



May 7, 2021

Via Electronic Mail (rule-comments@sec.gov)

Vanessa Countryman, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

Re: File No. SR-CboeBZX-2020-003; File No. SR-CboeBZX-2020-070; and File No. SR-CboeBZX-2020-053

Dear Ms. Countryman:

The Healthy Markets Association appreciates the opportunity to comment on the above-referenced proposals regarding Cboe BZX Exchange's proposals to offer volatility products linked to the Cboe's proprietary Volatility Index (VIX).¹

The Healthy Markets Association is a not-for-profit member organization of public pension funds, investment advisers, broker-dealers, and market data firms focused on reducing conflicts of interest and improving the transparency, efficiency, and fairness of the capital markets.²

The Exchange is proposing to offer an inverse VIX and a twice leveraged VIX. Unfortunately, these two VIX-linked exchange traded products raise significant questions regarding investor protection that have not been fully explored by the Commission or staff. While we may ultimately support the approval of the products subject to the filings, we do not believe the filings have met their burdens under Commission rules or the Exchange Act. Accordingly, the filings should be disapproved.

¹ *Notice of Filing of a Proposed Rule Change to List and Trade Shares of the -1x Short VIX Futures ETF, a Series of VS Trust, Under Rule 14.11(f)(4) (Trust Issued Receipts)*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 87992, Jan. 16, 2020, available at <https://www.sec.gov/rules/sro/cboebzx/2020/34-87992.pdf> ("Initial Inverse VIX Proposal"); *Notice of Filing of a Proposed Rule Change to List and Trade Shares of the -1x Short VIX Futures ETF, a Series of VS Trust, Under Rule 14.11(f)(4) (Trust Issued Receipts)*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 89901, Sept. 17, 2020, available at <https://www.sec.gov/rules/sro/cboebzx/2020/34-89901.pdf> ("Revised Inverse VIX Proposal"); *Notice of Filing of a Proposed Rule Change, as Modified by Amendment No. 1, to List and Trade Shares of the 2x Long VIX Futures ETF, a Series of VS Trust, under Rule 14.11(f)(4) (Trust Issued Receipts)*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 89234, July 6, 2021, available at <https://www.sec.gov/rules/sro/cboebzx/2020/34-89234.pdf> ("Leveraged VIX Proposal").

²To learn more about Healthy Markets or our members, please see our website at <http://healthymarkets.org/about>.

The Initial Inverted VIX Proposal was made on January 3, 2020, amended several times, and withdrawn in September 2020.³ That same day, the Revised Inverse VIX Proposal was filed.

In October 2020, the Commission staff delayed its decision on the Revised Inverse VIX Proposal,⁴ and the Commission staff instituted proceedings to approve or disapprove the proposal in December 2020.⁵ The Revised Inverse VIX Proposal was then modified again in January and February, and the Commission staff approved the modified proposal on an accelerated basis on March 5, 2021.⁶

Similarly, on June 23, 2020, the Exchange proposed listing 2x Long VIX Futures ETF.⁷ The Leveraged VIX Proposal was amended and the SEC ultimately instituted proceedings to approve or disapprove the proposal in October 2020.⁸ In December 2020, the agency designated a longer time to take action pursuant to the proceedings.⁹ The Leveraged VIX Proposal was modified again, and the Commission staff approved the modified proposal on an accelerated basis on March 5, 2021.¹⁰

That same day, March 5th, the approvals for both the Revised Inverse VIX Proposal and the Leveraged VIX Proposal were called up for review and consideration by the full

³ *Notice of Withdrawal of a Proposed Rule Change, as Modified by Amendment No. 3, to List and Trade Shares of the -1x Short VIX Futures ETF Under BZX Rule 14.11(f)(4), Trust Issued Receipts*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 89795, Sept. 9, 2020, available at <https://www.sec.gov/rules/sro/cboebzx/2020/34-89795.pdf>.

⁴ *Notice of Designation of a Longer Period for Commission Action on a Proposed Rule Change to List and Trade Shares of the -1x Short VIX Futures ETF, a Series of VS Trust, Under BZX Rule 14.11(f)(4) (Trust Issued Receipts)*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 90292, Oct. 30, 2020, available at <https://www.sec.gov/rules/sro/cboebzx/2020/34-90292.pdf>.

⁵ *Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change to List and Trade Shares of the -1x Short VIX Futures ETF, a Series of VS Trust, Under Rule 14.11(f)(4) ("Trust Issued Receipts")*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 90659, Dec. 14, 2020, available at <https://www.sec.gov/rules/sro/cboebzx/2020/34-90659.pdf>.

⁶ *In the Matter of the Cboe BZX Exchange, Inc.*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 91502, Apr. 7, 2021, available at <https://www.sec.gov/rules/other/2021/34-91502.pdf>.

⁷ Leveraged VIX Proposal.

⁸ *Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change, as Modified by Amendment No. 1, to List and Trade Shares of the 2x Long VIX Futures ETF, a Series of VS Trust, Under Rule 14.11(f)(4) (Trust Issued Receipts)*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 90118, Oct. 7, 2020, available at <https://www.sec.gov/rules/sro/cboebzx/2020/34-90118.pdf>.

⁹ *Notice of Designation of a Longer Period for Commission Action on Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change, as Modified by Amendment No. 1, to List and Trade Shares of the 2x Long VIX Futures ETF, a Series of VS Trust, Under Rule 14.11(f)(4) (Trust Issued Receipts)*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 90671, Dec. 15, 2020, available at <https://www.sec.gov/rules/sro/cboebzx/2020/34-90671.pdf>.

¹⁰ *In the Matter of the Cboe BZX Exchange, Inc.*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 91501, Apr. 7, 2021, available at <https://www.sec.gov/rules/other/2021/34-91501.pdf>.

Commission.¹¹ Those approvals, which had been granted pursuant to delegated authority, have now been stayed.¹²

As you know, the VIX uses a complex S&P 500 weighted formula incorporating prices from call and put options. While the VIX wasn't originally intended to serve as a benchmark for investment products, in 2004, Cboe began listing VIX-linked futures contracts.¹³ In 2006, the Commission granted Cboe to list VIX-linked options.¹⁴ The Commission even granted approval for Cboe to list options on the "increased value" VIX-linked options.

Following the financial crisis of 2008, demand grew for an array of volatility-linked investment products. Volumes in these products took off, and firms increasingly sought to create their own volatility-linked products.

Meanwhile, experts involved in the creation of the VIX began to question financial products tied to it.¹⁵ Similarly, another creator of the VIX, Robert Whaley, noted that

The VIX doesn't trade. It's just a number produced from these 250 S&P 500 option prices. But what does trade are the VIX futures and the VIX options, which are related to VIX but in a strange way. Where VIX is the volatility over the next 30 days, VIX futures is the expectation of the volatility 30 days from now. Those two series don't behave like one another, in fact quite differently.¹⁶

Why? Because the VIX wasn't really designed as an investment product so much as an options pricing and risk management tool.

Importantly, some academics have been concerned with the increasing use of these new volatility-linked investment products. For example, Eckhard Platen and Leunglung Chan published a paper in 2010 that warned about the design of volatility derivatives,

¹¹ This process occurs pursuant to Commission Rules of Practice. See 17 C.F.R. 201.431.

¹² 17 C.F.R. 201.431.

¹³ *VIX Futures Debut on New CBOE Futures Exchange*, ETF.com, Mar. 26, 2004, available at <https://www.etf.com/sections/features/127.html>.

¹⁴ *Notice of Filing and Order Granting Accelerated Approval of Proposed Rule Change and Amendment No. 1 Thereto Relating to Strike Price Intervals for VIX Options*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 54192, July 21, 2006, available at <https://www.sec.gov/rules/sro/cboe/2006/34-54192.pdf>.

¹⁵ Max Abelson and Joe Weisenthal, *An Inventor of the VIX: 'I Don't Know Why These Products Exist'*, Bloomberg, Feb. 6, 2018, available at <https://www.bloomberg.com/news/articles/2018-02-06/an-inventor-of-the-vix-i-don-t-know-why-these-products-exist>.

¹⁶ Graham Rapiere, *The creator of Wall Street's 'fear gauge' says people don't understand it as well as they should*, Business Insider, Sept. 11, 2017, available at <https://www.businessinsider.com/vix-creator-bob-whaley-interview-investors-dont-understand-wall-street-fear-gauge-2017-9>.

and suggested regulatory intervention to mitigate potential systemic risks.¹⁷ In 2017, former Chief Economist to the Commission Larry Harris and Vineer Bhansali released a paper on short volatility strategies. that, amongst other findings, cautioned that "[t]he extraordinary growth of short volatility strategies creates risks that may trigger the next serious market crash."¹⁸

In addition to concerns about systemic risk, some academics have raised concerns with the integrity of the VIX itself as a benchmark. For example, in May 2017, John Griffin and Amin Shams from the University of Texas at Austin released a study that identified significant trading volume spikes that occurred in the underlying SPX options at the exact time of monthly VIX settlement, but only in the SPX options that were included in the VIX settlement calculation.¹⁹ These findings strongly implied some degree of VIX manipulation and questionable relationships between the components of the VIX calculation, the VIX itself, and VIX-related investment products.

Nevertheless, demand for VIX-linked investment products exploded. In fact, it was reported that as much as 25% of Cboe's revenues in the last half of 2017 were tied to the VIX.²⁰

And so it continued, as trading and warnings mounted.

On Friday, February 2, 2018, the market finished down 1094 points for the week -- one of the worst point drops in history. The following Monday, February 5, the markets opened lower, but then towards the end of the trading day, the market dropped 700 points within minutes (reaching a low of 1600 points down), followed by an equally impressive recovery.

The VIX, which had been trading at about 20, soared to 50. At the same time, an inverted volatility product tied to the VIX plummeted in value, causing investors to lose over 90% of their assets over just a few days.²¹

¹⁷ Eckhard Platen and Leunglung Chan, *A Cautious Note on the Design of Volatility Derivatives*, July 20, 2010, available at <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=70C590CACB304E705A7222C344EC48A9?doi=10.1.1.170.3161&rep=rep1&type=pdf>.

¹⁸ Vineer Bhansali and Larry Harris, *Everybody's Doing it: Short Volatility Strategies and Shadow Financial Insurers*, 2017, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3071457 (last revised Nov. 2020).

¹⁹ John Griffin and Amim Shams, *Manipulation in the VIX?*, May 24, 2017, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2972979.

²⁰ Thomas Franck, *Shares of the Cboe exchange tank on fears a big source of revenue may take a hit — volatility trading*, CNBC, Feb. 6, 2018, available at <https://www.cnbc.com/2018/02/06/shares-of-the-cboe-exchange-tank.html>.

²¹ Thomas Franck, *Credit Suisse says it will end trading in the volatility security that's become the focus of this sell-off*, CNBC, Feb. 6, 2018, available at

While some investors suffered very significant losses as a result of the VIX volatility,²² it was reported that a handful of others made significant profits.²³ Then, on April 18, 2018, the VIX again went wild just as its futures contracts were expiring. Regulators reportedly began investigations and investors brought suit.²⁴

Cboe has a very significant financial interest in its proprietary VIX franchise, and is obviously looking to expand that franchise further.²⁵ The Revised Inverse VIX Proposal and Leveraged VIX Proposal provide insufficient information for the Commission to conclude that the Exchange has established that its proposed changes are consistent with the Exchange Act.

The Commission is obligated to review SRO filings and determine that those filings are consistent with the Exchange Act,²⁶ including, inter alia, that an exchange's rules are designed to:

- “prevent fraudulent and manipulative acts and practices,”
- “promote just and equitable principles of trade,” and
- “protect investors and the public interest.”²⁷

The Commission's Rules of Practice clearly place the “burden to demonstrate that a proposed rule change is consistent with the [Exchange Act] and the rules and regulations issued thereunder” on the Exchange proposing a rule change.²⁸ In addition

[t]he description of a proposed rule change, its purpose and operation, its effect, and a legal analysis of its consistency with applicable requirements must all be sufficiently detailed and specific to support an affirmative Commission finding,

<https://www.cnbc.com/2018/02/06/the-obscure-volatility-security-thats-become-the-focus-of-this-sell-off-is-halted-after-an-80-percent-plunge.html>.

²² See, e.g., Saqib Iqbal Ahmed, *Black Monday for VIX ETPs leaves retail players smarting*, Reuters, Feb. 6, 2018, available at <https://www.reuters.com/article/us-usa-stocks-volatility/black-monday-for-vix-etps-leaves-retail-players-smarting-idUSKBN1FQ261>.

²³ *VIX Surge Hands 8,600% Profit to Little-Known Hedge Fund*, Fortune, Feb. 10, 2018, available at <https://fortune.com/2018/02/10/vix-index-hedge-fund-colorado/>.

²⁴ We note that the suit was ultimately dismissed. See Jonathan Stempel, *Cboe wins dismissal of Wall Street 'fear gauge' manipulation lawsuit*, Reuters, May 29, 2019, available at <https://www.reuters.com/article/us-cboe-lawsuit-volatility/cboe-wins-dismissal-of-wall-street-fear-gauge-manipulation-lawsuit-idUSKCN1SZ2NN?il=0>.

²⁵ For example, you can now trade VIX options nearly 24 hours a day. Annabel Smith, *Cboe extends options trading to almost 24 hours-a-day*, The Trade, Apr. 9, 2021, available at <https://www.thetradenews.com/cboe-extends-options-trading-to-almost-24-hours-a-day/>.

²⁶ See *Susquehanna Int'l Grp., LLP v. SEC*, 866 F.3d 442 (D.C. Cir. 2017).

²⁷ 15 U.S.C. § 78f(b)(5).

²⁸ Rule 700(b)(3), Commission Rules of Practice, Sec. and Exch. Comm'n, 17 CFR 201.700(b)(3).

and any failure of an SRO to provide this information may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Act and the applicable rules and regulations.²⁹

Recent market events and the public record with the VIX have given rise to significant questions about the integrity, stability, and investor-protection risks of VIX-related investment products. At a very high level, we believe these questions must be adequately addressed by the filings supporting the creation of yet more VIX-related products. Unfortunately, the Exchange has not attempted to explain how these products -- despite the warnings and market events of recent past -- are consistent with the Exchange Act, including the protection of investors.

Again, we do not object to the creation of a volatility-linked investment product, *per se*. However, with respect to VIX-related products in particular, we believe the Exchange simply has more explaining to do. Unfortunately, despite working on these proposals for over a year, the Exchange has continued to fail to provide any meaningful explanation as to why concerns over the integrity, stability and risks to investors and the markets overall are overstated or inaccurate. It should.

Should you have any questions or would like to discuss these matters further, please contact me at [REDACTED].

Sincerely,



Tyler Gellasch
Executive Director

²⁹ *Suspension of and Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change Amending the Fee Schedule Assessed on Members to Establish a Monthly Trading Rights Fee*, Sec. and Exch. Comm'n, Exch. Act Rel. No. 86236, at 7, June 28, 2019, available at <https://www.sec.gov/rules/sro/cboeedga/2019/34-86236.pdf>.