but instead are aggressive profit maximizers. History cannot be turned backwards and exchanges will never again be non-profit institutions, but that fact states the case for closer regulation. A clear and present danger exists that profit-seeking exchanges (and other trading venues) can be bribed to favor one group of traders over others.
Endnotes


2 For a review of recent suits, see Zachary Ziliak, Pavitra Kumar, and Torben Voetmann, “Key Complexities In High Frequency Trading Litigation,” LAW360 (June 27, 2014). For an action largely borrowed from the text of Flash Boys, see City of Providence, R.I. v. BATS Global Mkts, Inc., No. 14-cv-2811 (S.D.N.Y. April 18, 2014). This author is not involved in any way in any of the suits discussed in this column.


4 See Complaint in Lanier v. BATS Exchange, Inc. at Paragraph 14.

5 Id. In Paragraph 15, this Complaint then alleges that, as a result, the subscribers to the Exchange “do not know the valid market data at any given time because their data is stale. . . .”


7 See 17 C.F.R. § 242.603(a)(2). Rule 603(a)(1) also requires that an exclusive provider of information to a securities information processor shall provide such information “on terms that are fair and reasonable.”

8 See 17 C.F.R. § 242.608(c).

9 Partial or issue certification is authorized by Rule 23(c)(4) of the Federal Rule of Civil Procedure, but each Circuit has interpreted it somewhat differently. See McLaughlin v. American Tobacco Co., 522 F.3d 215, 234 (2d Cir. 2008) (requiring that partial certification must “materially advance the litigation.”) This may not be a problem in the Lanier case as plaintiffs probably need not prove reliance, proximate causation, or other complex issues and the damages sought are simply restitution of fees paid.
10 133 S.Ct. 1426 (2013). The scope of this decision is the subject of intense debate.


12 For both Virtu’s estimate that it lost money on only one day (and that was because of “human error”) and the annual $1 billion revenue estimate, see Pierpont’s “Trading at Full Speed,” Australian Financial Review, July 4, 2014 at p. 23.