December 27, 2021

Vanessa Countryman, Secretary Securities and Exchange Commission 100 F Street NE Washington DC

Re: Release No. 34-93688, File No. SR-CboeBZX-2021-078; Release No. 34-93689, File No. SR-CboeBYX-2021-028; Release No. 34-93694, File No. SR-CboeEDGA-2021-025; Release No. 34-93696, File No. SR-CboeEDGX-2021-049;

Dear Ms. Countryman:

Happy holidays and thank you for the chance to comment on the above noted filings.

Earlier this year four of Cboe's exchanges submitted rule filings with plans to sell regulatory data to high frequency trading firms (see Releases 34-92147, 34-92148, 34-92149, 34-92151, and my related comment, collectively "Round One"). That regulatory data is intended to protect listed companies and investors from predatory market tactics and should be confidential, but these exchanges hoped to sell it throughout the trading day.

The filings themselves were poorly drafted and confusing, and the exchanges seemed clueless about their responsibilities under the Exchange Act. Luckily that effort flopped, but now we see that Cboe's exchanges have reengineered and repackaged their initiative into the new set of filings here (Releases 34-93688, 34-93689, 34-93694, and 34-93696, collectively "Round Two"), which I'll discuss below. They appear to be just the same old stink in a new suit.

The disgrace is that in 2013, in what the SEC said was the first time the SEC sanctioned an exchange for regulatory failures, Cboe was fined millions of dollars and instructed to keep regulatory data confidential and independent from commercial interests (Release 34-69726, "Settlement"). This isn't ancient history. Cboe would have affirmed its compliance with the Settlement as recently as 2018, and the government's cease-and-desist order in the Settlement appears to be in effect to this day. This past summer, though, everyone looked to have forgotten about it.

Two things should have happened after Round One flopped. The Division of Enforcement should have looked at whether Cboe, wittingly or not, attempted to violate the Settlement cease-and-desist with its filings in Round One, and whether Cboe still had in place the policies and procedures demanded by the Settlement, and whether those policies and procedures were truly effective. And then Cboe should have been banished to the wilderness for a year or two, living on nothing but roots and berries, and told to consider just how much of a lits rule filings were, especially so after the debacle of Cboe EDGA's 2019 discriminatory speed bump filing (see Release 34-86168, related comments, and the SEC's disapproval order,

collectively "Debacle"). What apparently happened after Round One flopped is that Cboe's exchanges instead tried to get whatever they could get into Round Two.

Numbers and Letters

Like the Round One filings, the Round Two filings claim to offer a product "similar" to products from other exchanges. "Similar" is in the eye of the beholder. They're similar in that these products all contain information and are made by computers and filled with numbers and letters and you need electricity to see and use them. There seem to be substantial differences, however, the Cboe exchanges don't fully explain in the Round Two filings. Just how different is difficult to know because the filings are so badly drafted it's not at all clear what numbers and letters will be in the proposed products. The details here matter enormously so let's look at the details.

The exchanges write that the products will include "trade date, symbol, total volume, buy volume, buy trade count, sell volume, sell trade count, sell short volume, sell short trade count, sell short exempt volume, and sell short exempt trade count." Trade date, symbol, and total volume are clear enough. But what is the difference between "total volume" and for example "buy volume," since every trade always includes a buyer?

The next sentence of the filings then says the feed will include "buy and sell volume as well as trade counts for buy, sell, sell short, and sell short exempt volume." Does this mean the feed will include "buy and sell volume" and trade counts for each category of (a) buy, (b) sell, (c) sell short, and (d) sell short exempt "volume"? Aren't the "buy and sell volume" of all "sell short exempt" trades, for example, exactly the same? They certainly are if you use the words "buy and "sell" generically, which is how they could be read in that phrase. What does it mean to include "buy and sell volume" for (a) buy volume or (b) sell volume or (c) sell short volume or (d) sell short exempt volume? How exactly are buy and sell volume even distinguishable in these (a) through (d) contexts? Does "buy and sell volume" just mean "trade volume"? It's otherwise senseless.

It's senseless unless, perhaps, what this describes is splitting out buyer and seller-initiated trade volume or total buy and sell order volume. The phrase "buy and sell volume as well as trade counts for buy, sell, sell short, and sell short exempt volume" makes more sense if understood as (a) "buy[er-initiated] and sell[er-initiated] volume as well as trade counts for buy, sell, sell short, and sell short exempt volume" or (b) "buy [order] and sell [order] volume as well as trade counts for buy, sell, sell short, and sell short exempt volume."

It would be surprising, but if that's actually what's going on here, well, the SEC can figure out whether this gobbledygook was submitted in good faith, the exchanges should have to call it out and explicitly justify it, and the public should have the opportunity to comment on that point. My experience of Cboe's drafting skills (see Round One and Debacle) makes me wonder if that's what Round Two intends, even though the filings don't say so. If the exchanges expect to tell

high frequency firms just how much aggressive short selling there is or how much short selling order volume there is, every day and stock-by-stock, listed companies and investors might want to comment about that. It's also a very substantial difference from what NYSE and Nasdaq offer.

The proposed rule text doesn't clear things up. The rule text simply says the feed will include "trade count and volume by symbol for buy, sell, sell short, and sell short exempt trades." Again, "buy [volume]" as a separate category is senseless because every trade of every kind has a buyer, and so we're still left wondering what exactly this product includes. And if it means "buy[er-initiated]" and is distinguished from "sell[er-initiated]," or if it means to include total buy and sell order volume, or something else, the public deserves to be told that and deserves a chance to comment before approval.

My concerns here are of course informed by the unfortunate regulatory history of two of these four exchanges. In a prior incarnation Cboe EDGA and Cboe EDGX were fined \$14 million - a record fine at the time - and sanctioned by the SEC in 2015 (see Release 34-74032, "EDGE Settlements") because these exchanges "did not completely and accurately describe" how their systems worked and "disclosed information ... to some but not all of their members." This isn't ancient history either. These two exchanges would have affirmed their compliance with the EDGE Settlements as recently as 2018. And while the violative conduct happened under different ownership than Cboe, as I've already noted Cboe has its own unfortunate regulatory history. (Isn't it remarkable all the different ways this exchange family makes regulatory history?)

Laundry lists of field names are vague, and in the worst case gamed. Data definitions matter, and relevant rule filings must be precise, accurate, and complete. Quoting from the Form 19b-4 itself, "The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal..." As I've outlined here in detail, Round Two doesn't do it. I'm a native English speaker and I've been around a while, long enough to get thrown out of Bobby Van's more than once over the years, and I can't figure out what Round Two is talking about. Who can?

TAQ

The Round Two filings each use the word "similar" about a half dozen times, perhaps trying to make them look like copycat filings, a set of filings with precedent behind them. One "similar" claim says that while the Round Two data feeds include more information than the daily Short Volume reports offered by NYSE, "similar data is otherwise available or determinable in other NYSE data product offerings." The filings then note "Specifically, the NYSE TAQ product provides trade and quote information for orders entered on the NYSE affiliated equity exchanges, which include buy, sell, and sell short volume. Thus, subscribers to NYSE TAQ could determine volume and trade counts from such data," and footnote a NYSE TAQ spec.

Specifically, that NYSE TAQ product does no such thing. If you look at that footnoted specification (https://www.nyse.com/publicdocs/nyse/data/

TAQ_XDP_Products_Client_Spec_v2.3c.pdf) you'll see that sell short volume is not, so far as I can tell, identified or derivable. Nor can you use the data described in that specification to tally trade counts for everything listed in the Round Two rule text, "trade counts for buy, sell, sell short, and sell short exempt volume." Short trades are not identified in the specification, so how you count them is a mystery. In fairness, it did take effort to figure out that short trades weren't identified - for example, first I opened the document, then I located the find function, and then I searched for the word "short" - but that no one else seems to have verified this claim, and yet it appears in a 19b-4 filling, is another mystery. (And we still have no idea what "buy" trade volume might mean and how that is distinguished from "sell, sell short, and sell short exempt" trade volume.)

I'll sum it up. First, so far as I can tell Cboe's exchanges gave a materially inaccurate description of the NYSE TAQ feed they point to as precedent. Despite the footnote, it's not precedent for what they want to do. They haven't identified any precedent at all for offering short and short exempt trade counts on a daily basis. And their proposed rule text and their descriptions of the proposed feed are incoherent.

Master Class

Where are we with all this? From its beginning last summer to these latest filings I believe we've had a master class in how exchanges cater to a powerful group of trading firms at the public's expense. The SEC is supposed to defend against this but didn't. Even after a decade of whistleblowers, reform advocates, best-selling books, Wall Street Journal reports, and Congressional hearings, the industry still treats the public and the government as just a drawer full of muppets.

The master class began in Round One when four Cboe equity exchanges proposed near-real time data feeds. The data feeds would have reported trade activity in incremental 10 minute time slices during the trade day by stock, sale type, and capacity. But sale type and capacity are well-known regulatory constructs. Sale type has no meaning in stock exchange matching engines other than to enforce Reg SHO price restrictions, a purely regulatory function designed to protect public companies and investors. So far as I know capacity has no meaning in equity exchange matching engines either. It's a legacy of older market models that once used that data to protect institutional and retail investors.

The government requires the exchanges to collect this data and the exchanges require it on every order sent to them. The problem is that both of these fields, especially if used in combination with each other, and in combination with other available data, can also tell you quite a bit about who is doing what in the markets, and you can use that insight against the very companies and investors the data is intended to protect. Despite their clear responsibilities to

keep regulatory data confidential and to use it only for regulatory purposes, Cboe's equity exchanges wanted to slap a price tag on this stuff and sell it during the trading day.

In their Round One filings, the exchanges were also out-loud that the target for this data included what they called "active equity trading firms," which we can easily guess include the usual gangs of predatory high frequency trading firms. Who would be surprised if one of those firms came up with the idea in the first place? Somehow the proposal got through the SEC and the SEC published it for comment.

Let's go over some history to add more perspective. In 2014 Michael Lewis went on television to launch "Flash Boys." He said the stock market was rigged. He didn't mean listed companies were frauds or mutual funds were skimming accounts. He meant that after a decade or two of transformation, stock exchanges were neglecting the public interest to cater to a particular kind of professional trading firm. High frequency traders dominated the equity markets and stock exchanges cheered them on. Government regulators, when they could be said to appreciate what was happening, applauded them too. And in the meantime the public was sucker punched and picked off by a marketplace twisted upside-down to profit high speed traders.

Lewis was attacked for it. The industry and regulators circled the wagons and tut-tutted and said he didn't understand and got it all wrong and investors never had it better. They squawked with all the modesties of a fat man eating a pie. But soon enough the fact that one of America's most famous writers had turned on one of America's most famous institutions created enough political pressure that government had to respond. And it did respond, mostly by targeting secondary players with deep pockets.

Back to Cboe. Eight years ago Cboe paid an historic fine and was hit with a cease-and-desist order from the SEC because Cboe had "failed to fulfill its fundamental responsibilities as an SRO and exchange." Cboe agreed to several undertakings, including that it would keep regulatory information confidential and separate from commercial interests. Now fast forward to last June. Over the years Cboe had acquired four exchanges, and this summer those Cboe exchanges proposed to sell regulatory information to "active equity trading firms." The government looked at Cboe's idea and apparently thought sure, go ahead, this is good, let's run it up the flagpole. None of this should have happened, ever, and is a perfect example of what Lewis talked about.

Fat Elvis

Cboe's attempt to profit from regulatory data in the Round One filings was profoundly troubling on its own, and as precedent could have been devastating. Round One's proposed rule text didn't specify any particular frequency of the data feed. It didn't limit its content either. You could wonder whether the exchanges were free to speed them up on their own initiative and add other sensitive data to them without going through the rule filing process. These would vastly increase their usefulness to "active equity trading firms" without any SEC review or public

comment. You could also wonder whether, using these data feeds as precedent, the Cboe exchanges or some other exchange would someday propose including this regulatory data on every trade report, in true real-time as the trades happened, because, you know, "similar."

Step by step, these attempts are how the industry gets its way with the SEC. It plays a long game. The industry starts with what it says is a reasonable proposal and then builds on that over time, using earlier proposals as precedent, until it reaches a goal that may well have seemed impossible at the beginning. By that point the government has been lured into the regulatory equivalent of a blackout drunk, horrified to wake up next to a remember what happened or where it is or how it got there. And then the door opens and the industry steps into the room to coo that everything will be all right, the industry is a friend, the industry will help.

Thankfully the Round One filings didn't make it. The exchanges came back with Round Two. Round Two is another mess. As for these four exchanges themselves, something seems to happen to people and institutions in financial services. Whatever their energy when they're young they can become forgetful, sloppy, and even unintelligible as time goes by, but they still expect good things will keep on for them. In my view Cboe BYX, Cboe BZX, Cboe EDGA, and Cboe EDGX (collectively "Fat Elvis") were shameful in Round One, at minimum spectacularly failed to meet their obligations under the SEC's 19b-4 filing requirements in Round Two, and haven't met their obligations as SROs under the Exchange Act throughout. Please tell Fat Elvis to leave the building, and then please pick up the phone and call Enforcement.

Sincerely,

R. T. Leuchtkafer