No. 20-1843

In the
United States Court of Appeals
for the Seventh Circuit

IN RE:

CHICAGO BOARD OF OPTIONS EXCHANGE VOLATILITY INDEX MANIPULATION ANTITRUST LITIGATION

APPEAL OF: BRIAN BARRY, et al.

Appeal from the United States District Court
for the Northern District of Illinois, Eastern Division, No. 1:18-cv-04171.
The Honorable **Manish S. Shah**, Judge Presiding.

**BRIEF OF PLAINTIFFS-APPELLANTS
BRIAN BARRY, FTC CAPITAL GmBH, SPENCER R. BUENO, AMY HUANG, DAVID SAMUEL, WILLIAM TAD BERGER, DALE CARY, VICTOR CHOA, LRI INVEST S.A., JOHN PELS, PROJECTION CAPITAL MARKETS, LLC and RICHARD S. AARON**

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Counsel for Appellants

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APPEARANCE & CIRCUIT RULE 26.1 DISCLOSURE STATEMENT

Appellate Court No: 20-1843

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N/A

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N/A

(5) Provide Debtor information required by FRAP 26.1 (c) 1 & 2:

N/A

Attorney's Signature: Jonathan C. Bunge Date: June 29, 2020

Attorney's Printed Name: Jonathan C. Bunge

Please indicate if you are *Counsel of Record* for the above listed parties pursuant to Circuit Rule 3(d). **Yes** ☑ **No** ☐

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ATTACHMENT A

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N/A

Attorney's Signature: Daniel L. Brockett Date: June 29, 2020

Attorney's Printed Name: Daniel L. Brockett

Please indicate if you are *Counsel of Record* for the above listed parties pursuant to Circuit Rule 3(d). **Yes** ☐ **No** ☑

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Attorney's Signature: Jeremy Andersen Date: June 29, 2020

Attorney's Printed Name: Jeremy Andersen

Please indicate if you are *Counsel of Record* for the above listed parties pursuant to Circuit Rule 3(d). **Yes** ☐ **No** ☑

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Attorney's Signature: Sharan Nirmul Date: June 29, 2020

Attorney's Printed Name: Sharan Nirmul

Please indicate if you are *Counsel of Record* for the above listed parties pursuant to Circuit Rule 3(d). **Yes** ☐ **No** ☑

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Attorney's Signature: Joshua A. Materese Date: June 29, 2020

Attorney's Printed Name: Joshua A. Materese

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Short Caption: Brian Barry, et al. v. Chicago Board of Options Exchange, et al

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Attorney's Signature: /s/ Stacey M. Kaplan Date: 6/29/2020

Attorney's Printed Name: Stacey M. Kaplan

Please indicate if you are *Counsel of Record* for the above listed parties pursuant to Circuit Rule 3(d). **Yes** ☐ **No** ☑

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Attorney's Signature: Kimberly A. Justice Date: June 29, 2020

Attorney's Printed Name: Kimberly A. Justice

Please indicate if you are *Counsel of Record* for the above listed parties pursuant to Circuit Rule 3(d). **Yes** ☐ **No** ☑

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E-Mail Address: kjustice@fklmlaw.com

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JURISDICTIONAL STATEMENT

This case alleges violations of Section 22 of the Commodity Exchange Act ("CEA") (7 U.S.C. § 25) and Section 10(b) of the Securities Exchange Act ("Exchange Act") (15 U.S.C. § 78aa). Dkt.271,[1] 15-128. The district court had jurisdiction pursuant to 28 U.S.C. § 1331.

This Court has appellate jurisdiction pursuant to 28 U.S.C. § 1291 based on the partial final judgment entered by the district court under Federal Rule of Civil Procedure 54(b). Dkt.312. This class action was brought by investors ("Plaintiffs") alleging they were harmed by two distinct groups of defendants: (1) Cboe Global Markets, Inc., Cboe Futures Exchange, LLC, and Cboe Exchange, Inc. (collectively, "Cboe"), which designed, promoted, offered, and administered the settlement of the financial products at issue (SA-9, ¶¶28-31), and (2) unnamed "Doe Defendants" who manipulated the prices of those products (SA-9, ¶32).

After dismissing with prejudice all claims against Cboe, the district court directed entry of final judgment under Rule 54(b) on April 21, 2020, with the certification that "[t]here is no just reason for delay." Dkt.312.

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[1] All Dkt. citations are to the district court docket. All emphasis added,

Plaintiffs timely appealed on May 19, 2020. Dkt.317.

PRELIMINARY STATEMENT

Although the math behind the financial products at issue is complex, the crux of this case is simple: Cboe designed and sold to investors financial products that were readily susceptible to manipulation, and continued to do so even while knowing that these products were, in fact, being manipulated. All the while, Cboe refused to enforce its own statutorily required anti-manipulation rules. Unsurprisingly, Plaintiffs were harmed.

Congress enacted the CEA and the Exchange Act to protect investors from precisely these types of abuses. The CEA requires that exchanges, like Cboe, "list on the … market only [financial products] that are ***not*** readily susceptible to manipulation." 7 U.S.C. § 7(d)(4). It also requires that exchanges "have the capacity and responsibility to prevent manipulation." *Id.* Similarly, the Exchange Act makes it unlawful for an exchange to use "any manipulative deception or device or contrivance" in connection with selling financial products to investors. 15 U.S.C. § 78j. Cboe violated both.

---

and citations and quotations omitted.

Following a whistleblower letter to the SEC and CFTC exposing problems with the VIX, Plaintiffs brought suit to hold Cboe and the manipulators accountable and to recover their losses.

The amended complaint here contains over 130 pages of factual allegations detailing Cboe's years-long complicity in the manipulation. It explains in painstaking detail specific ways in which Plaintiffs were harmed, and how Cboe's conduct was a cause of that harm. Under the applicable standards, these allegations more than suffice to plead plausible claims at this stage.

Still, the district court dismissed Plaintiffs' claims against Cboe. To do so, the district court overlooked or refused to credit well-pled allegations and imposed extraordinarily high pleading standards that are contrary to well-settled law, disregarding that nearly all Plaintiffs' claims are governed by Rule 8. As detailed below, these holdings effectively nullify Congress's intent to provide investors with a remedy against an exchange like Cboe.

The district court's judgment should be reversed.

ISSUES PRESENTED

1. Whether the amended complaint sufficiently alleges causation and actual damages under the CEA.

2. Whether the amended complaint sufficiently alleges a strong inference of scienter and loss causation under Section 10(b) of the Exchange Act.

STATEMENT OF THE CASE

Cboe created, marketed, and administered a suite of products that could be easily manipulated by privileged insiders, without correcting or disclosing these design flaws to the public. These flaws were exploited for years by the Doe Defendants. And Cboe knew it, yet continued to market and administer the same products. This manipulation harmed investors, like Plaintiffs, who traded these products in this manipulated market.

A. Cboe's Creation Of Exclusive VIX Products To Drive Its Profits

Cboe operates options and futures exchanges, where investors can trade a variety of financial products. SA-9, ¶28. Cboe's original business model was to operate only exchanges that allowed investors to trade financial products sold and marketed by other companies. But as the market for exchanges grew more competitive, and as Cboe marched toward its highly anticipated initial public offering in June 2010, Cboe looked to develop proprietary products that would *only* be available on Cboe's exchanges. SA-68-69, ¶¶175-78.

Cboe sought to implement this strategy by expanding its suite of derivative products based on its license with Standard & Poor's. Under this license, Cboe was given the exclusive right to sell financial products that derived from the movement of the S&P 500. SA-71, ¶184 & n.46. Cboe's first products were called "SPX options." SA16-17, ¶¶45-48. These essentially allowed investors to bet on whether the S&P 500 would increase or decrease by a given amount over a 30-day period. SA-5-6, ¶¶3-4; SA-17, ¶47; SA-71, ¶184.

Cboe next created the Volatility Index, or "VIX," which eventually became its crown-jewel asset. SA-6-7 ¶6; SA-71-72, ¶¶185-86. The VIX is a real-time index that represents expectations of how volatile the market will be over the next 30 days, as indicated by trading activity in SPX options. SA-18, ¶¶49-50. The VIX is higher when the market is expected to be more volatile and lower when the market is expected to be calm. As a result, the VIX has been referred to as a "fear gauge." SA-5, ¶2.

In 2004, Cboe sought to monetize the VIX by creating products that allowed investors to take positions in the VIX itself. SA-20-21, ¶56. The VIX products[2] Cboe created essentially allow investors to bet whether the VIX is going to be higher or lower (i.e., whether the S&P 500 is going to be more or less volatile) at a given point in the future. SA-18, ¶49. When that future date arrives (the "settlement" or "expiration" date), Cboe determines who wins or loses and by how much. SA-18-19, ¶¶50-51. This settlement process plays a central role in this case.

B. The Rigged "SOQ" Settlement Process for VIX Products

Cboe could have determined winners and losers among holders of VIX products by using the published VIX figure, which was calculated based on real-time SPX options trading data. SA-19-21, ¶¶51-53, 58 & n.6. Cboe instead created a different settlement process to make the VIX products more "replicable" (meaning that an investor can more

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[2] The two VIX products Cboe created are called VIX futures and VIX options. VIX futures are at issue in the CEA claim. VIX options and

easily accumulate a portfolio of the components of the VIX to "replicate" the VIX itself to offset risk)—something Cboe knew it needed in order to attract large investors to its new VIX products. SA-6, ¶5; SA-24-26, ¶¶67-72.

The new settlement process for VIX products was called the "Special Opening Quotation" or "SOQ" process. SA-21, ¶¶57-58. The SOQ process involved a select group of traders, chosen by Cboe, who gathered for an hour before the market opened from 7:30 to 8:30 a.m. once a month, and later once a week. SA-21-11, ¶¶58-61; SA-93, ¶236. During this hour, this select group traded SPX options among themselves, knowing that Cboe would use the results of their trades to determine the settlement prices of VIX futures and options expiring that day. SA-5, ¶5; SA-22-23, ¶¶62-63; SA-28-29, ¶¶75-78. It was *exclusively* the SPX options trades that occurred in this closed process that Cboe used to determine the winners and losers of VIX products settling that day. *Id.*

From the beginning, Cboe hid the identity of participants in the SOQ process from the public. SA-22, ¶62. It also granted them special

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SPX options are at issue in the Exchange Act claim.

trading rights. SA-22-23, ¶¶59-63. These special rights included discounts on SPX options, the product underling the VIX. SA-22, ¶61. Cboe placed no restrictions on whether participants in the SOQ process could have an interest in its outcome—and in practice, SOQ participants regularly had large positions in VIX products settling that day and therefore had a keen interest in where the settlement price would be set. SA-22, ¶61; SA-23, ¶64; SA-27-28, ¶75 & n.11; SA-29, ¶78 & n.14.

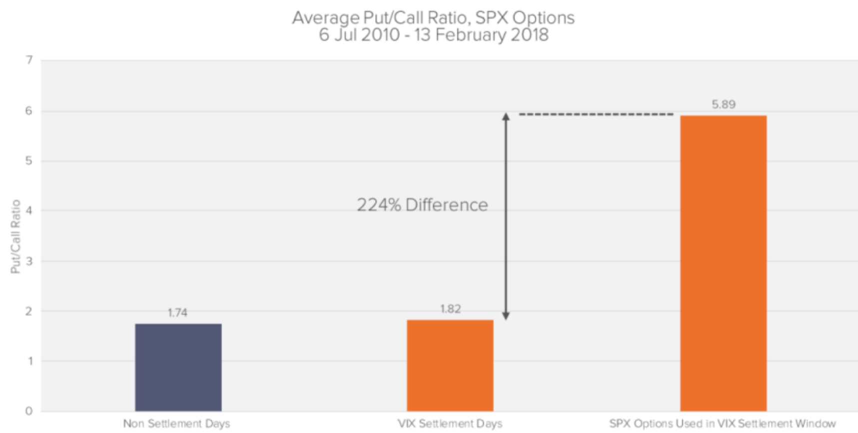
Cboe thus designed its VIX products to have settlement values determined by a complex and secretive process that occurred outside of normal trading hours, and was dominated by self-interested, anonymous traders who were granted special powers by Cboe. *E.g.*, SA-19, ¶52; SA-21-22 ¶¶59-64; SA-27-28, ¶75 & n.11. As one former prominent banker explained, these flaws meant that "you could push around a large dollar value of [VIX] futures by trading a small dollar value in [SPX] options [during the SOQ process] … [I]f you are going to manipulate a tradable market, the VIX looks pretty tempting." SA-30-31, ¶82. In other words, the privileged traders could "game" the system.

Matthew Shapiro, who was a member of Cboe's "Product Development Committee" in 2003 and 2004, admitted that the SOQ process enabled traders to "crush the print" or "bid up the print"—i.e., to trade in order to manipulate the inputs Cboe used to calculate the settlement value. SA-30, ¶81. This would ensure that the cash settlement would be in the manipulators' favor. *E.g.*, SA-27-30, ¶¶74, 79-80.

C. Cboe's Knowledge That The VIX Products' Design Defects Were Being Routinely Exploited

These vulnerabilities in the VIX settlement process were regularly exploited by traders on Cboe's exchanges, and Cboe knew of this manipulation in real time.

For instance, Cboe knew that traders were "banging the close"—i.e., engaging in trades during a settlement-measurement window for the sole purpose of impacting the settlement price. *E.g.*, SA-28, ¶¶77; SA-39-40, ¶¶100-03; SA-77-79, ¶¶201, 203-04. Trading volume for SPX options spiked on settlement days as compared to non-settlement days—just as one would expect if those products were being used to manipulate the SOQ process. SA-28-29, ¶¶77; SA-39-40, ¶¶100-03. Similarly, in the SOQ formula, a particular type of SPX option, called "puts," were given more weight than the other type of option, called "calls." SA-26, ¶72. During SOQ windows, and *only* during these windows, puts were traded dramatically more than calls:



SA-37, ¶¶96-97.

Cboe also knew that the spike in trading volume on settlement days was disproportionately concentrated in the types of trades that count most in the SOQ formula and are cheapest to buy—in particular, SPX options that (1) were far out the money, (2) had the widest gap between consecutive strike prices, and (3) were expiring in exactly 30 days. SA-33, ¶¶89; SA-40-42, ¶¶104-108; SA-44-47, ¶¶114-17; SA-77-79, ¶¶201, 203-04. This anomaly (of increased trading on VIX settlement days of the SPX options worth less) was especially present for the type of SPX options that had the greatest weight in the SOQ process (and thus the greatest impact on the VIX settlement value). SA-42-46,

¶¶108-09, 111-16. There are no trading anomalies, however, for SPX options that were *not* used to calculate those settlement prices, SA-40-42, ¶¶104-09, SA-48, ¶118-19, or at times other than the brief window when those prices were being calculated, SA-39-40, ¶¶101-03.

Cboe knew of these spikes not merely because the trades occurred on its exchange, or even because Cboe was the entity running the SOQ process. It knew because Cboe collected a fee for every trade and could see what trades were occurring and in what volume. SA-61, ¶149; SA-63, ¶153.

Cboe further knew that market actors were abusing another part of its settlement formula called the "two zero bid" rule, which affects which SPX options are used in the VIX settlement calculation. SA-19-20, ¶¶53-55; SA-27-31, ¶¶ 83-89; SA-47-50, ¶¶120-27. This rule made Cboe's SOQ process more susceptible to manipulation because manipulators could trade in a way to prevent two zeros in a row, and thereby force certain SPX options into the VIX calculation that would otherwise be excluded. SA-31-32, ¶¶84-85; SA-48-49, ¶120. On settlement days, the number of SPX options that were eligible for the VIX calculation was much higher at 8:30 a.m. than at 8:40 a.m., when the calculation was over. SA-49, ¶¶121-22. The number of eligible SPX options was also higher at 8:30 a.m. on settlement days than the day prior. SA-49, ¶123. Manipulators thus were strategically trading SPX options during the SOQ window not because they were legitimately interested in those trades, but to ensure that they would be included in the VIX calculation. SA-49-50, ¶¶121-25.

Through these abusive trading practices, the traders chosen by Cboe could (and did) waste money trading effectively worthless SPX options in the SOQ process knowing they would make it back several fold from the manipulated settlement prices for VIX products. SA-34-57, ¶¶90-140. As the exchange operator, Cboe had unfettered access to the trading data and alone knew the identities of the underlying traders. Cboe was, by necessity, regularly analyzing the data—as the exchange it was responsible for crunching the numbers every time a settlement occurred and, in any event, publicly represented that it monitored for and policed against manipulation. SA-7, ¶7; SA-77-78, ¶201.

To that end, Cboe employed numerous departments that monitored trading (*e.g.*, the SPX Market Performance Committee, Business Conduct Committee, Department of Market Regulation, SPX

Floor Procedure Committee, and Risk Committee). SA78-79, ¶203. According to Cboe's chief regulatory officer, Cboe "has a dedicated regulatory department that works with FINRA to monitor … trading activity that could impact the VIX settlement." *Id.*

This was not a one-time event that escaped scrutiny. ***Nearly every SOQ process Cboe ever administered—week after week, month after month, for years—was manipulated.*** *E.g.*, SA13-16, ¶¶30-44; SA34-57, ¶¶ 90-140; SA-100, ¶261.

D. Cboe's Decision To Continue To Promote Its VIX Products, Notwithstanding Its Knowledge Of Their Manipulation

Despite this knowledge of rampant manipulation on its exchanges and of its proprietary VIX products, Cboe continued to market and sell them, assuring investors that the products "help you turn volatility to your advantage" and "give you the opportunity to protect against or capitalize on volatility." SA-92-93, ¶¶234-35. Rather than altering the process or at least warning investors of the years of manipulation it had witnessed, Cboe in 2015 quadrupled the number of settlement days for the VIX products, deciding to conduct settlements weekly, rather than monthly. SA-93, ¶236. Here too, Cboe misled investors, declaring that the new “addition of weekly expirations … offers volatility exposures that more precisely track the performance of the VIX Index.” SA-93-94, ¶237. In truth, the weekly settlements (like the monthly settlements) did not track the VIX index’s true performance, but instead continued to reflect the manipulated settlement values caused by the anonymous traders granted special privileges by Cboe. Cboe also continued to calculate and force payouts based on manipulated settlement values. SA-68, ¶¶172-74. By doing so, Cboe determined whether and how much Plaintiffs would pay or be paid. SA-95, ¶¶242-43.

Plaintiffs and other class members relied on the fairness of the market for VIX products, and believed the prices at which they bought, sold, and settled were determined by natural market forces of supply and demand. SA-94-95, ¶241. As a result, they collectively lost huge sums investing in the rigged markets Cboe created. SA-95-97, ¶¶242-43, 246-48.

Cboe, in contrast, enjoyed massive profits. Between 2006 and 2016, the market for SPX options and VIX products exploded from just over $200 billion to $1.6 trillion. SA-72, ¶187. Cboe saw an 88% rise in “transaction fees” “primarily” because of trading in these “home run” proprietary products, which provided Cboe its highest margin. SA6-7, ¶6; SA-72, ¶186; SA-74, ¶190. By 2016, SPX options, VIX options, and VIX futures made up nearly 60% of Cboe's total revenue, and almost 90% of its transaction fee revenue—exceeding all other sources of revenue combined. SA-73-74, ¶¶188-89. SPX options and VIX products became "cash cows," generating over $400 million in revenues annually. *Id.* Cboe's extraordinary revenue growth from its manipulated VIX products has also translated into massive financial gains for its directors and officers, who hold over two million shares of Cboe stock. SA-75, ¶192.

E. Exposure Of The VIX Manipulation

In February 2018, a whistleblower sent a letter to the SEC and the CFTC referring to "pervasive flaw[s]" and a lack of "any safeguards," and concluding that the VIX was "highly subject to manipulation." SA-35-36, ¶93. FINRA began investigating VIX manipulation. SA-52, ¶132. Former CFTC Commissioner Bart Chilton stated that the alleged VIX manipulation "rings true to me" and that there is "certainly enough smoke." SA-7, ¶8. Former SEC chairman Harvey Pitt echoed that sentiment, saying "***it's quite clear that [the***

VIX] indexes' options can be manipulated … Cboe … should have sprung into action." *Id.*

Manipulation of the SOQ process diminished significantly after regulators began shining a spotlight on Cboe and the VIX. SA-52-53,¶132. *Prior* to February 2018, almost every VIX settlement window was marked by sudden and significant spikes, a pattern of irrational trading, and inexplicable price fluctuations. These suspicious behaviors declined drastically *after* negative publicity brought regulatory attention in February 2018. *Id.*

The amended complaint details other tell-tale signs that demonstrate a newfound caution by the manipulators in the face of known regulatory scrutiny of the kind that Cboe should have been applying all along. These include, among others:

- The trading volume difference between settlement Wednesdays and other days shrank. SA-52-53, ¶132.
- The trading volume difference between settlement Wednesdays and the day prior to each settlement also shrank. SA-53, ¶133.

- There was no longer a statistically significant difference between the trading volume on settlement Wednesdays and non-settlement Wednesdays for the most out-of-the-money SPX options. SA-53, ¶134.

These changes reinforce the conclusion that the anomalous pre-2018 trading patterns were not the result of innocent behavior, but rather were signs of manipulation that subsided after wrongdoers understood investigations were (finally) being undertaken. SA-52-57, ¶¶132-40.

F. Plaintiffs' Harm From The VIX Manipulation

As a result of Cboe's misconduct, Plaintiffs traded products that were mispriced and were forced to accept settlements based on a manipulated SOQ process. SA-92-113, ¶¶234-93. Plaintiffs were thus deemed the "losers" in the VIX settlement process when they should not have been, and they lost money that should have been theirs. *Id.* Plaintiffs also lost money when they bought and sold VIX products outside of the settlement window, because the manipulation that was occurring tainted prices for the VIX products themselves. *Id.* Plaintiffs therefore paid more for VIX products than they should have, and were forced to sell VIX products for less than they were worth. *Id.*

The amended complaint substantiates these allegations through expert analysis that allowed Plaintiffs to identify acts of manipulation and their impact. *E.g.*, SA-96, ¶¶246-48; SA-100-106, ¶¶260-71. Plaintiffs applied these case-specific models to over a *hundred thousand* of their transactions. The details of those transactions were provided in exhibits to the amended complaint—Plaintiffs' Private Securities Litigation Reform Act ("PSLRA") certifications—which stretched many thousands of pages long. Dkt.263-1. Plaintiffs unsurprisingly found repeated instances where they were on the wrong side of the manipulation. The portion of the amended complaint describing these issues culminates in allegations walking through specific instances where each named Plaintiff lost money as a result of the manipulation. SA-97-98, ¶¶249-54; SA-107-13, ¶¶276-93.

For example, Plaintiff FTC held "long futures positions" through "the settlement on August 22, 2012." SA-97, ¶252. Plaintiffs' modeling found that there was "manipulation occurring that day," which caused FTC harm. *Id.* The complaint explains that long futures positions, like this one detailed for FTC, were harmed "on settlement days when the VIX was suppressed." SA105-06, ¶270. The amended complaint accordingly concludes by alleging that Plaintiff FTC was harmed in settlement "due to [the] manipulation." SA-97, ¶252.

G. The Proceedings Below

On April 5, 2018, Plaintiffs filed suit seeking to hold Cboe accountable for failing to prevent and punish manipulation under the CEA and for committing securities fraud by selling, promoting, and settling products that deceived and defrauded investors under the Exchange Act. Several plaintiffs filed separate lawsuits in various courts around the country, which were consolidated in the Northern District of Illinois. The district court established a leadership structure, and Plaintiffs filed a consolidated class action complaint alleging, *inter alia*, violations of the CEA and Exchange Act against Cboe.

1. CEA Claim

The district court dismissed the CEA claims in the original complaint. A-24-30. The district court ruled that the Plaintiffs sufficiently allege that Cboe failed to enforce its rules in bad faith, but nonetheless concluded that the complaint fails to sufficiently allege actual damages. A26-28. The district court reasoned that because it was conceptually possible that the manipulation *helped* Plaintiffs (i.e., if Plaintiffs happened to be on the same side of the bet as the manipulative traders), Plaintiffs must "identify specific transactions that resulted in a loss from the manipulation." A-19. The district court thus directed Plaintiffs to include more detailed allegations showing that they traded against the manipulators and "they experienced a net loss or [] made less than they would have absent the manipulation." A-18-19.

To cure this perceived deficiency, Plaintiffs filed an amended complaint that engages in additional expert analysis to further set forth the "direction" and degree of the manipulated prices caused by Defendants' misconduct on any given date. SA-96, ¶¶246-48; SA-100-106, ¶¶260-71. The amended complaint applies those models of price artificiality to Plaintiffs' own transactional data, pleading specific transactions where Plaintiffs suffered a loss from the manipulation, including on a "net" basis, both when Plaintiffs held a VIX product to settlement and when they did not. SA-97-98, ¶¶249-54; SA-107-13, ¶¶276-93.

As to the amended complaint, the district court: (1) ruled that Plaintiffs "plausibly pleaded that they transacted when prices were manipulated" (A-67) and (2) recognized that Plaintiffs identified specific trades where they alleged that, based on their experts' analysis, "they suffered more harm than they gained a benefit" (A-46).

Nevertheless, the district court, relying on the Second Circuit's opinion in *Harry v. Total Gas & Power N. Am.*, 889 F.3d 104, 110 (2d Cir. 2018) (A-66),[3] ruled that the amended complaint insufficiently pleads actual damages under the CEA. The court reasoned that the amended complaint does not, for each individual transaction, explicitly allege the exact direction and level of the manipulation on each side of the contract, and, for VIX products not held to settlement, "how much net harm any particular plaintiff suffered." A-46, A-68. In reaching this conclusion, the district court declined to consider the appendix Plaintiffs submitted with their opposition brief, Dkt.281-1, which further

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[3] Under Second Circuit law, to plead actual damages under the CEA, a plaintiff must plausibly allege "(1) that she transacted in at least one commodity contract at a price that was lower or higher than it otherwise would have been absent the defendant's manipulations, and (2) that the manipulated prices were to the plaintiff's detriment." *Total Gas*, 889 F.3d at 112. If the Court elects to apply this standard, Plaintiffs' allegations meet it, as shown below in Section I.B.

illustrates the amended complaint's allegations of actual harm. The district court denied leave to amend solely because the issue was mooted by the court's dismissal of the CEA claims on other grounds.

The district court also ruled that the amended complaint does not sufficiently allege causation. A-75-77. The court reasoned that Cboe could not be deemed to have proximately caused Plaintiffs' damages by failing to comply with CEA and failing to enforce its anti-manipulation rules because the Doe Defendants engaged in the manipulative trades, and thus were the cause of Plaintiffs' injuries. A-77. The court further determined the amended complaint's causation allegations were too "speculative" because, according to the district court, even if Cboe had enforced its rules or prevented manipulation as it was required to do, there is no guarantee it would have prevented the particular manipulation alleged here. *Id.*

2. The Dismissal Of The Exchange Act Claim

Regarding the Exchange Act claim, the district court first ruled that Cboe was not immune from suit based on its status as an exchange or because the SEC approved certain aspects of the VIX enterprise. A-

11-17. But it dismissed the claim for failure to plead loss causation and scienter. A-17-24.

Regarding scienter, the district court made inconsistent rulings. When evaluating the original complaint, the district court acknowledged that Plaintiffs sufficiently pled that Cboe had actual knowledge of manipulation, A-21, and that such knowledge suffices to plead scienter on the part of a speaker in a misstatement-type Section 10(b) claim, A-24. At the same time, the court ruled (without citation to authority) that something different, and more, is required in a manipulation-type securities fraud case. A-24. In its order dismissing the amended complaint, however, the district court inexplicably reversed course and held that Plaintiffs did ***not*** sufficiently plead that Cboe acted with actual knowledge. A-53. It then held that, even if Plaintiffs had, allegations of actual knowledge are insufficient to support a strong inference of scienter under the Exchange Act. A-54.

Regarding loss causation, the district court held that Plaintiffs "have not plausibly alleged that the Doe Defendants' manipulation caused them to lose money" for the same "reasons discussed … in the context of actual damages under the CEA." A-60.

SUMMARY OF ARGUMENT

CEA Claim

Contrary to the district court's ruling, the amended complaint plausibly alleges that Cboe's bad-faith failure to enforce its anti-manipulation rules was a cause of Plaintiffs' harm when the very manipulation it was required to police and prevent inevitably occurred. The facial plausibility of these allegations are further substantiated by the undisputed fact that the manipulation quickly and largely subsided once the government began investigating problems with the VIX.

Indeed, had Cboe taken steps to enforce its rules earlier, it is plausible that at least some of the manipulation would have been deterred, and that Plaintiffs would not have suffered harm as a result. The district court's ruling otherwise was premised on unsupported factual determination—that any such enforcement would have been ineffective—and a legally erroneous determination that causation was lacking with respect to Cboe because the Doe Defendants were the more direct cause of Plaintiffs' injuries.

The district court further erred in ruling that the amended complaint failed to plausibly allege Plaintiffs suffered actual damages.

As pled, Plaintiffs conducted a painstaking econometric analysis of when the manipulation occurred and how it lined up with the thousands of VIX trades they made. The analysis also provided specific examples of dates on which Plaintiffs were harmed. In each instance, the amended complaint clearly pleads Plaintiffs were on the "losing" side of the manipulation. Even more, Plaintiffs provided the district court with facts in an appendix to further illustrate this clear harm. The district court's ruling that Plaintiffs were required to provide still more "details" to render their allegations plausible is contrary to both Rule 8 and this Court's precedent. At a minimum, Plaintiffs should have been granted leave to amend.

Exchange Act Claim

The district court also erred in dismissing the Exchange Act claim. The district court's determination that the scienter allegations are insufficient rests on legal errors and fails to credit Plaintiffs' well-pled facts as true. To plead scienter, Plaintiffs need only allege sufficient facts to give rise to a strong inference that Cboe knew of (or recklessly disregarded) the extensive manipulation of its products at the time it participated in or furthered the alleged scheme. The amended complaint amply meets this requirement. It alleges that Cboe had teams of people monitoring its exchanges; that Cboe stared the manipulation in the face when it crunched the numbers to decide the winners and losers at every settlement; and that the manipulation was severe, and rampant, and threatened the viability of its premier VIX products. Plaintiffs further detail how Cboe, despite its knowledge of the manipulation, continued to promote, sell, and settle its flawed VIX products month after month, and week after week. Given these facts, the purportedly non-culpable competing inference the district court credited—that Cboe was unaware of or merely acquiesced to the Doe Defendants' manipulation—does not cogently arise from the facts pled and, in any case, is no stronger than Plaintiffs' inference.

Finally, contrary to the district court's determination, the amended complaint's loss causation allegations are also sufficient. As discussed with respect to "actual damages" above, Plaintiffs plausibly allege—with detailed factual support of expert modeling Plaintiffs performed—that they were harmed when they traded the VIX products because the market and settlements for those products were corrupted by manipulation, and Plaintiffs lost money as a result. Thus, the causal connection between Cboe's misconduct and Plaintiffs' loss is clear, and certainly plausible.

STANDARD OF REVIEW

This Court reviews the district court's dismissal for failure to state a claim under Rule 12(b)(6) *de novo*. *Pension Trust Fund for Operating Engineers v. Kohl's Corp.*, 895 F.3d 933, 936 (7th Cir. 2018). In doing so, this Court must accept all factual allegations in the amended complaint as true. *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 322 (2007). This Court reviews the denial of leave to amend based on futility *de novo*. *Phillips v. Baxter*, 768 Fed. App'x 555, 558 (7th Cir. 2019) (unpublished).

ARGUMENT

I. The Amended Complaint Sufficiently Alleges CEA Violations

A. The Amended Complaint Adequately Alleges Causation

The district court erred in finding the amended complaint does not sufficiently allege causation under the CEA. Plaintiffs allege that Cboe violated Section 25(b) of the CEA by failing to enforce its rules regarding price manipulation. Because the claim does not sound in fraud, the liberal standard of Rule 8 applies. *See, e.g.*, *In re Platinum* *and Palladium Antitrust Litig.*, 2017 WL 1169626, at *8 (S.D.N.Y. Mar. 28, 2017).

Thus, Plaintiffs need only make a plausible showing that Cboe's conduct was a proximate cause of their injuries. *See, e.g.*, *S&A Farms v. Farms.com*, 678 F.3d 949, 953 (8th Cir. 2012).[4] Importantly, proximate cause does not require that the alleged violation be the sole or exclusive cause of Plaintiffs' injuries. *See, e.g.*, *In re Platinum*, 2017 WL 1169626, at *32. Instead, Plaintiffs can plead a CEA claim by alleging Cboe's violation was "at least one cause" and "contributed" to Plaintiffs' losses. *Id.*

1. The Causation Allegations Are Plausible

The CEA requires Cboe to "prevent manipulation," "prohibit abusive trade practices," "promote fair and equitable trading on the contract market" and "list on the contract market only contracts that are not readily susceptible to manipulation." 7 U.S.C. § 7. As the district

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[4] The loss causation requirement established in *Dura Pharmaceuticals, Inc. v. Broudo*, 544 U.S. 336 (2005) for Exchange Act claims is not applicable to "[p]roximate cause" under the CEA. *See, e.g.*, *De David v. Alaron Trading Corp.*, 2015 WL 2208407, at *9-10 (N.D. Ill. May 7, 2015); *In re Crude Oil Commodity Futures Litig.*, 913 F. Supp. 2d 41, 60-61 (S.D.N.Y. 2012) ("loss causation is not a statutory element of proof under the CEA").

court initially acknowledged, Cboe knew the Doe Defendants were manipulating products traded on Cboe's exchanges yet did none of these things. A-21 ("[I]t can be inferred that someone in Cboe's management knew about the manipulation and authorized the continued offering and advertising of the VIX."). Had Cboe complied with its statutory obligations—by enforcing its own anti-manipulation rules or by ceasing sales of products it knew were defrauding investors—it is plausible that some (if not all) of Plaintiffs' injuries would have been avoided. *See, e.g.*, SA-121, ¶322 (Cboe's failure to enforce "allow[ed] prices of VIX Futures to be artificial" and "Plaintiffs suffered injury as a result of transacting at these artificial prices").

The causal link between Cboe's bad faith non-compliance and the harm Plaintiffs suffered is plain. At the most basic level, if Cboe had complied with its statutory obligation to "prevent manipulation," the manipulation, by definition, would not have occurred, meaning Plaintiffs would not have traded in a manipulated market and thus would not have sustained their losses. Similarly, had Cboe complied with its obligation to "list on the contract market only contracts that are not readily susceptible to manipulation," then it would not have listed the VIX futures, which Cboe knew were not merely susceptible to manipulation, but were in fact being manipulated. SA-87, ¶223; SA-126, ¶351. If Cboe had not listed the VIX futures, Plaintiffs would not have traded in them and so would not have suffered harm.

Indeed, had Cboe done ***anything*** to punish, deter, or prevent the manipulation of the VIX settlements—rather than, as the district court put it, "[p]assive[ly] acquiesce[]" in the Doe Defendants' near-constant manipulation, A-24—it is plausible that at least some of the later-occurring misconduct would not have been undertaken or would have been remedied, and at least some of Plaintiffs' losses avoided. This conclusion is reinforced by the fact that as soon as it became clear investigations were underway in February 2018, the manipulative trading patterns dropped dramatically. SA-52-57, ¶¶132-40.

2. The District Court Erred In Deeming The Causation Allegations Speculative

The district court nevertheless dismissed the CEA claim, ruling (1) that it was "too speculative" to think Cboe could have done anything to prevent the manipulation from occurring, A-76, and (2) that Cboe was not liable because the Doe Defendants, not Cboe, directly caused

Plaintiff's losses, A-77. Both reasons for dismissal do not withstand scrutiny.

First, the district court's starting premise—that Cboe somehow was helpless to prevent the repeated manipulation of its own products[5]—conflicts with the CEA, which ***requires Cboe to "have the capacity and responsibility to prevent manipulation***." 7 U.S.C. § 7. Plainly, the CEA does not permit an exchange operator like Cboe to "acquiesce"—passively or otherwise—to market manipulation. Indeed, to the extent Cboe did not have the capacity to prevent manipulation, that itself was a violation of the CEA. 7 U.S.C. § 25(b)(1)(A). In that circumstance, Cboe should have done one of two things: either withdraw the product from the market as the statute requires, 7 U.S.C. § 7 (Cboe required to list "only contracts that are not readily susceptible to manipulation"), or change the SOQ process, as it subsequently did in response to this lawsuit.

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[5] *See, e.g.*, A-75-76 (finding that "Plaintiffs' allegations that enforcement would have stopped manipulation are too vague and speculative to be plausible" because Plaintiffs did not explain what Cboe could have done to prevent manipulation from occurring).

More fundamentally, Rule 8 does not require that Plaintiffs plead what form enforcement would have taken as to each specific act of manipulation, that enforcement would have had widespread effect, or that each such measure would have succeeded. *See Chapman v. Yellow Cab Cooperative*, 875 F.3d 846, 848 (7th Cir. 2017) (complaint need not plead "facts corresponding to the elements"). Rather, so long as Plaintiffs' theory is plausible, proximate cause under the CEA "is a matter of proof at trial and not to be decided on a Rule 12(b)(6) motion to dismiss." *Krukever v. TD Ameritrade, Inc.*, 337 F. Supp. 3d 1227, 1240 n.7 (S.D. Fla. 2018).

The district court also erred in ignoring the fact that manipulation subsided once government investigations began in February 2018. SA-52-57, ¶¶132-40; *see* A-77-78. In other words, what the district court found to be implausible—that the known presence of a serious regulatory effort would cause people to stop trying to manipulate—*actually happened*. These allegations demonstrate that when the manipulators feared real consequences, the manipulation abated.

Instead of drawing plausible inferences in Plaintiffs' favor—i.e., that manipulators would have acted similarly had Cboe itself acted earlier—the district court improperly speculated that the manipulators *might* have had a different reaction to an earlier Cboe-led enforcement effort. *See* A-77 ("[T]hat manipulators reacted a certain way to a government investigation, or at least news reports of one, does not mean that manipulators would have reacted the same way to Cboe enforcing its rules against individual traders."). The district court's weighing of inferences was improper. *See Swanson v. Citibank, N.A.*, 614 F.3d 400, 404 (7th Cir. 2010) (court is not "to stack up inferences side by side and allow the case to go forward only if the plaintiff's inferences seem more compelling than the opposing inferences").[6]

Second, the district court erred in absolving Cboe from liability merely because the Doe Defendants' manipulation was also a cause of Plaintiffs' injury. Op 45. Causation under the CEA permits more than

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[6] None of the cases the district court relied on hold otherwise. For example, in *Braman v. CME Group, Inc.*, 149 F. Supp. 3d 874 (N.D. Ill. 2015), plaintiffs did not adequately plead that the alleged manipulation caused an artificial price, and so the court did not address causation in the context of an exchange's failure to enforce anti-manipulation rules. *Id*. at 888-89. Likewise, neither *Wigod v. Chicago Mercantile Exchange*, 981 F.2d 1510 (7th Cir. 1992), nor *Troyer v. National Futures Association*, 2019 WL 4695524 (N.D. Ind. Sept. 26, 2019), involved an exchange's failure to enforce manipulation rules and, in each case, causation was analyzed on a full record at summary judgment rather than on the pleadings.

one cause of Plaintiffs' injury. *See, e.g.*, *In re Platinum*, 2017 WL 1169626, at *32 (proximate cause sufficiently pleaded when defendants' action "contributed to" artificial price); *CFTC v. Parnon Energy Inc.*, 875 F. Supp. 2d 233, 248 (S.D.N.Y. 2012) (same). Foreseeability is the touchstone of proximate cause; the requirement serves to exclude only those chains of causation that are "so freakish as to be unforeseeable" such that "liability is unlikely to have a deterrent effect." *CDX Liquidating Tr. v. Venrock Assoc.*, 640 F.3d 209, 214 (7th Cir. 2011). Here, it does not require an attenuated chain of logic to foresee that Cboe's failure to enforce anti-manipulation rules would harm investors who lost money when the rules were routinely broken.[7]

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[7] Nor is Cboe saved by theories of intervening causation. As the Restatement (Third) of Torts explains, a defendant remains liable despite an intervening cause (including a criminal one) so long as the risk of that third party's act was foreseeable. § 34 (cmt. d). This Court has thus held that someone who donated money to a terrorist group was a proximate cause of an American soldier's death, even though the terrorist group detonated the bomb. *Boim v. Holy Land*, 549 F.3d 685 (7th Cir. 2008). Plainly, if the terrorist group had not murdered the soldier, the solder would still be alive. But that did not defeat proximate cause. The district court's similar reasoning—"If the Does would not have manipulated the market, plaintiffs would not have lost money," A-77—is equally flawed.

The district court's approach also cannot be squared with the text or purpose of the CEA. As the Supreme Court has explained, Congress passed the CEA "to protect all futures traders from price manipulation" and, to do so, specifically "wished to preserve the private cause of action as a tool for enforcement" against the exchanges themselves. *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Curran*, 456 U.S. 353, 391-93 (1982). Accordingly, Congress included provisions in the CEA that allowed investors to sue "exchanges … for not enforcing their rules." *Id.* Following the Supreme Court's interpretation of the CEA in *Curran*, Congress amended the CEA to expressly create a private cause of action. 7 U.S.C. §§1-26 (1982).

The statute thus contemplates, by design, that an exchange can be held liable for not enforcing rules, even though it is a third-party manipulator who is breaking the exchange's rules. The district court's ruling, however, would mean that an exchange can ***never*** be held liable for failing to prevent or punish rule-breakers, because rule-breakers' conduct can always be argued to be the more direct cause of the injury.

The district court's logic thus effectively nullifies an express act of Congress.[8] This cannot be the law.

B. The Amended Complaint Adequately Alleges Actual Damages

1. The Actual Damages Allegations Are Plausible

The district court similarly erred in ruling that Plaintiffs fail to allege actual damages. Like causation above, allegations of actual damages under the CEA need only meet the liberal pleading standard of Rule 8. That means the complaint need only plead "a plausible claim, after which a plaintiff receives the benefit of the imagination so long as the hypotheses are consistent with the complaint." *Rowlands v. United Parcel Serv.*, 901 F.3d 792, 800 (7th Cir. 2018). "A full description of the facts that will prove the plaintiff's claim comes later, at the summary-judgment stage or in the pretrial order." *Chapman*, 875 F.3d at 848.

The amended complaint far exceeds what Rule 8 requires for pleading actual damages. Cboe's defective VIX futures were exploited by the Doe Defendants, who manipulated the prices at which they would

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[8] In many cases, such a rule would also leave defrauded investors with no recourse at all, as the identity of the anonymous manipulative traders is often impossible to discern, particularly where, as here, the exchange operator has refused to disclose their identity. SA-13, ¶32; SA-

settle by throwing away money on bogus, precisely-timed, cheap SPX option trades during the SOQ process. Cboe then used the manipulated prices to incorrectly deem the manipulators the "winners" of the much-larger VIX bets they had placed, and thus Cboe incorrectly deemed Plaintiffs the "losers."

Accordingly, with respect to VIX futures held to settlement, for example, the amended complaint alleges that Cboe's conduct caused the settlement values for VIX products, including futures, to be artificial. SA-29-30, ¶¶79-80; SA-96, ¶246; SA-105, ¶270. It alleges the exact way in which Plaintiffs were harmed—when the VIX settlement value was inflated, Plaintiffs who held short futures positions to settlement were harmed; when the VIX settlement value was suppressed, Plaintiffs who held long futures positions to settlement were harmed. SA-105, ¶270. The amended complaint also:

- details the statistical models that Plaintiffs' experts used to identify *which* settlement dates were manipulated ***and*** in *which* direction (i.e., whether the settlement value was artificially inflated or suppressed), SA-96, ¶246 & n.81;

113-14, ¶296.

- alleges that Plaintiffs' experts applied their models to Plaintiffs' transactional data to determine instances where, "***Plaintiffs were on the losing side of the artificiality caused by the manipulation***," SA-96-97, ¶248; and
- sets forth ***multiple examples*** where this analysis confirmed that a Plaintiff both held VIX futures to settlement on a manipulated settlement date ***and*** that the manipulation was adverse to that Plaintiff's position. SA-96-98, ¶¶247-48, 251-52, 254.

With respect to VIX futures that Plaintiffs traded before settlement, the amended complaint conducts a similar analysis. For these trades, Plaintiffs devote over six pages explaining how their experts determined when and how the VIX product prices had been manipulated over time, and then compares those prices to the prices at which Plaintiffs bought and sold. It also explains what direction of manipulation would harm what type of transaction. SA-105, ¶270. This section similarly concludes with multiple examples where a specific Plaintiff lost money as a result of buying and selling specific VIX futures on specific dates. SA-97-98, ¶¶251-52, 254; SA 108-110, ¶¶279-80, 282-83.

In sum, the amended complaint provides over sixty paragraphs detailing how econometric models identify manipulated prices for any given settlement. It then applies these models to the over hundred thousand transactions contained in Plaintiffs' PSLRA certifications, which were exhibits to the amended complaint, Dkt.263-1, to identify dozens of Plaintiff-product-date example combinations where Plaintiffs were injured. SA-96-98, ¶¶247-48, 251-52, 254; SA-108-10, ¶¶279-80, 282-83; SA-112-113, ¶¶289-90, 292. Were that not enough, Plaintiffs then proffered by way of an appendix thirty-six additional pages providing additional details Cboe demanded in its motion to dismiss. SA-135-70. Such allegations easily suffice to plead actual damages.

2. The District Court's Dismissal Rests On Legal Error

The district court did not fault the economic models Plaintiffs used to identify when and in which direction manipulation occurred (i.e., inflating or suppressing prices). Instead, the district court faulted Plaintiffs for alleging only that they were harmed because they traded positions that were opposite the manipulation, rather explaining that the manipulation caused the market to be "inflated" or "suppressed" on every alleged manipulation day. A-67-69. This was legal error, with respect to both types of harms alleged.

(a) Plaintiffs Alleged Plausible Harm For VIX Futures Held To Settlement

For VIX futures held to settlement, the district court acknowledged that Plaintiffs sufficiently (1) "identify specific dates on which named plaintiffs held futures to expiration," (2) "allege that the SOQ process was manipulated on those dates," and (3) that "[a]s a result of settling based on a manipulated process, [Plaintiffs] were 'forced to pay more (or accept less)." A-66-67.

The district court nevertheless determined that these allegations are insufficient because Plaintiffs did not "provide details of their own positions in the market." A-67. The district court thus identified no plausible allegations of injury even though many Plaintiffs alleged that they held VIX futures to settlement, the settlement was manipulated, they were on the "losing side" of the manipulation, and they lost money as a result. SA-96, ¶248. This was because, according to the district court, it had no way of knowing if the plaintiffs were on the winning or losing side of the manipulation without more "details." A-67. This ruling is wrong for several reasons.

First, Plaintiffs specifically allege that they were on the losing side—i.e., they held VIX futures to settlements in which ***the manipulated SOQ process caused artificiality that was adverse to their position***. SA-5-9, ¶¶16-27. These allegations, which the district court was required to accept as true, suffice to plead actual damages. *Baghdady v. Robbins Futures, Inc.*, 1999 WL 162789, at *6 (N.D. Ill. Mar. 11, 1999) ("The term 'actual damages' has been applied by the Seventh Circuit in a straightforward manner to require a showing of actual injury caused by the violation." (citing *Wigod*, 981 F.2d at 1521-22)).

In demanding extra detail—whether the losing side on any particular day was the side that wanted the market to be high (but manipulation pushed the market to be suppressed) or low (but manipulation pushed the market to be inflated)—the district court failed to apply Rule 8's liberal pleading standards and controlling Seventh Circuit precedent. This Court has held that so long as a plaintiff "pleaded facts showing a plausible injury," the "[c]omplaint[] need not delineate every detail of the plaintiff's legal theory." *Robertson v. Allied Sols., LLC*, 902 F.3d 690, 695 (7th Cir. 2018). For that reason, it was "inappropriate" for the district court to require "a full description of the facts" underlying Plaintiffs' claims at the pleading stage. *Chapman*, 875 F.3d at 848.

Given this liberal pleading standard, CEA complaints that allege far fewer "details" of actual harm have survived dismissal. *See, e.g.*, *In re Crude Oil Commodity Futures Litig.*, 913 F. Supp. 2d 41, 59-61 (S.D.N.Y. 2012) (rejecting argument that "[p]laintiffs must allege the date and price of the specific [] derivatives they bought and sold, and specific losses from those transactions" because "that is a fact-intensive inquiry for another day"); *Dennis v. JPMorgan Chase & Co.*, 343 F. Supp. 3d 122, 175 (S.D.N.Y. 2018) (a CEA plaintiff "need not specify, at this early stage in the litigation, exactly which tenor of [the relevant benchmark] was manipulated nor explain precisely how the pricing relationship [between the manipulation and his specific transaction] worked"); *Baghdady*, 1999 WL 162789, at *6 & n.11 ("[w]hether Baghdady can prove up these damages, however, is not at issue now" where "[t]he parties have not had an opportunity to conduct discovery").

By contrast, the cases on which the district court relied involved only generic, boilerplate allegations of harm. *See* A-67-79; *In re LIBOR-Based Fin. Instruments Antitrust Litig.*, 962 F. Supp. 2d 606, 620-24 (S.D.N.Y.

2013) (complaint contained bald allegations of harm, "devoid of any references to" plaintiffs' trades); *Harry v. Total Gas & Power N. Am.*, 244 F. Supp. 3d 402, 413-17 (S.D.N.Y. 2017) (plaintiffs did not allege any specific transactions, let alone a transaction through which they suffered actual damage);[9] *Nguyen v. FXCM Inc.*, 364 F. Supp. 3d 227, 240 (S.D.N.Y. 2019) (plaintiffs failed to plead "any actual instances where Plaintiffs did suffer actual harm or damages"); *Braman*, 149 F. Supp. 3d at 892 (same).

Second, the district court's ruling disregards that, on a motion to dismiss, "all inferences must be drawn in Plaintiffs' favor." *AnchorBank, FSB v. Hofer*, 649 F.3d 610, 614 (7th Cir. 2011). This standard presupposes that inferences can be made, meaning the amended complaint need not spell out everything. And where inferences are permitted, the amended complaint provides more than enough to show that Plaintiffs were each harmed on at least one occasion.

For example, the amended complaint alleges that Plaintiff Choa (1) held "VIX Futures positions to expiration … on April 19, 2017" and (2) that

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[9] Moreover, in several cases cited by the district court, the manipulation did not cause ***any*** artificiality in the instruments plaintiffs transacted in. *See, e.g.*, *Total Gas*, 244 F. Supp. 3d at 413-17; *In re London Silver Fixing, Ltd., Antitrust Litig.*, 332 F. Supp. 3d 885, 923 (S.D.N.Y. 2018).

Choa "was forced to pay more (or accept less) in settlement due to manipulation occurring that day." SA-97, ¶251. Choa's PSLRA declaration, an exhibit to the amended complaint, reflects that the type of position that Choa held in the VIX futures that day was a short position. Dkt.263-1 at 2283, 2285.[10] The only inference that can be drawn from these allegations is that Choa held positions in VIX futures (short positions) that were opposite the direction of the manipulation (inflated). SA-105, ¶270 (explaining that Plaintiffs who held short positions of VIX futures to settlement were harmed when the VIX settlement value was inflated). The district court's attempt to fault Plaintiffs for not putting the word "inflated" in Paragraph 251, too, elevates form over substance, and ignores the requirement that the district court must accept not only the well-pled facts, but the reasonable inferences that can be drawn therefrom.

Third, even if reliance on inferences were not permissible and Rule 8 required that every factual dot be connected (which it does not), the district court erred in refusing to consider the appendix, which did

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[10] Although not required to show plausibility, the PSLRA certifications provide such granular details as that Choa acquired this short position by selling a contract for $16.06 on April 17, 2017, and another on April 18, 2017, for $15.15. Dkt.263-1 at 2283-85.

precisely that. In the Choa illustration, the appendix uses the information already available in the amended complaint and accompanying PSLRA declaration to expound that Choa shorted 2 VIX futures that settled on April 19, 2017. On that date, the VIX settlement value was higher than it should have been due to manipulative trading. As a result, Choa was deemed a "loser" and was forced to pay more than he otherwise would have. SA-97, ¶251.

Even the district court determined that the appendix was sufficiently detailed. A-73-74. But the court declined to consider it and refused to allow Plaintiffs to amend their complaint to add the appendix. A-74. This was improper, as "nothing prevents a plaintiff opposing dismissal from elaborating on the complaint or even attaching materials to an opposition brief illustrating the facts the plaintiff expects to be able to prove." *Defender Sec. Co. v. First Mercury Ins. Co.*, 803 F.3d 327, 335 (7th Cir. 2015); *see also Geinosky v. City of Chicago*, 675 F.3d 743, 745 (7th Cir. 2012) (plaintiff "may elaborate on his factual allegations so long as the new elaborations are consistent with the pleadings"). Plaintiffs' appendix falls squarely within such permissible materials.

The district court's sole basis for rejecting the appendix was that it was "inconsistent with plaintiffs' theory." A-74.[11] But, the district court did not find, or even assert, that there were any relevant ***factual*** inconsistencies between the amended complaint and the appendix. Instead, it held that the appendix was "inconsistent" merely because the amended complaint "omit[ted]" facts that the appendix included. A-74. That is not "inconsistency." It is supplementation, which Plaintiffs are allowed to do, by amendment or otherwise. *Geinosky*, 675 F.3d at 745.

Finally, Plaintiffs have expended significant resources—hiring expert economists, creating statistical models, reviewing over 100,000 trades for 8 named plaintiffs, preparing a 134-page complaint, 4000 pages of declarations, and a 41-page appendix—to provide well-supported allegations that Plaintiffs were harmed. Most plaintiffs, in most cases, will not have the resources to do this kind of analysis before filing suit, particularly since the vast majority of the information is in the hands of

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[11] The district court also erred in suggesting that the appendix was improper because it relied upon information contained in the PLSRA declarations. A-73. PSLRA declarations—which were attached to the complaint as exhibits, Dkt.263-1—are routinely considered on a motion to dismiss, so the appendix's reliance on them was proper. *See, e.g.*, *Dean v. China Agritech, Inc.*, 2011 WL 5148598, at *6 (C.D. Cal. Oct. 27, 2011).

the manipulative traders and exchange. To hold that even this extensive effort and resulting, extensive allegations are insufficient would again undermine Congress's policy of encouraging private actions to ensure proper behavior by regulated exchanges.

(b) The Amended Complaint Alleges Plausible Harm For VIX Futures Traded Away Before Settlement

For largely the same reasons, the district court erred in ruling that Plaintiffs failed to plausibly allege that they were harmed when they traded VIX futures prior to settlement.

On this issue, Plaintiffs allege that the near-constant market manipulation affected prices for VIX futures not only during the weekly, one-hour, pre-market SOQ window, but at virtually all times. SA-98-106, ¶¶256-71. The amended complaint details how industry-standard econometric modeling can measure and track this artificiality over time and apply it to a given Plaintiff transaction on a given day. SA-106-07, ¶¶272-75. In many instances, this analysis reveals that Plaintiffs transacted in a direction adverse to the manipulation, and so were harmed. *Id*. Nothing more was required.[12]

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[12] *See In re Term Commodities Cotton Futures Litig.*, 371 F. Supp. 3d

The district court nonetheless rejected this theory of harm, reasoning that "[P]laintiffs may not have suffered any net loss, because they could have entered their positions at artificial prices in one direction and exited them at artificial prices in the same direction." A-68-69. This ruling was wrong for at least two reasons.

First, even if Plaintiffs entered and exited positions in the same direction, harm can be presumed. That is because, as the academic literature explains, the effect of the manipulation dissipated over time. SA-101, ¶263; *see also In re Crude Oil*, 913 F. Supp. 2d at 59-61 (recognizing this principle). In other words, if Plaintiffs bought a VIX product (here, VIX futures) at a time where the prices were artificially inflated due to manipulation, and that artificial inflation dissipated, Plaintiffs were harmed when they sold because even if the price was still inflated, it was less so. For this reason, where Plaintiffs "transacted at artificial prices, injury may be presumed." *Id.* Disagreement over this economic theory is an issue to be resolved at a *Daubert* hearing or, more

95, 100 (S.D.N.Y. 2019) ("If a complaint alleges that a plaintiff traded and lost money during defendant's alleged market manipulation in the same contract type in the same exchange for delivery at the same time and place … her pleading is likely to be sufficient.").

likely, via competing experts at trial—not by the district court at the pleading stage.

Second, even if Plaintiffs are required to plead a "net loss" in a more traditional sense, they do so: The amended complaint alleges not only that Plaintiffs bought at artificial prices and sold at artificial prices but that, in many instances, this artificiality did *not* even out. SA-112-113, ¶¶289-90, 292-93. In particular, the amended complaint alleges based on economic analyses that Plaintiffs suffered harm on a net basis such that they lost money overall on at least certain VIX futures compared to what they would have earned in a non-manipulated market. *Id.*

For example, Plaintiff Pels purchased a VIX future contract on November 28, 2017, with an anticipated settlement in December 2017. SA-110, ¶283; Dkt.263-1 at 3749. Before settlement, on December 6, 2017, he sold that VIX future to someone else. *Id.* Price suppression benefits purchasers of VIX futures, but harms sellers of VIX futures. SA-104-05, ¶270. Pels here was both. But the Complaint makes clear that even taking "both sides" into account—Pels' purchase and his sale—Pels was harmed. SA-110, ¶283. This plausibly alleges harm, even on a "net" basis.

Moreover, though unnecessary, Plaintiffs' appendix expressly lays out that Pels' purchase price was at a manipulated price that was favorable to him, i.e., the market was suppressed and so he paid less than he would have absent manipulation. SA-169. But on the sales date, the market was also suppressed; Pels was therefore only able to sell for far less than he otherwise would have, absent the effects of the manipulation. *Id.* The appendix makes clear that Pels was harmed even on a net basis because the level (or "quantum") of artificiality was not the same on both days. *Id.*

Given the foregoing, the district court erred in holding that it was *implausible* that Plaintiffs—who traded in the manipulated VIX futures many thousands of times—ended up on the wrong side of manipulation at least once.

3. At A Minimum, Plaintiffs Should Be Granted Leave To Amend

At the very least, the district court erred in declining to permit Plaintiffs to amend their complaint to remedy the purported pleading deficiencies. Rule 15(a) provides that "[t]he court should freely give leave [to amend] when justice so requires." Here, the district court *sua sponte* indicated it would not entertain any request to amend the complaint on this issue because amendment would be futile, given the court's causation ruling. A-74. Should this Court reverse on that issue the district court's rationale for denying amendment would no longer apply. Thus, if this Court does not reverse on the issue of actual damages, it should remand with instructions that the district court allow amendment.

II. The Amended Complaint Adequately Alleges Exchange Act Violations

In addition to suing Cboe under the CEA for its bad faith failure to enforce its own rules, Plaintiffs also sought to hold Cboe directly liable for its participation in the manipulative and deceptive scheme under the Exchange Act. Cboe designed a product that was uniquely susceptible to manipulation; promoted, listed, and administered flawed products; expanded its product offerings; and refused to alter the SOQ process or notify the market of the manipulation that was occurring. At nearly every settlement Cboe "published the wrong, manipulated prices to the market." *See, e.g.*, SA-78, ¶202. By doing so, Cboe forced investors to pay (or accept) artificial prices virtually each time a settlement process was carried out.

In addition, despite knowing that its VIX products (here VIX options) did not accurately reflect the performance of the VIX index, but instead reflected the manipulation occurring in the rigged SOQ process, Cboe continued to launch false ad campaigns on its website and in other places. For example, Cboe marketed its VIX options as allowing a "targeted trading strategy" to take advantage of "volatility exposures" that "more precisely track the performance of the VIX Index."

And, of course, Cboe continued to accept the hundreds of millions in fees that traders (both honest and manipulative) paid Cboe for the ability to trade in VIX options and SPX options. Cboe thereby profited handsomely from the manipulative scheme.

Despite this affirmative, deceptive conduct by Cboe, the district court dismissed Plaintiffs' Exchange Act claim for failure to allege scienter. A-49-59. The district court also dismissed this claim for failure to plead loss causation. A-60-61. Both rulings should be reversed.

A. The Amended Complaint Adequately Alleges Scienter

A complaint sufficiently pleads scienter when it alleges facts showing actual knowledge or strong circumstantial evidence of conscious misbehavior or egregious recklessness. *See Makor Issues &*

Rights, Ltd. v. Tellabs Inc., 513 F.3d 702, 704-10 (7th Cir. 2008) ("*Tellabs II*"). "The inquiry is whether *all* of the facts alleged, taken collectively, give rise to a strong inference of scienter, not whether any individual allegation, scrutinized in isolation, meets that standard." *Tellabs*, 551 U.S. at 323 (emphasis in original). The inference "need not be irrefutable, i.e., of the smoking-gun genre, or even the most plausible of competing inferences," so long as it is "cogent and at least as compelling as any opposing inference one could draw from the facts alleged." *Id.* at 324.

1. The Amended Complaint Pleads A Strong Inference Of Scienter

As the operator of its exchanges, Cboe was required to monitor trading to detect and prevent potential manipulation. *See* 7 U.S.C. § 7(d)(3), (4). That obligation aside, Cboe's core business is to oversee trading and to run the calculations necessary to administer the settlements of its SPX and VIX options. SA-6-7, ¶6; SA-19-31, ¶¶51-58; SA-68-74, ¶¶186-90. It has entire teams of people employed to do so, some of whom admitted that the SOQ formula suffered from flaws that made it easy to manipulate. SA-27, ¶74; SA-30, ¶81.

Timothy Klassen, who helped design the relevant VIX formula in 2003, admitted that "trying to manipulate the VIX is not conceptually distinct from trying to manipulate any other index product that is dependent on underlying financial contracts or securities" and that these flaws could have been "easily improved." SA-27, ¶74. This admission is not one of negligence (that a reasonable person should have known of the risk of manipulation) but one of actual knowledge, or, at a minimum, recklessness (a conscious disregard of the known risk of manipulation). Still, Cboe continued to sell the flawed SPX and VIX options unchanged. *E.g.*, SA-6, ¶6, SA-28, ¶75; SA-116,¶303.

The amended complaint alleges not only that Cboe knew the VIX settlements were highly susceptible to manipulation—it alleges Cboe knew the settlements were being manipulated. *E.g.*, SA-28, ¶77; SA-34-36, ¶¶99-103; SA-77-80, ¶¶ 201-07. The manipulation was not some isolated fluke in one random stock on one particular settlement day; the Doe Defendants manipulated the SOQ process in a systematic way, nearly *every single time* the SOQ process was run, for *years*. *E.g.*, SA-13-16, ¶¶30-44; SA-34- 52, ¶¶90-131; SA-100-01, ¶261. The spike in trading activity in SPX options on (at first, only monthly) settlement days, for example, happened over a hundred times, and was obvious to Cboe, which had teams of people monitoring its exchange. SA-77-78, ¶¶201, 203.

These factual allegations must be accepted as true and viewed holistically. So taken, they create a strong inference that Cboe knew or, at a minimum, was egregiously reckless in not knowing of the manipulative trading occurring on its exchanges. *See Novak v. Kasaks*, 216 F.3d 300, 308 (2d Cir. 2000) ("[A]llegations of recklessness [are] sufficient where plaintiffs allege[] facts demonstrating that defendants failed to review or check information that they had a duty to monitor, or ignored obvious signs of fraud."); *Sharette v. Credit Suisse Int'l*, 127 F. Supp. 3d 60, 85-86 (S.D.N.Y. 2015) (sustaining manipulation claims where underwriter defendants "knew in advance of the Offerings how hedge funds planned to exploit [those offerings]" and then structured the offerings in a manner that enabled the hedge funds to do so at the expense of investors).[13]

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[13] The amended complaint also sufficiently alleges that Cboe knew, or was egregiously reckless in not knowing, that its VIX products were flawed at the design stage. SA-6, ¶5; SA-24-26, ¶¶67-72 (alleging that Cboe wanted to make the VIX products replicable, and so removed precautions that would have protected the VIX from manipulation in

SPX options and VIX products were at the "core" of Cboe's operations. The manipulative trading was rampant. This Court's precedent confirms such facts further confirm the strong inference of scienter.

In *Tellabs II*, the Court rejected as implausible the idea that the CEO did not know his statements about "strong demand" for the company's flagship switching systems were untrue, even though these switching systems were Tellabs' most important products. *See Tellabs II,* 513 F.3d at 711. These switching systems "were to Tellabs as Windows XP and Vista are to Microsoft"—and so even without direct evidence of the CEO's actual knowledge of falsity, the complaint sufficed. *Id.* at 709; *see also In re Motorola Sec. Litig.*, 2004 WL 2032769, at *29 (N.D. Ill. Sept. 9, 2004) (Motorola should have known that its billion dollar loan to Turkish wireless company was at risk because "the sheer size of the[] loan" rendered it implausible that executives were "unaware").

Contrasting such cases confirms the lesson of *Tellabs II*. In the cases relied upon by Cboe and the district court, the alleged wrongdoing

order to maximize profits for IPO).

at issue involved far less fundamental problems with products that were not central to the defendant company's business. *See Kohl's*, 895 F.3d at 938-39 (upholding dismissal for lack of scienter where alleged misconduct, including accounting misclassification of renovation and construction costs, did not concern Kohl's core business, and management lacked any real reason to think that the accounting treatment was wrong); *see also Pugh v. Tribune*, 521 F.3d 686, 694 (7th Cir. 2008) (upholding dismissal where executives merely had access to subsidiary's circulation numbers, and therefore might have been in a position to detect fraud); *Higginbotham v. Baxter Int'l, Inc.*, 495 F.3d 753, 758 (7th Cir. 2007) (upholding dismissal where executives had access to foreign subsidiary's financial statements and therefore theoretically could have detected accounting error).

Thus, although this Court has eschewed any bright line rules, *Tellabs II* and its progeny hold that when a company is built around core products that are central to its business, allegations that there are pervasive and longstanding problems with those core products suffice to create a strong inference that management knew about them because these kinds of problems are unlikely to be innocently overlooked.

That is precisely the situation here. SPX options and VIX products are Cboe's marquee products, its "cash cow." They are to Cboe "what Windows [is] to Microsoft." *Tellabs II*, 513 F.3d at 709. And these products were being dramatically manipulated, on a near-constant basis, during an SOQ process that Cboe regularly reviewed. *E.g.*, SA-7, ¶7; SA-13-16, ¶¶30-44; SA-34-52, ¶¶90-131; SA-77-78, ¶201; SA-100-101, ¶261. Yet Cboe continued to expand, offer, advertise, and settle these products month after month, week after week, consciously disregarding the known risk that honest investors trading in Cboe's star products would lose substantial sums as a result of the manipulation. The district court's failure to find a strong inference of scienter is thus contrary to this Court's precedent.

2. The District Court's Orders Rest On Legal Error

(a) The District Court's First Dismissal Order Was Erroneous

In its first dismissal ruling, the district court expressly and properly held that Plaintiffs had adequately alleged that "manipulation was constantly occurring in Cboe's most lucrative market" and that, from this allegation, "it can be inferred that someone in Cboe's management knew about the manipulation and authorized the continued offering and advertising of the VIX." A-21. The district court then ruled, however, that "[w]hile knowledge of a statement's falsity may allow an inference of scienter in a ***misrepresentation*** case, *see, e.g.*, *Tellabs II*, 513 F.3d at 709-10, Cboe's knowledge of the Doe Defendants' ***manipulation*** is not enough to infer that Cboe acted with the requisite intent for its conduct." A-24. Instead, the court determined that for a Rule 10b-5 "scheme claim," a higher standard like "inten[t] to cheat" is required. A-24. The court concluded Plaintiffs had failed to allege this malice-like requirement because, based on the facts alleged, "[p]assive acquiescence is just as strong an inference." This ruling is flawed.[14]

First, the district court cited no authority for the proposition that a manipulation-type securities fraud claim requires a higher showing of scienter than a misstatement-type securities fraud claim. A-20-24. Nor did Cboe.

[14] While the order dismissing the original complaint was not at that point a final appealable order, this Court "may review 'all decisions that shaped the contours of th[e final] judgment,' including earlier interlocutory orders." *Heraeus Kulzer, GmbH v. Biomet, Inc.*, 881 F.3d 550, 563 (7th Cir. 2018).

The PSLRA, by its terms, does not purport to create differing scienter requirements; instead, it merely states that "the complaint shall … state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind." 15 U.S.C. § 78u-4(b)(2)(A). Nor does the Exchange Act vary the required proof on scienter depending on the type of securities fraud that is alleged. *See* 15 U.S.C. § 78j (stating only that a person cannot "use or employ, in connection with the purchase or sale of any security … , any manipulative or deceptive device or contrivance in contravention of [SEC] rules"). And Rule 10b-5, in turn, contains three subsections—(a) and (c) (which prohibit, *inter alia*, manipulation) and (b) (which prohibits misstatements)—but none of these provisions requires a different state of mind depending upon the type of fraud at issue. *See* 17 C.F.R. § 240.10b-5.

Accordingly, the Supreme Court has treated the scienter requirement as a uniform one for all cases arising under Rule 10b-5, regardless of the specific subsection of 10b-5 that applies. *Tellabs*, for instance, quoted all three subsections of 10b-5 before describing the scienter inquiry, without suggesting that the requirements were different. 551 U.S. at 319 (explaining what is required to "establish liability under § 10(b) and Rule 10b-5"). While the Supreme Court declined to weigh in on the substantive standard, the Court recognized that "[e]very Court of Appeals that has considered the issue has held that a plaintiff may meet ***the*** scienter requirement," singular, "by showing that the defendant acted intentionally or recklessly." *Id.* at n.3 (emphasis added).[15]

This non-distinction reflects a core purpose of the Exchange Act and Rule 10b-5—to "protect investors from unfair market manipulation" and to put "the burden of [honest dealing and] telling the whole truth on the seller" of financial products. Matt Silverman, *Fraud Created the Market*, 79 Fordham L. Rev. 1787, 1793 (2011) (quoting H.R. Rep. 73-85, at 2 (1933)); *see also* Frank E. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 Va. L. Rev. 669, 669 (1984). These purposes would be ill-served if the law protected investors from market participants who knowingly make false

[15] Following *Tellabs*, courts have freely cited manipulation-type fraud case law to explain the scienter requirements in misstatement-type cases and vice versa. *See, e.g.*, *Sharette*, 127 F. Supp. 3d at 96 (citing *ECA v. JP Morgan*, 553 F.3d 187, 198 (2d Cir. 2009)).

statements, but not from those who knowingly manipulate financial products.

Second, the district court erred in ruling that an ***equally*** plausible inference of "passive acquiescence" meant the complaint should be dismissed. *See* A-24 ("Passive acquiescence is just as strong an inference" as an inference "that the exchange intended to cheat through its behavior"). Even accepting the district court's erroneous recognition of a "tie" between competing inferences, "the tie goes to the plaintiff." *City of Brockton Ret. Sys. v. Shaw Group Inc.*, 540 F. Supp. 2d 464, 472 (S.D.N.Y. 2008); *see also Saunwin Int'l v. Donville*, 2018 WL 3543533, at *7 (D. Mass. July 20, 2018); *Maiman v. Talbott*, 2010 WL 11421950, at *5 (C.D. Cal. Aug. 9, 2010).

This rule is clear from *Tellabs* itself. 561 U.S. at 326 (scienter pled whenever "the inference of scienter [is] at least as strong as any opposing inference"). The district court's decision to favor Defendants in what the court itself held was a tie between a culpable inference ("that the exchange intended to cheat") and a non-culpable inference ("[p]assive acquiescence") was in error. A-24.

Third, the district court further erred by failing to credit Plaintiffs' well-pled facts as true, and instead misconstruing the complaint as merely alleging "passive acquiescence." A-20-24. To be clear, Plaintiffs are not attempting to hold Cboe liable under the securities laws merely because it knew of the Doe Defendants' manipulation and sat silent.

Instead, Plaintiffs allege that Cboe itself was an active participant in the manipulative scheme by designing a flawed product, by continuing to promote, expand, and tout its SPX and VIX options to honest investors, and by forcing innocent investors (like Plaintiffs) to trade and cash-settle Cboe's products at artificial prices.

Such active conduct gives rise to scienter in a manipulation-based claim, even if Cboe itself did not make the manipulative trades. *See, e.g.*, *In re Global Crossing, Ltd. Sec. Litig.*, 322 F. Supp. 2d 319, 336 (S.D.N.Y. 2004) ("market manipulation" encompasses not only "illegal trading activity" but also "any device, scheme or artifice" or "any act, practice, or course of business" used to perpetrate a fraud); *Sharette*, 127 F. Supp. 3d at 84-85 (same).

City of Providence v. Bats Global Markets, Inc., 878 F.3d 36 (2d Cir. 2017) is instructive. There, plaintiffs alleged that the defendant exchanges engaged in securities fraud by creating, designing and offering certain services (like data feeds and co-location services) that allowed the investors who used them to manipulate the market. The district court dismissed the complaint, holding that "the most that the Complaints can be said to allege is that the Exchanges aided and abetted the [trading defendants'] manipulation." *In re Barclays Liquidity Cross and High Frequency Trading Litig.*, 126 F. Supp. 3d 342, 362 (S.D.N.Y. 2015). The Second Circuit disagreed and reversed, explaining that "even an entity that plays a secondary role in a securities fraud case may be held liable as a primary violator" and that it sufficed to allege that an exchange created, maintained and profited from the services that allowed the trading defendants to engage in manipulation. *City of Providence*, 878 F.3d at 51.

The same reasoning applies with equal, if not greater, force here. Cboe created, designed, promoted, administered, and profited from the flawed SPX and VIX options. *See* pp.51-53, *supra*. Thus, as in *City of*

Providence, Cboe can and should be held liable;[16] the district court was wrong to characterize the amended complaint as alleging that Cboe merely "acquiesce[d]" in the fraud of others.

(b) The District Court's Second Dismissal Order Was Erroneous

Following the first order, Plaintiffs amended their complaint to add ***more*** scienter allegations, including that Cboe continued to promote its flawed products to protect its profits for its upcoming IPO. SA-68-69, ¶¶175-78. For example, the complaint now alleges that Cboe profited not only from its explosively popular VIX products, but from the fees it collected on each manipulative SPX option trade as well. SA-6-7, ¶6; SA-72-74, ¶188-90. The amended complaint also explains why Cboe would be willing to design such a dangerous product—to entice much-needed liquidity into the system in order to get its then-new proprietary products off the ground. SA-6, ¶5; SA-24-26, ¶¶ 67-72.

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[16] In its later order dismissing the now-amended complaint, the district court attempted to distinguish *City of Providence* because there the exchanges acted as co-participants who created products to cater to specific high value clients, whereas here, the amended complaint merely alleges that "Cboe's flawed design allowed anonymous third parties to manipulate the settlement process and Cboe failed to correct it." A-58. As discussed above, however, the amended complaint alleges far more than Cboe's passive "failure to correct" a third party's fraud.

These new allegations, considered with the existing ones as *Tellabs* requires, should have put any concerns about scienter to rest.

Yet the district court for unknown reasons ***reversed*** its earlier ruling that Plaintiffs sufficiently pled knowledge:

> [P]laintiffs argue that Cboe acted recklessly when it allowed manipulation to continue over time and continued to promote its products. They note that Cboe oversaw all of its trades, had access to its own data, and reviewed that data for manipulation, as evidenced by its detection of some acts of manipulation. But none of these allegations support a strong inference that Cboe knew about the Does' manipulation of the SOQ settlement process.

A-53. This statement cannot be reconciled with the district court's earlier determination that Plaintiffs plausibly alleged "that someone in Cboe's management knew about the manipulation and authorized the continued offering and advertising of the VIX." A-21.[17]

See pp.51-53, *supra*.

[17] The district court's cited cases do not support its scienter findings. *See Municipal Employees v. Pier 1*, 935 F.3d 424, 432 (5th Cir. 2019) (no scienter because executives disclosed everything they themselves knew); *Maguire Financial, LP v. PowerSecure Int'l*, 876 F.3d 541, 547-48 (4th Cir. 2017) (no scienter where CEO simply "misspoke," and had no reason to believe misstatement was material); *Owens v. Jastrow*, 789 F.3d 529, 546 (5th Cir. 2015) (no scienter where CEO was "merely negligent" in failing to realize that financial statements were not GAAP compliant). And even if they did, this Court's clear precedent—that "the danger was either known to the defendant or so obvious that the defendant must have been aware of it"—would control. *Tellabs II*, 513

This new ruling is wrong. The district court analogized this case to those where plaintiffs allege that the defendant should have known his statement was false given available information. A-52-54. But this is not a case where Plaintiffs allege scienter because Cboe should be deemed to know every minute detail of every transaction that takes place on its exchanges, or because Cboe "ha[d] broad access to every book in a library" and "chos[e] to ignore facts contained in a particular book" as the district court believed. A-53-54 (quoting *Special Situations Fund v. Deloitte Touche*, 33 F. Supp. 3d 401, 429-30 (S.D.N.Y. 2014)).

More than *half of Cboe's revenue* was made up of these two "books" alone. SA-73-74, ¶¶188-90. Indeed, the SPX and VIX products were Cboe's crown jewels, giving rise to a strong inference that Cboe knew, or was reckless in not knowing, about the *years* of *constant* settlement manipulation occurring on its exchange. *See Tellabs II*, 518 F.3d at 709, and pp. 56-58, *supra*.

Finally, the district court further erred in treating Cboe as an aider and abettor whose conduct was beyond the reach of the Exchange Act. *See* A-56-60. The court ruled that "Plaintiffs here essentially bring

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F.3d at 704.

an aiding-and-abetting claim against Cboe" and that this type of claim is not legally cognizable. A-57. Not so.

The district court improperly assumed that there can be only one primary violator in a securities-manipulation case. *But see Cent. Bank, N.A. v. First Interstate Bank, N.A.*, 511 U.S. 164, 191 (1994) ("[i]n any complex securities fraud, moreover, there are likely to be multiple violators"). Even if the district court were correct that Cboe's wrongdoing should be viewed as somehow less reprehensible than the wrongdoing of the Doe Defendants, this does not absolve Cboe from primary securities-fraud liability. *See id.* ("The absence of § 10(b) aiding and abetting liability does not mean that secondary actors in the securities markets are always free from liability under the securities Acts."); *see also City of Providence*, 878 F.3d at 51.

The amended complaint does not seek to hold Cboe responsible for merely *aiding* wrongdoing. Instead, the amended complaint details Cboe's own primary wrongdoing of attempting to maintain and expand the profitability of its flawed VIX products, and in affirmatively forcing victims to cash-settle the products at artificial levels. The district court's refusal to credit these allegations in favor of its own factual determination that Cboe engaged in mere "passive acquiescence," A-24, was therefore error.

In sum, Plaintiffs' 134-page amended complaint is replete with facts demonstrating that Cboe—the very entity legally responsible for overseeing the marketplaces it created—designed financial products that were uniquely susceptible to manipulation, watched as they were manipulated nearly every time a SOQ process was ran for years, and nevertheless continued to promote, offer, force the settlement of, and profit from the products. Cboe's proffered competing inference—that it simply did not notice the rampant manipulation—does not arise from the complaint's allegations and, regardless, is not a more plausible inference.

B. The Amended Complaint Adequately Pleads Loss Causation

The district court further erred in holding the amended complaint failed to allege loss causation. Under the Exchange Act, "loss causation" is the requirement that a plaintiff allege a causation connection between the defendant's fraudulent conduct and plaintiff's loss. *Dura*, 544 U.S. at 347. Notably, the PSLRA's "heightened pleading standard does not apply to … loss causation." *Boca Raton Firefighters' and Police Pension Fund v. Devry*

Inc., 2013 WL 1286700, at *2 (N.D. Ill. Mar. 27, 2013). Allegations thus need only "provide a defendant with some indication of the loss and the causal connection that the plaintiff has in mind." *Dura*, 544 U.S. at 347.

The amended complaint satisfies this standard. As discussed with respect to "actual harm" above, *see* Part I,B. *supra*, the amended complaint alleges that Cboe's conduct caused Plaintiffs to suffer losses both when Plaintiffs held VIX options to settlements, SA-96, ¶¶246-47, and when Plaintiffs traded VIX products prior to settlement, SA-98-105, ¶¶256-70.[18]

In particular, Plaintiffs' experts determined which settlement dates were manipulated—and in which direction—and estimated the total amount and direction of artificiality in the VIX at any given time. Plaintiffs applied these analyses to Plaintiffs' trades to isolate instances where Plaintiffs were harmed. *See* SA-96-97, ¶¶248-50; SA-97, ¶253; SA-107-09, ¶¶274-79; SA-109-10, ¶¶281-83. More specifically, Plaintiffs identify (1) instances where Plaintiffs were harmed when they held to settlement because they were "on the losing side" of the manipulation

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[18] While the CEA section refers to VIX futures (which are the specific products the CEA pertains to), Plaintiffs' extensive allegations of harm with respect to products held to and traded away before settlement apply with equal force to Exchange Act claims for VIX options and SPX options, as the district court acknowledged. A-60-61.

when they held VIX options to settlement, *e.g.*, SA-97, ¶248 and (2) instances where Plaintiffs were harmed when they did not hold to settlement because they "bought VIX products and SPX options were still 'too high,'" or "sold VIX products and SPX options when prices were still 'too low,'" *e.g.*, SA-107-09, ¶¶274-79. The district court recognized that Plaintiffs "plausibly pleaded that they transacted when prices were manipulated," but nevertheless found loss causation insufficiently pled. A-67. This was error.

First, the district court departed from notice pleading and "inappropriately … demand[ed] … facts" underlying loss causation. *See Chapman*, 875 F.3d at 848; *Ong ex rel. Ong v. Sears, Roebuck & Co.*, 459 F. Supp. 2d 729, 742–43 (N.D. Ill. 2006) ("Plaintiffs are not required to plead facts showing economic loss or causation."). Specifically, the district court superimposed a requirement that Plaintiffs "identify in which direction the manipulation occurred or how it harmed them in any specific trade," and "whether the market was suppressed or inflated during any given transaction." A-60-61.

To support its exacting pleading standard, the district court cited only *Dura*. A-60-61. Yet the court ignored *Dura*'s admonishment that pleading loss causation should not be "burdensome"; rather Plaintiffs need only give Cboe "fair notice of what the [plaintiff's] claim is." *Dura*, 544 U.S. at 346-47; *see also Caremark, Inc. v. Coram Healthcare Corp.*, 113 F.3d 645, 649 (7th Cir. 1997) (loss causation "ought not place unrealistic burdens on the plaintiff at the initial pleading stage").

Here, Plaintiffs' allegations—that they transacted while the market was manipulated and suffered losses as a result—clear this threshold. *See, e.g.*, Order, *CP Stone Fort Holdings, LLC v. Doe(s)*, No. 16 C 4991, Dkt. 67 (N.D. Ill. Oct. 3, 2017) (allegations sufficient where they showed that "if defendant artificially manipulated the spread, plaintiff might have incurred losses (or earned smaller profits) as a result of defendant's actions").

Second, even if Plaintiffs were required to allege specific facts and whether the market was inflated or suppressed during specific individual transactions, they do so. The same models and exhibits discussed in Part I.B. in connection with VIX futures were used to create the same type of detailed allegations, and an explanatory appendix, for VIX options and SPX options. *See* SA-96-97, ¶¶248-50; SA-97, ¶253; SA-105, ¶270; SA-107-09, ¶¶274-79; SA-109-10, ¶¶281-83. This includes allegations of harm even on a "net" basis. SA-111-112, ¶¶286-89, 291-93. These allegations more than suffice to give Cboe "fair notice" of how Cboe's wrongdoing caused Plaintiffs harm.

At a minimum, Plaintiffs should have been given leave to amend. *See* Part I.B.3, *supra*.

CONCLUSION

The judgment should be reversed.

DATED: Chicago, Illinois
June 29, 2020

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June 29, 2020

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I hereby certify that on June 29, 2020, the Brief of Plaintiffs-Appellant was filed with the Clerk of the Court for the United States Court of Appeals for the Seventh Circuit by using the appellate CM/ECF system. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

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Jonathan C. Bunge

CIRCUIT RULE 30(D) STATEMENT

Pursuant to Seventh Circuit Rule 30(d), counsel certifies that all the material required by Seventh Circuit Rule 30(a) and (b) are included in the appendix.

/s/ Jonathan C. Bunge
Jonathan C. Bunge

APPENDIX

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UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

IN RE: CHICAGO BOARD OPTIONS EXCHANGE VOLATILITY INDEX MANIPULATION ANTITRUST LITIGATION	No. 18 CV 4171 Judge Manish S. Shah

MEMORANDUM OPINION AND ORDER

The Chicago Board Options Exchange created the Volatility Index to measure stock market volatility. It also created VIX-related products, including futures and options, that allow investors to trade on their predictions of the market's volatility. Plaintiffs bought and sold VIX-related products on Cboe's exchanges and now argue that Cboe designed the VIX enterprise in a way that allowed anonymous traders to manipulate the market for their own benefit. Cboe knew about this manipulation of its most profitable venture, plaintiffs assert, and chose not to stop it, prioritizing its own profits over its duty to maintain a fair market. Plaintiffs allege that they lost money as a result and bring Securities Exchange Act and Commodities Exchange Act claims against Cboe, as well as a negligence claim. Plaintiffs bring similar claims against unknown Doe Defendants and allege that the Does violated the Sherman Act through their manipulative trading. Cboe moves to dismiss all claims plaintiffs bring against it, and for the reasons discussed below, the motion is granted.

I. Legal Standards

A complaint must describe the claim in sufficient factual detail to give the defendant fair notice of the claim and the grounds on which it rests. *Dura Pharmaceuticals, Inc. v. Broudo*, 544 U.S. 336, 346 (2005). It must also "contain sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" *Ashcroft v. Iqbal*, 556 U.S. 662, 672 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). When a plaintiff alleges fraud, heightened pleadings requirements apply, and the plaintiff "must state with particularity the circumstances constituting fraud or mistake." Fed. R. Civ. P. 9(b). This requires "describing the 'who, what, when, where, and how' of the fraud." *Anchor Bank, FSB v. Hofer*, 649 F.3d 610, 615 (7th Cir. 2011) (quoting *Pirelli Armstrong Tire Corp. Retiree Medical Benefits Trust v. Walgreen Co.*, 631 F.3d 436, 441–42 (7th Cir. 2011)). Ordinarily, "[m]alice, intent, knowledge, and other conditions of a person's mind may be alleged generally," Fed. R. Civ. P. 9(b), but the Private Securities Litigation Reform Act requires that securities-fraud complaints "state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind." 15 U.S.C. § 78u–4(b)(2)(A); *Cornielsen v. Infinium Capital Mgmt., LLC*, 916 F.3d 589, 598 (7th Cir. 2019).

II. Background

Plaintiffs are individuals and companies who bought or sold various products related to Cboe's[1] proprietary VIX, which measures market volatility. [140] ¶¶ 15–25.[2] They allege that Cboe designed the index with features that made it susceptible to manipulation, that the Doe Defendants exploited those features to consistently manipulate the market, that Cboe knew about it and chose not to act (in violation of its own internal rules), and that plaintiffs lost money as a result.

A. An Overview of the VIX

Defendant Cboe Global Markets, Inc. was a publicly traded holding company of, among other entities, defendants Cboe Futures Exchange, LLC and Cboe Exchange, Inc. *Id.* ¶ 26. The S&P 500 index, known as the SPX, was a weighted index of 500 U.S. stocks from different industries and widely regarded as the leading benchmark of the overall U.S. stock market. *Id.* ¶¶ 42–43. Cboe was the exclusive provider of options on the SPX, offering a range of SPX Options, including those with morning and afternoon settlements, weekly options, end-of-month options, and mini SPX options. *Id.* ¶¶ 43–44. An option contract gives the buyer the right—but not the obligation—either to buy (a call option) or sell (a put option) a commodity or financial instrument at some specified time, at an agreed price–the strike price. *Id.* ¶ 35. A contract that involves a promise to buy or sell at a certain price on a fixed date is a

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[1] Throughout the complaint plaintiffs refer to Cboe generally, without specifying which Cboe entity acted.

[2] Bracketed numbers refer to entries on the district court docket. Referenced page numbers are taken from the CM/ECF header placed at the top of filings. Plaintiffs' joint amended complaint is [140].

futures contract. *Id.* ¶ 40. Whether the owner of an option exercises it usually turns on whether the option is in the money or out of the money. *Id.* ¶ 37. An option is in the money if the owner would be entitled to payment if she chose to exercise it; an out-of-the-money option is one where the owner would not get a payment if exercised. *Id.* ¶¶ 37–38. A substantial portion of Cboe's trading volume and transaction fees came from SPX Options. *Id.* ¶ 44.

Cboe created its own index (called the VIX), to measure the expected volatility of the S&P 500. *Id.* ¶¶ 1–2. The VIX Index was meant to provide an instantaneous measure of how much the market thought the S&P 500 would fluctuate over 30 days. *Id.* ¶ 49. The VIX was determined by referencing the prices of SPX Options because the prevailing quotation levels of SPX Options indicated the market's expectations of future stock price volatility. *Id.* ¶ 48. Initially, the VIX was only a benchmark figure; there was no way for investors to take a position in it. *Id.* ¶ 54. But in 2004, Cboe created VIX Futures, and two years later it created VIX Options, to allow participants to make investments based on market volatility. *Id.* The VIX quickly became Cboe's most profitable venture, and today it is widely known as the U.S. stock market's "fear gauge." *Id.* ¶¶ 1, 54.

Because the VIX was a financial index, not a physical good, all VIX Options and Futures were cash-settled. *Id.* ¶ 5. When VIX Options or Futures expired, Cboe made a series of calculations to determine who owed whom money and how much. *Id.* Cboe calculated the VIX using only standard SPX Options (which expired on the third Friday of each month) and weekly SPX Options (which expired on all other Fridays) that Cboe listed for trading. *Id.* ¶ 49. Only SPX Options with more than 23 days and fewer than 37 days to expiration were used in the calculation. *Id.* Those options were then weighted to yield a constant, 30-day measure of expected volatility of the S&P 500 Index. *Id.*

The VIX was calculated every 15 seconds throughout the trading day and was based on bid and ask premiums at various strike prices for different SPX Options. *Id.* ¶ 51. To determine which SPX Options to use, the calculation process began with the strike price closest to the prevailing at-the-money value and moved in both out-of-the-money directions until it reached two zero-bid strike prices. *Id.* The two-zero bid rule ensured that the SPX put and call options used to determine the value of the VIX were drawn from those for which there had not been two or more zero bids in a row, as illustrated below:

Application of the Two-Zero Bid Rule

Put Strike	Bid Premium	Ask Premium	Included in VIX calculation?
1380	0.1	0.2	Yes
1375	0.1	0.15	Yes
1370	0.05	0.35	Yes
1365	0	0.35	No
1360	0	0.35	No
1355	0.05	0.35	Excluded following two zero bids
1350	0.05	0.15	
1345	0	0.15	

Call Strike	Bid Premium	Ask Premium	Included in VIX calculation?
2100	0.05	0.15	Yes
2120	0	0.15	No
2125	0.05	0.15	Yes
2150	0	0.1	No
2175	0	0.05	No
2200	0.05	0.05	Excluded following two zero bids
2225	0.05	0.1	
2250	0	0.05	

Id. ¶¶ 51–53. Before 2003, the VIX was calculated based on a small range of strike prices for puts and calls of options on the S&P 100, clustered around an at-the-money price. *Id.* ¶ 54 n. 12.

Investors could only exercise VIX Options at expiration, which since mid-2005 occurred every Wednesday (before 2005 expirations were monthly). *Id.* ¶ 55. VIX Futures were also cash-settled at expiry, through the same process—the SOQ process—as VIX Options. *Id.* That process was similar, but not identical, to the process used to calculate the VIX itself. *Id.* Cboe conducted the SOQ settlement process using a Hybrid Opening System, which found a single clearing price that maximized the number of contracts that could be traded within the SOQ price range. *Id.* ¶ 56. Before September 2007, Cboe employed an Order Book Official who worked with market makers through the SOQ process. *Id.* ¶ 57. As Cboe prepared to take itself public, it shifted toward automation and removed that position. *Id.* Cboe officials received warnings that this would expose the SOQ process to the risk that unreasonable orders that did not reflect prevailing market conditions would influence the calculation. *Id.*

A lot of control over the bidding and trading process for SPX Options was vested in Cboe-appointed Lead Market Makers. *Id.* ¶ 58. Cboe required Lead Market Makers to "provide continuous electronic quotes" in certain situations. *Id.* ¶ 58. All market makers could participate in the SOQ, but Lead Market Makers were obligated to enter opening quotes for SPX Options if no one else did. *Id.* ¶ 60. Cboe initially designated two Lead Market Makers for SPX Options, and by 2014 it designated three Lead Market Makers for both SPX Options and VIX Options. *Id.* ¶ 59. Cboe kept the identities of these Lead Market Makers confidential. *Id.* ¶ 61. Lead Market Makers (and Designated Primary Market Makers for weekly SPX Options) could participate in the SOQ with both orders and non-binding quotes; all other market participants could participate only through orders, which are binding offers. *Id.* ¶¶ 61–62. Certain market makers were given steep discounts for quoting out-of-the-money SPX Options. *Id.* ¶ 60 n. 14. When there was no opening trade for SPX Options during the settlement window for VIX Options and Futures, and thus no price to incorporate, the opening price was the average of an SPX Option's bid and ask price determined at the open at 8:30 a.m. *Id.* ¶ 63. Cboe then executed the SPX Options orders at market-clearing prices and removed remaining unexecuted orders. *Id.* The auction clearing prices for SPX Options expiring in exactly 30 days were then used as part of the calculations to settle VIX Options and VIX Futures expiring that calculation day. *Id.* Shortly after Cboe created VIX Options, it also created a new set of products which allowed investors to buy shares (ETFs) and notes (ETNs), the value of which was directly linked to the value of the VIX or related products. *Id.* ¶ 64. They traded on a national securities exchange like a security. *Id.*

Cboe long promoted VIX Options and Futures as effective investments. *Id.* ¶¶ 66, 68. Cboe's website encouraged investors to use VIX Options and Futures to "seek diversification, hedge or capitalize on volatility or efficiently generate income." *Id.* ¶¶ 66–67. It advertised the VIX as "a leading measure of market expectations of near-term volatility" and stressed that the "addition of weekly expirations … offers volatility exposures that more precisely track the performance of the VIX Index." *Id.* ¶ 69. In 2007, Cboe launched a branding campaign to "communicat[e] to the world that CBOE is a vital necessity in the options marketplace for which there is no substitute." *Id.* ¶ 71. In 2012, Cboe advertised that VIX Options provided investors "targeted trading strategies around market news and events." *Id.*

B. Vulnerability to manipulation

Some people have criticized the settlement process for the VIX Options and Futures as being ripe for manipulation. *Id.* ¶ 74. Plaintiffs allege that the Doe Defendants took advantage of this vulnerability and routinely manipulated the cash-settlement values for VIX Options and Futures. *Id.* ¶ 73. Certain features of the settlement process made it especially susceptible to manipulation. *Id.* ¶ 74. For example, the settlement process depended on the value of thinly traded, illiquid financial instruments—out-of-the-money SPX Options—which traded in far lower volumes than VIX Options and Futures. *Id.* ¶ 76. This allowed Does to make a small number of out-of-the-money SPX Options trades and have a disproportionate impact on the settlement values of the VIX Options and Futures. *Id.* ¶ 77. Though it took place in the morning, this strategy is similar to what's commonly referred to as "banging the close." *Id.* The ability to manipulate the market was amplified by the fact that manipulators only needed to move the market for a very short period to have an effect. *Id.* ¶ 78. Cboe began publishing information at 7:30 a.m. and required all strategy orders for SPX Options to be made within fifty minutes, meaning the manipulators only needed to move the market shortly before 8:20 a.m. to have an effect. *Id.* The infrequency of VIX settlements further exacerbated the problem. *Id.* Had Cboe made the SOQ settlement window longer, during normal market hours, or more frequent, it would have been more difficult for manipulators to affect the market. *Id.*

Similarly, manipulators were able to exploit the two-zero bid rule by spreading bids out across strike prices to ensure there were never two or more consecutive zero-bid puts ahead of any strike prices the manipulators wanted the SOQ process to include. *Id.* ¶ 82. Cboe's formula further magnified the effect of the manipulation. *Id.* ¶¶ 84–87. In May 2017, two professors published a research paper, detailing patterns that were consistent with manipulation. *Id.* ¶ 88.

C. Cboe's Rules

As a board of trade, Cboe was required to establish rules to prevent abusive trade practices. *Id.* ¶ 143. Cboe's Rule 8.7 required market makers to "contribute to the maintenance of a fair and orderly market" and not "enter into transactions or make bids or offers that are inconsistent with such a course of dealings." *Id.* ¶ 144. Cboe also required that trading-permit holders not

> effect or induce the purchase, sale or exercise of any security for the purpose of creating or inducing a false, misleading, or artificial appearance of activity … or for the purpose of unduly or improperly influencing the market price of such security … or for the purpose of making a price which does not reflect the true state of the market.

Id. Cboe's Rule 601 further prohibited manipulation by providing,

> [n]either a Trading Privilege Holder nor any of its Related Parties shall engage or attempt to engage in any fraudulent act or engage or attempt to engage in any scheme to defraud, deceive or trick, in connection with or related to any trade on or other activity related to the Exchange or Clearing Corporation.

Id. And Rule 603 stated,

> [a]ny manipulation of the market in any Contract is prohibited. Orders entered into the CFE System for the purpose of generating unnecessary volatility or creating a condition in which prices do not or will not reflect fair market values are prohibited and any Trading Privilege Holder (including its respective Related Parties) who makes or assists in entering any such Order with knowledge of the purpose thereof or who, with such knowledge, in any way assists in carrying out any plan or scheme for the entering of any such Order, shall be deemed to have engaged in an act detrimental to the Exchange.

Id. These rules signaled to investors that the VIX was safe and show, plaintiffs allege, that Cboe must have known about, or recklessly disregarded, the Doe Defendants' manipulation.

III. Analysis

Cboe moves to dismiss all of plaintiffs' claims against it. Cboe argues plaintiffs' Securities Exchange Act claim is precluded, that Cboe's status as a self-regulatory organization entitles it to immunity, and that plaintiffs have otherwise failed to allege the requisite elements of a claim, including loss causation and scienter. Cboe argues plaintiffs' Commodities Exchange Act claim fails because it is too general and because plaintiffs have failed to plausibly allege actual damages and bad faith. For similar reasons, Cboe asserts, plaintiffs have failed to plead a claim for secondary Commodities Act liability. Finally, Cboe argues plaintiffs' negligence claim is preempted or otherwise inadequate.[3]

A. Standing

Plaintiffs have alleged Article III standing. To have standing, a plaintiff must have (1) suffered an injury in fact that is concrete and particularized and actual or

[3] Cboe also argues that the Does' manipulation is insufficiently alleged, but I do not reach that argument.

imminent, (2) fairly traceable to the challenged action of the defendant, and (3) likely to be redressed by a favorable decision. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992). Plaintiffs have alleged that Cboe and the Does manipulated the VIX, causing plaintiffs—who purchased and sold VIX-related products—to lose money. Damages would remedy that injury, and at this stage, this is enough. *See RK Co. v. See*, 622 F.3d 846, 851 (7th Cir. 2010). Plaintiffs have standing to pursue their claims.

B. Securities Exchange Act

Plaintiffs allege Cboe Exchange, Inc. and Cboe Global[4] manipulated the VIX marketplace in violation of the Securities Exchange Act by designing a settlement process that was susceptible to manipulation and by failing to prevent Doe Defendants from taking advantage of those vulnerabilities. Section 10(b) of the Securities Exchange Act forbids: (1) the "use or employ[ment] … of any … manipulative or deceptive device," (2) "in connection with the purchase or sale of any security," and (3) "in contravention of" SEC "rules and regulations." 15 U.S.C. § 78j(b). Rule 10b–5 makes it unlawful for any person to: (a) "employ any device, scheme, or artifice to defraud," and (c) "engage in any act … which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security." 17 C.F.R. § 240.10b–5 (2004). To state a claim for market manipulation, plaintiffs must allege (1) manipulative acts, (2) damage, (3) caused by reliance on an

[4] Plaintiffs do not bring a Securities Exchange Act claim against Cboe Futures, *see* [192] at 28 n. 16, and do not allege Cboe Futures took any action "in connection with the purchase or sale of any security." *See* 15 U.S.C. § 78j(b). There is no aider and abettor liability under the Securities Exchange Act. *Central Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A.*, 511 U.S. 164 (1994).

assumption of an efficient market free of manipulation, (4) scienter, (5) in connection with the purchase or sale of securities, (6) using the mail or any national securities exchange facility. *ATSI Commc'ns, Inc. v. Shaar Fund, Ltd.*, 493 F.3d 87, 101 (2d Cir. 2007).

1. Immunity

Self-regulatory organizations—such as Cboe Exchange, *see* 15 U.S.C. § 78c(a)(26)—and their officers are entitled to absolute immunity from private suits "when they perform their statutorily delegated adjudicatory, regulatory, and prosecutorial functions." *Weissman v. Nat'l Ass'n of Secs. Dealers, Inc.*, 500 F.3d 1293, 1296 (11th Cir. 2007). Absolute immunity allows public officials who are entrusted with sensitive tasks to carry out their responsibilities without the concern of a future damages suit. *In re NYSE Specialists Securities Litigation*, 503 F.3d 89, 95 (2d Cir. 2007). Because self-regulatory organizations perform "a variety of regulatory functions that would, in other circumstances, be performed by a government agency," and for which the government would enjoy immunity, courts extended absolute immunity to self-regulatory organizations when performing regulatory tasks. *Barbara v. N.Y. Stock Exch., Inc.*, 99 F.3d 49, 59 (2d Cir. 1996).

But exchanges are also private entities that engage in non-governmental activities to serve their private business interests. *Weissman*, 500 F.3d at 1296 (citing SEC Release No. 34–50700, *Concept Release Concerning Self-Regulation*, 69 Fed. Reg. 71,256, 71,261–262 (Dec. 8, 2004) (noting that self-regulatory organizations face growing business pressure that "can create a strong conflict between [their] regulatory and market operations functions”)). Because self-regulatory organizations are only immune for performing delegated functions, courts must determine whether immunity applies on a case-by-case basis. *In re NYSE*, 503 F.3d at 96. The doctrine “is of a rare and exceptional character,” and the party seeking immunity bears the burden of demonstrating it is warranted. *Id.* (quoting *Barrett v. United States*, 798 F.2d 565, 571 (2d Cir. 1986)). When deciding whether a self-regulatory organization is entitled to immunity, courts apply a functional test, considering “the nature of the function performed, not the identity of the actor who performed it.” *See In re NYSE*, 503 F.3d at 96 (quoting *Forrester v. White*, 484 U.S. 219, 229 (1988) (holding that a state court judge did not have § 1983 immunity for his decision to demote and dismiss a probation officer)). Neither motive, nor reasonableness, is considered. *See In re NYSE*, 503 F.3d at 95–96.

As a self-regulatory organization, Cboe is immune from suit where the alleged misconduct concerns instituting disciplinary proceedings, enforcing rules and regulations and general oversight over members, interpreting securities laws and regulations, and referring exchange members to the SEC or other government agencies. *See Standard Inv. Chartered, Inc. v. Nat’l Ass’n of Securities Dealers, Inc.*, 637 F.3d 112, 116 (2d Cir. 2011). Because this conduct is immune, plaintiffs cannot base their claim on Cboe’s failure to enforce rules prohibiting manipulation or decisions not to discipline those who manipulated the market. Cboe argues that plaintiffs’ claim inevitably stems from these regulatory actions. But at this stage, I draw all inferences in plaintiffs’ favor and frame their claim—to the extent possible—

as one based on Cboe's non-immune acts. When it designed the SOQ settlement process, created and promoted the VIX-related products, and listed those products on the exchange, Cboe acted in its private capacity. The SEC would not create, advertise, or make available proprietary products if Cboe did not exist, so Cboe is not entitled to immunity for doing so. *See Opulent Fund v. NASDAQ Stock Mkt., Inc.*¸ 2007 WL 3010573, at *5 (N.D. Cal. Oct. 12, 2007). Cboe did not create and administer the VIX-related products because of any statutorily delegated duty. It sought to further its private interests of attracting investors and increasing trading to generate fees. *See id.* at *5 (holding Nasdaq was not immune from claims alleging it miscalculated the Nasdaq-100 price because it chose to create that market and disseminate that information); *Weissman*, 500 F.3d at 1299 (holding an exchange's advertisements promoting a certain stock are not entitled to immunity); *In re Facebook, Inc. IPO Securities and Derivative Litigation*, 986 F.Supp.2d 428, 455–47 (S.D.N.Y. 2013) (holding that an exchange is not immune for statements made touting its technology and trading platforms because they did not relate to its delegated responsibilities).

And though the SEC approved some of Cboe's actions, which shows that the SEC acted in its capacity to regulate Cboe, it does not follow that Cboe's conduct was regulatory. Whether Cboe's non-immune conduct gives rise to a Securities Act claim is a separate question, but dismissal is not warranted solely on immunity grounds. There may be a statute of repose defense to aspects of plaintiffs' claim; for example, the design of the VIX occurred more than five years before this lawsuit. *See* 28 U.S.C. § 1658(b). But plaintiffs allege ongoing conduct, some of which continued well past the deadline. Plaintiffs "need not anticipate and attempt to plead around defenses." *United States v. N. Trust Co.*, 372 F.3d 886, 888 (7th Cir. 2004). Because it is not clear from the complaint that plaintiffs' claim is barred by the statute of repose, dismissal at this stage based on the statute of repose is unwarranted.

2. Preclusion

Cboe argues that the Securities Exchange Act precludes plaintiffs' claim because the SEC approved many aspects of the VIX enterprise, including the opening auction procedures, the listing of VIX options, the SOQ settlement process and accompanying rules, the shift from an order book official to an automated trading platform, and the transition to weekly listings of VIX Options. *See* SEC Release No. 34-49798 (June 3, 2004); SEC Release No. 34-49563 (Apr. 14, 2004); SEC Release No. 34-49698 (May 13, 2004); SEC Release No. 34-52367 (Aug. 31, 2005); SEC Release No. 34-55874 (June 7, 2007); and SEC Release No. 34-75501 (July 21, 2015). Regulatory approval of an action does not automatically preclude a private right of action; it depends on what Congress, when passing the relevant statute, intended. *See, e.g., S. Austin Coalition Cmty. Council v. SBC Commc'ns, Inc.*, 274 F.3d 1168, 1170 (7th Cir. 2001) (noting that Congress granted only certain regulators the authority to immunize a merger from an antitrust lawsuit and concluding that because the FCC and DOJ were not among those with that authority, their approval did not foreclose plaintiff's claims). In determining congressional intent as to preclusion, traditional rules of statutory interpretation apply. *POM Wonderful, LLC v. Coca-Cola Co.*, 573 U.S. 102, 112 (2014).

In arguing that the SEC's approval of its conduct precludes plaintiffs' claims, Cboe relies on antitrust cases, in which the Court has recognized that the SEC's approval of certain acts may preclude a plaintiff's antitrust claim where there is a "plain repugnancy between the antitrust and regulatory provisions." *Credit Suisse Securities (USA) LLC v. Billing*, 551 U.S. 264, 272 (2007). But it would be odd to apply this preclusion principle within a single statutory scheme. Cboe points to no cases where a court has found preclusion under similar circumstances, where one provision precludes another from the same regulatory regime.[5]

Even assuming preclusion can be found under such circumstances, the two provisions, as applicable here, are not clearly repugnant. Though it involved two separate statutes, the Court's reasoning in *POM Wonderful* is instructive. There, the Court held that the Food, Drug, and Cosmetic Act does not preclude a private party from bringing a Lanham Act claim challenging a food label as misleading. *POM Wonderful*, 573 U.S. at 115. The Court reasoned, "[w]hen two statutes complement each other, it would show disregard for the congressional design to hold that Congress nonetheless intended one federal statute to preclude the operation of the other." *Id*. Though Congress intended for the SEC to oversee and approve an exchange's proposed rule changes, *see* 15 U.S.C. § 78s(b)(1), it also implied a private right of

[5] In *City of Providence*, the Second Circuit did not reach this issue, but noted, "when a plaintiff challenges actions of [a self-regulatory organization] that are in accordance with rules approved by the SEC, the challenge may be precluded because it would conflict with 'Congress's intent that the SEC, with its expertise in the operation of the securities markets, make the rules regulating those markets.'" *City of Providence, Rhode Island v. Bats Global Mkts., Inc.*, 878 F.3d 36, 50 n. 5 (2d Cir. 2017) (quoting *Lanier v. Bats Exch., Inc.*, 838 F.3d 139, 155 (2d Cir. 2016)). For the reasons discussed, in these circumstances, no such conflict arises.

action, recognizing that manipulation may occur despite the rules designed to prevent it and allowing private individuals who are harmed by manipulation to bring lawsuits to recover their losses. Like the FDCA (which gives the government nearly exclusive enforcement authority) and the Lanham Act (which relies on injured competitors to file lawsuits), the private right of action and SEC oversight offer different mechanisms to further same broad goal: preventing manipulation. Those two different mechanisms complement each other, and so preclusion is not warranted.

Where, as here, plaintiffs allege that the exchange participated in the manipulation, the SEC may not have foreseen that risk when approving the exchange's rules, and so allowing a private suit to go forward does not undermine the agency's decision. *See POM Wonderful*, 573 U.S. at 115 ("The FDA, however, does not have the same perspective or expertise in assessing market dynamics that day-to-day competitors possess."). Allowing plaintiffs to pursue a manipulation claim against Cboe—as they could against any other manipulator, despite the SEC's determination that the VIX enterprise contained adequate safeguards—does not frustrate Congress's intent that the SEC regulate these markets. It allows for the SEC to establish procedures up front to prevent future manipulation and provides recourse for individuals who are harmed when manipulation occurs despite the SEC-approved safeguards.

3. Loss Causation

A private plaintiff bringing a claim for securities fraud must prove that the defendant's fraud caused an economic loss. 15 U.S.C. § 78u–4(b)(4). Allegations that a plaintiff purchased a security at an inflated price, alone, are insufficient to state a misrepresentation claim under the Act. *Dura Pharm. v. Bruodo*, 544 U.S. 336, 346–47 (2005). Inflated prices do not harm buyers unless there is a subsequent price drop, so trading at an inflated price does not necessarily result in a loss. *Id.* at 342–46.

Plaintiffs bring a manipulation, not misrepresentation, claim. But the same principle applies, and they must identify both sides of a transaction to show that they suffered a loss. Given the nature of a manipulation claim, plaintiffs are less likely to have access to certain facts necessary to plausibly state a claim, leading some courts to relax pleadings standards. *See ATSI*, 493 F.3d at 102 ("A claim of manipulation, however, can involve facts solely within the defendant's knowledge; therefore, at the early stages of litigation, the plaintiff need not plead manipulation to the same degree of specificity as a plain misrepresentation claim."); *Sharette v. Credit Suisse Intern.*, 127 F.Supp.3d 60, 78 & 103 (S.D.N.Y. 2015). But plaintiffs have access to information about their own trades. They should be able to identify transactions where they lost money, and so in this context, relaxing the pleading standard is not necessary.

And though plaintiffs allege ongoing manipulation, they do not assert that the manipulation caused constant inflation or suppression; rather, they allege the manipulation varied in direction depending on what was most advantageous to Does at a given time. So even if the manipulation was constant, based on the timing of a given plaintiff's trades, she may not have suffered a loss. To plead loss causation, plaintiffs must identify specific transactions where they lost money, either because they experienced a net loss or because they made less than they would have absent manipulation. The named plaintiffs' declarations list, for each of their transactions: the security, whether they bought or sold, the date, the quantity, and the price. *See* [141]–[149], [168]–[169]. But they do not identify specific transactions that resulted in a loss from the manipulation, and so, they have not plausibly alleged loss causation. And to the extent any plaintiff class members did not hold their options through settlement, their loss is even less directly linked to the SOQ manipulation, and plaintiffs have not alleged loss causation as required to state a claim.

4. Reliance

Cboe argues plaintiffs failed to allege reliance (also known as transaction causation). The Supreme Court has established a rebuttable presumption of reliance in two situations. The first, established in *Affiliated Ute Citizens of Utah v. United States*, 406 U.S. 128 (1972), provides that "if there is an omission of a material fact by one with a duty to disclose, the investor to whom the duty was owed need not provide specific proof of reliance." *Stoneridge Inv. Ptnrs., LLC v. Scientific-Atlanta, Inc.*, 552 U.S. 148, 159 (2008). The second, the fraud-on-the-market doctrine, applies to statements that become public. *Id.* Because public information is reflected in the price of a security, one can assume that the investor who bought or sold at the market price relied on the statement. *Id.* The Court has never addressed whether either of these presumptions applies to manipulation claims. *See CP Stone Fort Holdings, LLC v. Does*, No. 16 C 4991, 2017 WL 1093166, at *5 (N.D. Ill. Mar. 22, 2017).

Because the manipulation was communicated to the public, in the sense that it was incorporated into the pricing of the securities plaintiffs bought and sold, the principle behind the fraud-on-the-market presumption warrants a presumption of reliance here. *See Fezzani v. Bear, Stearns & Co. Inc.*, 716 F.3d 18, 21 n. 2 (2d Cir. 2013) ("There may thus be some merit to a modified presumption of reliance in market manipulation cases because reliance by investors on a misrepresentation of a price as being set by an active, arms-length market may be presumed."); *ATSI*, 493 F.3d at 101 (listing "reliance on an assumption of an efficient market free of manipulation" as an element of a market-manipulation claim); *Ploss v. Kraft Foods Group., Inc.*, 197 F.Supp.3d 1037, 1059 n. 11 (N.D. Ill. 2016) (noting that "reliance on a direct misrepresentation is not necessary. … [T]hat the market relies on the transactions to signal true, rather than manipulative demand—is all that is necessary" to plead reliance for a Commodities Exchange Act claim). Applying this presumption, plaintiffs have alleged reliance.

5. Scienter

The Private Securities Litigation Reform Act requires that a plaintiff plead with particularity facts giving rise to a "strong inference that the defendant acted with the required state of mind." 15 U.S.C. § 78u–4(b)(2). This requires that the inference of scienter be "more than merely plausible or reasonable—it must be cogent and at least as compelling as any opposing inference of nonfraudulent intent." *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 314 (2007) ("*Tellabs I*"). The critical question, then, is whether it is more likely that Cboe either intended to deceive, manipulate, or defraud investors when it designed the VIX-related products, promoted them, and listed them on its exchange (its non-immune conduct), or whether Cboe was merely careless in failing to respond appropriately. *See Pension Trust Fund for Operating Engineers v. Kohl's Corp.*, 895 F.3d 933, 939 (7th Cir. 2018).

Cboe first argues plaintiffs have failed to identify who, within Cboe, acted with the requisite intent. Though it is not enough to refer "generally to the collective knowledge" of a corporation's employees, "it is possible to draw a strong inference of corporate scienter without being able to name the individuals who concocted and disseminated the fraud." *Makor Issues & Rights, Ltd. v. Tellabs Inc.*, 513 F.3d 702, 708–10 (7th Cir. 2008) ("*Tellabs II*"). Plaintiffs allege that the VIX was uniquely important to Cboe's success. Assuming manipulation was constantly occurring in Cboe's most lucrative market, as plaintiffs allege, it can be inferred that someone in Cboe's management knew about the manipulation and authorized the continued offering and advertising of the VIX. This is more than a general reference to Cboe's collective knowledge.

A plaintiff can plead a strong inference of scienter by alleging facts showing either: (1) a motive and opportunity to commit fraud or (2) strong circumstantial evidence of conscious misbehavior or recklessness. *ATSI*, 493 F.3d at 99. Recklessness is "an extreme departure from the standards of ordinary care … to the extent the danger was either known to the defendant or so obvious that the defendant must have been aware of it." *Tellabs II*, 513 F.3d at 710 (quoting *In re Scholastic Corp. Secs. Litigation*, 525 F.3d 63, 76 (2d Cir. 2007)).

Cboe does not dispute that it had the opportunity to commit the manipulation alleged. To allege motive, a plaintiff must assert that the defendant "benefitted in some concrete and personal way from the purported fraud." *Novak v. Kasaks*, 216 F.3d 300, 307–08 (2d Cir. 2000). A generalized motive common to all corporate executives, such as the motive to pretend nothing is wrong to avoid a loss, does not create a strong inference of scienter. *Kohl's Corp.*, 895 F.3d at 939–40. Plaintiffs acknowledge this principle but argue that the "extreme importance of the VIX franchise to Cboe" went beyond a generalized profit motive. [192] at 36. I disagree. Though the VIX franchise was especially lucrative to Cboe, Cboe did not enjoy any additional benefit from the manipulation itself. It merely earned the same trading fees it would have for any legitimate transaction. *Compare Sharette*, 127 F.Supp.3d at 94–95 (noting defendants' incentive to strengthen relationships with hedge funds, whose business was much more lucrative than other investors, evidenced motive), *with Kohl's Corp.*, 895 F.3d at 939–40 (concluding that executives' motive to overlook misclassifications on a balance sheet and pretend nothing was amiss was a motive common to all executives and insufficient to raise a strong inference of scienter).[6] Though the VIX franchise was an important source of profit for Cboe, the manipulation itself was not. Plaintiffs have not alleged that Cboe benefitted in any additional way by attracting the business of market makers. Instead, plaintiffs allege generalized profit motivations, which are not enough to establish a strong inference of scienter.

[6] Plaintiffs also cite *Anschutz Corp. v. Merrill Lynch & Co. Inc.*, 785 F.Supp.2d 799 (N.D. Cal. 2011). But there, the plaintiff alleged that the scheme not only allowed the defendant bank to earn underwriting fees but also provided insurance against losses to its portfolio and could not be explained by legitimate investment aims. *Id.* at 817.

As circumstantial evidence of Cboe's scienter, plaintiffs assert that Cboe had full access to relevant trading data and that it reviewed that data—as it was obligated to do—for signs of manipulation. Because the VIX was so central to Cboe's success, and because even public data showed signs of manipulation, the most compelling inference, plaintiffs assert, is that Cboe was aware that the VIX was being manipulated. Plaintiffs also allege that the SEC has previously fined Cboe for prioritizing its business interests over its regulatory interests by allowing short selling to occur and argue this makes it more likely Cboe acted with scienter here. [140] ¶¶ 161–64. Finally, plaintiffs argue that Cboe's design of the SOQ calculation process (including the use of out-of-the-money SPX Options, the two-zero bid rule, and restricted access to anonymous participants), along with its removal of the Order Book Official and granting of special privileges to select market participants, make it in increasingly likely that Cboe knew about the manipulation.

Taking these allegations together and in the light most favorable to plaintiffs, they are not enough to suggest that Cboe intended to manipulate the market. Though Cboe may have designed a process with features that made it vulnerable to manipulation, the facts alleged in complaint do not support the conclusion that Cboe knew about these flaws at the time it designed the VIX enterprise or that it purposefully designed the market to facilitate manipulation. And showing that fraud occurred does not support an inference that Cboe must have, therefore, intentionally or recklessly created a market susceptible to manipulation. *See Pugh v. Tribune Co.*, 521 F.3d 686, 694 (7th Cir. 2008) (rejecting a similar "fraud by hindsight" theory of scienter). Plaintiffs go one step further than the plaintiffs in *Pugh* and explain why the design features of the VIX were, in fact, prone to manipulation. But this is still insufficient to show that Cboe included those features to facilitate manipulation. A more compelling inference is that Cboe (like the SEC, who approved nearly all aspects of the design) thought it included adequate safeguards.

Cboe's alleged knowledge of the Does' manipulation does not combine with its knowledge of vulnerabilities to strongly suggest an intent to defraud. Plaintiffs allege two layers of manipulation, the Does' manipulative trading and Cboe's manipulative market structure. Cboe must have scienter with respect to its conduct (aiding and abetting the Does is not enough). While knowledge of a statement's falsity may allow an inference of scienter in a misrepresentation case, *see, e.g., Tellabs II*, 513 F.3d at 709–10, Cboe's knowledge of the Doe Defendants' manipulation is not enough to infer that Cboe acted with the requisite intent for its conduct. Knowing that certain market participants acted fraudulently through one course of conduct does not suggest that the exchange intended to cheat through its behavior. Passive acquiescence is just as strong an inference. As a result, plaintiffs have not adequately pled a strong inference of Cboe's scienter.

C. Commodities Exchange Act

The Commodities Exchange Act provides,

> A registered entity that fails to enforce any bylaw, rule, regulation, or resolution that it is required to enforce by section 7, 7a–1, 7a–2, 7b–3, or 24a of this title, … shall be liable for actual damages sustained by a person who engaged in any transaction on or subject to the rules of such registered entity to the extent of such person's actual losses that resulted from such transaction

> and were caused by such failure to enforce or enforcement of such bylaws, rules, regulations, or resolutions.

7 U.S.C. § 25(b)(1)(A). Section 7(d) outlines core principles for contract markets, including that the "board of trade shall have the capacity and responsibility to prevent manipulation … through market surveillance, compliance, and enforcement practices and procedures." 7 U.S.C. § 7(d)(4).[7]

1. Specificity

Cboe first argues that plaintiffs do not identify any particular failure to enforce a particular rule, instead making "a broadside attack on Cboe's disciplinary program, alleging Cboe should have enforced 'a number of particular rules' against unspecified violators, causing hypothetical deterrence effects on other unspecified violators." [203] at 26. Though plaintiffs allege that Cboe repeatedly violated rules it was required to enforce, its allegations are not so general that they fail to state a claim. Plaintiffs list Rules 601 and 603, both of which are applicable to Cboe Futures and prohibit market manipulation. Plaintiffs further assert that by allowing manipulation to take place, Cboe failed to enforce those rules. Cboe argues plaintiffs' allegations are more general than any previously successful 22(b) claim. This matters, Cboe argues, because without alleging a specific rule violation, it is impossible to assess whether the circumstances warranted enforcement, whether

[7] Cboe points out that there is no direct private right of action under 7 U.S.C. § 7 (also referred to as Section 5). But plaintiffs bring a claim under 7 U.S.C. § 25(b) (also referred to as Section 22), which does provide a private right of action. Section 25(b) references § 7, and plaintiffs' allegations regarding the core principles in § 7, therefore, are relevant to their § 25(b) claim.

enforcement would have made any difference, and if lack of enforcement was done in bad faith. But I read plaintiffs' complaint as alleging that each time a Doe Defendant manipulated the VIX Futures, Cboe failed to enforce its rules prohibiting manipulation. This is sufficiently concrete to assess whether Cboe's conduct otherwise rises to the level of a Commodities Exchange Act violation.

2. Bad Faith

A plaintiff bringing a Commodities Exchange Act claim "must establish that the registered entity … acted in bad faith in failing to take action or in taking such action as was taken." 7 U.S.C. § 25(b)(4). Whether plaintiffs have adequately pled bad faith depends in part on whether Cboe, in causing plaintiffs' injury, was exercising a discretionary power. If an exchange injures a trader through exercise of a discretionary power—such as instituting an emergency resolution or interpreting its own rules—then the plaintiff must plausibly allege that the exchange acted unreasonably or that it had an improper motivation. *Bosco v. Serhant*, 836 F.2d 271, 278 (7th Cir. 1987) ("Discretion implies latitude for judgment, and commodity exchanges must not be deterred from exercising judgment by the prospect of heavy liability if they make a mistake."). If "an exchange's regulation imposes a duty that the exchange *should* know is being flouted, the exchange is acting wrongfully—in an attenuated sense, perhaps, but one sufficient" under the law. *Id.* (holding a reasonable juror could conclude the exchange acted in bad faith where a trader violated the exchange's own rules requiring that orders be made in writing and indicate the customer's designation).

Plaintiffs allege that Cboe acted in bad faith in failing to enforce Commodities Exchange Act regulations and its own rules prohibiting manipulation. Cboe argues that enforcing these rules and regulations was discretionary and that plaintiffs have failed to allege that it acted unreasonably or pursuant to an improper motivation. The regulations provide that Cboe "shall list on the contract market only contracts that are not readily susceptible to manipulation" and that it "shall have the capacity and responsibility to prevent manipulation, price distortion, and disruptions of the delivery or cash-settlement process through market surveillance, compliance, and enforcement." 7 U.S.C. § 7(d)(3), (4). In arguing that preventing manipulation is discretionary, Cboe points out that "[u]nless otherwise determined by the Commission by rule or regulation," it has "reasonable discretion in establishing the manner in which it complies" with these principles. 7 U.S.C. § 7(d)(1)(B).

Even assuming enforcing the regulations constitutes a discretionary function, plaintiffs have plausibly alleged that Cboe also failed to enforce its own rules prohibiting manipulation, including Rules 601 and 603, and that those rules are not discretionary. While an exchange has discretion to interpret its own rules, where a market participant violates a rule—and the exchange knows (or should know) about the violation—the failure to enforce suggests wrongfulness. *Bosco*, 836 F.2d at 278. Cboe points to nothing in the text of Rules 601 or 603, or elsewhere, showing that their enforcement is discretionary, and plaintiffs have adequately alleged that Cboe acted in bad faith in failing to enforce them.

3. Actual Damages

To bring a claim under the Commodities Exchange Act, a plaintiff must have suffered "actual damages" from the defendant's manipulation. 7 U.S.C. § 25(b)(1). For the same reasons that plaintiffs have not pled loss causation, they have not alleged they suffered actual damages as the Commodities Exchange Act requires. Without identifying both sides of a transaction, plaintiffs have not shown they lost money and have not plausibly alleged they suffered actual damages. Because plaintiffs do not assert that the market was constantly suppressed or inflated, their general allegations that they must have been harmed at some point are insufficient to state a claim. *See In re LIBOR-Based Financial Instruments Antitrust Litigation*, 962 F.Supp.2d 606, 620 (S.D.N.Y. 2013).

4. Secondary Liability

In addition to Cboe Futures' primary liability, plaintiffs allege Cboe Global and Cboe Options aided and abetted Cboe Futures and Does in violating the Commodities Exchange Act. The act provides that any person "who willfully aids, abets, counsels, commands, induces, or procures the commission of, a violation of any of the provisions of this chapter, or any of the rules, regulations, or orders issued pursuant to this chapter … may be held responsible for such violation as a principal." 7 U.S.C. § 13c(a). To state a claim for aiding and abetting liability under the Commodity Exchange Act, plaintiffs must allege that Cboe Global and Cboe Options (1) knew of the principal's intent to violate the act, (2) intended to further that violation, and (3) committed some act in furtherance of the principal's objective. *Damato v. Hermanson*, 153 F.3d 464, 473 (7th Cir. 1998).

Plaintiffs argue that because Cboe Global and Cboe Options knowingly benefitted from the ongoing manipulation, it does not matter whether they wanted Does to manipulate its market. Plaintiffs' reliance on *Kohen v. Pacific Inv. Mgmt. Co.*, 244 F.R.D. 469 (N.D. Ill. 2007), for this proposition is misplaced. There, the court merely inferred from the totality of the circumstances—including allegations that the defendant fund had accumulated unprecedented positions at suspicious times, combined with the fund's awareness that it had the ability to influence prices—that the fund had intended to manipulate prices. *Id*. at 482–84. Plaintiffs do not similarly allege anything suspicious about Cboe Global's or Cboe Option's actions. To state a claim for aiding and abetting liability, plaintiffs were required to allege that defendants intended to further the primary violations, and they have failed to do so.

Plaintiffs also bring a principal-agent liability claim against all defendants. *See* 7 U.S.C. § 2. ("The act, omission, or failure of any official, agent, or other person acting for any individual, association, partnership, corporation, or trust within the scope of his employment or office shall be deemed the act, omission, or failure of such individual, association, partnership, corporation, or trust, as well as of such official, agent, or other person."). To the extent plaintiffs allege that Cboe Global and Cboe Exchange are liable as agents of Cboe Futures—because defendants are related corporations who should be able to sort out their own involvement—plaintiffs need not specify, at this stage, which defendant was responsible for which acts. *See Jepson,* *Inc. v. Makita Corp.*, 34 F.3d 1321, 1328–29 (7th Cir. 1994). But the claim against Cboe Global and Cboe Exchange as agents fails for the same reasons as the underlying claim against Cboe Futures. To the extent this claim alleges that the Cboe entities are liable for the acts of their employees, it too fails for the same reasons as the underlying claim. Plaintiffs have failed to allege secondary liability claims.

D. Negligence

Plaintiffs bring an ordinary negligence claim against Cboe, alleging Cboe owed them a duty of reasonable care in designing, testing, and promoting the VIX calculation process, the SOQ settlement process, VIX Futures, VIX Options, and SPX Options. [140] ¶¶ 241–42. Plaintiffs withdraw their negligence claims with respect to VIX and SPX Options,[8] leaving only their claim based on VIX Futures.

Cboe argues the Commodities Exchange Act preempts plaintiffs' negligence claim. "A federal law may preempt a state law expressly, impliedly through the doctrine of conflict preemption, or through the doctrine of field (also known as complete) preemption." *Boomer v. AT&T Corp.*, 309 F.3d 404, 417 (7th Cir. 2002). "Congress did not intend to preempt the field of futures trading," nor did it expressly preempt state-law claims. *Am. Agric. Movement, Inc. v. Bd. of Trade of City of Chi.*, 977 F.2d 1147, 1155 (7th Cir. 1992). But the Commodities Exchange Act preempts conflicting state-law claims, which includes those that bear upon the actual operation

[8] Cboe argues that SLUSA warrants dismissal of the entire complaint, not just plaintiffs' Securities Act claims. *See Goldberg v. Bank of America, N.A.*, 846 F.3d 913, 919–920 (7th Cir. 2017) (Flaum, J., concurring). Because dismissal is warranted for the other reasons discussed, I do not address this argument.

of commodity futures markets. *Id*. at 1156. In other words, "[w]hen application of state law would directly affect trading on or the operation of a futures market," it is preempted; when "the application of state law would affect only the relationship between brokers and investors or other individuals involved in the market, preemption is not mandated." *Id*. at 1156–57.

In *American Agriculture Movement*, the court held that the Commodities Exchange Act preempted the plaintiff's state-law breach of fiduciary duty and negligence claims against the Chicago Board of Trade for implementing an emergency resolution. *Id*. at 1157. It reasoned that allowing plaintiff to bring its state-law claims would frustrate Congress's intent to bring the markets under a uniform set of regulations. At the same time, the court acknowledged that different states impose dissimilar fiduciary duties upon brokers, which may affect private relationships. But because subjecting private relationships to varying standards would not hamper the efficient operation of the futures market, the act would not preempt those claims.

Cboe argues that plaintiffs' negligence claim would clearly affect trading on or operation of a futures market. In response, plaintiffs argue that the preemption inquiry mirrors the immunity analysis, and because Cboe was not acting as a regulator, there is no preemption. *See In re Facebook*, 986 F.Supp.2d at 454 n. 15 (noting "preemption precludes allowing state law claims that arise from actions taken by Defendants in their regulatory capacity as agents of the government or even actions 'incident to the exercise of regulatory power'" (quoting *NYSE Specialists*, 503 F.3d at 98)). But the two inquiries are not one in the same. *Compare City of*

Providence, 878 F.3d 36 (holding an exchange is not immune for providing co-location services, proprietary data feeds, and complex order types), *with Lanier*, 838 F.3d 139 (holding the Securities Exchange Act preempts a breach-of-contract claim where the SEC has approved the use co-location services, proprietary data feeds, and complex order types). Because the SEC approved much of the design process that forms the basis for plaintiffs' negligence claim, subjecting Cboe to conflicting state negligence regimes, even though that conduct is non-regulatory, would run counter to congressional intent that markets be subject to uniform standards. Subjecting Cboe to varying standards would hamper the efficient operation of the futures market, and so the Commodities Exchange Act preempts plaintiffs' negligence claims. Because plaintiffs' negligence claim is preempted, I do not reach Cboe's alternative arguments that plaintiffs failed to state a claim and that recovery is barred by the economic loss doctrine.

IV. Conclusion

Defendants' motion to dismiss [184] is granted. Plaintiffs' negligence claim is dismissed with prejudice, but the other claims are dismissed without prejudice and with leave to file an amended complaint. Any amended complaint must be filed by June 19, 2019, and a status hearing is set for June 14, 2019 at 9:45 a.m.

ENTER:

Manish S. Shah
United States District Judge

Date: May 29, 2019

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

IN RE: CHICAGO BOARD OPTIONS EXCHANGE VOLATILITY INDEX MANIPULATION ANTITRUST LITIGATION	No. 18 CV 4171 Judge Manish S. Shah

MEMORANDUM OPINION AND ORDER

Plaintiffs traded in options and futures contracts tied to the Chicago Board Options Exchange Volatility Index (VIX). VIX options and futures are cash-settled on designated dates. The price at which such an instrument settles is determined by a formula that Cboe designed. Plaintiffs allege that a group of anonymous traders used certain trading strategies to manipulate the process behind that formula, and, as a result, plaintiffs paid more or accepted less for their positions than they otherwise would have. They allege that Cboe knew that this manipulation was occurring, but allowed it to continue to increase profitability. Plaintiffs bring claims against Cboe and the unknown alleged manipulators (as Doe Defendants) under the Securities Exchange Act and Commodity Exchange Act. They also bring a negligence claim. Cboe moved to dismiss the complaint for failure to state a claim. I granted that motion and dismissed the complaint without prejudice as to all counts but the negligence count, which I dismissed with prejudice. Plaintiffs amended their complaint, and Cboe again moves to dismiss all counts against it. For the reasons discussed below, Cboe's motion is granted.

I. Legal Standards

To survive a motion to dismiss under Rule 12(b)(6), a complaint must state a claim upon which relief may be granted. Fed. R. Civ. P. 12(b)(6). The complaint must contain "sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). In reviewing a motion to dismiss, a court must construe all factual allegations as true and draw all reasonable inferences in the plaintiff's favor. *Doe v. Columbia Coll. Chi.*, 933 F.3d 849, 854 (7th Cir. 2019); *Sloan v. Am. Brain Tumor Ass'n*, 901 F.3d 891, 893 (7th Cir. 2018).

When a plaintiff alleges fraud, heightened pleading requirements apply. The plaintiff "must state with particularity the circumstances constituting fraud or mistake." Fed. R. Civ. P. 9(b). A plaintiff must provide "precision and some measure of substantiation" to each fraud allegation. *Menzies v. Seyfarth Shaw LLP*, 943 F.3d 328, 338 (7th Cir. 2019) (quoting *United States ex rel. Presser v. Acacia Mental Health Clinic, LLC*, 836 F.3d 770, 776 (7th Cir. 2016)). This requires describing the "who, what, when, where, and how" of the fraud. *Id.* (quoting *Vanzant v. Hill's Pet Nutrition, Inc.*, 934 F.3d 730, 738 (7th Cir. 2019)). Ordinarily, "[m]alice, intent, knowledge, and other conditions of a person's mind may be alleged generally," Fed. R. Civ. P. 9(b). But securities-fraud complaints under the Private Securities Litigation Reform Act must "state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind." 15 U.S.C. § 78u–4(b)(2)(A); *Cornielsen v. Infinium Capital Mgmt., LLC*, 916 F.3d 589, 598–99 (7th Cir. 2019).

II. Background

A. Overview

Plaintiffs' claims involve options and futures contracts. An option contract gives the buyer the right, but not the obligation, to buy (a call option) or sell (a put option) a particular commodity or financial instrument at a predetermined price, generally known as the strike price, at a specific time, the expiry date. [271] ¶ 37.[1] A futures contract involves a promise to buy or sell a particular commodity or financial instrument at a predetermined price, also on the expiry date. [271] ¶ 42. VIX options and futures are cash-settled at expiration, meaning the holder of the derivative receives a cash payment (rather than a physical delivery of a stock or commodity). [271] ¶¶ 38, 42–43.

Whether the holder of an option contract exercises it depends on whether the option is "in the money" or "out of the money," compared to the prevailing market price of the option at the time of settlement (the at-the-money price). [271] ¶¶ 39, 41. If an option is in the money, the holder is entitled to a cash payment if she exercises the option. [271] ¶ 39. If an option is out of the money, the holder is not entitled to a cash payment. [271] ¶ 40.

Plaintiffs bring claims against three entities under the umbrella of the Chicago Board Options Exchange. Cboe Global Markets, Inc. (Cboe Global) was the holding

[1] Bracketed numbers refer to entries on the district court docket. Referenced page numbers are taken from the CM/ECF header placed at the top of filings.

company of Cboe Futures Exchange, LLC (Cboe Futures) and Chicago Board Options Exchange, Inc. (Cboe Options). [271] ¶¶ 28–30.

Cboe[2] owned the VIX, a published number that measured the expected volatility of the S&P 500 (SPX), a weighted index of 500 U.S. stocks. [271] ¶¶ 2, 44, 49. The number was higher when the market was expected to be more volatile in 30 days, and lower when the market was expected to be less volatile in 30 days. [271] ¶ 50. The VIX was sometimes known as Wall Street's "fear gauge." [271] ¶ 2.

Cboe calculated the VIX every 15 seconds throughout the trading day using the midpoint price of real-time SPX option contracts. [271] ¶¶ 50–51, 53. The calculation only used options that expired on Fridays and had more than 23 days and less than 37 days until expiration. [271] ¶¶ 51–52. To determine which SPX options went into the VIX, the calculation started from the strike price that was closest to the at-the-money value. [271] ¶ 53. It then moved in both directions (in and out of the money) until it reached two zero-bid strike prices in a row. [271] ¶¶ 53, 83. This was referred to as the "two-zero-bid rule." [271] ¶ 53.

B. The New VIX Formula

Replication is the ability to accumulate a portfolio of the components of an index in the same proportion that each component is represented in the index. [271] ¶ 66. The ability to replicate is important for liquidity providers, because it allows them to offset risk. [271] ¶ 53. Until 2003, only four SPX options series were used to calculate the VIX. [271] ¶ 67. All of the SPX options series used were at, or very close

[2] Unless otherwise noted, all references to "Cboe" refer to one or more of the Cboe entities.

to, at-the-money. [271] ¶ 67–68. These series were the most liquid, and thus the most expensive, making it difficult to replicate the VIX. [271] ¶ 68. Cboe wanted to monetize and profit from the VIX. [271] ¶ 69. To that end, it consulted key market participants, who told Cboe that it needed to make the VIX replicable. [271] ¶ 71. In 2003, Cboe improved the VIX's replicability by expanding the number of SPX options series used in the calculation, from four to up to 130. [271] ¶¶ 69–71.

C. VIX Options and Futures

Until 2004, the VIX was just a published figure; investors could not take a position in it or trade on what they expected it to be. [271] ¶¶ 2, 56. In 2004, Cboe created VIX futures, and in 2006, it created VIX options, products that allowed traders and investors to speculate on the volatility of the stock market. [271] ¶¶ 2, 56.[3] Both VIX options and futures were cash-settled at expiration, which occurred every Wednesday. [271] ¶ 57.[4]

Cboe determined the settlement value of VIX options and futures by using a process known as the SOQ process. [271] ¶ 57. The settlement price was calculated before the market opened at 8:30 a.m. on expiration days. [271] ¶ 58. The SOQ used a similar formula to the VIX itself, and used the same expanded set of inputs used in the new VIX formula. [271] ¶¶ 57, 69–70. The SOQ formula relied heavily on thinly

[3] Shortly after creating VIX options, Cboe created products that allowed investors to purchase shares (ETFs) or notes (ETNs), the value of which were linked to the value of the VIX or related products, like VIX futures. [271] ¶ 65.

[4] VIX options and futures expired monthly until 2015, when Cboe changed the expiration to every Wednesday. [271] ¶ 57.

traded, illiquid, out-of-the-money SPX options that traded in lower volumes than VIX options and futures. [271] ¶¶ 5, 76.

The SOQ process differed from the VIX process in a number of ways: the VIX was calculated every 15 seconds during a trading day, while the settlement price was only calculated on the day that VIX options and futures expired; the VIX only used SPX options that expired within 23–37 days, while the SOQ process used SPX options that expired in exactly 30 days; and the VIX used the midpoint of bid and ask premiums of SPX options, while the settlement value used actual traded prices where possible. [271] ¶ 57 n.6.

D. Alleged Manipulation

Plaintiffs allege that Doe Defendants manipulated the SOQ settlement process in two ways: manipulating the two-zero-bid rule and employing a process analogous to "banging the close." [271] ¶¶ 77–78, 84, 120. Cboe began publishing information about SPX options at 7:30 a.m. on settlement days, and traders had to submit trades for relevant SPX options before 8:20 a.m. [271] ¶¶ 78–79. Traders could manipulate the market by trading certain SPX options (influential in the SOQ process) shortly before 8:20 a.m. on settlement days. [271] ¶¶ 77–79. Because SPX options trade in lower volumes than VIX futures and options, manipulators could move VIX-based settlement values by trading a small number of out-of-the money SPX options. [271] ¶¶ 77–79. Specifically, they could raise their bid premiums for SPX options at certain strike prices, which would increase the settlement price, or lower their ask premiums, which would decrease the settlement price. [271] ¶¶ 79–80.

Also, by spreading bids across strike prices, the manipulators prevented two zero bids from occurring in a row, causing the SOQ calculation to rely on strike prices that were further out of the money. [271] ¶¶ 84, 120. Out-of-the-money put options had a more significant impact on the settlement price than other, similar options. [271] ¶¶ 88, 91, 96, 108, 125. The more out of the money the option was, the more weight it was assigned in the SOQ formula. [271] ¶ 108. Thus, by avoiding the two-zero-bid rule and causing the SOQ to use deeper out-of-the-money put options, the manipulators were able to affect the settlement price. [271] ¶¶ 88–89, 125. The complaint does not explain whether manipulation of the two-zero-bid rule typically resulted in an increase or decrease of the settlement price, but I infer that the method could push the settlement values in either direction.

In May 2017, an academic paper concluded that, at the exact time of settlement every month, trading volume spiked, but only in out-of-the-money SPX options that were included in the settlement calculation. [271] ¶¶ 8, 91. Plaintiffs' data similarly shows that, on nonsettlement days, the ratio of put to call trades was similar, but on settlement days, and particularly during the settlement window, trading in put options increased much more than in call options. [271] ¶¶ 9, 97–99, 108. And trading in out-of-the-money options spiked on settlement days as compared to in-the-money options. [271] ¶¶ 9, 117. The more out of the money the SPX put option was, the more it was traded as compared to other options. [271] ¶¶ 107, 109, 111. Plaintiffs' data also show that the VIX itself—which used almost identical inputs as the SOQ—moved differently around the settlement window than it did at other times. [271] ¶¶ 128–

31. And, around the time of the settlement window, out-of-the-money SPX options were more likely to be eligible for inclusion in the VIX formula than that same option when considered on a nonsettlement day—because on other days the two-zero-bid rule would have excluded that option. [271] ¶¶ 126–27.

In 2018, a whistleblower contacted the SEC and the CFTC and alleged, among other things, that active manipulation was occurring in the VIX, and that Cboe was allowing pervasive flaws to persist. [271] ¶¶ 8, 93. In response to the academic paper and whistleblower complaint, Cboe officials denied that manipulation was occurring, claimed that internal regulators monitored for settlement manipulation, and said that safeguards were built into the VIX settlement calculation to prevent manipulation. [271] ¶¶ 226–27, 299–300.

That same year, the media reported that FINRA was investigating the manipulation of VIX pricing. [271] ¶¶ 8, 132. After that announcement, there was less of a discrepancy between the volume of trades in out-of-the-money SPX put options on nonsettlement Wednesdays versus settlement Wednesdays than there had been before the investigation was reported. [271] ¶¶ 10, 132–34. The media later reported that Cboe was making a series of changes to the settlement process. [271] ¶¶ 228–32.

Plaintiffs allege that the Does' manipulation benefited Cboe financially. [271] ¶ 152. Cboe collected a fee for every transaction, regardless of the value of the transaction. [271] ¶ 153. By increasing the number of SPX options series included in the VIX and SOQ formulas, Cboe increased its profits, because more transactions occurred during the settlement window. [271] ¶ 154. Plaintiffs' analysis shows a 60% increase in fees on days when manipulation was stronger. [271] ¶¶ 157–59. According to plaintiffs' analysis, Cboe earned 753% more in fees on SPX options trades during the SOQ window from 2007 to 2018 than it would have under the VIX calculation that used only four SPX options series. [271] ¶¶ 155–56.

The market for VIX options and futures and SPX futures increased from $200 billion in 2006 to $1.6 trillion in 2016. [271] ¶ 187. Cboe's revenues grew with the market. [271] ¶ 188. Between 2010 and 2018, Cboe's stock price increased over 300%. [271] ¶ 191.

E. Cboe's Knowledge of Manipulation

To allege Cboe's knowledge of manipulation (either the potential for it to occur or actual knowledge that it occurred), the complaint includes several details. It asserts generally that Cboe knew that manipulation either could occur or was occurring. [271] ¶¶ 200–01. And it includes examples like a statement from Timothy Klassen, a member of the team that assisted Cboe with the new formula, who said that the SOQ formula could have been "easily improved." [271] ¶ 74. A former Cboe employee who was responsible for designing the VIX, Matthew Shapiro, said in a 2012 interview that traders could "crush the print" by selling "thousands and thousands of S&P options" during the SOQ process, or "bid the print up" by buying thousands of S&P options. [271] ¶ 81.

Because Cboe had data about its trades, plaintiffs say it knew that manipulation was occurring. [271] ¶¶ 119, 203. Cboe had several committees and departments responsible for monitoring its products, and Cboe executives have stated that the regulatory group "actively surveils for potential VIX settlement manipulation." [271] ¶ 203. The complaint asserts that Cboe did not fix the SOQ process because it was collecting additional fees from the manipulation, and because acknowledging the flaws in the process would put Cboe's IPO at risk. [271] ¶¶ 172–74.

In 2013, the SEC found that Cboe had failed to detect, investigate, and discipline naked short selling in 2008 and 2009 by one of its member firms. [271] ¶¶ 194–99. Cboe settled those charges. [271] ¶¶ 194–99. Cboe imposed fines on three financial institutions for manipulating or attempting to manipulate Cboe's products, and imposed disciplinary actions on trading firms for disruptive trading. [271] ¶¶ 208–11, 233. As part of those disruptive-trading fines, Cboe identified two firms that had attempted to manipulate the two-zero-bid rule by utilizing "safety bids," bids that ensured that the settlement calculation included far out-of-the-money options series by avoiding triggering the two-zero-bid rule. [271] ¶¶ 11, 210–11, 216. Plaintiffs used the trading patterns that Cboe found sanctionable in other instances and applied those patterns to VIX-related data, finding similar patterns. [271] ¶¶ 212–22.

In 2014, Cboe gave a presentation to "potential European retail investors." [271] ¶ 164. A slide from that presentation stated that, "Since both long and short strategy orders are placed by firms at VIX settlements, there are frequently buy or sell imbalances to some degree." [271] ¶ 164. The slide stated that those "mismatches" presented "compelling trading opportunities for liquidity providers," and noted that "[t]rading VXST settlements could present trading opportunities 52 times a year." [271] ¶ 164. The complaint alleges that this showed that Cboe both knew that the SOQ process was being manipulated, and was actively seeking to profit off of that manipulation. [271] ¶¶ 165–66. But the slides don't explicitly refer to banging the close or the two-zero-bid rule, and the complaint does not allege that those manipulative devices—the two ways plaintiffs allege the Doe Defendants manipulated the SOQ settlement process—are the same as the mismatches and trading opportunities referenced in the slide.

F. Cboe's Enforcement of its Rules

The Commodity Exchange Act requires boards of trade like Cboe to enforce compliance with the rules of the contract market. [271] ¶ 223; *see* 7 U.S.C. § 7(d)(2)(A). Cboe had rules to promote a fair market, and rules that prohibited fraud and manipulation of the market. [271] ¶ 224. Rule 601 required that no trader "engage or attempt to engage in" "any fraudulent act" or "scheme to defraud, deceive or trick." [271] ¶ 224(c). Rule 603 prohibited "[a]ny manipulation of the market." [271] ¶ 224(d). According to that rule, anyone who knowingly placed, or helped to place, an order with the purpose of "generating unnecessary volatility" or created a condition "in which prices do not or will not reflect fair market values" "engaged in an act detrimental to the Exchange." [271] ¶ 224(d).

G. Plaintiffs' Allegations of Harm

Plaintiffs lost money because they traded in SPX options, VIX options and futures, and VIX ETFs or ETNs that were mispriced, or settled at a manipulated price, because of manipulation. [271] ¶¶ 242–43. Plaintiffs relied on the VIX settlement process being fair. [271] ¶¶ 243–45.

Plaintiffs allege three theories of harm. First, that manipulation occurred only at the time of settlement, so plaintiffs who held their instruments to expiration were harmed by settling at manipulated settlement prices. [271] ¶ 255. Under this theory, those harms were not offset by artificial gains at the time the plaintiffs purchased their contracts, because manipulation was limited to a fleeting period of time (the settlement window). [271] ¶ 255.

To allege damages under this theory, plaintiffs identified days on which settlements were manipulated, and identified named plaintiffs who held VIX options or futures to settlement on those days. [271] ¶¶ 246–48. For example, on January 18, 2017 and October 18, 2017, plaintiff Richard Aaron held VIX put option positions to expiration. [271] ¶ 249. Since manipulation occurred on those days, Aaron either paid more or accepted less upon settlement. [271] ¶ 249. Similarly, on three dates in 2017, plaintiff Victor Choa held VIX futures positions to expiration. [271] ¶ 251. The settlement process was manipulated on each of those days, so Choa either paid more or accepted less at settlement than he would have absent manipulation. [271] ¶ 251; *see also* [271] ¶¶ 249–254. The complaint does not allege whether the manipulation moved the settlement price artificially higher or lower on any given settlement date.

Under plaintiffs' second theory of harm, plaintiffs suffered damages because manipulative trades had a lasting impact on the market. [271] ¶¶ 256–64. Under this theory, each manipulative event had a lingering impact—presumably (although not specifically alleged) in the direction targeted by the manipulators—that lessened over time. [271] ¶¶ 256–64. So the level of artificiality in the market at any given time was not the effect of the last instance of manipulation, but the cumulative effect of all prior manipulative events. [271] ¶¶ 256–64. Artificiality affected all VIX-related products, not just those held to settlement. [271] ¶ 266. And plaintiffs were affected both when they bought or sold the products and on settlement. [271] ¶¶ 270–71, 273. So, the theory goes, plaintiffs were harmed even when they didn't hold their instruments to expiration because prices were artificially high or low even outside the settlement window. [271] ¶¶ 273–74.

Plaintiffs developed a chart they call a lasting-impact artificiality ribbon to identify when prices were artificially high or low. [271] ¶ 264–65, 274. The ribbon does not specify how high or low the allegedly artificial prices were. Plaintiffs say they applied the artificiality ribbon to their trades to identify transactions in which they purchased when prices were artificially high, or sold when prices were artificially low. [271] ¶ 274. For example, plaintiffs identified 13 days between 2014 and 2017 when Aaron traded multiple VIX options; on each of those days, prices were artificially high or low, so Aaron sold for less or bought for more that he would have with legitimate pricing. [271] ¶ 276; *see also* [271] ¶¶ 277–79, 281–83. Likewise, plaintiffs identified multiple dates between 2015 and 2017 when Victor Choa bought or sold VIX futures when prices were artificial, so Choa bought for more or sold for less than he otherwise would have. [271] ¶ 279; *see also* [271] ¶¶ 280, 282–83. Plaintiffs do not specify, for any given transaction, whether prices were artificially high or low, how high or low they were, whether the plaintiff bought or sold, whether the plaintiff accepted less or paid more for his or her position, or how much harm any plaintiff suffered by trading in an artificial market.

Finally, plaintiffs' third allegation of harm attempts to answer the argument that, under a lasting-impact theory, plaintiffs could not have been harmed because they would have benefited as much as they were damaged—in other words, that considering harm on a net basis, plaintiffs would have both gained and lost from manipulation and would have come out even. [271] ¶ 284. Plaintiffs allege that applying an artificiality ribbon to every step in a given contract for a sample of transactions establishes that they suffered more harm than they gained a benefit. [271] ¶¶ 285–93. The complaint does not specify how much net harm any particular plaintiff suffered.

H. Procedural History

Plaintiffs bring ten claims, five of which are against the various Cboe entities. The other five claims are against the Doe Defendants and are not at issue here. Plaintiffs allege that Cboe Global and Cboe Options violated the Securities Exchange Act, [271] ¶¶ 311–19 (Count One), and that all Cboe defendants—Cboe Global, Cboe Options, and Cboe Futures—failed to enforce Cboe's rules under the Commodity Exchange Act. [271] ¶¶ 320–27 (Count Two). They bring two secondary-liability claims under the CEA; they bring a principal-agent claim against all defendants, including the Does, [271] ¶¶ 361–64 (Count Seven), and they allege aiding and abetting against all defendants except Cboe Futures. [271] ¶¶ 365–68 (Count Eight). Plaintiffs also bring a claim of ordinary negligence against all Cboe defendants. [271] ¶¶ 328–33 (Count Three).

This is Cboe's second motion to dismiss. Plaintiffs brought the same ten claims in their original complaint, and Cboe moved to dismiss for failure to state a claim. I dismissed the Securities Exchange Act claim and the CEA claims without prejudice, and the negligence claim with prejudice. *See generally* [245].[5] In their first complaint, plaintiffs failed to establish loss causation and scienter under the Private Securities Litigation Reform Act to state a claim for securities fraud. As to the CEA claims, plaintiffs plausibly alleged bad faith but failed to plead actual damages. I did not reach the issue of whether plaintiffs alleged manipulation. Plaintiffs amended their complaint, and Cboe again moves to dismiss all claims against it for failure to state a claim.

III. Analysis

Cboe argues that plaintiffs have again failed to state a securities-fraud claim because they have not adequately pleaded scienter or loss causation. Cboe also argues that plaintiffs have failed to state a CEA claim; it says plaintiffs have not plausibly

[5] Plaintiffs included the negligence claim in their amended complaint to preserve it for appeal. [271] at 118 n.101. It is dismissed for the reasons stated in the earlier opinion.

alleged bad faith, actual damages, or causation, and that plaintiffs have failed to sufficiently plead their CEA secondary-liability claims.

A. The Securities Exchange Act Claim

Section 10(b) of the Securities Exchange Act forbids: (1) the "use or employ[ment] … of any … manipulative or deceptive device," (2) "in connection with the purchase or sale of any security," and (3) "in contravention of" SEC "rules and regulations." 15 U.S.C. § 78j(b). Rule 10b–5 makes it unlawful for any person to: (a) "employ any device, scheme, or artifice to defraud," and (c) "engage in any act … which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security." 17 C.F.R. § 240.10b–5 (2004).

To state a claim for market manipulation, plaintiffs must allege that defendants engaged in manipulative conduct while buying or selling securities; defendants used the mail or any national securities exchange facility to do so; defendants acted with scienter; and plaintiffs relied on the assumption of a manipulation-free market and suffered damage as a result. *ATSI Commc'ns, Inc. v. Shaar Fund, Ltd.*, 493 F.3d 87, 101 (2d Cir. 2007).

Cboe argues that plaintiffs have failed to plead scienter and loss causation. It also renews its arguments that Cboe is immune from suit, that plaintiffs' claims are precluded, and that the five-year statute of repose bars plaintiffs' claims.

1. Standing

Cboe argues in reply that the named plaintiffs lack standing to bring claims on behalf of class members who traded on settlement days other than the ones plaintiffs identify. [282] at 22–23. As an initial matter, "[a]rguments raised for the first time in a reply brief are waived." *Gonzales v. Mize*, 565 F.3d 373, 382 (7th Cir. 2009) (quoting *Simpson v. Office of the Chief Judge of Will Cty.*, 559 F.3d 706, 719 (7th Cir. 2009)). In any event, standing disputes over absent class members need not be resolved until after a class is certified; class-certification issues are "logically antecedent" to such standing issues. *Ortiz v. Fibreboard Corp.*, 527 U.S. 815, 831 (1999) (quoting *Amchem Products, Inc. v. Windsor*, 521 U.S. 591, 612 (1997)); *Payton v. Cty. of Kane*, 308 F.3d 673, 680 (7th Cir. 2002) (noting that courts should evaluate class-action standing "with reference to the class as a whole" only "once a class is properly certified"). A class has not been certified in this case. At this stage, I need not resolve standing issues implicating the class as a whole, and Cboe does not argue that any named plaintiffs lack Article III standing. There is a case or controversy here.

2. Scienter

The PSLRA requires plaintiffs to state with particularity both the facts constituting the violation and the defendant's intention "to deceive, manipulate, or defraud." *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 313 (2007) (quoting *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 194 n.12 (1976)); *Cornielsen*, 916 F.3d at 601. To survive a motion to dismiss, plaintiffs must plead facts giving rise to a "strong inference" that the defendant acted with the requisite intent. *Tellabs*, 551 U.S. at 314 (quoting 15 U.S.C. § 78u–4(b)(2)). A strong inference is more than plausible or reasonable. *Id.* Rather, it must be "cogent and at least as compelling as any opposing inference of nonfraudulent intent." *Id.* In considering a motion to dismiss a securities-fraud claim, a court must consider "plausible opposing inferences" and determine whether a reasonable person would "deem the inference of scienter at least as strong as any opposing inference." *Id.* at 323, 326; *Cornielsen*, 916 F.3d at 601.

A plaintiff may plead scienter by either presenting strong circumstantial evidence of conscious misbehavior or recklessness, or by showing that the defendants had both the motive and opportunity to commit fraud. *ATSI Commc'ns*, 493 F.3d at 99. Recklessness in this context is "an extreme departure from the standards of ordinary care … to the extent that the danger was either known to the defendant or so obvious that the defendant must have been aware of it." *Makor Issues & Rights, Ltd. v. Tellabs Inc.*, 513 F.3d 702, 704 (7th Cir. 2008) (quoting *In re Scholastic Corp. Secs. Litig.*, 252 F.3d 63, 76 (2d Cir. 2001)). Alleging that a defendant should have known about fraud is not enough to show that the defendant was reckless. *Abrams v. Baker Hughes Inc.*, 292 F.3d 424, 432 (5th Cir. 2002) ("A pleading of scienter may not rest on the inference that defendants must have been aware" or "should have known"); *Special Situations Fund III QP, L.P. v. Deloitte Touche Tohmatsu CPA, Ltd.*, 33 F.Supp.3d 401, 429 (S.D.N.Y. 2014) ("[I]t is well-established that an accusation that a defendant 'merely ought to have known' is insufficient to allege recklessness." (citation omitted)).

Cboe argues that plaintiffs have failed to plead either that Cboe had the motive and opportunity to commit fraud, or that Cboe acted recklessly.[6] Plaintiffs primarily focus on Cboe's alleged recklessness, both in changing the VIX formula and later allowing manipulation to continue. They also argue that Cboe had the motive and opportunity to commit fraud, which, they say, supports a strong inference of scienter.

Plaintiffs allege that when Cboe changed the VIX formula in 2003, it knew that the new formula would "exponentially increase the chance of manipulation." [281] at 28. But they do not plead sufficient facts allowing a strong inference that Cboe knew that the new VIX formula, and by extension the SOQ formula, were vulnerable to manipulation at the time of their design. To show knowledge, plaintiffs point to their allegations that key market participants told Cboe to make the VIX replicable in 2003, and that Cboe enjoyed more profits from increased trading than it would have if the pre-2003 formula remained in effect. [281] at 28 (citing [271] ¶¶ 69–71, 153–66). But neither of those allegations establish that Cboe knew the formula was vulnerable to manipulation. Nothing about making the VIX replicable in and of itself suggests manipulation could occur, let alone that Cboe knew manipulation would certainly happen. Replication is not synonymous with market manipulation, the expansion of inputs for the purpose of replication is not synonymous with an intent to foster a trader's manipulation of those inputs, and increased trading volume is not

[6] Cboe again argues that plaintiffs have failed to identify a particular corporate officer who acted with intent. [274] at 19. But it is possible to draw a "strong inference of corporate scienter" without naming specific individuals. *Makor Issues & Rights, Ltd. v. Tellabs Inc.*, 513 F.3d 702, 710 (7th Cir. 2008).

itself manipulative. Cboe's increase in profit is consistent with its decision to make the VIX replicable to attract liquidity providers. Plaintiffs argue that Cboe acted recklessly when it changed the VIX formula in 2003—but Cboe did not start using the formula that plaintiffs allege the Does manipulated, the SOQ process, until Cboe started offering cash-settled products in 2004. Though the VIX and SOQ formulas are similar, if not identical,[7] that the SOQ itself was temporally separate from the VIX redesign weakens plaintiffs' argument that, when Cboe changed the VIX formula in 2003, it knew that change would prompt manipulation of the SOQ calculation—a process that wasn't in operation yet.

To argue that Cboe knew that its SOQ process could be manipulated, plaintiffs identify a number of features of the process that they say made the SOQ vulnerable to fraud, such as disproportionately emphasizing the cheapest kind of trades, designing the settlement window to be relatively short, and setting up a two-zero-bid system. [281] at 29–30. But the mere existence of these features is not enough to suggest that Cboe knew they would lead to fraud. Plaintiffs do not plead any fact supporting the inference that Cboe knew that its design choices would expose the process to manipulation, let alone that Cboe deliberately made those choices because it intended the formula to be manipulated. Similarly, that one individual connected to the VIX design stated that traders could "crush the print" does not show that Cboe

[7] It is unclear how similar the SOQ and VIX formulas are. In their complaint, plaintiffs allege that the SOQ and VIX processes are "similar, but not identical." [271] ¶ 57. And, they say the SOQ uses the same expanded set of option series as the post-2003 VIX in a "nearly identical fashion." [271] ¶¶ 70, 128. In their brief, plaintiffs assert both that the two formulas are "similar, even if not identical," and "identical." [281] at 12 n.4, 35. Since I must draw all inferences in plaintiffs' favor at this stage, I assume the formulas are the same.

knew its SOQ design was flawed at the time it designed it, as plaintiffs argue. [281] at 30. Shapiro made that statement in 2012, [271] ¶ 81, years after Cboe designed the SOQ, and it could just as easily have been an observation about the current state of affairs rather than a confession of what the designers knew and ignored when creating the formula years earlier.

Beyond the design phase, plaintiffs argue that Cboe acted recklessly when it allowed manipulation to continue over time and continued to promote its products. They note that Cboe oversaw all of its trades, had access to its own data, and reviewed that data for manipulation, as evidenced by its detection of some acts of manipulation. But none of these allegations support a strong inference that Cboe knew about the Does' manipulation of the SOQ settlement process. That Cboe had access to its own data means nothing in isolation. The complexity of plaintiffs' complaint establishes that the ongoing manipulation was not "so obvious" that Cboe "must have been aware of it." *See Makor Issues*, 513 F.3d at 704. Plaintiffs submit a variety of models, charts, and datasets that they say are evidence of manipulation. While those models may support the inference that manipulation occurred for purposes of the complaint, plaintiffs don't allege that Cboe ever ran the same tests and analyses that plaintiffs did. Cboe's access to information does not mean that Cboe analyzed that information the same way, or drew the same conclusion from the information. *See, e.g.*, *Special Situations Fund*, 33 F.Supp.3d at 429–30 ("[T]hat a person has broad access to every book in a library does not mean that the person has read and chosen to ignore facts contained in a particular book … Pleading the existence of red flags does not amount to an allegation that the facts and circumstances at issue would have put a reasonable [defendant] on notice of potential fraud." (citation omitted)).

Nor does the placement of internal regulators screening for manipulation support the inference that Cboe knew about the Does' manipulation, as plaintiffs argue. There is no suggestion that those monitors detected the same manipulation that plaintiffs have. Likewise, that Cboe disciplined other trading firms for other manipulative acts doesn't mean that Cboe knew about the specific manipulation plaintiffs allege here. *See* [281] at 29. Rather, that Cboe disciplined some traders suggests that, when Cboe did detect manipulation, it stopped it. Thus, plaintiffs have failed to plead facts supporting a strong inference that Cboe knew about manipulation, either at the design phase or later.

Even if plaintiffs had sufficiently alleged that Cboe knew about the risk of manipulation, their complaint would still fall short of pleading scienter. Knowledge of the risk of fraud does not automatically mean that Cboe was severely reckless, or intended that fraud to continue. *See, e.g.*, *Mun. Emps.' Ret. Sys. of Michigan v. Pier 1 Imports, Inc.*, 935 F.3d 424, 432 (5th Cir. 2019) (upholding dismissal of securities-fraud complaint where plaintiffs alleged that defendants knew about circumstances that led to risk, but failed to plead that defendants had an intent to deceive or acted with severe recklessness by not disclosing it); *Maguire Fin., LP v. PowerSecure Int'l, Inc.*, 876 F.3d 541, 547 (4th Cir. 2017), *cert denied*, 138 S. Ct. 2027 (2018) (same, where inference that defendant "knew his statement was false" was insufficient to show that he "acted intentionally or recklessly to deceive, manipulate, or defraud");

Owens v. Jastrow, 789 F.3d 529, 545 (5th Cir. 2015) (same, where plaintiffs' "allegations of knowledge" did not support inference that defendants acted with "severe recklessness" but supported equally compelling inference that defendants acted only "negligently").

Plaintiffs' motive-and-opportunity argument does not push their scienter claim over the compelling-inference threshold. Plaintiffs argue that Cboe had the motive to commit fraud because the opportunity for manipulation attracted certain traders that Cboe found desirable, and Cboe was able to earn more fees than it would have if it used the same VIX formula that it had used in 2003. Plaintiffs also argue that once Cboe knew manipulation was occurring, it acted out of self-interest to keep it quiet, because publicly acknowledging the manipulation would "sabotage[] the whole enterprise." [281] at 37. They add that Cboe's stock price increased over 300% from 2010 to 2018.

Plaintiffs' complaint establishes that Cboe changed the VIX formula because it wanted to make its product replicable. But plaintiffs fail to plead that Cboe benefited from the manipulation itself. After making its product replicable, Cboe would have enjoyed increased trading (and thus increased fees) even if manipulation had never occurred. That Cboe had a profit motive does not suffice to establish that it had the motive to defraud its customers. *See Plumbers & Pipefitters Local Union 719 Pension Fund v. Zimmer Holdings, Inc.*, 679 F.3d 952, 956 (7th Cir. 2012) (upholding dismissal of securities-fraud complaint where plaintiffs' allegations that defendants sought to benefit from higher stock prices was "too generic to satisfy

Tellabs" because "that managers benefit from higher stock prices does not imply that any particular manager committed fraud"); *Defer LP v. Raymond James Fin., Inc.*, 654 F.Supp.2d 204, 217–18 (S.D.N.Y. 2009) ("[A]llegations of a generalized motive that could be imputed to any for-profit endeavor therefore are not sufficiently concrete for purposes of inferring *scienter*."); *cf. City of Providence v. Bats Glob. Markets, Inc.*, 878 F.3d 36, 51 (2d Cir. 2017), *cert. denied*, 139 S. Ct. 341 (2018) (finding exchange defendants benefited from third-party manipulation by receiving "hundreds of millions of dollars" for products specifically designed to benefit the manipulators, and the manipulation "substantially increased trading volume on their exchanges").

The Securities Exchange Act itself is, of course, instructive. There is no private cause of action under § 10(b) for aiding and abetting manipulation. *Cent. Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A.*, 511 U.S. 164, 177–78 (1994); *see also Santa Fe Industries, Inc. v. Green*, 430 U.S. 462, 473 (1977) ("The language of § 10(b) gives no indication that Congress meant to prohibit any conduct not involving manipulation or deception."). The statute does not create a private right of action for "giving aid to a person who commits a manipulative or deceptive act." *Cent. Bank*, 511 U.S. at 177. And the Supreme Court has declined to read the statute to create liability "for acts that are not themselves manipulative or deceptive within the meaning of the statute." *Id.* at 177–78. "[A]n entity that plays a secondary role in a securities fraud case may be held liable as a primary violator." *City of Providence*, 878 F.3d at 51. But the exchange itself must have "participated in a fraudulent scheme." *Id.* (quoting *Fezzani v. Bear, Stearns & Co.*, 716 F.3d 18, 26 (2d Cir. 2013)).

Plaintiffs here essentially bring an aiding-and-abetting claim against Cboe while framing it as a claim of direct liability (as they must to bring a § 10(b) claim). Their theory is that Cboe knew that its products were vulnerable to manipulation and, later, that manipulation was occurring. By failing to act, plaintiffs say, Cboe allowed the Doe Defendants to manipulate the market, which caused plaintiffs harm. That is secondary-liability reasoning. *See Damato v. Hermanson*, 153 F.3d 464, 471 n.8 (7th Cir. 1998) (noting that aiding-and-abetting liability "reaches persons who do not engage in the proscribed activities at all, but who give a degree of aid to those who do" (quoting *Central Bank*, 511 U.S. at 176)). If adopted, plaintiffs' theory of scienter would impose aiding-and-abetting liability when such liability is not allowed under § 10(b).

In re Barclays Liquidity Cross & High Frequency Trading Litig., 390 F.Supp.3d 432 (S.D.N.Y. 2019) (*Barclays II*), is not as persuasive as plaintiffs argue. [281] at 29, 43. In that securities-fraud case, the plaintiffs alleged that several exchanges had participated in a manipulative scheme by enabling high-frequency trading firms to exploit loopholes in return for directing their trading activity to the defendant exchanges. The exchanges developed specific order types for those firms and marketed them exclusively to the HFTs. *Barclays II*, 390 F.Supp.3d at 451–52. The district court initially dismissed the securities-fraud claims because plaintiffs had alleged only that the exchanges had aided and abetted the primary violators of the Exchange Act (the HFT firms). *In re Barclays Liquidity Cross and High Frequency Trading Litig.*, 126 F.Supp.3d 342, 353–54 (S.D.N.Y. 2015) (*Barclays I*), *vacated and* *remanded sub nom. City of Providence v. Bats Glob. Markets, Inc.*, 878 F.3d 36 (2d Cir. 2017). The district court did not reach the issue of scienter. *Id.* at 361 n.6. The Second Circuit reversed, finding that plaintiffs had alleged more than aiding and abetting because "the exchanges were co-participants with HFT firms in the manipulative scheme and profited by that scheme." *City of Providence*, 878 F.3d at 51. On remand, the district court found that plaintiffs adequately alleged scienter, because the exchanges acted with the specific knowledge that the HFT firms would manipulate prices. *Barclays II,* 390 F.Supp.3d at 451. The inference of scienter was at least as compelling as a general profit motive. *Id.* at 452.

Here, by contrast, plaintiffs do not plead that Cboe was a coparticipant in any manipulation. Cboe did not conspire with the Doe Defendants, develop its formula to assist the Does' strategy of manipulation, or market any particular product exclusively to the Does, so Cboe's relationship to the Does is not comparable to the *Barclays* defendants' relationship with the HFT firms. Plaintiffs do not plausibly allege that Cboe knew who the Does were, let alone that Cboe worked with them to develop specific, exclusive products. Rather, plaintiffs allege that Cboe's flawed design allowed anonymous third parties to manipulate the settlement process and Cboe failed to correct it.

Plaintiffs compare the special order types that the *Barclays* defendants created for the HFTs with the safety bids that two firms used to manipulate the two-zero-bid rule in 2017 and 2019; plaintiffs categorize both as "manipulative abuses" of "special tools." [281] at 29. But Cboe fined traders that it discovered using safety bids to compromise the settlement process. And plaintiffs do not plead that only certain traders had the ability to use safety bids. Theoretically, anyone who understood how to manipulate the two-zero-bid rule could have done so.

And plaintiffs' insistence that Cboe "cater[ed]" to a "select clientele" and a "privileged, sophisticated few," as the exchanges did in *Barclays*, is not compelling. [281] at 29, 42–43. First, in *Barclays*, the alleged manipulators were unambiguously defined as HFT firms. Here, plaintiffs cryptically refer to a group of privileged traders, but don't explain who makes up the group that Cboe allegedly was courting, or what special access Cboe afforded them, other than to generally identify them as manipulators. For example, plaintiffs say Cboe catered to manipulators by expanding the VIX franchise and marketing VIX products as safe. Nothing about those actions affords any exclusive information or product to manipulators; those are actions that Cboe took to expand its general profitability.

Likewise, plaintiffs make much of a presentation that Cboe gave to potential investors that referenced "trading opportunities" on settlement days. [281] at 36, 68 (citing [271] ¶¶ 164–66). But the presentation plaintiffs reference appears to have been public, not exclusive. And the slides are not alleged to be about the Does' method of manipulation, much less encouraging of it. That is, plaintiffs argue that Cboe was promoting the opportunity to trade on the difference between the SOQ settlement price and the VIX when the market opened. Plaintiffs point to that deviation as a consequence of the Does' manipulation, and argue that Cboe's encouragement of trading opportunities on that deviation is proof of scienter. But the complaint does not allege that deviation between the opening VIX and the SOQ could only have been caused by fraud such that Cboe's knowledge of deviation provides a compelling inference of scienter. The presentation does not suffice to show that Cboe was knowingly pushing its products to commit fraud.

To determine whether plaintiffs have established scienter, I must consider plausible opposing inferences. *Tellabs*, 551 U.S. at 323. The more compelling inference here is that Cboe pursued a profit motive by making the VIX replicable, and any manipulation that occurred was unintentional or negligent (from Cboe's perspective). *See Pension Tr. Fund for Operating Engineers v. Kohl's Corp.*, 895 F.3d, 933, 941 (7th Cir. 2018) (finding inference of "negligent oversight" or "some other breakdown" a more compelling inference than wrongdoing). Plaintiffs have not pleaded facts supporting a strong inference of scienter.

3. Loss Causation

To state a private claim for securities fraud, plaintiffs must allege a causal connection between Cboe's fraudulent conduct and plaintiffs' alleged losses. *Dura Pharma. v. Broudo*, 544 U.S. 336 (2005). For the reasons discussed in more detail below in the context of actual damages under the CEA, plaintiffs have not adequately pleaded loss causation under the Securities Exchange Act. Plaintiffs have not plausibly alleged that the Doe Defendants' manipulation caused them to lose money. More specifically, plaintiffs allege that they held options to settlement on days when the Does manipulated the settlement process. But they do not identify in which direction the manipulation occurred or how it harmed them in any specific trade. In the alternative, plaintiffs allege that the market was constantly manipulated due to the cumulative aftereffects of prior manipulative acts. But they do not identify whether the market was suppressed or inflated during any given transaction, so they fail to plead that any manipulation caused them harm.[8]

4. Preclusion, Timeliness, Immunity

Finally, Cboe argues that it cannot be liable for the design of the SOQ process because it created the formula in 2003, outside the repose period. Cboe also argues that the SEC's approval of the formula would preclude liability for its design, and that Cboe is immune from suit because it was acting in its capacity as a self-regulatory organization. I adhere to my original rulings against Cboe on these points. [245] at 12–17.

The Securities Exchange Act has a five-year statute of repose. 28 U.S.C. § 1658(b); *China Agritech, Inc. v. Resh*, 138 S. Ct. 1800, 1804 (2018). While a statute of limitations runs from when the cause of action accrues, a statute of repose begins to run on "the date of the last culpable act or omission of the defendant." *China Agritech*, 138 S. Ct. at 1804 n.1 (quoting *Cal. Public Emps.' Ret. Sys. v. ANZ Secs., Inc.*, 137 S. Ct. 2042, 2049 (2017)). The complaint was filed in 2019, and Cboe argues that plaintiffs' securities-fraud claim largely revolves around actions Cboe took in 2003 and 2004. But plaintiffs need not plead around affirmative defenses, such as a statute of repose, at the pleading stage. *See O'Gorman v. City of Chi.*, 777 F.3d 885,

[8] Cboe also argues that plaintiffs have failed to plead manipulation at all, but I do not reach that argument.

889 (7th Cir. 2015). And while some of plaintiffs' allegations involve acts that Cboe took in 2003 and 2004, they also allege an ongoing pattern of conduct, including Cboe's failure to address manipulation that occurred within the repose period. Many of plaintiffs' allegations involve trades they say harmed them over the course of several years, beginning in 2014. At this stage of the case, there would be no basis to dismiss the claim on statute-of-repose grounds.

Nor is the claim precluded. Cboe argues that the SEC expressly approved the SOQ formula and determined that it would not be susceptible to manipulation. [274] at 46–47. When a plaintiff challenges actions of a self-regulatory organization that are in accordance with rules approved by the SEC, "the challenge may be precluded because it would conflict with 'Congress's intent that the SEC, with its expertise in the operation of the securities markets, make the rules regulating those markets.'" *City of Providence*, 878 F.3d at 50 n.5 (quoting *Lanier v. Bats Exch., Inc.*, 838 F.3d 139, 155 (2d Cir. 2016)). Generally, whether regulatory action precludes a private right of action depends on Congress's intent when passing the relevant statute. *See Stewart v. Parkview Hosp.*, 940 F.3d 1013, 1015 (7th Cir. 2019). Here, Congress implied a private right of action in the Securities Exchange Act. *Cent Bank*, 511 U.S. at 173 ("Of course, a private plaintiff now may bring suit against violators of § 10(b)."). Though Congress intended the SEC to also oversee and approve an exchange's proposed rule changes, that oversight does not supersede the private right of action. The two complement each other.

Cboe is immune from liability for conduct in its regulatory capacity to enforce its rules and regulations. *See Standard Inv. Chartered, Inc. v. Nat'l Ass'n of Secs. Dealers*, *Inc.*, 637 F.3d 112, 116 (2d Cir. 2011). But plaintiffs base their securities-fraud claim on different, nonimmune acts: namely, Cboe's designing the SOQ settlement process, creating and promoting VIX-related products, and listing those products on the exchange. Cboe took these actions in its private capacity, with the goal of generating profit. The claim would survive Cboe's immunity argument. *See Weissman v. Nat'l Ass'n of Sec. Dealers, Inc.*, 500 F.3d 1293, 1299 (11th Cir. 2007) (holding an exchange's advertisements promoting a certain stock were not entitled to immunity).

B. The Commodity Exchange Act Claims

Plaintiffs allege that Cboe violated Section 25(b) of the CEA by failing to enforce its rules and prevent price manipulation.[9] The CEA requires registered entities to "enforce any bylaw, rule, regulation, or resolution that it is required to enforce" by Section 7, 7a–1, 7a–2, 7b–3, or 24a of the statute. For example, Section 7 requires boards of trade to "establish, monitor, and enforce compliance with the rules of the contract market," including "rules prohibiting abusive trade practices." 7 U.S.C. § 7(d)(2)(A)(iii). If a board of trade fails to enforce its rules, it "shall be liable for actual damages" sustained by anyone who engaged in a transaction subject to those rules, "to the extent of such person's actual losses that resulted from such transaction and were caused by such failure to enforce." 7 U.S.C. § 25(b)(1)(A). Thus,

[9] Section 22 of the CEA corresponds to Section 25 of Title 7 of the U.S. Code.

to state a claim under the CEA, plaintiffs must establish that Cboe failed to enforce a rule that it was required to enforce, and that plaintiffs suffered "actual losses" that "were caused by such failure to enforce." 7 U.S.C. § 25(b)(1)(A). Section 25(b)(4) requires plaintiffs to establish that Cboe "acted in bad faith in failing to take action." *See Bosco v. Serhant*, 836 F.2d 271, 276 (7th Cir. 1987).

Plaintiffs allege that Cboe failed to enforce its required rules prohibiting manipulation. [271] ¶ 223–24. Cboe moves to dismiss on the basis that plaintiffs' amended complaint fails to establish that it acted in bad faith, that plaintiffs suffered actual losses, and that Cboe's failure to enforce caused any alleged losses.

1. Bad Faith

The pleading requirements for bad faith turn on whether Cboe was exercising a discretionary power. *Bosco*, 836 F.2d at 278. If an exchange has no discretion to apply the rule to the alleged facts, plaintiffs can establish bad faith by pleading that the exchange should have known that its rule was being violated and failed to act, a negligence standard. *Id.* However, if an exchange acts within its discretion, the pleading standard is higher—the plaintiff must show that the exchange acted "unreasonably" or that it had an "improper motivation." *Id.*[10]

Cboe contends that the heightened bad-faith standard applies because interpretation was required to distinguish between manipulation and legitimate

[10] In the Second Circuit, plaintiffs must plead bad faith by alleging "that the exchange acted or failed to act with knowledge," and "that the exchange's action or inaction was the result of an ulterior motive." *Ryder Energy Distribution Corp. v. Merrill Lynch Commodities, Inc.*, 748 F.2d 774, 780 (2d Cir. 1984). In *Bosco*, 836 F.2d at 278, the court held that negligence in failing to enforce a nondiscretionary rule constituted bad faith under the statute. *Bosco* sets a lower bar for the meaning of "bad faith."

replication activity. [274] at 58. Plaintiffs argue that nothing in their amended complaint undermines my prior holding that they had sufficiently pleaded bad faith. I agree with plaintiffs.

The CEA provides that Cboe "shall list on the contract market only contracts that are not readily susceptible to manipulation" and that it "shall have the capacity and responsibility to prevent manipulation." 7 U.S.C. § 7(d)(3), (4). "The word 'shall' generally imposes a nondiscretionary duty." *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1354 (2018). Moreover, Cboe's Rule 601 reads, "Any manipulation of the market in any Contract is prohibited." Since the statute and Cboe's own rules unambiguously require Cboe to prevent manipulation, Cboe was not exercising discretion if it allowed manipulation to occur and continue. Thus, plaintiffs need only plead that Cboe was negligent to establish bad faith.

Plaintiffs have adequately pleaded that Cboe should have known that the anti-manipulation rules were being flouted. Plaintiffs allege irregular trading activity in a number of ways that occurred around the time of the SOQ settlement process. For example, every settlement day, sales spiked in illiquid, out-of-the-money SPX options—the type of option with a disproportionately significant impact on the SOQ settlement process. The patterns plaintiffs identify were detectable, and Cboe had a duty to investigate and ensure that it was running a manipulation-free market. Under the lower pleading standard, plaintiffs' allegations suffice to support the inference that Cboe was acting in bad faith when it should have known about manipulation and did not enforce its ban on it.

2. Actual Damages

To plead actual damages under the CEA, a plaintiff must plausibly allege "(1) that she transacted in at least one commodity contract at a price that was lower or higher than it otherwise would have been absent the defendant's manipulations, and (2) that the manipulated prices were to the plaintiff's detriment." *Harry v. Total Gas & Power N. Am., Inc.*, 889 F.3d 104, 112 (2d Cir. 2018).

Cboe argues that plaintiffs' allegations of actual damages are insufficient because the allegations do not identify specific transactions, the direction of manipulation, or whether the named plaintiffs paid more or accepted less upon settlement. I agree with Cboe.

Plaintiffs offer two theories of actual damages. First, they identify days on which their data show the settlement process was manipulated, and assert that, on those days, several named plaintiffs held futures contracts to expiration.[11] As a result, they paid more or accepted less than they otherwise would have. Second, they allege that manipulation cumulatively affected the market over time—rather than just at the fleeting moment immediately before each settlement—so they suffered harm by transacting in a manipulated market. They submit these theories in the alternative.

Beginning with the episodic manipulation, plaintiffs identify three named plaintiffs—Victor Choa, FTC Capital, and LRI Invest—and list dates on which those

[11] Plaintiffs' CEA claims only implicate transactions in VIX futures (not options). [271] ¶¶ 321, 362, 366.

three plaintiffs held VIX futures to settlement; plaintiffs allege that manipulation occurred on those settlement dates. As a result of settling based on a manipulated price, Choa, FTC Capital, and LRI Invest were "forced to pay more (or accept less)" than they otherwise would have. [271] ¶¶ 251–52, 254.

Considered in the light most favorable to plaintiffs, these allegations come closest to stating a claim for actual damages. When plaintiffs allege episodic manipulation, they "need only allege that they engaged in a transaction at a time during which prices were artificial as a result of defendants' alleged trader-based manipulative conduct, and that the artificiality was adverse to their position." *In re LIBOR-Based Fin. Instruments Antitrust Litig.*, 962 F.Supp.2d 606, 622 (S.D.N.Y. 2013) (*LIBOR I*). Plaintiffs have plausibly pleaded that they transacted when prices were manipulated. They identify specific dates on which named plaintiffs held futures to expiration, and they allege that the SOQ process was manipulated on those dates. But plaintiffs do not say in which direction the settlement price artificially moved on any given date, nor whether any plaintiff specifically accepted less or paid more on those days. By not addressing the direction in which the manipulation occurred, plaintiffs have not established that any manipulation was "to the plaintiff's detriment." *Total Gas*, 889 F.3d at 112. Put differently, where the market was being manipulated "in different directions on different days," plaintiffs must "provide details of their own positions in the market" to state a claim under the CEA. *In re LIBOR-Based Fin. Instruments Antitrust Litig.*, 27 F.Supp.3d 447, 461 (S.D.N.Y.

2014) (*LIBOR III*) (denying motion to reconsider dismissal of CEA claims). The lack of directionality is fatal to the complaint.

Plaintiffs' alternative lasting-impact theory suffers from the same defect. Plaintiffs argue that manipulative acts generally have a lasting impact on the market, so manipulated information is baked into prices, and all future movements are from a new, artificial "baseline." But plaintiffs do not allege in which direction the baseline moved at any particular time. Alleging that the market was constantly artificial is too ambiguous to show that plaintiffs suffered a loss. To adequately plead damages under a lasting-impact theory, they would need to specify whether the market was constantly suppressed or inflated. *See, e.g.*, *In re Platinum and Palladium Antitrust Litig.*, No. 1:14-CV-9391-GHW, 2017 WL 1169626, at *29 (S.D.N.Y. Mar. 28, 2017) (finding plaintiffs pleaded actual damages under lasting-impact theory where they sold derivatives on days when defendants "suppressed" prices, and prices were "artificially low" throughout the class period); *In re Commodity Exch., Inc.*, 213 F.Supp.3d 631, 650, 667 (S.D.N.Y. 2016) (same, where plaintiffs alleged that defendants "artificially suppressed" the market so plaintiffs had to sell at "artificially depressed prices"); *In re London Silver Fixing, Ltd., Antitrust Litig.*, 213 F.Supp.3d 530, 564 (S.D.N.Y. 2016) (same).

Without alleging directionality (or some degree of price inflation or suppression), plaintiffs may not have suffered any net loss, because they could have entered their positions at artificial prices in one direction and exited them at artificial prices in the same direction, meaning they suffered the same loss or made the same profit as they would have under legitimate pricing. Moreover, there may have been days when plaintiffs were helped by manipulation instead of harmed. That is, a plaintiff who sold when the market was inflated, or bought when the market was suppressed, may have benefited from the lasting impact of manipulation. *See Nguyen v. FXCM Inc.*, 364 F.Supp.3d 227, 239–41 (S.D.N.Y. 2019) (dismissing complaint because, where there "might have been days" that plaintiffs were "actually helped" by manipulation, "it is insufficient to allege that losses are conceivable without more particularity"); *Harry v. Total Gas & Power N. Am., Inc.*, 244 F.Supp.3d 402, 416 (S.D.N.Y. 2017), *aff'd as modified*, 889 F.3d 104 (2d Cir. 2018) (same).

Plaintiffs attempt to answer this problem with their "lasting-impact netted" hypothesis. They built and applied models to measure the effect on all transactions (opening, closing, settlement, and expiration) in certain contracts. By alleging that prices were artificial both at the entrance and exit point of a certain contract, plaintiffs argue that they have plausibly pleaded harm on a net basis. For example, plaintiffs point to their allegation that, on September 27, 2016, plaintiff Aaron entered into 135 purchase contracts for put VIX options expiring on October 19, 2016 with a strike price of 14. [281] at 54. So, plaintiffs say, Aaron was harmed on a "net" basis. But the complaint doesn't explain how Aaron was harmed, whether he lost money, or whether the market was artificially high or low when he exited or entered his position. As another example, plaintiffs suggest that "a Plaintiff that purchased when prices were artificially high and sold when prices were artificially low" would be harmed on "both ends." [281] at 55. But plaintiffs do not specifically allege that any named plaintiffs bought when prices were artificially high and sold when prices were artificially low. Combining surface-level information about a named plaintiff with more specific information about a hypothetical plaintiff does not get plaintiffs over the plausibility hurdle. Plaintiffs have failed to state that they suffered damages to their detriment.

Plaintiffs attempt to circumvent directionality with regard to episodic manipulation by claiming it is "obvious" that, for each settlement date on which they allege manipulation occurred, plaintiffs mean the manipulation was in the direction adverse to each plaintiff's position. [281] at 46. I disagree that directionality is obvious from the complaint. The complaint alleges that manipulation could either inflate or suppress the SOQ settlement value. [271] ¶¶ 79–80. "Manipulation" or "artificiality" cannot be a catch-all for directionality and still give defendants notice of how a particular plaintiff was harmed by the fraud. Plaintiffs also point to a "table of directionality" in the complaint. [281] at 45 (citing [271] ¶ 270). That table explains, hypothetically, who would be harmed if manipulation occurred in a given direction. For example, a plaintiff who held long positions of VIX futures would be harmed when the settlement price was suppressed, whereas someone who held short positions of VIX futures would be harmed on settlement when the VIX was inflated. But the table doesn't mention any particular plaintiff or transaction, or specify when the settlement price was suppressed or inflated. The table is another way of generally saying that plaintiffs were harmed when prices were artificially high or low, but it doesn't sufficiently allege that any plaintiff suffered any specific harm.

Regarding their lasting-impact theory, plaintiffs acknowledge they have not pleaded directionality; they argue that "a cataloguing of directionality is not a pleading prerequisite," and that listing the direction of manipulation "would have done nothing but distract, with no actual benefit." [281] at 55–56. But without identifying the direction of manipulation, plaintiffs cannot plausibly plead that the manipulation was to their detriment, under either an episodic or persistent theory of manipulation. Their damages allegations are insufficient. *See, e.g.*, *Braman v. The CME Grp., Inc.*, 149 F.Supp.3d 874, 892 (N.D. Ill. 2015) (dismissing CEA complaint where plaintiffs alleged that they "purchased and/or sold futures contracts" during times defendant allowed a manipulated marketplace because a "generic version of a damages allegation is not enough to tie a concrete loss to any manipulation"); *see also Nguyen*, 364 F.Supp.3d at 239–41 (same, where plaintiffs' "damages claims [we]re too generalized and hypothetical to establish the requisite indication of loss suffered"); *Total Gas*, 244 F.Supp.3d at 416 (same, where plaintiffs failed to allege "a single specific transaction that lost value as a result of the defendants' alleged misconduct"); *cf. In re Term Commodities Cotton Futures Litig.*, 371 F.Supp.3d 95, 100 (S.D.N.Y. 2019) (finding plaintiff sufficiently alleged actual losses from manipulation where he purchased 57 contracts, defendants artificially inflated prices, and he lost $289,520 on the contracts, "indicating the detrimental impact of the market manipulation").

The cases plaintiffs rely on to support their claim that they have pleaded actual damages are inapposite. [281] at 50, 54. For example, they point to *In re Foreign Exch. Benchmark Rates Antitrust Litig.*, 74 F.Supp.3d 581, 595 (S.D.N.Y. 2015) and *Alaska*

Elec. Pension Fund v. Bank of Am. Corp., 175 F.Supp.3d 44, 53 (S.D.N.Y. 2016) for the proposition that less detail about actual damages is necessary at the pleading stage. [281] at 54. But both of those cases discuss the injury requirement in the context of standing. The actual-injury requirement under the CEA "looks very similar" to the injury-in-fact analysis used to determine standing, and courts have historically framed the actual-damages requirement under the CEA as a standing issue. *Total Gas*, 889 F.3d at 111. But actual injury is an "element of a substantive cause of action," so "the pleading requirements differ." *Id.* at 112. Injury under the CEA must be plausible, not just colorable. *Id.* Likewise, plaintiffs rely on *In re Commodity Exch. Inc*, 213 F.Supp.3d at 650–51 and *In re London Silver Fixing*, 213 F.Supp.3d at 549. But, as noted above, those cases are distinguishable because they include allegations of directionality; plaintiffs in both cases pleaded that manipulators suppressed the respective markets, causing plaintiffs to sell at depressed prices.

Plaintiffs attach an appendix to their complaint that offers more details about their trades. [281–1]. That appendix is based on 4,000 pages of data that plaintiffs submitted as an exhibit to their amended complaint. [263–1]. In reply, Cboe argues that I should disregard the appendix because it is a backdoor attempt to amend the complaint.

A complaint "may not be amended by the briefs in opposition to a motion to dismiss." *Agnew v. Nat'l Collegiate Athletic Ass'n*, 683 F.3d 328, 348 (7th Cir. 2012) (quoting *Thomason v. Nachtrieb*, 888 F.2d 1202, 1205 (7th Cir. 1989)). But plaintiffs have "flexibility in opposing a Rule 12(b)(6) motion." *Geinosky v. City of Chi.*, 675 F.3d 743, 745 n.1 (7th Cir. 2012). That is, "nothing prevents a plaintiff opposing dismissal from elaborating on the complaint or even attaching materials to an opposition brief illustrating the facts the plaintiff expects to be able to prove." *Defender Sec. Co. v. First Mercury Ins. Co.*, 803 F.3d 327 (7th Cir. 2015); *see also Phillips v. Prudential Ins. Co. of Am.*, 714 F.3d 1017, 1020 (7th Cir. 2013) (noting that courts may consider "additional facts" in a response brief); *Geinosky*, 675 F.3d at 745 n.1 (noting that a party opposing a Rule 12(b)(6) motion "may submit materials outside the pleadings"). "[T]he flexibility is not without limitations." *Heng v. Heavner, Beyers & Mihlar, LLC*, 849 F.3d 348, 354 (7th Cir. 2017); *Epstein v. Epstein*, 843 F.3d 1147, 1151 n.5 (7th Cir. 2016) ("[T]his latitude is not unlimited."). In particular, attachments to a plaintiff's response to a motion to dismiss must be "consistent with the pleadings." *Heng*, 849 F.3d at 354 (quoting *Geinosky*, 675 F.3d at 745 n.1).

Here, plaintiffs' appendix provides details about plaintiffs' trades that are absent from the complaint. Specifically, the appendix offers examples of directionality (i.e., specific days on which manipulation caused the SOQ settlement process or the VIX to be suppressed or inflated). For example, the appendix asserts that plaintiff Victor Choa held two VIX futures to expiration on April 19, 2017; manipulation inflated the settlement price on that day, so Choa paid more than he otherwise would have. [281–1] at 7. But the amended complaint itself does not rely on the exhibit that the appendix is based on, and the complaint fails to allege directionality at all. And since the manipulative scheme affected prices in both directions, there is no way for a defendant to know from the complaint whether or how Choa was harmed. Plaintiffs' appendix is thus not consistent with the pleadings. *See Heng*, 849 F.3d at 354 (affirming district court's decision to strike exhibit to plaintiff's response brief that was not material to or consistent with the complaint). Plaintiffs knew that they needed to plead directionality to show actual damages. *See* [245] at 28 ("Because plaintiffs do not assert that the market was constantly suppressed or inflated, their general allegations that they must have been harmed at some point are insufficient to state a claim."). Plaintiffs chose not to specify when the market was suppressed or inflated in their amended complaint, and instead argued in their response brief that directionality was unnecessary. That they opted to omit directionality allegations from their complaint, despite having access to the relevant data, confirms that the allegations in the appendix are inconsistent with plaintiffs' theory of the case as pleaded in the amended complaint. *See, e.g.*, *Epstein*, 843 F.3d at 1151 n.5 (disregarding theory presented for first time on appeal where plaintiff "took the opportunity to amend his complaint" and "could have included" the new allegation in the amended complaint). I do not consider the appendix.

In any event, as explained below, plaintiffs have not plausibly pleaded that it was Cboe's failure to enforce its rules that caused plaintiffs' alleged damages. So even if the appendix rehabilitated plaintiffs' actual-damages allegations and I allowed plaintiffs to amend yet again to allege the details in the appendix, I would still dismiss the CEA claim.

3. Causation

"[I]t is not enough for a plaintiff to show a CEA violation and damages." *S&A Farms, Inc. v. Farms.com, Inc.*, 678 F.3d 949, 953 (8th Cir. 2012). Rather, a plaintiff must show "that the CEA violation proximately caused the damages for which the plaintiff seeks relief." *Id.* (emphasis omitted); *see Wigod v. Chi. Mercantile Exch.*, 981 F.2d 1510, 1521–22 (7th Cir. 1992).

Cboe argues that plaintiffs have failed to plead that it was Cboe's failure to enforce its rules that caused their damages. Plaintiffs argue that if Cboe had been enforcing its rules, "a demonstrably strong regulatory regime would have helped prevent manipulation in the first place" and "an honest CBOE would not have forced traders to settle based on calculations it knew to be rigged." [281] at 61. Plaintiffs assert that the market's reaction to the FINRA investigation is proof that, had Cboe made certain changes, manipulation would have stopped. They do not argue that a single disciplinary action would have had any wider effect (or that Cboe would have refunded victims of manipulation), but that Cboe had affirmative obligations to prevent manipulation from occurring in the first place.

Plaintiffs' allegations that enforcement would have stopped manipulation are too vague and speculative to be plausible. Plaintiffs do not explain what form enforcement would have taken other than broad allegations that Cboe should have prevented manipulation from occurring. Though they disclaim that their theory of enforcement is that Cboe should have disciplined individual traders, the rules they say Cboe should have enforced are disciplinary rules that generally apply to individual contracts and traders. For example, Rule 601 prohibits manipulation in "any Contract." Presumably, Cboe would have enforced those rules by disciplining violators on a contract-by-contract or trader-by-trader basis. And without tying any particular enforcement mechanism to any particular act of manipulation, it is too speculative to infer that enforcement would have had any widespread effect or avoided the alleged losses of the named plaintiffs. Plaintiffs allege elsewhere that Cboe could have prevented manipulation by designing the SOQ process differently, such as making the settlement window longer or not giving disproportionate weight to one, inexpensive option. But there is no allegation that redesign is an enforcement tool under Cboe's rules. The design and existence of the SOQ formula themselves didn't violate any of Cboe's rules, and plaintiffs don't argue that Cboe's rules required it to redesign the settlement process entirely. Plaintiffs thus fail to link their damages to Cboe's inaction.

In *Braman*, 149 F.Supp.3d at 885, plaintiffs alleged that two exchanges created a two-tiered market that allowed HFTs to exploit a loophole in the market; plaintiffs were suing "to hold the defendants liable for creating the circumstances in which such activity flourished." *Id.* at 885. In considering the plaintiffs' manipulation claim against the exchange under the CEA, which includes as an element that "defendants caused the artificial price," the court held that plaintiffs had failed to state a claim. *Id.* at 88–89. Any artificiality was "caused by the HFTs, not by the Exchange Defendants." *Id.* "[H]ad the HFTs not traded, there would have been no fluctuation in price because of anything the defendants did or did not do." *Id.*

So too here, if plaintiffs suffered damages, it was the Doe Defendants' manipulation of the market that caused their harm. If the Does had not manipulated the market, plaintiffs would not have lost money. It was not anything that Cboe "did or did not do" in its rule enforcement. *Id.* The suggestion that Cboe could have prevented these damages by enforcing its rules is too speculative to be plausible. *See, e.g.*, *Wigod*, 981 F.2d at 1521–22 (affirming summary judgment for exchange defendant where plaintiff's alleged injuries were "not a result of nonenforcement" of exchange rules, so plaintiff "suffered no actual injury from nonenforcement"); *In re London Silver Fixing Ltd. Antitrust Litig.*, 332 F.Supp.3d 885, 923 (S.D.N.Y. 2018) (dismissing CEA manipulation claim where court was required to draw "numerous inferences" to "connect" defendants' "manipulative conduct to Plaintiffs' alleged injury"); *see also Troyer v. Nat'l Futures Ass'n*, No. 1:16-cv-00146-SLC, 2019 WL 4695524, at *16–18 (N.D. Ind. Sept. 26, 2019) (granting summary judgment for defendant in failure-to-enforce claim under the CEA on grounds that plaintiff failed to show that defendant's actions "proximately caused" plaintiff's losses).

Nor do the purported effects of the FINRA investigation prove that Cboe's failure to enforce its rules caused plaintiffs' injuries. Plaintiffs allege that, after the media reported that FINRA was investigating manipulation in 2018, data show that the irregular trading volume in certain options on settlement days lessened. [271] ¶¶ 132–40. But that manipulators reacted a certain way to a government investigation, or at least news reports of one, does not mean that manipulators would have reacted the same way to Cboe enforcing its rules against individual traders.

After all, plaintiffs do not allege that manipulative patterns changed after Cboe enforced its rules against other trading firms for disruptive trading.

Plaintiffs argue that to find no causation here would nullify the private right of action under the CEA. I disagree. The scope of the private right of action is set by the statute, and it requires the bad-faith failure to enforce rules to be the cause of plaintiffs' damages. Applying that causation requirement is entirely consistent with the private right of action.

4. Secondary-Liability Claims

Cboe also moves to dismiss plaintiffs' secondary-liability claims. In Claim VIII, plaintiffs allege aiding and abetting manipulation against all defendants (including the Does) except Cboe Futures. [271] ¶¶ 365–68. Plaintiffs argue that Cboe Global and Cboe Options are liable for the violation of Cboe Futures. [281] at 67.

The CEA provides that any person "who willfully aids [or] abets" a CEA violation "may be held responsible for such violation as a principal." 7 U.S.C. § 13c(a). To state a claim for aiding and abetting liability, plaintiffs must allege that Cboe Global and Cboe Options (1) knew of the principal's intent to violate the act, (2) intended to further that violation, and (3) committed some act in furtherance of the principal's objective. *Damato*, 153 F.3d at 473.

Plaintiffs do not adequately allege any of those elements. Plaintiffs' allegations that Cboe (treated collectively by the complaint without parsing Cboe Options's or Cboe Global's knowledge) knew that manipulation was occurring do not state a claim, because even if Cboe Options and Cboe Global knew about the Does' manipulation, that does not suggest that they knew that Cboe Futures intended to not regulate that conduct. And as discussed above, plaintiffs have not plausibly alleged that Cboe derived any benefit from manipulation or had any interest in manipulation continuing. *See, e.g.*, *Nicholas v. Saul Stone & Co. LLC*, 224 F.3d 179, 189–90 (3d Cir. 2000) (upholding dismissal of CEA aiding-and-abetting claim where plaintiffs pleaded defendants' knowledge but failed to allege that defendants intended to further the violation). The complaint alleges that Cboe's interest and benefit derived from replicability, not manipulation, so it is not reasonably inferred that Cboe Options and Global intended to further the Does' manipulation or some purposeful regulatory abandonment by Cboe Futures. Finally, plaintiffs do not identify what act the alleged aiders and abettors took to further the principal's objective. Even drawing all inferences in plaintiffs' favor, Cboe's participation was at most knowingly allowing manipulation to continue; passive enabling is not an act in furtherance of the principal's objective.

Plaintiffs also bring a principal-agent claim under the CEA against all defendants (including the Does). [271] ¶¶ 361–64. The CEA provides that the "act, omission, or failure" of any "official, agent, or other person acting … within the scope of his employment or office" shall be considered "the act, omission, or failure of such individual, association, partnership, corporation, or trust, as well as of such official, agent, or other person." 7 U.S.C. § 2(a)(1)(B).

Plaintiffs argue that the VIX franchise operated as an "integrated whole," so all of the Cboe defendants were each other's agents. [281] at 67. They also argue that

Cboe entities are responsible for the acts of their employees. Cboe argues that these allegations are not sufficiently specific to put Cboe on notice of who is the principal and who is the agent. [282] at 33.

Plaintiffs need not specify at this stage which defendant was responsible for which acts. *See Jepson, Inc. v. Makita Corp.*, 34 F.3d 1321, 1328–29 (7th Cir. 1994). But a principal-agent claim is "viable only where an underlying primary violation of the CEA can survive a motion to dismiss." *Sonterra Capital Master Fund, Ltd. v. Barclays Bank PLC*, 366 F.Supp.3d 516, 554 (S.D.N.Y. 2018). Here, plaintiffs do not argue that the Cboe entities were agents of the Does, but that the Cboe entities were each other's agents. *See* [281] at 67. Since plaintiffs have not stated an underlying CEA claim against a Cboe entity, there can be no claim against another Cboe entity as an agent. The principal-agent claim is dismissed.

IV. Conclusion

Cboe's motion to dismiss, [273], is granted. All counts against Cboe are dismissed with prejudice.[12] A status hearing is set for February 6, 2020 at 11:00 a.m.

ENTER:

Manish S. Shah
United States District Judge

Date: January 27, 2020

[12] Leave to amend should be freely given, but plaintiffs have amended the complaint and marshaled significant resources to investigate the claims. There is no reason to think that plaintiffs could allege anything in a third complaint that would change the outcome of their case against Cboe.

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

IN RE: CHICAGO BOARD OPTIONS EXCHANGE VOLATILITY INDEX MANIPULATION ANTITRUST LITIGATION	No. 18 CV 4171 MDL No. 2842 Judge Manish S. Shah

PARTIAL FINAL JUDGMENT PURSUANT TO FED. R. CIV. P. 54(B)

It is hereby ordered that:

1. Judgment is entered against plaintiffs in favor of defendants Cboe Global Markets, Inc., Cboe Futures Exchange, LLC, and Chicago Board Options Exchange, Inc.; and

2. Plaintiffs recover nothing against defendants Cboe Global Markets, Inc., Cboe Futures Exchange, LLC, and Chicago Board Options Exchange, Inc.; the action against defendants Cboe Global Markets, Inc., Cboe Futures Exchange, LLC, and Chicago Board Options Exchange, Inc. is dismissed on the merits; and the Cboe defendants recover costs from plaintiffs.

The action was decided by the court on a motion to dismiss under Federal Rule of Civil Procedure 12(b)(6) and a motion for entry of final judgment under Federal Rule of Civil Procedure 54(b). There is no just reason for delay.

ENTER:

Date: April 21, 2020

Manish S. Shah
U.S. District Judge