March 10, 2017

Self-Regulatory Organizations; Bats BZX Exchange, Inc.; Order Disapproving a Proposed Rule Change, as Modified by Amendments No. 1 and 2, to BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, to List and Trade Shares Issued by the Winklevoss Bitcoin Trust

Bats BZX Exchange ("Exchange" or "BZX") has filed a proposed rule change to list and trade shares of the Winklevoss Bitcoin Trust.\(^1\) When an exchange makes such a filing,\(^2\) the Commission must determine whether the proposed rule change is consistent with the statutory provisions, and the rules and regulations, that apply to national securities exchanges.\(^3\) The Commission must approve the filing if it finds that the proposed rule change is consistent with these legal requirements, and it must disapprove the filing if it does not make such a finding.\(^4\)

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\(^1\) The Exchange filed notice of the proposed rule change on June 30, 2016, and the Commission published the notice in the Federal Register on July 14, 2016. See Exchange Act Release No. 78262 (July 8, 2016), 81 FR 45554 (July 14, 2016) ("Notice"). On August 23, 2016, the Commission designated a longer period within which to act on the proposed rule change. See Exchange Act Release No. 78653 (Aug. 23, 2016), 81 FR 59256 (Aug. 29, 2016). On October 12, 2016, the Commission instituted proceedings under Section 19(b)(2)(B) of the Securities Exchange Act of 1934 ("Exchange Act"), 15 U.S.C. 78s(b)(2)(B), to determine whether to approve or disapprove the proposed rule change. See Exchange Act Release No. 79084 (Oct. 12, 2016), 81 FR 71778 (Oct. 18, 2016). On October 20, 2016, the Exchange filed Amendment No. 1 to the proposed rule change, replacing the original filing in its entirety, and Amendment No. 1 was published for comment in the Federal Register on November 3, 2016. See Exchange Act Release No. 79183 (Oct. 28, 2016), 81 FR 76650 (Nov. 3, 2016) ("Amendment No. 1"). On January 4, 2017, the Commission designated a longer period for Commission action on the proposed rule change. See Exchange Act Release No. 79725 (Jan. 4, 2017), 82 FR 2425 (Jan. 9, 2017) (designating March 11, 2017, as the date by which the Commission must either approve or disapprove the proposed rule change). On February 22, 2017, the Exchange filed Amendment No. 2 to the proposed rule change ("Amendment No. 2"). Amendment No. 2 further modified the Exchange’s proposal by (a) changing the size of a creation and redemption basket from 10,000 shares to 100,000 shares, (b) changing the bitcoin value of a share from 0.1 bitcoin to 0.01 bitcoin, and (c) changing the Exchange’s representation about the number of shares outstanding at the commencement of trading from 100,000 shares to 500,000 shares. Because Amendment No. 2 does not materially alter the substance of the proposed rule change, Amendment No. 2 is not subject to notice and comment. Amendment No. 2 is available on the Commission’s website at https://www.sec.gov/comments/sr-batsbzx-2016-30/batsbzx201630-1594698-132357.pdf.


\(^4\) See id.
As discussed further below, the Commission is disapproving this proposed rule change because it does not find the proposal to be consistent with Section 6(b)(5) of the Exchange Act, which requires, among other things, that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest.\(^5\) The Commission believes that, in order to meet this standard, an exchange that lists and trades shares of commodity-trust exchange-traded products (“ETPs”) must, in addition to other applicable requirements, satisfy two requirements that are dispositive in this matter. First, the exchange must have surveillance-sharing agreements with significant markets for trading the underlying commodity or derivatives on that commodity. And second, those markets must be regulated.\(^6\)

Based on the record before it, the Commission believes that the significant markets for bitcoin are unregulated. Therefore, as the Exchange has not entered into, and would currently be unable to enter into, the type of surveillance-sharing agreement that has been in place with respect to all previously approved commodity-trust ETPs—agreements that help address concerns about the potential for fraudulent or manipulative acts and practices in this market—the Commission does not find the proposed rule change to be consistent with the Exchange Act.

I. DESCRIPTION OF THE PROPOSAL

The Exchange proposes to list and trade shares (“Shares”) of the Winklevoss Bitcoin Trust (“Trust”) as Commodity-Based Trust Shares under BZX Rule 14.11(e)(4).\(^7\) Details


\(^6\) As discussed below, infra note 96 and accompanying text, the significant markets relating to the commodity-trust ETPs approved to date have been well-established regulated futures markets for the underlying commodity.

\(^7\) See BZX Rule 14.11(e)(4)(C) (permitting the listing and trading of “Commodity-Based Trust Shares,” defined as a security (a) that is issued by a trust that holds a specified commodity deposited with the trust; (b) that is issued by the trust in a specified aggregate minimum number in return for a deposit of a quantity of the underlying (footnote continued…)}
regarding the proposal and the Trust can be found in Amendments No. 1 and 2 to the proposal, and in the registration statement for the Trust, but the salient aspects of the proposal are described below.

The Trust would hold only bitcoins as an asset, and the bitcoins would be in the custody of, and secured by, the Trust’s custodian, Gemini Trust Company LLC (“Custodian”), which is a limited-liability trust company chartered by the State of New York and supervised by the New York State Department of Financial Services (“NYSDFS”). Gemini Trust Company is also an affiliate of Digital Asset Services LLC, the sponsor of the Trust (“Sponsor”). The Trust would issue and redeem the Shares only in “Baskets” of 100,000 Shares and only to Authorized Participants, and these transactions would be conducted “in-kind” for bitcoin only.

(…footnote continued)

commodity; and (c) that, when aggregated in the same specified minimum number, may be redeemed at a holder’s request by the trust, which will deliver to the redeeming holder the quantity of the underlying commodity). Other national securities exchanges that list and trade shares of commodity-trust ETPs have similar rules. See, e.g., NYSE Arca Equities Rule 8.201 (permitting the listing and trading of Commodity-Based Trust Shares) and Nasdaq Rule 5711(d) (permitting the listing and trading of Commodity-Based Trust Shares). Commodity-trust ETPs differ from exchange-traded funds (“ETFs”) in a number of ways, including that they hold as an asset a single commodity, rather than a portfolio of multiple securities, and that they are not regulated under the Investment Company Act of 1940.

See Amendments No. 1 and 2, supra note 1.

See Registration Statement on Form S-1, as amended, dated February 8, 2017 (File No. 333-189752) (“Registration Statement”). The Exchange represents in the proposed rule change that the Registration Statement will be effective as of the date of any offer and sale pursuant to the Registration Statement.

The proposed rule change describes the ETP’s underlying bitcoin asset as a “digital asset” and as a “commodity,” see Amendment No. 1, supra note 1, 81 FR at 76652 & n.21, and describes the ETP as a Commodity-Based Trust. For the purpose of considering this proposal, this order describes bitcoin as a “digital asset” and a “commodity.”

Bitcoin is a digital asset that is issued by, and transmitted through, the decentralized, open-source protocol of the peer-to-peer bitcoin computer network that hosts the public transaction ledger, known as the “Blockchain,” on which all bitcoins are recorded. The bitcoin network source code includes the protocols that govern the creation of bitcoin and the cryptographic system that secures and verifies bitcoin transactions. See id. at 76652.

See id. at 76651–52.

See id. at 76651.

See id. at 76664–65. See also Amendment No. 2, supra note 1.
The investment objective of the Trust would be for the Shares to track the price of bitcoins on the Gemini Exchange, which is a digital-asset exchange owned and operated by the Gemini Trust Company.\(^\text{15}\) The Net Asset Value (“NAV”) of the Trust would be calculated each business day, based on the clearing price of that day’s 4:00 p.m. ET Gemini Exchange Auction, a two-sided auction open to all Gemini Exchange customers.\(^\text{16}\) The Intraday Indicative Value of the Trust would be calculated and disseminated by the Sponsor, every 15 seconds during the Exchange’s regular trading session, based on the most-recent Gemini Exchange Auction price.\(^\text{17}\) The Exchange represents that it has entered into a comprehensive surveillance-sharing agreement with the Gemini Exchange.\(^\text{18}\)

II. SUMMARY OF COMMENT LETTERS

The comment period closed on November 25, 2016. As of March 8, 2017, the Commission had received 59 comment letters on the proposed rule change.\(^\text{19}\) Many of these

\(^{15}\) See Amendment No. 1, supra note 1, 81 FR at 76652.

\(^{16}\) See id. In the event that the Sponsor determines that the Gemini Exchange Auction price, because of extraordinary circumstances, is “not an appropriate basis for evaluation of the Trust’s bitcoin on a given Business Day,” the Exchange’s proposal provides that the Sponsor may use other specified criteria to value the holdings of the Trust. See id. at 76664.

\(^{17}\) See id. at 76666.

\(^{18}\) See id. at 76668. As discussed below, infra Section III.B.3, the Commission does not believe that this agreement is sufficient to form the basis for approving this proposed rule change.


letters address the nature and uses of bitcoin;\textsuperscript{20} the state of development of bitcoin as a digital asset;\textsuperscript{21} the inherent value of, and risks of investing in, bitcoin;\textsuperscript{22} the desire of investors to gain access to bitcoin through an ETP;\textsuperscript{23} the appropriate measures for the Trust to secure its bitcoin holdings against theft or loss;\textsuperscript{24} whether the Trust should insure its bitcoin holdings against theft

(…footnote continued)


\textsuperscript{20} See, e.g., Stolfi Letter, supra note 19; Stolfi Letter II, supra note 19; Chronakis Letter, supra note 19.

\textsuperscript{21} See, e.g., Stolfi Letter II, supra note 19; Barish Letter IV, supra note 19; ARK Letter, supra note 19; Lee Letter, supra note 19; Chronakis Letter, supra note 19; Struna Letter, supra note 19; Johnson Letter, supra note 19; Anonymous Letter IV, supra note 19; Whitman Letter, supra note 19; Anonymous Letter V, supra note 19.

\textsuperscript{22} See, e.g., Stolfi Letter, supra note 19; Stolfi Letter II, supra note 19; Shatto Letter, supra note 19; Lethuillier Letter, supra note 19; Delehanty Letter, supra note 19; Xin Lu Letter, supra note 19; Neidhardt Letter, supra note 19; XBT Letter, supra note 19; Williams Letter, supra note 19; ARK Letter, supra note 19; Kim Letter, supra note 19; Dalla Val Letter, supra note 19; Paneque Letter, supra note 19; Lee Letter, supra note 19; Chronakis Letter, supra note 19; Struna Letter, supra note 19; Johnson Letter, supra note 19; Whitman Letter, supra note 19; Primm Letter, supra note 19; Anonymous Letter V, supra note 19.

\textsuperscript{23} See, e.g., R.D. Miller Letter, supra note 19; R. Miller Letter, supra note 19; Hall Letter, supra note 19; Keeler Letter, supra note 19; Lethuillier Letter, supra note 19; McMinn Letter, supra note 19; Herbert Letter, supra note 19; Fernandez Letter, supra note 19; Tomaselli Letter, supra note 19; Circle Letter, supra note 19; Baird Letter, supra note 19; Stolfi Letter, supra note 19; Anderson Letter, supra note 19; P. Miller Letter, supra note 19; Swiderski Letter, supra note 19; Situation Letter, supra note 19; Paneque Letter, supra note 19; Nootenboom Letter, supra note 19; Chronakis Letter, supra note 19.

\textsuperscript{24} See, e.g., Barish Letter, supra note 19; Barish Letter IV, supra note 19; Neidhardt Letter, supra note 19; Dylan Letter, supra note 19; Keeler Letter, supra note 19; Casey Letter, supra note 19; Arouesty Letter, supra note 19; ARK Letter, supra note 19; Tull Letter, supra note 19; Stolfi Letter, supra note 19; Stolfi Letter II, supra note 19; McMinn Letter, supra note 19; Lethuillier Letter, supra note 19; Delehanty Letter, supra note 19; Tull Letter II, supra note 19; Anonymous Letter, supra note 19; Bats Letter, supra note 19; Struna Letter, supra note 19.
or loss;\textsuperscript{25} the blockchain treatment of positions in the Shares, including short positions or derivative positions;\textsuperscript{26} the potential conflicts of interest related to the affiliations among the Sponsor, the Custodian, and the Gemini Exchange;\textsuperscript{27} the proposed valuation method for the Trust’s holdings;\textsuperscript{28} or the legitimacy or enhanced regulatory protection that Commission approval of the proposed ETP might confer upon bitcoin as a digital asset.\textsuperscript{29} Ultimately, however, comments on these topics do not bear on the basis for the Commission’s decision to disapprove the proposal. Accordingly, the Commission will summarize and address the comments that relate to the susceptibility of bitcoin or the Shares to fraudulent or manipulative acts and practices, including the need for surveillance-sharing agreements with significant, regulated markets for trading in bitcoin or derivatives on bitcoin.

\textbf{A. \textit{Comments Regarding The Worldwide Market for Bitcoin}}

Several commenters note that the majority of bitcoin trading occurs on exchanges outside the United States. One commenter claims that most daily trading volume is conducted on poorly capitalized, unregulated exchanges located outside the United States and that these non-U.S.

\begin{footnotesize}
\begin{enumerate}
\item See, e.g., Anonymous Letter, supra note 19; Tull Letter, supra note 19; Lethuillier Letter, supra note 19; Aronesty Letter, supra note 19; Delehanty Letter, supra note 19; XBT Letter, supra note 19; ARK Letter, supra note 19; Anonymous Letter III, supra note 19; Bats Letter, supra note 19.
\item See, e.g., Anonymous Letter, supra note 19; Tull Letter, supra note 19.
\item See, e.g., XBT Letter, supra note 19; Tull Letter, supra note 19; Stolfi Letter II, supra note 19; ARK Letter, supra note 19; Anonymous Letter II, supra note 19; Bats Letter, supra note 19.
\item See, e.g., McMinn Letter, supra note 19; Bats Letter, supra note 19; Delehanty Letter II, supra note 19; Dylan Letter, supra note 19; ARK Letter, supra note 19; Anonymous Letter II, supra note 19; Circle Letter, supra note 19.
\item See, e.g., Stolfi Letter, supra note 19; Circle Letter, supra note 19; Kim Letter, supra note 19; Delehanty Letter, supra note 19; Baird Letter, supra note 19; Anonymous Letter, supra note 19; Keeler Letter, supra note 19; Dalla Val Letter, supra note 19; Elron Letter, supra note 19; P. Miller Letter, supra note 19; Marchionne Letter, supra note 19; Situation Letter, supra note 19; Paneque Letter, supra note 19; Nootenboom Letter, supra note 19; Chronakis Letter, supra note 19; Johnson Letter, supra note 19; Bang Letter, supra note 19; Primm Letter, supra note 19.
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\end{footnotesize}
exchanges and their practices significantly influence the price discovery process. Another commenter states that the biggest and most-influential bitcoin exchange is located outside U.S. jurisdiction.

One commenter states that, since 2013, the price of bitcoin has been defined mostly by the major Chinese exchanges, whose volumes dwarf those of exchanges outside China. According to the commenter, those exchanges are not regulated or audited, and are suspected of engaging in unethical practices like front-running, wash trades, and trading with insufficient funds. The commenter interprets pricing data from these Chinese exchanges to mean that the price of bitcoin is defined entirely by speculation, without any ties to fundamentals. Another commenter also observes that Chinese markets drive much of the volume in the bitcoin markets and that the bitcoin/Chinese Yuan (BTC/CNY) quote is apt to trade at a significant premium to the bitcoin/U.S. dollar (BTC/USD) quote. The commenter points out that large arbitrage opportunities would not exist for long in efficient markets, but they do persist in bitcoin markets.

One commenter claims that a sizeable number of traders and owners of bitcoin do not desire to trade in a well-regulated environment for reasons including tax evasion, evading capital controls, and money laundering. This commenter also states that U.S. exchanges do not offer products such as fee-free trading, margin trading, or options, which drive traffic to the top non-U.S. exchanges. The commenter claims that, because trade is now sparse on regulated U.S. exchanges including Gemini, arbitrage will not occur efficiently or proportionally to mitigate

30 See Williams Letter, supra note 19, at 2.
31 See Anonymous Letter IV, supra note 19.
33 See ARK Letter, supra note 19, at 5.
manipulation from the dominant unregulated bitcoin exchanges. This commenter also claims that several Chinese exchanges actively engage in bitcoin mining operations, creating a conflict of interest, and notes that these exchanges are unaudited and unaccountable.\textsuperscript{34} Another commenter also claims that the Chinese exchanges that account for the bulk of trading are subject to little regulatory oversight and that existing know-your-customer or identity-verification measures are lax and can be easily bypassed.\textsuperscript{35}

One commenter states that the market for bitcoin, by trade volume, is very shallow. This commenter notes that the majority of bitcoin is hoarded by a few owners or is out of circulation. The commenter also notes that ownership concentration is high, with 50 percent of bitcoin in the hands of fewer than 1,000 people, and that this high ownership concentration creates greater market liquidity risk, as large blocks of bitcoin are difficult to sell in a timely and market efficient manner. This commenter claims that daily trade volume is only a small fraction of total bitcoin mined.\textsuperscript{36} This commenter also states that several fundamental flaws make bitcoin a dangerous asset class to force into an exchange traded structure, including shallow trade volume, extreme hoarding, low liquidity, hyper price volatility, a global web of unregulated bucket-shop exchanges, high bankruptcy risk, and oversized exposure to trading in countries where there is no regulatory oversight.\textsuperscript{37} This commenter believes that lack of regulation and consumer protection also increase the chance and incentives for market price manipulation and states that approving

\textsuperscript{34} See Maher Letter, supra note 19; see also Johnson Letter, supra note 19; Anonymous Letter IV, supra note 19. According to the Exchange, “bitcoin mining” refers to the process of adding a set of transaction records (a “block”) to bitcoin’s “blockchain”—its public ledger of past transactions. See Amendment No. 1, supra note 1, 81 FR at 76655. The Exchange states that “[b]itcoin miners engage in a set of prescribed complex mathematical calculations in order to add a block to the blockchain and thereby confirm bitcoin transactions included in that block’s data. Miners that are successful in adding a block to the blockchain are automatically awarded a fixed number of bitcoins for their efforts.” Id.

\textsuperscript{35} See Maher Letter, supra note 19.

\textsuperscript{36} See Williams Letter, supra note 19, at 1–2.

\textsuperscript{37} See id. at 1.
the ETP before structural protections and controls are firmly in place would put investors at undue risk.\textsuperscript{38}

The Exchange, in its comment letter, asserts that bitcoin is resistant to manipulation, arguing that the increasing strength and resilience of the global bitcoin marketplace serve to reduce the likelihood of price manipulation and that arbitrage opportunities across globally diverse marketplaces allow market participants to ensure approximately equivalent pricing worldwide.\textsuperscript{39}

The Exchange further asserts, in its comment letter, that the Commodity Futures Trading Commission (“CFTC”) has designated bitcoin as a commodity and is “broadly responsible for the integrity” of U.S. bitcoin spot markets.\textsuperscript{40} The Exchange acknowledges that the CFTC has not yet brought any enforcement actions based on the anti-manipulation provisions of the Commodity Exchange Act, but notes that the CFTC has issued orders against U.S. and non-U.S. bitcoin exchanges for engaging in other activity prohibited by the Commodity Exchange Act. The Exchange’s comment letter states that a regulatory framework for providing oversight and deterring market manipulation therefore currently exists in the U.S.\textsuperscript{41}

Finally, the Commission notes a paper that was submitted with respect to a similar proposed rule change,\textsuperscript{42} arguing that bitcoin is relatively uncorrelated with other assets, enabling

\textsuperscript{38} See id., at 2–3.
\textsuperscript{39} See Bats Letter, supra note 19, at 2.
\textsuperscript{40} See id., at 3.
\textsuperscript{41} See id.
investors to construct more efficient portfolios, and that, as a general matter, the underlying market for bitcoin is inherently resistant to manipulation. The author of the paper posits that the underlying bitcoin market is not susceptible to manipulation because (a) there is no inside information related to earnings, revenue, corporate actions, or new sources of supply; (b) the asset is not subject to the dissemination of false or misleading information; (c) each bitcoin market is an independent entity, so that a demand for liquidity does not necessarily propagate across other exchanges; (d) a substantial over-the-counter (“OTC”) market provides additional liquidity and absorption of shocks; (e) there is no market-close pricing event to manipulate; (f) the market is not subject to “spoofing” or other high-frequency-trading tactics; (g) order books on exchanges worldwide are publicly visible and available through APIs (application program interfaces); and (h) it is unlikely that any one person could obtain a dominant market share. The author also asserts that listing the shares on a national securities exchange and a shift from OTC trading to trading on exchanges would make the overall bitcoin market more transparent.

B. Comments Regarding the Gemini Exchange

Several commenters discuss the Gemini Exchange’s low trading volumes and one commenter claims that of all the exchanges Gemini has the worst pricing. Another commenter asserts that there is a significant risk that the nominal ETP share price will be manipulated by

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44 See id. at 5–8.
45 See Lewis Paper, supra note 42, at 5–6, 8–9; Lewis Paper II, supra note 42, at 2. The Commission notes that the Lewis Paper made additional assertions directed to the particular structure and pricing mechanism of another proposed bitcoin-based commodity-trust ETP, and the Commission does not address those arguments in this order.
46 See Lewis Paper, supra note 42, at 7.
47 See, e.g., Maher Letter, supra note 19; Stolfi Letter, supra note 19; Anonymous Letter II, supra note 19.
48 See Anonymous Letter II, supra note 19.
relatively small trades that manipulate the bitcoin price at that exchange.\textsuperscript{49} This commenter notes that, while U.S.-based bitcoin exchanges are subjected to stricter regulations and auditing for the holding of client accounts, the trading itself seems to occur in a regulatory vacuum and seems impossible to audit effectively.\textsuperscript{50} This commenter expresses concerns regarding the Gemini Exchange Spot Price,\textsuperscript{51} noting that the nominal price of the Shares under the proposal is supposed to be tied to the market price of bitcoins at the Gemini Exchange, which is closely tied to the ETP proponents.\textsuperscript{52}

One commenter claims that among U.S.-dollar bitcoin exchanges, Gemini has a 3% share and its liquidity measured by order book depth is significantly lower than several other exchanges. The commenter notes that it is possible that after the launch of an ETP, Gemini’s liquidity and volume will increase, but claims that the nature of bitcoin trading that leads to the concentration of volume and liquidity outside of U.S. borders makes any significant future increase unlikely.\textsuperscript{53} This commenter also observes that while Gemini is a regulated U.S. exchange, it does not operate in a vacuum. The commenter claims that the global landscape of many unregulated bitcoin exchanges exerts huge influence on the Gemini Exchange and consequently on the Winklevoss ETP.\textsuperscript{54}

One commenter states that exchanges other than Gemini are not subject to the same level of oversight and that, if the ETP were based on some broad measure of weighted prices across

\textsuperscript{49} See Stolfi Letter, supra note 19.
\textsuperscript{50} See Stolfi Letter II, supra note 19.
\textsuperscript{51} See Stolfi Letter, supra note 19.
\textsuperscript{52} See id.
\textsuperscript{53} See Maher Letter, supra note 19 (noting that the market is very concentrated and is controlled by a small group of exchanges operating in China, three of which represented 96% of all bitcoin trade volume over a six-month period, and noting that the Gemini Exchange had a 0.07% share of bitcoin volume worldwide during that period, with a 3% share of USD-exchange volume).
\textsuperscript{54} See id.
different exchanges, then completely unregulated actors might be able to exercise undue influence on the ETP valuation price.\textsuperscript{55}

One commenter states that the Gemini Exchange Auction could be an improvement over other bitcoin pricing mechanisms, but asserts that the auction has not improved volume. The commenter claims that the Gemini Exchange has the lowest liquidity of the three exchanges in the United States and is one of the least-liquid of all exchanges that trade bitcoin for U.S. dollars.\textsuperscript{56} The commenter observes that the auction data show that traders in the auction are taking advantage of the discounted auction price. The commenter notes that the daily two-sided auction process was designed to maximize price discovery and reduce price volatility that could be the result of momentum pricing, but asks what measures have been put in place to address traders who take advantage of the discounted auction price. The commenter also notes that while other financial products sometimes have auctions to determine price, an auction on a stock exchange does not require money to be deposited in advance with the exchange to be in the auction. The commenter notes that, by contrast, the Gemini Exchange requires dollars or bitcoin to be deposited before participation. The commenter believes that this is a problem because the Gemini auction is limited and “warped” and has failed on at least two occasions.\textsuperscript{57}

One commenter claims that there are more robust ways to value the Trust’s holdings than using the spot price of a single exchange, such as the Gemini Exchange. The commenter notes that bitcoin trades on a number of exchanges around the world and that most of these exchanges can be considered isolated liquidity pools, which are more vulnerable to manipulation or security

\textsuperscript{55} See Delehanty Letter, supra note 19.
\textsuperscript{56} See Anonymous Letter II, supra note 19.
\textsuperscript{57} See id.
breach than the broader market. The commenter also notes that the Gemini Exchange typically processes less than 10% of the total volume in the bitcoin/U.S. dollar pair and states that an index of the most reliable exchanges should be constructed to value the Trust’s holdings. The commenter questions whether using only the Gemini Exchange’s spot price could serve to incentivize Authorized Participants and other market participants to direct traffic and flow to Gemini, at the expense of best execution.

Another commenter takes a different view on the merits of single versus multiple price sources. This commenter notes that bitcoin spot prices diverge across exchanges due to various factors and that some exchanges may suffer from lack of oversight and a lack of transparency or fairness. The commenter claims that these facts strengthen the case for an investment product that does not rely on the spot price of less-credible exchanges to value its holdings and instead relies on the spot price on the Gemini Exchange, which is subject to substantive regulation of its exchange activity and custody of assets by the NYSDFS. This commenter also notes that, while leveraged trading on some other exchanges has historically sparked excessive price volatility and instability, Gemini does not offer such products and would be able to serve as a trusted, regulated spot exchange for institutional market participants driving the arbitrage mechanism that ensures efficient pricing between the spot price and the Shares. The commenter claims that the Gemini Exchange has the potential for more-robust price discovery as liquidity is concentrated on that exchange.

One commenter states that there is an inherent trade-off to using one exchange versus an average of several exchanges, some of which may be less scrupulous. The commenter

58 See ARK Letter, supra note 19, at 8.
59 See id. at 8–9.
60 See Circle Letter, supra note 19, at 2.
acknowledges that manipulation is a legitimate concern, but notes that it is not uncommon to see a very small number of physical trades determine the base price for a much larger paper market.\footnote{See Delehanty Letter, \textit{supra} note 19.}

Other commenters view the risk of manipulation as more significant. One commenter notes that it would be surprising if illegal and manipulative practices did not occur, since they would be easy to implement, impossible to detect, perfectly legal, and extremely lucrative.\footnote{See Stolfi Letter II, \textit{supra} note 19.} This commenter also states that the Gemini Exchange Auction closing volumes have been low and have shown a slight decreasing trend since the inception of the auction. The commenter notes that, with low volumes, it seems possible to manipulate the NAV by entering suitable bids or asks in the Gemini Exchange Auction.\footnote{See \textit{id}.} Another commenter agrees that bitcoin traders can manipulate trading on Gemini Exchange because of its low trading volumes and notes that the Trust’s documentation states that momentum pricing of bitcoin has resulted, and may continue to result, in speculation regarding future appreciation in the value of bitcoin, making the price of bitcoin more volatile.\footnote{See Anonymous Letter II, \textit{supra} note 19.} The commenter states that the value of bitcoin may therefore be more likely to fluctuate due to changing investor confidence in future appreciation in the Gemini Exchange Auction price, which could adversely affect an investment in the Shares.\footnote{See \textit{id}.} According to another commenter, in this unregulated environment, price manipulation and front-running of
large buy or sell orders can happen and well-connected customers can gain preferential treatment in order execution.\(^{66}\)

The Exchange, in its comment letter, notes that the Gemini Exchange Auction typically already transacts a volume greater than the proposed creation basket size for the Trust, and would likely support the needs of Authorized Participants to engage in basket creation or redemption. The Exchange claims that the global bitcoin marketplace has the potential to provide even more liquidity and to be a source of bitcoin for basket creation and hedging. The Exchange also notes that all intraday order-book and trade information on the Gemini Exchange is publicly available through various electronic formats and is also redistributed by various online aggregators, and that, with the launch of the proposed Trust, the Sponsor must make important pricing data available in real time.\(^{67}\)

The Exchange acknowledges in its comment letter that less-liquid markets, such as the market for bitcoin, may be more easily manipulated, but claims that these concerns are mitigated with respect to the Shares and the trading on the Gemini Exchange. The Exchange notes that the Gemini Exchange Auction price is based on an extremely similar mechanism to the one leveraged for the Exchange’s own Opening and Closing Auctions and allows full and transparent participation from all Gemini Exchange participants in the price discovery process. The Exchange states that the auction process leverages mechanics which have proven over the years to be robust and effective on the Exchange and other national listing exchanges in both liquid and illiquid securities alike. The Exchange notes that, because the time of the Gemini Exchange Auction coincides with the Exchange’s Closing Auction, efficient real-time arbitrage between

\(^{66}\) See Williams Letter, \textit{supra} note 19, at 2.

\(^{67}\) See Bats Letter, \textit{supra} note 19, at 9.
the closing price of the Trust and the Gemini Exchange Auction price will be prevalent and will lead to resilient and effective pricing of both the Trust and the underlying bitcoin asset, leading to convergence between the Trust’s closing price and its NAV. The Exchange states that the Gemini Exchange Auction price typically deviates very little from the prevailing price on other bitcoin exchanges, and the Exchange presents statistics to show that this price is consistent with other pricing sources.

C. Comments on the Derivatives Markets for Bitcoin

One commenter claims that the bitcoin markets are not yet efficient and attributes this inefficiency, in part, to the nascent state of the bitcoin derivatives market. This commenter notes that derivatives provide investors more ways to hedge against bitcoin’s potential price movements, introduce more volume and liquidity, and generally give the markets more points of information about bitcoin’s future prospects, leading to tighter bid/ask spreads. The commenter claims that most derivatives activity within the bitcoin markets is offered by entities outside of the purview of U.S. regulators. This commenter notes that, within the United States, one market offers bitcoin forwards, but no one currently offers regulated bitcoin futures. The commenter states that bitcoin options offered by regulated U.S. entities may come next, but that as of now there are none. The commenter observes that the lack of a robust and regulated derivatives market means that market participants do not have a broad basket of tools at their disposal, making hedging difficult and keeping away many market makers that provide significant liquidity to traditional capital markets. The commenter claims that, while derivative products may be in development, a full suite of investor tools that will drive market efficiency

68 See id. at 7–8.
69 See id. at 8–9.
70 See ARK Letter, supra note 19, at 5–6.
and eliminate price disparities is likely at least a couple of years away. The commenter also notes that without a robust derivatives market for institutional investors to short the underlying asset, or otherwise hedge their positions, there likely would be little counterbalance to the new demand generated by the ETP, and that Authorized Participants could then have trouble sourcing bitcoin and hedging their positions, stalling the creation process. The commenter concludes that it would be premature to launch a bitcoin ETP because bitcoin markets are not liquid enough to support an open-end fund, and because an ecosystem of institutional-grade infrastructure players is not yet available to support such a product.

One commenter disagrees with assertions linking inefficient bitcoin markets to nascent derivatives markets, stating that no evidence has been provided regarding the would-be effect of derivatives on the bitcoin market. The commenter claims that the assertion assumes that bitcoin pricing is inefficient, which the commenter claims is not the case. The commenter also claims that the assertion assumes that the lack of a derivatives market causes pricing to be inefficient, instead stating that there is direct evidence that many securities trade successfully and efficiently on U.S. and non-U.S. exchanges despite not having a direct derivatives market. The commenter also disagrees with the claim that, absent a robust derivatives market, there would be little counterbalance to the new demand generated by the ETP, stating that it is impossible to predict

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71 See id. at 6.
72 See id. at 13–14.
73 See id. at 2.
74 See Anonymous Letter III, supra note 19. Several commenters also assert that regulation by the Exchange of activity in the ETP could substitute for a lack of regulation in underlying or derivatives markets. See, e.g., Baird Letter, supra note 19; Keeler Letter, supra note 19; Marchionne Letter, supra note 19; Bang Letter, supra note 19.
the success or failure of the ETP. The commenter notes that Authorized Participants may be able to source bitcoin from China.\textsuperscript{75}

Another commenter claims that there are several bitcoin futures markets that have a significant impact on the spot price along with several OTC markets, such as the one recently launched by the Gemini Exchange, that also offer liquidity.\textsuperscript{76}

The author of the paper submitted with respect to a similar proposal states that one of the key differences between bitcoin and other commodities is the lack of a liquid and transparent derivatives market and that, although there have been nascent attempts to establish derivatives trading in bitcoin, bitcoin derivatives markets are not at this time sufficiently liquid to be useful to Authorized Participants and market makers who would like to use derivatives to hedge exposures.\textsuperscript{77} The author claims that, for physical commodities that are not traded on exchanges, the presence of a liquid derivatives market is a necessary condition, but claims that for digital assets like bitcoin, derivatives markets are not necessary because price discovery occurs on the OTC market and exchanges instead.\textsuperscript{78}

\section{III. DISCUSSION AND COMMISSION FINDINGS}
\subsection{A. Overview}

Under Section 19(b)(2)(C) of the Exchange Act, the Commission must approve the proposed rule change of a self-regulatory organization ("SRO") if the Commission finds that the proposed rule change is consistent with the requirements of the Exchange Act and the applicable

\begin{flushleft}
\textsuperscript{75} See Anonymous Letter III, supra note 19.
\textsuperscript{76} See Dylan Letter, supra note 19, at 1.
\textsuperscript{77} See Lewis Paper, supra note 42, at 8.
\textsuperscript{78} See id.
\end{flushleft}
rules and regulations thereunder. If it is unable to make such a finding, the Commission must disapprove the proposed rule change. Additionally, under Rule 700(b)(3) of the Commission’s Rules of Practice, the “burden to demonstrate that a proposed rule change is consistent with the Exchange Act and the rules and regulations issued thereunder … is on the self-regulatory organization that proposed the rule change.”

After careful consideration, and for the reasons discussed in greater detail below, the Commission does not believe that the proposed rule change, as modified by Amendments No. 1 and 2, is consistent with the requirements of the Exchange Act and the applicable rules and regulations thereunder. Specifically, the Commission does not find that the proposed rule change is consistent with Section 6(b)(5) of the Exchange Act—which requires that the rules of a national securities exchange be designed, among other things, to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest—because the

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81 17 CFR 201.700(b)(3). The 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. Id. Any failure of a self-regulatory organization to provide the information elicited by Form 19b-4 may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Exchange Act and the rules and regulations issued thereunder that are applicable to the self-regulatory organization. Id.
82 In disapproving the proposed rule change, as modified by Amendments No. 1 and 2, the Commission has considered its impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f); see also notes 42–46 & 115–118 and accompanying text. The Commission notes that, according to the Exchange, the Sponsor believes that the Shares will represent a cost-effective and convenient means of gaining investment exposure to bitcoin similar to a direct investment in bitcoin, allowing investors to more effectively implement strategic and tactical asset allocation strategies that use bitcoin, with lower cost than that associated with the direct purchase, storage, and safekeeping of bitcoin. See Amendment No. 1, supra note 1, 81 FR at 76662; see also Lewis Paper, supra note 42, at 3, 11–16 (asserting that a bitcoin-based ETP would enable ordinary investors to construct more efficient portfolios). Regarding competition, the Exchange has asserted that approval of the proposed rule change “will enhance competition among market participants, to the benefit of investors and the marketplace.” Amendment No. 1, supra note 1, 81 FR at 76669. The Commission recognizes that the Exchange asserts these economic benefits, but, for the reasons discussed throughout, the Commission must disapprove the proposed rule change because it is not consistent with the Exchange Act.
Commission believes that the significant markets for bitcoin are unregulated and that, therefore, the Exchange has not entered into, and would currently be unable to enter into, the type of surveillance-sharing agreement that helps address concerns about the potential for fraudulent or manipulative acts and practices in the market for the Shares. Accordingly, the Commission disapproves the proposed rule change.  

B. Analysis

1. Commodity-Trust ETPs and Surveillance-Sharing Agreements

The Exchange proposes to list and trade the Shares under BZX Rule 14.11(e)(4), which governs the listing of Commodity-Based Trust Shares. In this regard, the proposal is similar to many past proposals to list and trade shares of ETPs holding precious metals, assets that individuals could otherwise obtain directly (for example, in the form of bullion coins), but at the cost of having to secure those holdings. The Commission analyzes this proposal under the standards it has applied to previous commodity-trust ETPs.

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84 The Commission’s disposition of the Exchange’s proposed rule change is independent of, and serves a fundamentally different purpose than, any Commission actions with respect to the Securities Act of 1933 registration statement of the Trust.

85 The Commission notes that in settled actions the CFTC has designated bitcoin as a commodity and has asserted jurisdiction over the trading of at least certain derivatives on bitcoin, as well as certain leveraged or margined retail transactions in bitcoin. See In re Coinflip, Inc., d/b/a Derivabit, and Francisco Riordan, CFTC Docket No. 15-29, 2015 WL 5535736 (CFTC Sept. 17, 2015) (Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions (“Coinflip Settlement Order”)), available at http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoinfliporder09172015.pdf.


87 See Amendment No. 1, supra note 1, 81 FR at 76662 (“The Sponsor believes that investors will be able to more effectively implement strategic and tactical asset allocation strategies that use bitcoin by using the Shares instead of directly purchasing and holding bitcoin, and for many investors, transaction costs related to the Shares will be lower than those associated with the direct purchase, storage and safekeeping of bitcoin.”).
A key consideration for the Commission in determining whether to approve or disapprove a proposal to list and trade shares of a new commodity-trust ETP is the susceptibility of the shares or the underlying asset to manipulation. This consideration flows directly from the requirement in Section 6(b)(5) of the Exchange Act that a national securities exchange’s rules must be designed “to prevent fraudulent and manipulative acts and practices” and “to protect investors and the public interest.”

Since at least 1990, the Commission has expressed the view that the ability of a national securities exchange to enter into surveillance-sharing agreements “furthers the protection of investors and the public interest because it will enable the exchange to conduct prompt investigations into possible trading violations and other regulatory improprieties.” The Commission has also long held that surveillance-sharing agreements are important in the context of exchange listing of derivative security products, such as equity options. In 1994, the Commission stated:

As a general matter, the Commission believes that the existence of a surveillance sharing agreement that effectively permits the sharing of information between an exchange proposing to list an equity option and the exchange trading the stock underlying the equity option is necessary to detect and deter market manipulation and other trading abuses. In particular, the Commission notes that surveillance sharing agreements provide an important deterrent to manipulation because they facilitate the availability of information needed to fully investigate a potential manipulation if it were to occur. These agreements are especially important in the context of derivative products based on foreign securities because they facilitate the collection of necessary regulatory, surveillance and other information from foreign jurisdictions.

90 Exchange Act Release No. 33555 (Jan. 31, 1994), 59 FR 5619 (Feb. 7, 1994) (SR-Amex-93-28) (order approving listing of options on American Depositary Receipts). The Commission further stated that, “[b]ecause of the additional leverage provided by an option on an ADR, the Commission generally believes that having a comprehensive surveillance sharing agreement in place, between the exchange where the ADR option trades and the exchange where the foreign security underlying the ADR primarily trades, will ensure the integrity of the (footnote continued…)

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With respect to ETPs, when approving in 1995 the listing and trading of one of the first commodity-linked ETPs—a commodity-linked exchange-traded note—on a national securities exchange, the Commission continued to emphasize the importance of surveillance-sharing agreements, noting that the listing exchange had entered into surveillance-sharing agreements with each of the futures markets on which pricing of the ETP would be based and stating that “[t]hese agreements should help to ensure the availability of information necessary to detect and deter potential manipulations and other trading abuses, thereby making [the commodity-linked notes] less readily susceptible to manipulation.”

See Exchange Act Release No. 35518 (Mar. 21, 1995), 60 FR 15804 (Mar. 27, 1995) (SR-Amex-94-30). In that matter, the Commission noted that the listing exchange had comprehensive surveillance-sharing agreements with all of the exchanges upon which the futures contracts overlying the notes traded and was able to obtain market surveillance information, including customer identity information, for transactions occurring on NYMEX and other futures exchanges. See id., 60 FR at 15806 n.21. See also Exchange Act Release No. 36885 (Feb. 26, 1996), 61 FR 8315, n.17 (Mar. 4, 1996) (SR-Amex-95-50) (approving the exchange listing and trading of Commodity Indexed Securities, and noting (a) that through the comprehensive surveillance-sharing agreements, the listing exchange was able to obtain market surveillance information, including customer identity information, for transactions occurring on NYMEX and COMEX and that, through the Intermarket Surveillance Group information-sharing agreement, the listing exchange was able to obtain, upon request, surveillance information with respect to trades effected on the London Metal Exchange, including client identity information and (b) that, if a different market were utilized for purposes of calculating the value of a designated futures contract, the listing exchange had represented that it would ensure that it entered into a surveillance-sharing agreement with respect to the new relevant market). The Commission has made similar statements about surveillance-sharing agreements with respect to the listing and trading of stock-index, currency, and currency-index warrants. See, e.g., Exchange Act Release No. 36166 (Aug. 29, 1995), 60 FR 46660 (Sept. 7, 1995) (SR-PSE-94-28) (approving a proposal to adopt uniform listing and trading guidelines for stock-index, currency, and currency-index warrants). Specifically, the Commission noted that “a surveillance sharing agreement should provide the parties with the ability to obtain information necessary to detect and deter market manipulation and other trading abuses” and stated that the Commission “generally requires that a surveillance sharing agreement require that the parties to the agreement provide each other, upon request, information about market trading activity, clearing activity, and the identity of the ultimate purchasers for securities.” Id., 60 FR at 46665 n.35. In addition, the Commission stated that “[t]he ability to obtain relevant surveillance information, including, among other things, the identity of the ultimate purchasers and sellers of securities, is an essential and necessary component of a comprehensive surveillance sharing agreement.” Id., 60 FR at 46665 n.36.
In 1998, in adopting Exchange Act Rule 19b-4(e)\(^{92}\) to permit the generic listing and trading of certain new derivatives securities products—including ETPs—the Commission again emphasized the importance of the listing exchange’s ability to obtain from underlying markets, through surveillance-sharing agreements (called information-sharing agreements in the release), the information necessary to detect and deter manipulative activity. Specifically, in adopting rules governing the generic listing of new derivatives securities products, the Commission stated that the Rule 19b-4(e) procedures would “enable the Commission to continue to effectively protect investors and promote the public interest” and stated that:

It is essential that the SRO have the ability to obtain the information necessary to detect and deter market manipulation, illegal trading and other abuses involving the new derivative securities product. Specifically, there should be a comprehensive ISA [information-sharing agreement] that covers trading in the new derivative securities product and its underlying securities in place between the SRO listing or trading a derivative product and the markets trading the securities underlying the new derivative securities product. Such agreements provide a necessary deterrent to manipulation because they facilitate the availability of information needed to fully investigate a manipulation if it were to occur.\(^ {93}\)

The Commission, in the NDSP Adopting Release, also stressed the importance of these surveillance-sharing agreements comprehensively covering trading in the underlying assets. In the case of a product overlying domestic securities, the Commission said that the exchange listing a derivative securities product should ensure that it was either a common member of the Intermarket Surveillance Group with, or had entered into an information-sharing agreement with, each market trading each underlying security.\(^ {94}\) Further, the Commission stated that:

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\(^{92}\) 17 CFR 240.19b-4(e).


\(^{94}\) See id., 63 FR at 70959. The Commission further noted that “if a new SRO trades component securities underlying a new derivative securities product and is not a member of the ISG, the SRO seeking to list and trade (footnote continued…)

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For a new derivative securities product overlying an instrument with component securities from several countries, the Commission recognizes that it may not be practical in all instances to secure comprehensive ISAs with all of the relevant foreign markets. Foreign countries’ securities or ADRs that are not subject to a comprehensive ISA should not represent a significant percentage of the weight of such an underlying instrument."\(^95\) 

Consistent with these statements, for the commodity-trust ETPs approved to date for listing and trading, there have been in every case well-established, significant, regulated markets for trading futures on the underlying commodity—gold, silver, platinum, palladium, and copper—and the ETP listing exchange has entered into surveillance-sharing agreements with, or held Intermarket Surveillance Group membership in common with, those markets.\(^96\)

\(^{95}\) See id., 63 FR at 70959.  
The Exchange represents that its existing surveillance measures, which focus on trading in the Shares, are sufficient to support the proposed rule change. Specifically, the Exchange represents that its surveillance procedures are adequate to properly monitor the trading of the Shares on the Exchange during all trading sessions and to deter and detect violations of Exchange rules and the applicable federal securities laws. The Exchange further represents that trading of the Shares through the Exchange will be subject to the Exchange’s surveillance procedures for derivative products, including Commodity-Based Trust Shares, and that the Exchange may obtain information regarding trading in the Shares through the Intermarket

(…footnote continued)

97 See Amendment No. 1, supra note 1, 81 FR at 76668.
Surveillance Group, from other members or affiliates of that group, or from exchanges with which the Exchange has a surveillance-sharing agreement.\(^9\) In addition, the Exchange notes that it has entered into a comprehensive surveillance-sharing agreement with the Gemini Exchange and represents that it may obtain information about bitcoin transactions, trades, and market data from the Gemini Exchange (and from any bitcoin exchanges with which the Exchange enters into a surveillance-sharing agreement in the future), as well as certain additional information that is publicly available through the Blockchain. Moreover, several commenters assert that regulation by the Exchange of activity in the ETP could substitute for a lack of regulation in underlying or derivatives markets.\(^9\)

The Commission views the Exchange’s proposed surveillance procedures regarding the Shares themselves as necessary, but not sufficient in light of the discussion below noting that the Exchange has not entered into, and would currently be unable to enter into, surveillance-sharing agreements with significant, regulated markets for trading either bitcoin itself or derivatives on bitcoin.\(^1\) Moreover, the Commission does not accept the premise, suggested by some commenters, that regulation of trading in the Shares is a sufficient and acceptable substitute for regulation in the spot or derivatives markets related to the underlying asset.\(^2\) Absent the ability to detect and deter manipulation of the Shares—through surveillance sharing with significant,

\(^9\) See id.

\(^9\) See, e.g., Baird Letter, supra note 19 (stating that, if the U.S. were to approve an ETP and bring regulatory standards and oversight to cryptocurrencies, investors would not see major problems as they did with the Bitfinex and Mt. Gox hacks and that, if the ETP were not approved, investors would be forced to use those less-than-ideal exchanges); Keeler Letter, supra note 19 (stating that the alternative to a regulated ETP is investors having to purchase bitcoin at unregulated exchanges lacking SEC oversight); Bang Letter, supra note 19 (stating that disapproval of the ETP would create a more risky environment for investors, who will not have the option of investing through regulated exchanges).

\(^1\) See infra Section III.B.

\(^2\) See, e.g., Anderson Letter, supra note 19; Baird Letter, supra note 19; Keeler Letter, supra note 19; Marchionne Letter, supra note 19; Bang Letter, supra note 19.
regulated markets related to the underlying asset—the Commission does not believe that a national securities exchange can meet its Exchange Act obligations when listing shares of a commodity-trust ETP.

The Commission continues to believe that surveillance-sharing agreements between the exchange listing shares of a commodity-trust ETP and significant, regulated markets related to the underlying asset provide a “necessary deterrent to manipulation.” To the extent there is some question as to the degree to which bitcoin is subject to manipulation, moreover, surveillance-sharing agreements with significant, regulated markets relating to bitcoin would help answer that question and address instances of such manipulation. Therefore, the Commission’s analysis of the Exchange’s proposal examines whether regulated markets of significant size exist—in either bitcoin or derivatives on bitcoin—with which the Exchange has, or could enter into, a surveillance-sharing agreement.

2. **The Worldwide Spot Market for Bitcoin**

With respect to spot bitcoin trading outside the United States, the information in the Exchange’s proposal and from commenters demonstrates that the bulk of bitcoin trading occurs in non-U.S. markets where there is little to no regulation governing trading, and thus no meaningful governmental market oversight designed to detect and deter fraudulent and

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102 NDSP Adopting Release, supra note 93, 63 FR at 70959.

103 See Bats Letter, supra note 19, at 2–3 (noting that only a minority of global bitcoin exchanges are fully regulated for their fiduciary and custodial activities); Stolfi Letter II, supra note 19 (remarking that, since 2013, the price of bitcoin has been defined mostly by the major Chinese exchanges, whose volumes dwarf those of exchanges outside China, which are not regulated or audited, and which are suspected of unethical practices like front-running, wash trades, and trading with insufficient funds); ARK Letter, supra note 19, at 11–12 (noting that over 90% of bitcoin spot trading volume occurs in the BTC/CNY pair, where there is little regulatory oversight and transparency); Maher Letter, supra note 19 (explaining that the Chinese bitcoin exchanges fall under little oversight by any regulatory entities); Williams Letter, supra note 19, at 1 (noting that, among several fundamental flaws that make bitcoin a dangerous asset class to force into an ETP structure, specific risks include the “global web of unregulated bucket shop exchanges” and the “oversized exposure to trading in countries where there is no regulatory oversight, such as China”); Lee Letter, supra note 19 (noting that there is currently no regulation or oversight for the worldwide market of exchanges).
manipulative activity. The Exchange notes in its comment letter that only a minority of the global spot bitcoin exchanges are subject to any regulatory regime. Additionally, the Commission notes that no bitcoin spot market is currently a member of the Intermarket Surveillance Group.

With respect to trading in the United States, the Exchange asserts that the CFTC is broadly responsible for the integrity of bitcoin spot markets and that, therefore, a regulatory framework for providing oversight and deterring market manipulation currently exists in the United States. The Exchange’s conclusion about the state of regulation in the U.S. market for bitcoin, however, is not supported by the facts the Exchange presents.

Although the CFTC can bring enforcement actions against manipulative conduct in spot markets for a commodity, spot markets are not required to register with the CFTC, unless they offer leveraged, margined, or financed trading to retail customers. In all other cases, including the Gemini Exchange, the CFTC does not set standards for, approve the rules of, examine, or otherwise regulate bitcoin spot markets. The Exchange notes in its comment letter that the

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104 See supra notes 31–38 and accompanying text. The Commission also notes that, while the Exchange represents that it can obtain information about bitcoin trading made publicly available through the Blockchain, see Amendment No. 1, supra note 1, 81 FR at 76668, this information identifies parties to a transaction only by a pseudonymous public-key address.

105 See Bats Letter, supra note 19, at 2–3 (noting that only a minority of global bitcoin exchanges are fully regulated for their fiduciary and custodial activities, and naming Gemini Trust Company LLC and itBit Trust Company LLC, as the only two exchange operators that are subject to substantive regulation, each overseen by the NYSDFS).

106 See http://www.isgportal.com (listing the current members and affiliate members of the Intermarket Surveillance Group).

107 See Bats Letter, supra note 19, at 3.

108 Commodity Exchange Act Section 2(c)(2)(D), 7 U.S.C. 2(c)(2)(D). See also Commodity Exchange Act Section 2(c)(2)(A), 7 U.S.C. 2(c)(2)(A) (defining CFTC jurisdiction to specifically cover contracts of sale of a commodity for future delivery (or options on such contracts), or an option on a commodity (other than foreign currency or a security or a group or index of securities), that is executed or traded on an organized exchange).

109 The Gemini Exchange is not registered with the CFTC.
CFTC has brought several bitcoin-related enforcement actions against bitcoin-related entities, but the actions cited by the Exchange do not demonstrate that a regulatory framework for providing oversight and deterring market manipulation currently exists for the bitcoin spot market. Rather, the cited enforcement actions have involved either (a) the failure of an entity to register with the CFTC before trading derivatives on bitcoin or offering leveraged, margined, or financed bitcoin trading to retail customers, or (b) the facilitation of wash trades in bitcoin swaps by a swap execution facility registered with the CFTC.

Some commenters believe that bitcoin markets can be manipulated. The Exchange agrees, in its comment letter, that “less liquid markets, such as the market for bitcoin, may be more manipulable,” but asserts that the strength and resilience of the global bitcoin market serve to reduce the likelihood of manipulation. Additionally, the author of the paper submitted with respect to a similar proposal for a bitcoin-based ETP asserts that, for several reasons, the underlying market for bitcoin is not susceptible to manipulation.

The Commission does not believe that the record supports a finding that the unique properties of bitcoin and the underlying bitcoin market are so different from the properties of other commodities and commodity futures markets that they justify a significant departure from

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110 Bats Letter, supra note 19, at 3.
113 See supra notes 34–38 and accompanying text.
114 See supra notes 39–41 and accompanying text.
115 See Lewis Paper, supra note 42; see also supra notes 42–46 and accompanying text.
the standards applied to previous commodity-trust ETPs. While the Exchange and the author of the paper submit that arbitrage across bitcoin markets will help to keep worldwide bitcoin prices aligned with one another, hindering manipulation,\textsuperscript{116} neither provides data regarding how long pricing disparities may persist before they are arbitraged away, and one commenter specifically noted that large arbitrage opportunities persist in bitcoin markets.\textsuperscript{117}

The Commission also believes that the paper’s discussion of the possible sources of manipulation is incomplete and does not form a basis to find that bitcoin cannot be manipulated—or to find, by implication, that no surveillance-sharing agreement is necessary between an exchange listing shares of a bitcoin-based ETP and significant markets trading bitcoin or bitcoin derivatives. For example, while there is no inside information related to the earnings or revenue of bitcoin, there may be material non-public information related to the actions of regulators with respect to bitcoin; regarding order flow, such as plans of market participants to significantly increase or decrease their holdings in bitcoin; regarding new sources of demand, such as new ETPs that would hold bitcoin; or regarding the decision of a bitcoin-based ETP with respect to how it would respond to a “fork” in the blockchain, which would create two different, non-interchangeable types of bitcoin.\textsuperscript{118}

Moreover, the manipulation of asset prices, as a general matter, can occur simply through trading activity that creates a false impression of supply or demand, whether in the context of a trading activity that creates a false impression of supply or demand, whether in the context of a

\textsuperscript{116} See Bats Letter, supra note 19, at 2; Lewis Paper, supra note 42, at 6–7.

\textsuperscript{117} See ARK Letter, supra note 19, at 5.

\textsuperscript{118} For example, as described in the Trust’s Registration Statement, supra note 9, in the event the Bitcoin Network undergoes a “hard fork” into two blockchains, the Custodian and the Sponsor will determine which of the resulting blockchains to use as the basis for the assets of the Trust and, under certain circumstances, will have discretion to determine which blockchain is “most likely to be supported by a majority of users or miners.” \textit{Id.} at 113. See also Lee Letter, supra note 19; Johnson Letter, supra note 19; Schulte Letter, supra note 19; Anonymous Letter IV, supra note 19; Anonymous Letter V, supra note 19. The decision of the Custodian and Sponsor to support one resulting blockchain over another could have a material effect on the relative value of the bitcoins in each of the blockchains.
closing auction or in the course of continuous trading, and does not require formal linkages among markets (such as consolidated quotations or routing requirements) or the complex quoting behavior associated with high-frequency trading.\textsuperscript{119} Finally, while it may or may not be possible to acquire a dominant position in the bitcoin market as a whole, it might be quite possible to acquire a position large enough to temporarily move the price on a single, less-liquid bitcoin trading market, even if OTC markets exist that are capable of absorbing liquidity shocks.

3. \textbf{The Gemini Exchange}

The Exchange represents that it has entered into a comprehensive surveillance-sharing agreement with the Gemini Exchange with respect to trading of the bitcoin asset underlying the Trust and that the Gemini Exchange is supervised by the NYSDFS.\textsuperscript{120} Additionally, the Exchange states in its comment letter that it “agrees that less liquid markets, such as the market for bitcoin, may be more manipulable, but believes that … such concerns are mitigated as it relates to the Shares of the Trust and trading activity on the Gemini Exchange.”\textsuperscript{121} As explained below, however, the Commission does not believe this surveillance-sharing agreement to be sufficient, because the Gemini Exchange conducts only a small fraction of the worldwide trading in bitcoin, and because the Gemini Exchange is not a “regulated market” comparable to a national securities exchange or to the futures exchanges that are associated with the underlying assets of the commodity-trust ETPs approved to date.\textsuperscript{122}

\textsuperscript{119} The Commission notes that, even if transparent order books and transaction reports on bitcoin markets would by definition include the quoting or trading activity of a person attempting to manipulate the market, along with the activity of all other market participants, such information could not, by itself, definitively establish in real time which activity represented bona fide trading interest and which represented an intent to manipulate.

\textsuperscript{120} See Amendment No. 1, \textit{supra} note 1, 81 FR at 76660, 76668.

\textsuperscript{121} See Bats Letter, \textit{supra} note 19, at 7–8.

\textsuperscript{122} See \textit{supra} note 96.
Commenters disagree on whether the Gemini Exchange conducts a significant volume of trading in bitcoin and whether trading on the Gemini Exchange is susceptible to manipulation.

The Exchange promotes the Gemini Exchange as one of the top three bitcoin exchanges in the United States, and some commenters believe that the Gemini Exchange conducts sufficient volume to support the Winklevoss Bitcoin Trust. Other commenters, however, question these assertions, some noting that the vast majority of bitcoin trading, including trading denominated in U.S. dollars (“USD”) occurs on unregulated exchanges outside the United States.

The information currently available demonstrates that the Gemini Exchange does not, at this time, trade a significant volume of bitcoin relative to the overall market for the asset.

123 See Amendment No. 1, supra note 1, 81 FR at 76659; Bats Letter, supra note 19, at 7–8. But see Anonymous Letter II, supra note 19 (“There are only three exchanges in the United States. Gemini has the lowest liquidity of the three and is one of the least liquid exchanges of all exchanges that trade bitcoin for US dollars.”).

124 See McMinn Letter, supra note 19 (stating that trading volume on the Gemini Exchange is sufficient, and that manipulation of these Shares, while possible, would equally be possible for other exchange-traded funds); Delehanty Letter (concluding that trading volume in the recent Gemini bitcoin daily auctions seemed “to be of reasonable size”); see also Circle Letter, supra note 19, at 2 (noting that the Gemini Exchange would also have the potential for more robust price discovery as liquidity is concentrated on the exchange).

125 See ARK Letter, supra note 19, at 7–8 (noting that Gemini typically processes less than 10% of the total volume in the bitcoin-USD market); Williams Letter, supra note 19, at 2 (noting that most daily trading volume is conducted outside the U.S. and that 90% of bitcoin trading volume occurs in China); Stolfi Letter, supra note 19 (concluding that the Gemini Exchange “has relatively low liquidity and trade volume” and that “[t]here seems to be a significant risk that the nominal ETF share price will be manipulated, by relatively small trades that manipulate the bitcoin price at that exchange”); Stolfi Letter II, supra note 19 (concluding that the auction closing volume on the Gemini Exchange has shown a decreasing trend since its inception and is now under $1 million USD during work days, and considerably less during weekends, and that “[w]ith such low volume, it seems possible to manipulate the NAV value by entering suitable bids or asks in the auction”); Stolfi Letter II, supra note 19 (noting that, since 2013, the price of bitcoin has been defined mostly by the major Chinese exchanges, whose volumes dwarf those of exchanges outside China); Maher Letter, supra note 19 (characterizing volume on the Gemini Exchange as “sparse”); Anonymous Letter II, supra note 19 (asserting that “anyone who trades bitcoin can manipulate trading on the Gemini Exchange because it has no volume,” and further stating that Gemini Exchange has the worst pricing and the lowest trade volume in comparison to other exchanges); Anonymous Letter IV, supra note 19 (claiming that Gemini has “the lowest trading volume of known exchanges” and that “[t]here is evidence that markets have been manipulated by the exchanges for years”).

126 See Williams Letter, supra note 19, at 2 (stating that most daily trading volume in bitcoin is conducted on poorly capitalized, unregulated bucket shop exchanges located outside of the U.S., such as in China, Singapore, Hong Kong, and Bulgaria, and asserting that these non-U.S. exchanges and their practices significantly influence the price discovery process); ARK Letter, supra note 19, at 11–12 (stating that the average daily trading volume for bitcoin over the last year has been around $1 billion and that over 90% of that volume occurs in the bitcoin-Chinese Yuan pair where there is little regulatory oversight and transparency); Maher Letter, supra note 19 (stating that (footnote continued…)}
Instead, bitcoin trading on the Gemini Exchange represents a small percentage of overall bitcoin trading. For example, calculations using statistics from data.bitcoinity.org,\(^\text{127}\) show that, in the six months preceding February 28, 2017, trading on the Gemini Exchange accounted for just 0.07% of all worldwide bitcoin trading, and 5.16% of the much-smaller bitcoin-USD market worldwide.\(^\text{128}\)

Moreover, self-reported statistics from the Gemini Exchange show that volume in the Gemini Exchange Auction is small relative to daily trading in bitcoin and to the number of bitcoin in a creation or redemption basket for the Trust. As of February 28, 2017, the average daily volume in the Gemini Exchange Auction, since its inception on September 21, 2016, has been 1195.72 bitcoins, compared to average daily worldwide volume of approximately 3.4 million bitcoins in the six months preceding February 28, 2017. Also, as of February 28, 2017, the median number of bitcoins traded in the Gemini Exchange Auction on a business day (when a creation or redemption request might be submitted to the Trust) has been just 1,061.99 bitcoins,\(^\text{129}\) barely larger than the 1,000 bitcoins in a creation or redemption basket.\(^\text{130}\)

\(^{\text{127}}\)Because bitcoin trading activity is dispersed across markets, many of which are unregulated, and OTC transactions worldwide, there is no centralized, regulatory data source for bitcoin trading statistics. Accordingly, the Commission’s analysis of worldwide trading activity must use unofficial sources that purport to gather and disseminate trading data.

\(^{\text{128}}\)One commenter provides similar statistics comparing worldwide bitcoin trading volume to the Gemini Exchange bitcoin trading volume. See supra note 53 and accompanying text.

\(^{\text{129}}\)Although the Gemini Exchange conducts an auction on each calendar day, in order to better represent auction volume for days on which creations or redemptions might occur in the Shares, the calculation of average and median auction volume excludes auctions that occurred on weekends and days on which the U.S. equities markets are closed.

\(^{\text{130}}\)See Amendment No. 2, supra note 1 (setting size of creation unit at 100,000 shares, with the value of a share at 0.01 BTC, making content of a creation unit 1,000 BTC).
Additionally, 88.2% of the business-day auctions were for fewer than 2,000 bitcoins—equivalent to two creation or redemption baskets—suggesting that creation or redemption activity on the Gemini Exchange might dwarf other trading.

Regarding the regulation of the Gemini Exchange, the Exchange notes in its proposed rule change that the Gemini Trust Company is supervised by the NYSDFS, asserting that the Gemini Trust Company is one of only two bitcoin exchange operators in the world subject to substantive regulation. The Commission, however, does not believe that the record supports a finding that the Gemini Exchange is a “regulated market” comparable to a national securities exchange or to the futures exchanges that are associated with the underlying assets of the commodity-trust ETPs approved to date.

The Exchange represents that the Gemini Trust Company is subject to capitalization, anti-money-laundering compliance, consumer protection, and cybersecurity requirements set forth by the NYSDFS. Commission regulation of the securities markets includes similar elements, but national securities exchanges are also, among other things, required to have rules that are “designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.”

Moreover, national securities exchanges are subject to Commission oversight of, among other things, their governance, membership qualifications, trading rules, disciplinary procedures,

131 See Amendment No. 1, supra note 1, 81 FR at 76658–59.
recordkeeping, and fees. Designated Contract Markets (commonly called “futures markets”) registered with and regulated by the CFTC must comply with, among other things, a similarly comprehensive range of regulatory principles and must file rule changes with the CFTC.

4. The Market for Derivatives on Bitcoin

As noted above, the commodity-trust ETPs previously approved by the Commission for listing and trading have had—in lieu of significant, regulated spot markets—significant, well-established, and regulated futures markets that were associated with the underlying commodity and with which the listing exchange had entered into a surveillance-sharing agreement.

One commenter states that there are several bitcoin futures markets that have a significant impact on the spot price, but this commenter did not identify any regulated futures market. Another commenter describes the state of derivatives markets for bitcoin as “nascent.”

The Exchange also describes the current derivative markets for bitcoin as “[n]ascent.” The Exchange notes that certain types of options, futures contracts for differences, and other derivative instruments are available in certain jurisdictions, but that many of these are not available in the United States and that they generally are not regulated “to the degree that U.S.

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133 Section 6 of the Exchange Act, 15 U.S.C. 78f, requires national securities exchanges to register with the Commission and requires an exchange’s registration to be approved by the Commission, and Section 19(b) of the Exchange Act, 15 U.S.C. 78s(b), requires national securities exchanges to file proposed rule changes with the Commission.


135 See supra note 96 and accompanying text.

136 See Dylan Letter, supra note 19, at 1 (identifying OKCoin, BitVC, and Bitmex as three of the largest overseas bitcoin futures markets). See also ARK Letter, supra note 19, at 6 (stating that most derivatives activity within the bitcoin markets is conducted by unregulated entities).

137 See ARK Letter, supra note 19, at 5.

138 See Amendment No. 1, supra note 1, 81 FR at 76661.
investors expect derivatives instruments to be regulated.”\textsuperscript{139} The Exchange notes that the CFTC has approved the registration of TeraExchange LLC as a swap execution facility (“SEF”) and that, on October 9, 2014, TeraExchange announced that it had hosted the first executed bitcoin swap traded on a CFTC-regulated platform.\textsuperscript{140} Further, the Exchange notes that the CFTC has temporarily registered another SEF that would trade swaps on bitcoin.\textsuperscript{141}

The Commission acknowledges that TeraExchange, a market for swaps on bitcoin, has registered with the CFTC, but the Exchange’s description of trading activity on that market fails to note that the very activity it cites was the subject of an enforcement action by the CFTC. The CFTC found that TeraExchange had improperly arranged for participants to make prearranged, offsetting “wash” transactions of the same price, notional amount, and tenor and then issued a press release “to create the impression of actual trading in the Bitcoin swap.”\textsuperscript{142} Neither the Exchange nor any commenter provides evidence of meaningful trading volume in bitcoin derivatives on any regulated marketplace. Thus, the Commission believes that the bitcoin derivatives markets are not significant, regulated markets related to bitcoin with which the Exchange can enter into a surveillance-sharing agreement.

One commenter, and the author of the paper submitted with respect to a similar rule filing, assert that the existence of bitcoin derivative markets is not a necessary condition for a bitcoin ETP.\textsuperscript{143} The key requirement the Commission is applying here, however, is not that a futures or derivatives market is required for every ETP, but that—when the spot market is

\textsuperscript{139} See id.
\textsuperscript{140} See id. See also ARK Letter, supra note 19, at 6 (noting that TeraExchange offers bitcoin forwards).
\textsuperscript{141} See Amendment No. 1, supra note 1, 81 FR at 76661.
\textsuperscript{142} See TeraExchange Settlement Order, supra note 112.
\textsuperscript{143} See Anonymous Letter III, supra note 19, at 2; Lewis Paper, supra note 42, at 8.
unregulated—there must be significant, regulated derivatives markets related to the underlying asset with which the Exchange can enter into a surveillance-sharing agreement.

C. Basis for Disapproval

The Commission has, in past approvals of commodity-trust ETPs, emphasized the importance of surveillance-sharing agreements between the national securities exchange listing and trading the ETP, and significant markets relating to the underlying asset.\textsuperscript{144} Such agreements, which are a necessary tool to enable the ETP-listing exchange to detect and deter manipulative conduct, enable the exchange to meet its obligation under Section 6(b)(5) of the Exchange Act to have rules that are designed to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest.\textsuperscript{145}

As described above, the Exchange has not entered into a surveillance-sharing agreement with a significant, regulated, bitcoin-related market. The Commission also does not believe, as discussed above, that the proposal supports a finding that the significant markets for bitcoin or derivatives on bitcoin are regulated markets with which the Exchange can enter into such an agreement. Therefore, as the Exchange has not entered into, and would currently be unable to enter into, the type of surveillance-sharing agreement that has been in place with respect to all previously approved commodity-trust ETPs, the Commission does not find the proposed rule change to be consistent with the Exchange Act and, accordingly, disapproves the proposed rule change.

\textsuperscript{144} See supra note 96 and accompanying text.

\textsuperscript{145} 15 U.S.C. 78f(b)(5).
The Commission notes that bitcoin is still in the relatively early stages of its development and that, over time, regulated bitcoin-related markets of significant size may develop.\textsuperscript{146} Should such markets develop, the Commission could consider whether a bitcoin ETP would, based on the facts and circumstances then presented, be consistent with the requirements of the Exchange Act.

\textbf{IV. CONCLUSION}

For the reasons set forth above, the Commission does not find that the proposed rule change, as modified by Amendment Nos. 1 and 2, is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to a national securities exchange, and in particular, with Section 6(b)(5) of the Exchange Act.

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Exchange Act, that the proposed rule change (SR-BatsBZX-2016-30), as modified by Amendments No. 1 and 2, be, and it hereby is, disapproved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.\textsuperscript{147}

Eduardo A. Aleman
Assistant Secretary

\textsuperscript{146} The Exchange notes, for example, that the CME and the ICE recently announced bitcoin pricing indexes. See Amendment No. 1, supra note 1, 81 FR at 76666. In the future, regulated futures or derivative markets might begin to trade products based on these indexes.

\textsuperscript{147} 17 CFR 200.30-3(a)(12).