SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-80319; File No. SR-NYSEArca-2016-101)

March 28, 2017

Self-Regulatory Organizations; NYSE Arca, Inc.; Order Disapproving a Proposed Rule Change, as Modified by Amendment No. 1, Relating to the Listing and Trading of Shares of the SolidX Bitcoin Trust under NYSE Arca Equities Rule 8.201

NYSE Arca ("Exchange" or "NYSE Arca") has filed a proposed rule change to list and trade shares of the SolidX 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]

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

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1 The Exchange filed the proposed rule change on July 13, 2016, and the Commission published notice of the proposed rule change in the Federal Register on August 2, 2016. See Exchange Act Release No. 78426 (July 27, 2016), 81 FR 50763 (Aug. 2, 2016) ("Notice"). On September 6, 2016, the Commission designated a longer period within which to act on the proposed rule change. See Exchange Act Release No. 78770 (Sept. 6, 2016), 81 FR 62780 (Sept. 12, 2016). On October 27, 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. 79171 (Oct. 27, 2016), 81 FR 76400 (Nov. 2, 2016) ("Order Instituting Proceedings"). On January 3, 2017, the Commission designated a longer period for Commission action on the proposed rule change. See Exchange Act Release No. 79726 (Jan. 3, 2017), 82 FR 2426 (Jan. 9, 2017) (designating March 30, 2017, as the date by which the Commission must either approve or disapprove the proposed rule change). On February 15, 2017, the Exchange filed Amendment No. 1 to the proposed rule change, amending and replacing the original filing in its entirety, and Amendment No. 1 was published for comment in the Federal Register on March 1, 2017, with a 15-day comment period that ended on March 16, 2017. See Exchange Act Release No. 80099 (Feb. 24, 2017), 82 FR 12253 (Mar. 1, 2017) ("Amendment No. 1").

2 Such filings are made under Section 19(b)(1) of the Exchange Act, 15 U.S.C. 78s(b)(1), and Exchange Act Rule 19b-4, 17 CFR 240.19b-4.

3 See Exchange Act Section 19(b)(2)(C), 15 U.S.C. 78s(b)(2)(C).

4 See id.

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.[6] 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.[7]

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 SolidX Bitcoin Trust ("Trust") as Commodity-Based Trust Shares under NYSE Arca Equities Rule 8.201.[8]

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[5] 15 U.S.C. 78f(b)(5).

[6] This approach is consistent with standards the Commission has applied to previous commodity-trust ETPs as well as the Commission's recent action disapproving the proposed rule change of Bats BZX Exchange to list and trade shares issued by the Winklevoss Bitcoin Trust. See, e.g., Exchange Act Release No. 80206 (Mar. 10, 2017), 82 FR 14076, 14077 n.6 (Mar. 16, 2017) ("Bats BZX Order").

[7] As discussed below, infra notes 125–126 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.

[8] See NYSE Arca Equities Rule 8.201 (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 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., BZX Rule 14.11(e)(4)(C) (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

(footnote continued…)

The Trust would hold bitcoins as its primary asset,[9] along with smaller amounts of cash, and the bitcoins would be in the custody of, and secured by, the Trust's bitcoin custodian, SolidX Management LLC, which would also serve as the sponsor ("Sponsor") of the Trust.[10] The Bank of New York Mellon would serve as the Trust's cash custodian and its administrator ("Administrator").[11] According to the Exchange, the Sponsor has arranged for insurance coverage to protect investors against loss or theft of the Trust's bitcoins.[12]

The investment objective of the Trust would be for the Shares to track the price of bitcoins as measured by the TradeBlock XBX Index ("XBX Index").[13] The XBX Index is licensed by the Sponsor from Schvey, Inc., d/b/a TradeBlock, the index sponsor and calculation agent.[14] As of January 15, 2017, the eligible bitcoin exchanges for inclusion in the XBX Index are Bitfinex, Bitstamp, GDAX (f/k/a Coinbase), itBit, and OKCoin International.[15] According to the Exchange:

> [T]he XBX represents the value of one bitcoin in U.S. dollars at any point in time and closes as of 4:00 p.m. Eastern time ("E.T.") each weekday. The intra-day levels of the XBX incorporate the real-time price of bitcoin based on trading activity derived from constituent exchanges throughout each trading day. The

(…footnote continued)

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.

9 According to the Exchange, bitcoin is "an asset that can be transferred among parties via the Internet, but without the use of a central administrator or clearing agency." Amendment No. 1, supra note 1, 82 FR at 12254 n.14. The Exchange also states that "[t]he Bitcoin Network (i.e., the network of computers running the software protocol underlying bitcoin involved in maintaining the database of bitcoin ownership and facilitating the transfer of bitcoin among parties) and the asset, bitcoin, are intrinsically linked and inseparable." Id. at 12255. For the purpose of considering this proposal, this order describes bitcoin as a "digital asset" and a "commodity."

10 See id. at 12254.

11 See id.

12 See id. at 12261.

13 See id. at 12255.

14 See id. at 12257.

15 See id. at 12258.

> closing level of the XBX is calculated using a proprietary methodology utilizing bitcoin trading data from constituent exchanges and is published at or after 4:00 p.m. E.T. each weekday. The XBX is published to two decimal places rounded on the last digit.[16]

The Net Asset Value ("NAV") of the Trust would be calculated each business day by the Administrator, as promptly as practicable after 4:00 p.m. E.T., using the price set for bitcoin by the XBX Index.[17] The Intraday Indicative Value ("IIV") of the Trust would be calculated and disseminated by the Sponsor every 15 seconds during the Exchange's regular trading session. The IIV would be calculated by using the prior day's closing NAV per Share as a base and updating that value during the regular trading session on the Exchange to reflect intraday changes in the value of the Trust's bitcoin holdings.[18]

The Trust would issue and redeem the Shares only in baskets of 100,000 Shares and only to authorized participants ("Authorized Participants"), and these transactions would be conducted "in-kind" for bitcoin or for cash.[19] The Exchange states that for creating and redeeming baskets in-kind or for cash, Authorized Participants and market makers would be able to hedge their exposure to bitcoin using non-deliverable forward contracts ("NDFs") and swap contracts that would create synthetic long or short exposure to bitcoin for hedging.[20]

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[16] Id. at 12257. The Exchange represents that, according to the Sponsor, the XBX Index's price variance weighting decreases the influence on the XBX Index of any particular exchange that diverges from the rest of the data points used by the XBX Index and thereby reduces the possibility of an attempt to manipulate the price of bitcoin as reflected by the XBX Index. See id. at 12259.

[17] See id. at 12262. If for any reason, and as determined by the Sponsor, the Administrator is unable to value the Trust's bitcoin using the XBX Index price, the Exchange's proposal provides that the Administrator may use other specified criteria to value the holdings of the Trust. Id. at 12261.

[18] See id. at 12265.

[19] See id. at 12263.

[20] See id. The Exchange states that the Sponsor expects that NDFs or swaps will be offered by several participants in the bitcoin marketplace, including bitcoin exchanges and bitcoin over-the-counter ("OTC") market participants, and that the Sponsor itself (operating on a principal basis) also may offer NDFs and swaps in order to provide Authorized Participants and market makers with additional options for hedging their exposure to bitcoin. See id.

According to the Exchange, the underlying bitcoin marketplace operates 24 hours per day, 365 days per year. The Exchange cites the Trust's registration statement ("Registration Statement") for the proposition that the majority of bitcoin transactions are executed on public bitcoin exchanges where bitcoins are bought and sold daily for value in U.S. dollar ("USD"), euro, and other government-issued currencies,[21] and the Exchange states that there are currently 30 bitcoin exchanges across the world.[22] According to the Exchange, the various bitcoin exchanges are generally available to the public through online web portals, and trading information (including pricing, volume, and pending orders) is available on the exchanges' websites, with most of this information publicly available to anyone who visits the websites.[23]

The Exchange states that, according to the Registration Statement, there are currently several U.S.-based regulated entities that facilitate bitcoin trading and that comply with anti-money laundering ("AML") and know your customer ("KYC") regulatory requirements:[24]

- GDAX, which is based in California, is a bitcoin exchange that maintains money transmitter licenses in over 30 states, the District of Columbia, and Puerto Rico. GDAX is subject to the regulations enforced by the various state agencies that issued their respective money transmitter licenses to GDAX. In New York, GDAX applied for a BitLicense, a regulatory framework created by the New York Department of Financial Services ("NYSDFS") that sets forth consumer protection, AML compliance, and cybersecurity rules tailored for digital currency companies operating

21 See Registration Statement on Form S-1, as amended, dated February 3, 2017 (File No. 333-212479), at 38.

22 See id. at 12257. According to the Exchange, the Sponsor estimates that, in the global USD-bitcoin market, trading volume in the OTC market averages about half of the trading volume on exchanges. See id. at 12259–60.

23 See id. at 12256–67. The Exchange represents that, according to the Sponsor, Bitfinex, one of the bitcoin exchanges included in the Trust's underlying XBX Index, does not conduct business in New York or with New York residents and that another XBX Index component bitcoin exchange, OKCoin International, is open only to non-U.S. persons. See also id. at 12258 (acknowledging that certain spot bitcoin exchanges are open only to non-U.S. persons or do not conduct business with New York residents and that, as a result, the Sponsor must conduct some of its bitcoin trading on behalf of the Trust through a wholly-owned subsidiary, SolidX Management Ltd., an exempted limited company organized in the Cayman Islands specifically established to buy and sell bitcoin on behalf of the Trust on these bitcoin exchanges).

24 See id. at 12257.

and transacting business in New York. The NYSDFS granted a BitLicense to GDAX in January 2017.[25]

- itBit is a bitcoin exchange that was granted a limited-purpose-trust-company charter by the NYSDFS in May 2015. Limited-purpose trusts, according to the NYSDFS, are permitted to undertake certain activities, such as transfer agency, securities clearance, investment management, and custodial services, but without the power to take deposits or make loans.[26]

- Gemini is a bitcoin exchange that is also regulated by the NYSDFS. In October 2015, the NYSDFS granted Gemini authorization to operate as a limited-purpose trust company.[27]

- SecondMarket, Inc., d/b/a Genesis Global Trading, is a member firm of the Financial Industry Regulatory Authority ("FINRA") that makes a market in bitcoin by offering two-sided liquidity.[28]

The Exchange notes that the CFTC has stated that bitcoins and other virtual currencies are encompassed in the definition of "commodity" under the Commodity Exchange Act and are thus within the regulatory jurisdiction of the CFTC.[29]

According to the Exchange, the exchanges with the most significant bitcoin trading by volume—Bitfinex, Bitstamp, BTCC, BTC-e, GDAX, Huobi, itBit, Kraken, LakeBTC, OKCoin Exchange China, and OKCoin International—traded approximately 1.34 billion bitcoins, at USD-converted prices ranging between \$199 and \$1,203, for a total trade volume of over \$784 billion from February 2014 through January 2017. The Sponsor represents that average global daily trading volume during this period was approximately \$693 million.[30]

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25 See id.

26 See id.

27 See id.

28 See id.

29 See id. at 12261. The Exchange also cites views expressed by individual CFTC Commissioners for the proposition that derivatives based on bitcoin are subject to oversight by the CFTC, including oversight to prevent market manipulation of the price of bitcoin. Id.

30 See id. at 12257.

According to the Exchange, between January 16, 2016, and January 15, 2017 (including weekends and holidays), average daily bitcoin trading on Bitfinex, Bitstamp, GDAX, Gemini, itBit, and OKCoin International totaled approximately 44,000 bitcoins across all of those exchanges at prices that ranged between $371 and $1,161. Of that trading, Bitfinex accounted for 39%, Bitstamp accounted for 13%, GDAX accounted for 14%, Gemini accounted for 4%, itBit accounted for 9%, Kraken accounted for 3%, and OKCoin International accounted for 17% of bitcoins traded.[31] The Exchange represents that, during the twelve-month period from January 2016 through January 2017, the aggregate trading volume on the five constituent exchanges of the XBX Index as of January 15, 2017—Bitfinex, Bitstamp, GDAX, itBit, and OKCoin International—represented approximately 77% of the entire global USD-denominated bitcoin exchange market.[32]

According to the Exchange, although each bitcoin exchange has its own market price, it is expected that most bitcoin exchanges' market prices should be relatively consistent with the bitcoin-exchange market average, since market participants can choose the bitcoin exchange on which they buy or sell bitcoin. The Exchange also represents that, according to the Registration Statement, price differentials across bitcoin exchanges enable arbitrage between bitcoin prices on

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[31] See id. at 12259.

[32] See id. at 12259–61. The Exchange further notes that, in addition to the five constituent exchanges of the XBX Index as of January 15, 2017, the global USD-denominated bitcoin exchange market also includes BTC-e, Gemini, LakeBTC, and Kraken. The Exchange represents that, although BTC-e is a USD-denominated bitcoin exchange with significant trading volume, BTC-e does not comply with certain of the Sponsor's internal criteria regarding the exchanges on which the Sponsor will trade and that, therefore, the Sponsor will not transact with BTC-e. According to the Exchange, the Sponsor is aware of other smaller USD-denominated bitcoin exchanges, but the trading volume on these exchanges is insignificant, and the Sponsor does not intend to conduct business with these smaller exchanges. See id. at 12259 n.30. The Commission notes that, as of March 20, 2017, the TradeBlock website indicated that the XBX Index weighting assigned to the OKCoin International exchange was zero percent. See TradeBlock, https://tradeblock.com/markets/index/ (last visited Mar. 20, 2017).

the various exchanges.[33] As a result, according to the Exchange, the prices on bitcoin exchanges are the most accurate expression of the value of bitcoins.

With respect to derivatives on bitcoin, the Exchange states that certain non-U.S.-bitcoin exchanges offer derivative products on bitcoin such as options, swaps, and futures.[34] The Exchange refers to the Registration Statement and notes that BitMex (based in the Republic of Seychelles), CryptoFacilites (based in the United Kingdom), 796 Exchange (based in China), and OKCoin Exchange China all offer futures contracts settled in bitcoin. The Exchange also states that Coinut (based in Singapore) offers bitcoin binary options and "vanilla options" based on the Coinut index; that Nadex (based in Chicago) offers bitcoin binary options denominated in USD using the TeraBit Bitcoin Price Index; and that IGMarkets (based in the United Kingdom), Avatrade (based in the Republic of Ireland), and Plus500 (based in Israel) also offer bitcoin derivative products.[35] The Exchange also notes the CFTC has approved the registration of TeraExchange LLC as a swap execution facility ("SEF"), where bitcoin swaps and NDFs may be entered into, and the registration of LedgerX provisionally as a SEF.[36]

The Exchange asserts that its own surveillance procedures are sufficient to detect and deter manipulation.[37] The Exchange represents that the Exchange or FINRA, on behalf of the

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33 According to the Exchange, the Sponsor represents that, because bitcoin trades on more than 30 exchanges globally on a 24-hour basis, it is difficult for attempted market manipulation on any one exchange to affect the global market price of bitcoin, and that any attempt to manipulate the price would result in an arbitrage opportunity among exchanges, which would typically be acted upon by market participants. See id. at 12259.

34 According to the Exchange, the Sponsor is not aware of any bitcoin derivatives currently trading based on the XBX Index. See id. at 12258.

35 See id. at 12260.

36 See id.

37 The Exchange represents that its surveillance procedures generally focus on detecting securities trading outside their normal patterns, which could be indicative of manipulative or other violative activity. The Exchange represents that, when such situations are detected, surveillance analysis would follow and investigations would be opened, where appropriate, to review the behavior of all relevant parties for all relevant trading violations. See id. at 12266 (further representing that trading in the Shares will be subject to the existing trading surveillances

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Exchange, or both, (a) will communicate as needed regarding trading in the Shares with other markets and other entities that are members of the Intermarket Surveillance Group, and (b) may obtain trading information regarding trading in the Shares from these other markets and other entities. In addition, the Exchange states that it may obtain information regarding trading in the Shares from markets and other entities that are members of the Intermarket Surveillance Group or with which the Exchange has in place a comprehensive surveillance-sharing agreement.[38]

According to the Exchange, the Sponsor believes that demand from new investors accessing bitcoin through investment in the Shares will broaden the investor base in bitcoin, which could further reduce the possibility of collusion among market participants to manipulate the bitcoin market.[39]

Further details regarding the proposal and the Trust can be found in Amendment No. 1 to the proposal,[40] and in the Registration Statement.[41]

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administered by the Exchange, as well as cross-market surveillances administered by FINRA on behalf of the Exchange, which are designed to detect violations of Exchange rules and applicable federal securities laws, and further representing that these procedures are adequate to properly monitor Exchange trading of the Shares in all trading sessions and to deter and detect violations of Exchange rules and federal securities laws applicable to trading on the Exchange).

38 See id. at 12266. The Exchange also notes that, pursuant to NYSE Arca Equities Rule 8.201(g), the Exchange is able to obtain information regarding trading in the Shares and the underlying bitcoin or any bitcoin derivative through Exchange-registered market makers, in connection with the market makers' proprietary or customer trades effected on any relevant market. Id.

39 See id. at 12259.

40 See id. Compared to the initial Notice, see supra note 1, Amendment No. 1 makes the following substantive changes: (1) identifies Foreside Fund Services, LLC as the order examiner in connection with the creation and redemption of baskets of Shares; (2) identifies SolidX Management LLC as the custodian of the Trust's bitcoin and The Bank of New York Mellon as custodian of the Trust's cash; (3) adds content regarding a recent loss of trading volume on the leading Chinese exchanges and asserts that trading volumes at these Chinese exchanges are now in line with volumes at USD exchanges; (4) notes that, in May 2016, the Gibraltar Financial Services Commission approved the BitcoinETI, which was listed on the Gibraltar Stock Exchange in July 2016 and on Deutsche Boerse Frankfurt in August 2016; (5) adds or changes certain details regarding the first alternative pricing source for the Shares; (6) adds disclosure that the Sponsor (operating on a principal basis) also may offer NDFs and swaps in order to provide Authorized Participants and market makers with additional options for hedging their exposure to bitcoin; (7) deletes text relating to the suspension or rejection of redemption orders; and (8) adds text stating that, to the extent that the Administrator has utilized the cascading set of rules described in "bitcoin Market Price," in

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II. SUMMARY OF COMMENT LETTERS

The comment period for the initial Notice of Proposed Rule Change closed on August 23, 2016, and the comment period for Amendment No. 1 closed March 16, 2017.[42] As of March 24, the Commission had received 11 comment letters on the proposed rule change.[43] Commenters address, among other things, investors' interest in bitcoin and their desire to gain access to bitcoin through an ETP;[44] the state of development of bitcoin as a digital asset;[45] the inherent value of, and risks of investing in, bitcoin;[46] the appropriate measures for the Trust to secure its bitcoin holdings against theft or loss;[47] the creation and redemption processes for the Trust;[48] the

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Amendment No. 1, the Trust's Web site will note the valuation methodology used and the price per bitcoin resulting from that calculation.

41 See Registration Statement, supra note 21.

42 The initial comment period for the Order Instituting Proceedings closed on November 23, 2016, and the period for rebuttal comments closed on December 7, 2016. See Order Instituting Proceedings, supra note 1, 81 FR at 76401–02.

43 See Letters from Daniel H. Gallancy, CFA, SolidX Management LLP (Nov. 23, 2016) ("SolidX Letter"); Thaya B. Knight, Associate Director, Financial Regulation Studies, The Cato Institute (Dec. 1, 2016) ("Cato Letter"); Jerry Brito, Executive Director, Coin Center (Dec. 7, 2016) ("Coin Center Letter"); Joseph Colangelo, President, Consumers' Research (Dec. 7, 2016) ("Consumers' Research Letter"); Denise Krisko, CFA, President and Co-Founder, Vident Investment Advisory, LLC (Dec. 7, 2016) ("Vident Letter"); Balaji Srinivasan, Chief Executive Officer & Cofounder, 21, et al. (Dec. 7, 2016) ("Srinivasan Letter"); Ken I. Maher (Dec. 8, 2016) ("Maher Letter"); Craig M. Lewis, Madison S. Wigginton Professor of Finance, Owen Graduate School of Management, Vanderbilt University (Feb. 13, 2017) ("Lewis Paper"); Douglas M. Yones, Head of Exchange Traded Products, New York Stock Exchange (Feb. 22, 2017) ("NYSE Letter"); Craig M. Lewis, Madison S. Wigginton Professor of Finance, Owen Graduate School of Management, Vanderbilt University (Mar. 3, 2017) ("Lewis Paper II"); Daniel H. Gallancy, CFA, SolidX Management LLP (Mar. 15, 2017) ("SolidX Letter II"). All comments on the proposed rule change are available on the Commission's website at: https://www.sec.gov/comments/sr-nysearca-2016-101/nysearca2016101.shtml.

44 See, e.g., Cato Letter, supra note 43; Coin Center Letter, supra note 43; Vident Letter, supra note 43; Consumers' Research Letter, supra note 43; SolidX Letter, supra note 43; Srinivasan Letter, supra note 43; NYSE Letter, supra note 43; Lewis Paper, supra note 43; SolidX Letter II, supra note 43.

45 See, e.g., Coin Center Letter, supra note 43; Vident Letter, supra note 43; Lewis Paper, supra note 43.

46 See, e.g., Vident Letter, supra note 43; Coin Center Letter, supra note 43; SolidX Letter, supra note 43; Maher Letter, supra note 43; Lewis Paper, supra note 43; SolidX Letter II, supra note 43.

47 See, e.g., Srinivasan Letter, supra note 43; Coin Center Letter, supra note 43; SolidX Letter, supra note 43; Consumers' Research Letter, supra note 43; SolidX Letter II, supra note 43.

48 See, e.g., SolidX Letter, supra note 43; NYSE Letter, supra note 43; Lewis Paper, supra note 43.

proposed valuation method for the Trust's holdings;[49] and the legitimacy or other benefits that Commission approval of the proposed ETP might confer upon bitcoin as a digital asset.[50] 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.

A. Comments Regarding the Worldwide Market for Bitcoin

Several commenters note that a significant volume of bitcoin trading occurs in markets outside the United States that are largely unregulated.[51] One commenter claims that several bitcoin exchanges do not offer the same regulatory safeguards that U.S. consumers have come to expect when they make investments in U.S. securities, and that bitcoin exchanges lack Commission oversight and have lost investor funds.[52] The Lewis Paper also notes that the Commission does not regulate bitcoin exchanges.[53] A different commenter expresses concerns that certain bitcoin exchanges that are components of the XBX Index, such as Bitfinex and OKCoin International, are not audited or governed by fair and transparent business practices.[54]

The Sponsor asserts that the majority of bitcoin transactions are executed on public bitcoin exchanges that typically publish real-time trade data on their respective websites and

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49 See, e.g., SolidX Letter, supra note 43; NYSE Letter, supra note 43; Lewis Paper, supra note 43; Consumers' Research Letter, supra note 43; SolidX Letter II, supra note 43.

50 See, e.g., Vident Letter, supra note 43; Coin Center Letter, supra note 43.

51 See, e.g., Consumers' Research Letter, supra note 43; Maher Letter, supra note 43.

52 See Consumers' Research Letter, supra note 43, at 1–2.

53 See Lewis Paper, supra note 43, at 8.

54 See Maher Letter, supra note 43. This commenter also disputes some commenters' statements that this ETP would give investors safe exposure to bitcoin by reducing security risk of holding the bitcoins, noting that investors will still bear the many risks of the bitcoin ecosystem itself. See id.

through application programming interfaces. The Sponsor claims that the existence and availability of the numerous pricing sources for bitcoin delivers unmatched price transparency when compared to most other assets.[55] The Sponsor also asserts that the volume of bitcoin trading, both on-exchange and in the OTC market, is significant and that the bitcoin market is a liquid market. According to the Sponsor, between November 2015 and November 2016, the trading volume on the five constituent exchanges of the XBX Index (Bitfinex, Bitstamp, GDAX, itBit, and OKCoin International) represented the overwhelming majority of the entire USD-denominated bitcoin exchange market, and average daily trade volume on these exchanges during this period was approximately $24 million.[56]

The Sponsor acknowledges that a significant portion of bitcoin trading occurs on exchanges outside the United States.[57] The Sponsor also claims that, while there is a significant volume of bitcoin trading in China, the prices on U.S. and Chinese exchanges tend to conform with minimal variation, in spite of various capital controls in effect in China.[58] Consequently, for purposes of arbitrage among all the various bitcoin exchanges (including those that trade bitcoin for USD and Chinese yuan), the Sponsor concludes that the tendency for prices to conform supports the conclusion that the exchange market is efficient and is generally resistant to manipulation.[59] The Sponsor also provides data that, it says, indicate that arbitrage across bitcoin

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55 See SolidX Letter, supra note 43, at 12.

56 See id. at 13. The Sponsor also notes that there are three Chinese yuan-denominated exchanges on which trading volume is significant: BTCC, Huobi, and OKCoin Exchange China. See id.

57 See id. at 5, 13. For example, the Sponsor notes that Bitfinex, a component of the XBX Index, has continued to have the highest volume of trading on any of the USD-denominated bitcoin exchanges. See SolidX Letter, supra note 43, at 6. See also supra notes 31–32 and accompanying text.

58 See SolidX Letter, supra note 43, at 5.

59 See id. at 13–14.

markets helps to keep bitcoin prices aligned and to reduce the likelihood of manipulation and indicate that arbitrage functions within a few seconds to address price discrepancies.[60]

The Sponsor also submits that, as of January 2017, the volume of bitcoin trading on Chinese exchanges has declined to levels similar to those of USD-denominated exchanges that follow AML and KYC procedures applied by their respective jurisdictions.[61] The Sponsor states that, in light of capital controls that apply in China, the Sponsor views the Chinese markets for bitcoin as separate and distinct from the USD markets.[62] The Sponsor further asserts that the pricing differences between the XBX Index and the Chinese bitcoin exchanges are analogous to the location-based pricing differences in commodities markets, including the markets for gold, silver, platinum, and palladium—commodities that are the underlying assets for existing commodity-trust ETPs.

The Sponsor states that, in addition to exchange trading, bitcoin has a robust, global OTC market and states that the parallel existence of an exchange-based and an OTC bitcoin market increases the difficulty of manipulation. Similarly, the Exchange notes that the OTC market for bitcoin as a standalone liquidity pool has greater daily trade volumes than any single bitcoin exchange.[63]

According to the Sponsor, a potential manipulator in the bitcoin marketplace would need to prevent other market participants from taking advantage of potential arbitrage opportunities between the exchanges, which would be further complicated by the high level of price

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60 See SolidX Letter II, supra note 43, at 5.

61 See id. at 6.

62 See id.

63 See NYSE Letter, supra note 43, at 2.

transparency in the bitcoin market.[64] The Sponsor notes that "Level-II type" quotes for bitcoin are freely available from nearly all bitcoin exchanges.[65]

The Sponsor also claims that opening and closing prices for common financial instruments are a frequent target for market manipulators and that, because bitcoin trades continuously and never has an opening or closing price, the risk of such manipulation is eliminated.[66] The Exchange also notes that bitcoin is traded continuously and asserts that this means that price discovery for bitcoin is widespread and continuous.[67]

The Sponsor also states that the Trust is materially identical to existing, physically-backed ETPs, which, the Sponsor asserts, have become an important component of the market.[68] The Sponsor further claims that, as with any ETP, there may be attempts to spread false or misleading information about the Trust, but an attempt to manipulate the price of bitcoin through trading activity would be difficult, and controlling or artificially affecting the market would require a massive amount of capital distributed across numerous exchanges in multiple currencies and jurisdictions around the world.[69]

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64 See SolidX Letter, supra note 43, at 7.

65 See id. Generally, Level-II quotes provide best-price orders and quotes from each market participant on a market.

66 See id. at 8.

67 See NYSE Letter, supra note 43, at 2.

68 See SolidX Letter, supra note 43, at 3.

69 See id. at 7.

The Lewis Paper claims that the underlying market for bitcoin is inherently resistant to manipulation. This commenter posits that the underlying bitcoin market is not susceptible to manipulation because:

(1) unlike traditional securities, there is no inside information, and therefore bitcoin is not subject to the dissemination of false or misleading information;

(2) manipulation through acquisition of a dominant market share is unlikely;

(3) each bitcoin market is an independent entity, so demand for liquidity does not necessarily propagate across other exchanges;

(4) a substantial OTC market provides additional liquidity and absorption of shocks;

(5) compared to equity markets, trading on bitcoin exchanges is slower, and therefore cross-market arbitrage is available to all market participants at the same time; and

(6) the market is not subject to "spoofing" or other high-frequency-trading tactics.[70]

Specifically with respect to the risk that a market participant might acquire a dominant position, the Lewis Paper notes that one of the risks associated with bitcoin is the possibility that a single investor or a small group acting in collusion could own a dominant share of the available bitcoin, and the Lewis Paper also notes that the Registration Statement states that it is possible, and in fact, reasonably likely, that a small group of early adopters holds a significant proportion of the bitcoin that has been mined.[71] Since, according to the Lewis Paper, there is no registry showing which individuals or entities own bitcoin, or the quantity they own, it is not possible to know how large individual positions are.[72] The Lewis Paper asserts that this issue is not unique

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70 See Lewis Paper, supra note 43, at 5–9; Lewis Paper II, supra note 43, at 2. The Lewis Paper also raises a number of arguments bearing on the susceptibility to manipulation of the XBX Index and the Shares. See Lewis Paper, supra note 43, at 5–9. Those arguments are discussed below. See infra Sections III.B.3 & III.B.5.

71 See Lewis Paper, supra note 43, at 6.

72 Id.

to bitcoin, as there are no corresponding registries for precious metals.[73] The Lewis Paper also asserts that a number of factors relevant to the Shares should ameliorate risks associated with possible manipulation due to a dominant market share.[74]

The Sponsor, which commissioned the Lewis Paper, agrees with the paper's reasoning and with the assertion that the underlying bitcoin spot market is not susceptible to manipulation.[75] The Exchange also agrees with the Lewis Paper's analysis, claiming that trading in the Shares would not be expected to contribute to the manipulation of bitcoin prices and, in fact, may actually reduce the potential for fraud and manipulation.[76]

B. Comments Regarding Potential Manipulation of the XBX Index

One commenter notes that the XBX Index includes several exchanges that many have expressed concerns about and that are not audited or governed by fair and transparent business practices.[77]

The Sponsor claims that the XBX Index is resistant to manipulation and responsive to market movements in real time and that it is therefore a superior mechanism—compared to using

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73 Id.

74 Id. at 6–7. According to the Lewis Paper, those factors are: (a) that bitcoin held by the Trust will remain available to market participants through redemption of the Shares; (b) that, given the availability of arbitrage activity between the Shares and the underlying bitcoin market, the bitcoins held by the Trust will not represent a meaningful percentage of the bitcoin available for transaction purposes; (c) that a price increase in bitcoin following the introduction of a bitcoin ETP would be the result of increased demand for bitcoin, rather than a sign of price manipulation; (d) that the receive-versus-payment and delivery-versus-payment account arrangements that the Trust has with multiple bitcoin exchanges, the Trust's transparent and rules-based redemption protocol, and the transparency of the Trust's holdings and valuations, as well as of quotations and transactions in the Shares, would reduce the potential for fraud and manipulation in the bitcoin markets; (e) market participants can choose the bitcoin exchanges on which to trade and can arbitrage away price deviations; and (f) trading of the Shares on the Exchange may serve to make the overall bitcoin market more transparent, especially if OTC bitcoin trading shifts to bitcoin exchanges. Id.

75 See SolidX Letter II, supra note 43, at 3–4.

76 See NYSE Letter, supra note 43, at 5.

77 See Maher Letter, supra note 43.

a single exchange—for valuing the Trust's bitcoin holdings.[78] The Sponsor asserts that the XBX Index price closely approximates actual bitcoin transaction prices across the various USD-denominated bitcoin exchanges and that it accurately reflects the fair value of bitcoin for valuation, for accounting purposes, and as a practical matter.[79] The Sponsor states that the XBX Index's methodology penalizes stale prices because, if an exchange does not have recent trading data, its weighting in the XBX Index is gradually reduced until it is de-weighted entirely.[80]

The Exchange states that the XBX Index's proprietary methodology helps to protect the calculation of the XBX Index against any undue impact from bitcoin pricing outliers among the various exchanges and from any potential attempts to manipulate the price of bitcoin.[81]

The Lewis Paper claims that the following features of the XBX Index's proprietary weighting methodology mitigate manipulation risk: (a) that lower trading volume reduces the weight an exchange is given in the average; (b) that the weight of an exchange is reduced the more a price deviates from the average; and (c) that weights are reduced for stale prices. The Lewis Paper claims that these features significantly increase the amount of capital required to manipulate bitcoin prices enough to affect XBX Index levels.[82]

C. Comments on the Derivatives Markets for Bitcoin

The Lewis Paper 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

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78 See SolidX Letter, supra note 43, at 9.

79 See id. at 8.

80 See id. at 9.

81 See NYSE Letter, supra note 43, at 2–3.

82 See Lewis Paper, supra note 43, at 8–9.

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.[83] The Lewis Paper claims that, for physical commodities that are not traded on exchanges, the presence of a liquid derivatives market is a necessary condition, but that, for digital assets like bitcoin, derivatives markets are not necessary because price discovery occurs on the OTC market and exchanges instead.[84]

The Sponsor states that it expects that bitcoin NDFs, swaps, or both will be offered by several participants in the bitcoin marketplace, including bitcoin exchanges and bitcoin OTC market participants, and that the Sponsor itself (operating on a principal basis) also may offer NDFs and swaps in order to provide Authorized Participants and market makers with the ability to hedge their exposure to bitcoin.[85]

D. Comments Regarding the Susceptibility of the Shares to Manipulation

The Sponsor states that, as a full-fledged ETP in the United States, the Trust will provide investors with an opportunity to invest in bitcoin without being exposed directly to the risks associated with sourcing and holding bitcoin outside the regulated traditional financial markets.[86] The Sponsor also claims that, because the Shares would be traded on the Exchange, they should not be subject to risks of manipulation beyond those applicable to any publicly listed stock.[87] In addition, the Sponsor asserts that the dissemination of information on the Trust's website—along

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83 See id. at 8.

84 See id. (concluding that, for these assets, derivatives markets are not necessary because the OTC market and exchanges are close substitutes).

85 See SolidX Letter, supra note 43, at 14–15. The Sponsor notes that, while Authorized Participants and market makers will generally want to hedge their exposure to bitcoin in connection with basket creation and redemption orders, not all of them are ready, willing, and able to trade bitcoin, and they will require a mechanism to gain synthetic exposure to bitcoin for their hedging needs when they enter orders to create and redeem shares. Id. According to the Sponsor, Authorized Participants will be able to use NDFs and swap contracts to obtain synthetic long and short exposure to bitcoin for their hedging purposes. Id.

86 See SolidX Letter, supra note 43, at 4. For similar claims, see Consumers' Research Letter, supra note 43, at 1–2; Coin Center Letter, supra note 43, at 1–2; NYSE Letter, supra note 43, at 1–2.

87 See SolidX Letter, supra note 43, at 7.

with quotations for, and last-sale prices of transactions in, the Shares, and the IIV and NAV of the Trust—will help to reduce the ability of market participants to manipulate the bitcoin market or the price of the Shares, and that the Trust's arbitrage mechanism will facilitate the correction of price discrepancies in bitcoin and the Shares.[88] The Sponsor also asserts that the requirements of Section 6(b)(5) of the Exchange Act apply not to trading in bitcoin, but to trading in the Shares, and asserts that the rules of the Exchange will prevent fraudulent and manipulative acts and practices, and protect investors and the public interest, with respect to the Shares.[89] Finally, the Sponsor argues that the requirements of Section 6(b)(5) of the Exchange Act do not include any inherent requirement for market surveillance and asserts that the Commission, in 2005, approved the listing and trading of shares of the Euro Currency Trust, even though, according to the Sponsor, exchange surveillance of the underlying foreign exchange markets did not exist.[90]

The Lewis Paper also argues that several institutional features of the bitcoin trading environment and the Trust make the price of the Shares resistant to manipulation because: (a) the Trust's disclosures, creation and redemption activity, and price dissemination would increase transparency and diminish the risk of manipulation or unfair informational advantage;[91] (b) bitcoin prices are quoted to eight decimal places, mitigating incentives to move prices a penny up or down because the potential gains would be immaterial;[92] (c) bitcoin markets trade continuously, and the XBX Index is calculated continuously, and therefore the manipulation of

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[88] See Amendment No. 1, supra note 1, 82 FR at 12259.

[89] See SolidX Letter II, supra note 43, at 1–2.

[90] See id. at 3–4.

[91] See Lewis Paper, supra note 43, at 7.

[92] See id. at 9.

opening and closing prices is not a significant risk;[93] (d) the listing and delisting criteria for the Shares are expected to help to maintain a minimum level of liquidity and thus minimize the potential for manipulation of Share prices;[94] and (e) the continuous cash and in-kind creation and redemption of Shares increases the Trust's efficiency because the exchange trading of bitcoin lowers the costs of creating and redeeming Shares, which would tighten the spread between the Share price and the NAV and reduce manipulation risk.[95]

E. Comments Regarding the Protection of Investors and the Public Interest

The Sponsor asserts that the structure of the Trust and the proposed rule change by the Exchange will serve the public interest by protecting investors from the risks of investing in bitcoins directly, citing the hacking of bitcoin exchanges, as well as schemes perpetrated upon investors by dishonest individuals.[96] Several other commenters also raise similar points, arguing that approving the proposed rule change would benefit investor protection.[97] The Sponsor argues that the risk of investor harm from manipulation in the Shares is hypothetical in nature and unlikely, while the harm to investors from a lack of access to an insured vehicle is overt and likely to continue in the absence of the Commission's approval of the Exchange's proposed rule change.[98] The Sponsor also asserts that the Trust would provide other benefits to investors—such as limited counterparty risk, the simplicity of holding the Shares, and the lack of minimum investment requirements—and that approving the proposed rule change would enable U.S.

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93 See id.

94 See id.

95 See id. at 10.

96 See SolidX Letter II, supra note 43, at 2.

97 See, e.g., Cato Letter, supra note 43; Srinivasan Letter, supra note 43; Consumers' Research Letter, supra note 43; NYSE Letter, supra note 43.

98 See SolidX Letter II, supra note 43, at 2.

exchanges to remain competitive internationally.[99] Finally, the Sponsor asserts that disapproval of the proposed rule change would be in direct contravention of the goal of Section 6(b)(5) to protect investors and the public interest.[100]

Several commenters assert that the Trust's insurance of its bitcoin holdings would ensure safe access to bitcoin for investors.[101] The Sponsor notes that, in traditional and regulated systems, custodial and clearing firms mitigate risks and keep assets safe for the benefit of the investing public, but that no such mechanisms currently exist for bitcoin.[102] The Sponsor claims that insurance is important to investor protection and the public interest because investors cannot be expected to assume the risks associated with the possible loss or theft of the Trust's bitcoins.[103] The Sponsor acknowledges that Trust investors will expect to assume the market risk associated with their investment (i.e., bitcoin price fluctuations), but claims that it is appropriate to minimize the investors' risks regarding the adequacy of the mechanisms and infrastructure used to secure the Trust's bitcoin holdings, since that is not, and should not be, a typical analysis undertaken by investors in the U.S. securities markets.[104] The Sponsor also asserts that the Trust's insurance policy and the proposed rule change will serve the public interest in a manner otherwise unavailable and notes that multiple commenters have emphasized the importance of the Trust's insurance policy.[105]

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99 See SolidX Letter, supra note 43, at 2–4.

100 See SolidX Letter II, supra note 43, at 2.

101 See, e.g., SolidX Letter, supra note 43; Consumers' Research Letter, supra note 43; Lewis Paper, supra note 43; NYSE Letter, supra note 43; SolidX Letter II, supra note 43.

102 See SolidX Letter, supra note 43, at 11.

103 See id.

104 See id.; see also Lewis Paper, supra note 43, at 11.

105 See SolidX Letter II, supra note 43, at 2.

The Exchange claims that, as a substitute to the investor safeguards offered by traditional custodians, bitcoin insurance is important for investor protection and the public interest.[106] One commenter claims that the Trust's insurance coverage is an important, market-based solution that substitutes for a traditional custodial infrastructure and a true transfer-agency function that does not exist in the underlying bitcoin market.[107] Another commenter claims that the fact that the Trust carries insurance and will be exchange traded will prevent situations where consumers risk losing bitcoins or having them stolen due to a fiduciary's flawed security protocols.[108]

III. DISCUSSION AND COMMISSION FINDINGS

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 rules and regulations thereunder.[109] If it is unable to make such a finding, the Commission must disapprove the proposed rule change.[110] 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."[111]

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[106] See NYSE Letter, supra note 43, at 4.

[107] See Lewis Paper, supra note 43, at 11.

[108] See Consumers' Research Letter, supra note 43, at 2.

[109] 15 U.S.C 78s(b)(2)(C)(i).

[110] 15 U.S.C. 78s(b)(2)(C)(ii).

[111] 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 an SRO 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 SRO. Id.

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 Amendment No. 1, is consistent with the requirements of the Exchange Act and the applicable rules and regulations thereunder.[112] 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[113]—because the 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

[112] In disapproving the proposed rule change, as modified by Amendment No. 1, the Commission has considered its impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f); see also notes 70–74, 82–84, 91–95, 107, 148–158 & 169–176 and accompanying text. The Commission notes that, according to the Sponsor, the Trust is a means of providing a simple and cost-effective way for investors to gain investment exposure to the performance of the USD price of bitcoin. See SolidX Letter, supra note 43, at 1; see also Lewis Paper, supra note 43, at 3, 11–16 (asserting that a bitcoin-based ETP would enable ordinary investors to construct more efficient and diversified portfolios). The Sponsor also asserts that bitcoin exchanges have been subject to hacking and investor schemes in the past, the losses from which are documented and quantifiable at approximately $2 billion, and that such losses will continue unless investors are able to invest in bitcoin through a regulated and insured product such as the Trust. See SolidX Letter II, supra note 43, at 2. 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." See Amendment No. 1, supra note 1, 82 FR at 12267. The Sponsor claims that the proposed rule change would further advance the goal of helping U.S. exchanges remain competitive in the international marketplace by demonstrating to future sponsors of new products that the Commission remains committed to fostering innovation in the U.S. securities markets. See SolidX Letter, supra note 43, at 3. Finally, regarding the potential effect of the proposed rule change on capital formation, the Exchange asserts that the Sponsor believes that demand from new investors accessing bitcoin through investment in the Shares will broaden the investor base in bitcoin. See Amendment No. 1, supra note 1, 82 FR at 12259. The Commission recognizes that the Exchange and commenters assert these economic benefits and specifically addresses the Sponsor's claims about investor protection from hacking and other risks of bitcoin ownership below. See infra Section III.B.6. The Commission, however, for the reasons discussed throughout this order, must disapprove the proposed rule change because it is not consistent with the Exchange Act.

[113] 15 U.S.C. 78f(b)(5).

practices in the market for the Shares. Accordingly, the Commission disapproves the proposed rule change.[114]

B. Analysis

1. Commodity-Trust ETPs and Surveillance-Sharing Agreements

The Exchange proposes to list and trade the Shares under NYSE Arca Equities Rule 8.201, which governs the listing of Commodity-Based Trust Shares.[115] The proposal is similar to many past proposals to list and trade shares of ETPs holding precious metals.[116] Accordingly, the Commission analyzes this proposal under the standards that it has applied to previous commodity-trust ETPs—and that it also applied in the recent Bats BZX Order.[117]

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

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114 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.

115 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/enfcoinfliprorder09172015.pdf.

116 See, e.g., streetTRACKS Gold Shares, Exchange Act Release No. 50603 (Oct. 28, 2004), 69 FR 64614 (Nov. 5, 2004) (SR-NYSE-2004-22) (order approving the listing and trading of shares of commodity-trust ETP holding physical gold bullion). The Commission notes that the Sponsor also views the Trust to be materially identical to other existing commodity-trust ETPs. See SolidX Letter, supra note 43, at 3.

117 See Bats BZX Order, supra note 6, 82 FR at 14081–87.

must be designed “to prevent fraudulent and manipulative acts and practices” and “to protect investors and the public interest.”[118]

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 [e]xchange to conduct prompt investigations into possible trading violations and other regulatory improprieties.”[119] 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.[120]

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.”[121]

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118 15 U.S.C. 78f(b)(5).

119 See Exchange Act Release No. 27877 (Apr. 4, 1990), 55 FR 13344 (Apr. 10, 1990) (SR-NYSE-90-14).

120 See Exchange Act Release No. 33555 (Jan. 31, 1994), 59 FR 5619, 5621 (Feb. 7, 1994) (SR-Amex-93-28) (order approving listing of options on American Depositary Receipts).

121 Exchange Act Release No. 35518 (Mar. 21, 1995), 60 FR 15804 (Mar. 27, 1995) (SR-Amex-94-30). 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 that, through the comprehensive surveillance-sharing agreements, the listing exchange was able to obtain market surveillance information for transactions occurring on NYMEX and COMEX and from the London Metal Exchange through the Intermarket Surveillance Group.

In 1998, in adopting Exchange Act Rule 19b-4(e)[122] to permit the generic listing and trading of certain new derivative 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 derivative 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."[123] The Commission 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.[124]

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

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122 17 CFR 240.19b-4(e).

123 Amendment to Rule Filing Requirements for Self-Regulatory Organizations Regarding New Derivative Securities Products, Exchange Act Release No. 40761 (Dec. 8, 1998), 63 FR 70952, 70959 (Dec. 22, 1998) (File no. S7-13-98) ("NDSP Adopting Release") (also noting that "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.").

124 See id. 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 [Intermarket Surveillance Group], the SRO seeking to list and trade such new derivative securities product pursuant to Rule 19b-4(e) should enter into a comprehensive ISA with the non-ISG SRO. Conversely, if a new SRO seeks to list and trade a new derivative securities product pursuant to Rule 19b-4(e) and is not a member of the ISG, such SRO should enter into a comprehensive ISA with each SRO that trades securities underlying the new derivative securities product." Id. at 70959 n.99.

copper—and the ETP-listing exchange has entered into surveillance-sharing agreements with, or held Intermarket Surveillance Group membership in common with, those markets.[125] The

[125] See streetTRACKS Gold Shares, Exchange Act Release No. 50603 (Oct. 28, 2004), 69 FR 64614, 64618 (Nov. 5, 2004) (SR-NYSE-2004-22) (approval order notes the New York Stock Exchange's representation that "the most significant gold futures exchanges are the COMEX division of the NYMEX and the Tokyo Commodity Exchange" and that the New York Stock Exchange has entered into a reciprocal Memorandum of Understanding with the NYMEX (of which COMEX is a division) "for the sharing of information related to any financial instrument based, in whole or in part, upon an interest in or performance of gold"); iShares COMEX Gold Trust, Exchange Act Release No. 51058 (Jan. 19, 2005), 70 FR 3749, 3751, 3754 (Jan. 26, 2005) (SR-Amex-2004-38) (approval order notes the American Stock Exchange's representation that "the most significant gold futures exchanges are the COMEX division of the NYMEX and the Tokyo Commodity Exchange" and that the American Stock Exchange has "in place an Information Sharing Agreement with the NYMEX for the purpose of providing information in connection with trading in or related to COMEX gold futures contracts"); iShares Silver Trust, Exchange Act Release No. 53521 (Mar. 20, 2006), 71 FR 14967, 14968, 14973 (Mar. 24, 2006) (SR-Amex-2005-72) (approval order notes the American Stock Exchange's representation that "the most significant silver futures exchanges are the COMEX and the Tokyo Commodity Exchange" and that the American Stock Exchange has "in place an Information Sharing Agreement with the NYMEX for the purpose of providing information in connection with trading in or related to COMEX silver futures contracts"); ETFS Gold Trust, Exchange Act Release No. 59895 (May 8, 2009), 74 FR 22993, 22994–95, 22998 (May 15, 2009) (SR-NYSEArca-2009-40) (accelerated approval order notes NYSE Arca's representation that the COMEX is one of the "major world gold markets" and that NYSE Arca "has an Information Sharing Agreement with NYMEX for the purpose of sharing information in connection with trading in or related to COMEX gold futures contracts"); ETFS Silver Trust, Exchange Act Release No. 59781 (Apr. 17, 2009), 74 FR 18771, 18772, 18776 (Apr. 24, 2009) (SR-NYSEArca-2009-28) (accelerated approval order notes NYSE Arca's representation that "the most significant silver futures exchanges are the COMEX … and the Tokyo Commodity Exchange" and that NYSE Arca "has an Information Sharing Agreement with NYMEX for the purpose of sharing information in connection with trading in or related to COMEX silver futures contracts"); ETFS Palladium Trust, Exchange Act Release No. 60971 (Nov. 9, 2009), 74 FR 59283, 59285–86, 59291 (Nov. 17, 2009) (SR-NYSEArca-2009-94) (notice of proposed rule change includes NYSE Arca's representation that "the most significant palladium futures exchanges are the NYMEX and the Tokyo Commodity Exchange," that "NYMEX is the largest exchange in the world for trading precious metals futures and options," and that NYSE Arca "may obtain trading information via the Intermarket Surveillance Group," of which NYMEX is a member); ETFS Platinum Trust, Exchange Act Release No. 60970 (Nov. 9, 2006), 74 FR 59319, 59321, 59327 (Nov. 17, 2009) (SR-NYSEArca-2009-95) (notice of proposed rule change includes NYSE Arca's representation that "the most significant palladium futures exchanges are the NYMEX and the Tokyo Commodity Exchange," that "NYMEX is the largest exchange in the world for trading precious metals futures and options," and that NYSE Arca "may obtain trading information via the Intermarket Surveillance Group," of which NYMEX is a member); Sprott Physical Gold Trust, Exchange Act Release No. 61236 (Dec. 23, 2009), 75 FR 170, 171, 174 and n.27 (Jan. 4, 2010) (SR-NYSEArca-2009-113) (notice of proposed rule change includes NYSE Arca's representations that the COMEX is one of the "major world gold markets," that NYSE Arca "may obtain trading information via the Intermarket Surveillance Group," and that NYMEX, of which COMEX is a division, is a member of the Intermarket Surveillance Group); Sprott Physical Silver Trust, Exchange Act Release No. 63043 (Oct. 5, 2010), 75 FR 62615, 62616, 62619 and n.26 (Oct. 12, 2010) (SR-NYSEArca-2010-84) (accelerated approval order notes NYSE Arca's representation that the COMEX is one of the "major world silver markets," that NYSE Arca "may obtain trading information via the Intermarket Surveillance Group," and that NYMEX, of which COMEX is a division, is a member of the Intermarket Surveillance Group); ETFS Precious Metals Basket Trust, Exchange Act Release No. 62402 (Jun. 29, 2010), 75 FR 39292, 39295, 39298 (July 8, 2010) (SR-NYSEArca-2010-56) (notice of proposed rule change includes NYSE Arca's representation that "the most significant gold, silver, platinum and palladium futures exchanges are the COMEX and the TOCOM" and that NYSE Arca "may obtain trading information via the Intermarket Surveillance Group," of which NYMEX (of which COMEX is a division) is a member); ETFS White Metals Basket Trust, Exchange Act Release No. 62620 (July 30, 2010), 75 FR 47655, 47657, 47660 (Aug. 6, 2010) (SR-NYSEArca-2010-71) (notice of proposed rule change includes NYSE Arca's representation that "the most

(footnote continued…)

Commission believes that the need for an exchange listing a commodity-trust ETP to have surveillance-sharing agreements with significant, regulated markets relating to the underlying

(…footnote continued)

significant silver, platinum and palladium futures exchanges are the COMEX and the TOCOM" and that NYSE Arca "may obtain trading information via the Intermarket Surveillance Group," of which COMEX is a member); ETFS Asian Gold Trust, Exchange Act Release No. 63267 (Nov. 8, 2010), 75 FR 69494, 69496, 69500-01 (Nov. 12, 2010) (SR-NYSEArca-2010-95) (notice of proposed rule change includes NYSE Arca's representation that "the most significant gold futures exchanges are the COMEX and the Tokyo Commodity Exchange," that "COMEX is the largest exchange in the world for trading precious metals futures and options," and that NYSE Arca "may obtain trading information via the Intermarket Surveillance Group," of which COMEX is a member); Sprott Physical Platinum and Palladium Trust, Exchange Act Release No. 68101 (Oct. 24, 2012), 77 FR 65732, 65733, 65739 (Oct. 30, 2012) (SR-NYSEArca-2012-111) (accelerated approval order notes NYSE Arca's representation that "[f]utures on platinum and palladium are traded on two major exchanges: The New York Mercantile Exchange . . . and Tokyo Commodities Exchange" and that NYSE Arca "may obtain information via ISG [Intermarket Surveillance Group] from other exchanges that are members of ISG or with which [NYSE Arca] has entered into a comprehensive surveillance sharing agreement, including COMEX"); APMEX Physical—1 oz. Gold Redeemable Trust, Exchange Act Release No. 66627 (Mar. 20, 2012), 77 FR 17539, 17547 (Mar. 26, 2012) (SR-NYSEArca-2012-18) (notice of proposed rule change cross-references the proposed rule change to list and trade shares of the ETFS Gold Trust, in which NYSE Arca represented that the COMEX is one of the "major world gold markets" and notes that NYSE Arca "may obtain information via ISG from other exchanges that are members of ISG or with which [NYSE Arca] has entered into a comprehensive surveillance sharing agreement, including COMEX"); JPM XF Physical Copper Trust, Exchange Act Release No. 68440 (Dec. 14, 2012), 77 FR 75468, 75469–72 (Dec. 20, 2012) (SR-NYSEArca-2012-28) (approval order notes NYSE Arca's representation that a majority of copper derivatives trading occurs on the LME, the COMEX, and the Shanghai Futures Exchange and that NYSE Arca could obtain trading information from other members of the Intermarket Surveillance Group (including from the COMEX) and that it had entered into a comprehensive surveillance-sharing agreement with the LME with respect to trading in copper and copper derivatives); iShares Copper Trust, Exchange Act Release No. 68973 (Feb. 22, 2013), 78 FR 13726, 13727–30 (Feb. 28, 2013) (SR-NYSEArca-2012-66) (approval order notes NYSE Arca's representation that the LME is the exchange with the greatest number of open copper futures and options contracts and that NYSE Arca had entered into a comprehensive surveillance-sharing agreement with the LME regarding trading in copper and copper derivatives and could also obtain trading information from other members of the Intermarket Surveillance Group, including the COMEX, which also trades copper futures); First Trust Gold Trust, Exchange Act Release No. 69847 (June 25, 2013), 78 FR 39399, 39400 n.15, 39405 (July 1, 2013) (SR-NYSEArca-2013-61) (notice of proposed rule change notes that FINRA, on behalf of the exchange, can obtain trading information regarding gold futures and options on gold futures from members of the Intermarket Surveillance Group, including the COMEX, and cross-references the proposed rule change to list and trade shares of the ETFS Gold Trust, in which NYSE Arca represented that the COMEX is one of the "major world gold markets"); Merk Gold Trust, Exchange Act Release No. 71038 (Dec. 11, 2013), 78 FR 76367, 76369 n.26, 76374 (Dec. 17, 2013) (SR-NYSEArca-2013-137) (notice of proposed rule change notes that the exchange can obtain trading information via the Intermarket Surveillance Group from other members, including the COMEX, and cross-references the proposed rule change to list and trade shares of the ETFS Gold Trust, in which NYSE Arca represented that the COMEX is one of the "major world gold markets"); Long Dollar Gold Trust, Exchange Act Release No. 79518 (Dec. 9, 2016), 81 FR 90876, 90881, 90886 (Dec. 15, 2016) (SR-NYSEArca-2016-84) (accelerated approval order notes NYSE Arca's representation that the most significant gold futures exchange is the COMEX and that the exchange can obtain trading information from other members of the Intermarket Surveillance Group).

commodity applies equally to a commodity-trust ETP that is based on bitcoin or another digital asset.[126]

The Sponsor argues that Section 6(b)(5) does not contain any inherent requirement for market surveillance and argues that the Commission, in 2005, approved the listing and trading of an ETP—the Euro Currency Trust—where the underlying market was not surveilled.[127] The Commission, however, believes that its approval of the Euro Currency Trust is readily distinguishable from its disapproval of the proposed SolidX Bitcoin Trust.

First, the Euro Currency Trust is not a commodity trust, and it is not listed and traded under the Exchange listing standards for commodity-based trusts. Second, the Commission's approval order for the Euro Currency Trust notes that, in addition to a large OTC market in currency derivatives, currency options and futures were traded on regulated markets with the authority to perform surveillance on their members' trading activities, to review positions held by members and large-scale customers, and to monitor the price movements of options and futures markets by comparing them with cash and other derivative markets' prices.[128] These regulated derivatives markets included the Philadelphia Stock Exchange and the Chicago Mercantile Exchange, which, along with the ETP's listing exchange (the New York Stock Exchange) are members of the Intermarket Surveillance Group.

Third, the Commission's approval order notes a number of significant facts about the underlying spot market for foreign exchange, including:

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126 See Bats BZX Order, supra note 6, 82 FR at 14087 (disapproving proposed rule change to list a bitcoin-based commodity-trust ETP on the basis that the listing exchange had not, and would not be able to, enter into a surveillance-sharing agreement with significant, regulated markets related to the underlying asset).

127 See supra note 90 and accompanying text.

128 Exchange Act Release No. 52843 (Nov. 28, 2005), 70 FR 72486, 72487 (Dec. 5, 2005) (Order Granting Accelerated Approval of a Proposed Rule Change regarding the Euro Currency Trust).

- That the listing exchange had represented that the foreign exchange market is the largest and most liquid financial market in the world and that, as of April 2004, the foreign exchange market experienced average daily turnover of approximately $1.88 trillion;[129]

- That the most significant participants in the spot market are the major international commercial banks that act both as brokers and as dealers;[130] and

- That most trading in the global OTC foreign currency markets is conducted by regulated financial institutions, such as banks and broker dealers.[131]

Thus, significant, regulated markets related to foreign exchange trading exist, and the listing exchange of the Euro Currency Trust belongs to a multilateral surveillance-sharing agreement with those markets. Moreover, many prominent participants in the OTC foreign exchange market are regulated financial institutions. The markets related to foreign exchange therefore bear little resemblance to the markets currently related to bitcoin, which are either unregulated, not of significant size, or both. The rationale behind the Commission's approval of the Euro Currency Trust is therefore consistent with the rationale for the Commission's disapproval of the SolidX Bitcoin Trust.

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."[132] 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

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129 See id. at 72486.

130 See id. at 72487.

131 See id.

132 NDSP Adopting Release, supra note 123, 63 FR at 70959.

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

The Commission believes—consistent with its conclusion in the Bats BZX Order[133]—that the bulk of bitcoin trading occurs on markets where there is little to no regulation governing trading,[134] and thus no meaningful governmental market oversight designed to detect and deter fraudulent and manipulative activity.[135] The Commission also notes that none of the bitcoin spot markets identified by the Exchange or the Sponsor is currently a member of the Intermarket Surveillance Group.[136]

The Commission also believes that the bitcoin markets identified by the Exchange and the Sponsor as subject to certain regulatory requirements—GDAX, itBit, Gemini, and Genesis Global Trading—are not, in fact, regulated markets consistent with the requirements met with respect to previously approved commodity-trust ETPs. While the Exchange notes that GDAX, itBit, and Gemini are subject to consumer protection, KYC compliance, AML compliance, and cybersecurity requirements imposed by the NYSDFS,[137] the Commission's market oversight of

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133 See Bats BZX Order, supra note 6, 82 FR at 14084 & nn.103–106.

134 Several commenters discussed the unregulated state of the underlying bitcoin markets. See supra notes 51–54 and accompanying text. The Commission believes that certain restrictions imposed by the Trust to conduct bitcoin transactions reflect the absence of meaningful regulatory oversight and transparency of certain non-U.S. bitcoin markets. For example, the Sponsor notes that Bitfinex, one of the bitcoin exchanges included in the Trust's underlying XBX Index, does not conduct business in New York or with New York residents, and another XBX Index component bitcoin exchange, OKCoin International, is open only to non-U.S. persons. See supra note 23 and accompanying text. See also supra note 61 and accompanying text (noting that, as of January 2017, the volume of bitcoin trading on Chinese exchanges has declined to levels similar to those of USD-denominated exchanges that follow AML and KYC procedures applied by their respective jurisdictions).

135 See supra notes 51–54 and accompanying text.

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

137 See supra notes 24–28 and accompanying text (noting that there are currently several U.S.-based regulated entities that facilitate bitcoin trading and that comply with U.S. AML and KYC regulatory requirements, and that a regulatory framework created by the NYSDFS sets forth consumer protection, AML compliance, and cyber security

(footnote continued…)

national securities exchanges includes substantial additional requirements, including the requirement 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."[138] Moreover, national securities exchanges are subject to Commission oversight of, among other things, their governance, membership qualifications, trading rules, disciplinary procedures, recordkeeping, and fees.[139] Likewise, Designated Contract Markets that trade futures on commodities underlying other commodity-trust ETPs are registered with and regulated by the CFTC, and they must comply with, among other things, a similarly comprehensive range of regulatory principles and file their rule changes with the CFTC.[140] Additionally, while the Exchange asserts that Genesis Global Trading is a FINRA member,[141] the digital currency business of that firm, according to the Genesis Global Trading website, is

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(…footnote continued)

rules tailored for digital currency companies operating and transacting business in New York). The Commission notes that there is no basis in the record to support a finding that non-U.S. bitcoin exchanges that have not obtained a BitLicense are subject to AML, KYC, consumer protection, or cybersecurity requirements.

138 15 U.S.C. 78f(b)(5).

139 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.

140 See, e.g., Designated Contract Markets (DCMs), U.S. Commodity Futures Trading Commission, available at http://www.cftc.gov/IndustryOversight/TradingOrganizations/DCMs/index.htm.

141 See supra note 28 and accompanying text.

conducted pursuant to a BitLicense issued by the NYSDFS, and only the securities activities of the firm are regulated by FINRA.[142]

Further, while the Exchange notes that the CFTC has asserted jurisdiction over derivatives on bitcoin,[143] the Commission does not believe that the record supports a finding that there is currently a regulatory framework in the United States for detecting and deterring manipulation in the bitcoin spot markets. 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.[144] In all other cases, the CFTC does not set standards for, approve the rules of, examine, or otherwise regulate bitcoin spot markets.

While the CFTC has brought settled enforcement actions against bitcoin-related entities, these actions do not demonstrate that a regulatory framework for providing market oversight and deterring market manipulation currently exists for the bitcoin spot market. These 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,[145] or (b) the facilitation of wash trades in bitcoin swaps by a SEF registered with the CFTC.[146] Based

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142 See Frequently Asked Questions, Genesis: A Digital Currency Group Company (FAQ: "Is Genesis Regulated?"), https://genesistrading.com/frequently-asked-questions/ (last visited Mar. 17, 2017).

143 See supra note 29 and accompanying text.

144 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).

145 See Coinflip Settlement Order, supra note 115; In re BFXNA Inc., d/b/a Bitfinex, CFTC Docket No. 16-19 (CFTC June 2, 2016) (Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions ("BFXNA Settlement Order")), available at http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfbfxnaorder060216.pdf.

146 See In re TeraExchange LLC, CFTC Docket No. 15-33, 2015 WL 5658082 (CFTC Sept. 24, 2015) (Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and

(footnote continued…)

on the record, therefore, the Commission does not believe that the worldwide spot bitcoin markets, including the bitcoin exchanges that are constituents of the XBX Index, are regulated markets with which the Exchange has, or could enter into, a surveillance-sharing agreement.[147]

As noted above, the Lewis Paper asserts that, for several reasons, the underlying market for bitcoin is not susceptible to manipulation,[148] and the Exchange agrees with this conclusion.[149] While the Lewis Paper submits that arbitrage across bitcoin markets will help to keep worldwide bitcoin prices aligned with one another, hindering manipulation,[150] the Commission believes that the Lewis Paper's discussion of the possible sources of manipulation in the underlying bitcoin market 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.[151]

(…footnote continued)

Imposing Remedial Sanctions ("TeraExchange Settlement Order")), available at http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfteraexchangeorder92415.pdf.

147 The Exchange does not assert that it has a surveillance-sharing agreement with any bitcoin exchange.

148 See Lewis Paper, supra note 43; see also supra notes 70–74 and accompanying text.

149 See NYSE Letter, supra note 43, at 5; see also supra note 76 and accompanying text.

150 See Lewis Paper, supra note 43, at 6–7.

151 The Sponsor also argues, in its second comment letter, that arbitrage across bitcoin markets helps to keep bitcoin prices aligned and reduces the likelihood of manipulation. See SolidX Letter II, supra note 43, at 5. The Sponsor offers several histograms purporting to show that pricing discrepancies across bitcoin markets are generally arbitraged away within several seconds. Id. These histograms, however, use data from only four bitcoin exchanges, based on the Sponsor's argument that—in light of recently imposed capital controls in China and because Chinese exchanges trade bitcoins only against the Chinese yuan—the Chinese markets for bitcoin are "separate and distinct" from the USD market. Id. at 6–7. The Commission, however, believes that the Sponsor's argument that the worldwide markets for trading bitcoins against various government currencies are "stable, resilient, fair and efficient," see SolidX Letter, supra note 43, at 4, is at odds with its argument that there are at least two substantial segments of that market that have recently become "separate and distinct" from one another. See SolidX Letter II, supra note 43, at 6–7. Moreover, the Commission does not believe that the charts provided by the Sponsor establish there are two separate and distinct segments of the market. The data describe a limited period, and, while the charts purport to show a price differential between the XBX Index and the bitcoin prices on Chinese exchanges, the charts also appear to show a close correlation between the timing and direction of price movements in the two market

(footnote continued…)

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.[152] Additionally, 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 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. Although the Exchange notes that bitcoin trades continuously so that there are no opening or closing prices to manipulate, the Commission believes that continuous trading does not necessarily eliminate manipulation risk.[153]

(…footnote continued)

"segments." See id. If the market is not segmented, then the histograms (which show that pricing discrepancies across only four bitcoin markets are generally arbitraged away within several seconds) are not enough to establish that the worldwide markets are efficient. If anything, the data provided by the Sponsor show that bitcoin markets are still developing and that the efficiency of arbitrage between bitcoin markets may depend on, among other things, regulatory conditions that can change over time. And, even if the Commission assumed that bitcoin markets were efficient, other manipulation concerns—such as the potential for trading on material non-public information or potential issues arising from concentrated bitcoin holdings—would still be applicable. See infra notes 152–158 and accompanying text.

[152] For example, as described in the Trust's Registration Statement, supra note 21, in the event the bitcoin network undergoes a "hard fork" into two blockchains, the Trust would then hold equal amounts of both the original bitcoin and the alternative new bitcoin. As a result, the Sponsor would need to decide whether to continue to hold the original bitcoin, the alternative new bitcoin, or both and would need to decide what action to take with respect to the unselected bitcoin, such as the possible sale of the unselected bitcoin. The Sponsor's decision to continue to hold either the original or alternative new bitcoin would be based on factors such as the market value and liquidity of the original bitcoin versus the alternative new bitcoin. Id. at 14.

[153] See infra notes 164–165.

While it may or may not be possible to acquire a dominant position in the bitcoin market as a whole, this risk exists, as the Lewis Paper concedes.[154] And, as the Registration Statement discloses, it is reasonably likely that a small group of early adopters holds a significant proportion of the bitcoins that have been mined.[155] The Lewis Paper lists a number of features of the Trust that should, the paper claims, ameliorate the risk of manipulation through ownership of a dominant market share,[156] but these features generally address whether the Trust itself would acquire a dominant market share, or whether other market participants might acquire a dominant share of bitcoin ownership through participation in the underlying bitcoin markets. These features do not address the possible market effect of large bitcoin positions held by early adopters. Additionally, the Lewis Paper asserts that many features of the proposal that purportedly ameliorate the risk of price manipulation through a dominant market share are also factors that were used as a basis for the Commission's approval of a commodity-trust ETP based on copper.[157] The Commission notes, however, that the listing exchange for that copper-based ETP had entered into a surveillance-sharing agreement with the London Metal Exchange regarding trading in copper and copper futures and that the listing exchange was also a common member of the Intermarket Surveillance Group with the COMEX, which also trades copper futures.[158]

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[154] See supra notes 71–74 and accompanying text.

[155] See Registration Statement, supra note 21, at 16. See also Lewis Paper, supra note 43, at 6. The Lewis Paper states that there is "no compelling evidence" to suggest that any single investor or group has acquired a dominant position in bitcoin, but its citation of "media estimates" regarding the holdings of certain individuals, see Lewis Paper, supra note 43, at 6 & n.7, only demonstrates that the risk of a person or group acquiring a significant proportion of all bitcoins cannot be quantified or dismissed.

[156] See supra note 74.

[157] See Lewis Paper, supra note 43, at 6 n.8.

[158] See Exchange Act Release No. 68440 (Dec. 14, 2012), 77 FR 75468, 75472 (Dec. 20, 2012) (NYSEArca-2012-28) (approval of proposal to list and trade shares of the JPM XF Physical Copper Trust).

Thus, 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 the standards applied to previous commodity-trust ETPs.

3. The Susceptibility to Manipulation of the XBX Index

The Sponsor, the Exchange, and the Lewis Paper all express the view that the XBX Index is resistant to manipulation because of its proprietary weighting methodology and its ability to respond to market movements in real time.[159] In essence, they claim that the XBX Index's weighting methodology is able to resist the effects of manipulation because it discounts prices from constituent exchanges based on lower volume at that exchange, price deviation from the average on other exchanges, and the staleness of reported prices.[160] Additionally, the Sponsor and the Lewis Paper note that the XBX Index is not susceptible to a key mechanism of manipulation, opening and closing auctions.[161]

The Commission, however, does not agree that index-based pricing for the Trust's bitcoin assets eliminates the risk of manipulation or the need to monitor that risk through surveillance-sharing agreements. While the XBX Index methodology uses an algorithm to discount prices that deviate from the average, this automatic discounting could attenuate, but not eliminate, the effect of manipulative activity on one of the constituent exchanges—just as it could attenuate, but not eliminate, the effect of bona fide liquidity demand on one of those exchanges.

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159 See supra Section II.B. See also supra note 16 (describing the Sponsor's representation that the XBX Index's price variance weighting decreases the influence on the XBX Index of any particular exchange that diverges from the rest of the data points used by the XBX Index and thereby reduces the possibility of an attempt to manipulate the price of bitcoin as reflected by the XBX Index).

160 See, e.g., Lewis Paper, supra note 43, at 8.

161 See SolidX Letter, supra note 43, at 8; Lewis Paper, supra note 43, at 9.

The Lewis Paper asserts that the absence of formal ties between bitcoin exchanges (i.e., the absence of an analog to Regulation NMS in the U.S. equity markets) means that demands for liquidity will not propagate across the worldwide market for bitcoin, limiting the price impact of manipulative behavior in the underlying market.[162] However, to the extent that market participants view pricing information from one exchange as indications of likely price moves on other exchanges, price moves on the first exchange might be, temporarily at least, reflected on those other exchanges, despite the discounting function of the XBX Index algorithm. And, as material non-public information—such as regulatory information—can exist with respect to bitcoin, use of that information might be possible across multiple component exchanges, affecting the level of the XBX Index without requiring the deployment of large amounts of capital.[163]

The Commission also observes that, while the XBX Index will be calculated continuously, this does not eliminate possible incentives for market participants to manipulate prices at single points in time. The Exchange notes that a closing level of the XBX Index will be calculated and published at or after 4:00 p.m. E.T.,[164] and that the NAV of the Trust will be set using the XBX Index value as of 4:00 p.m. E.T., so the Commission believes that incentives would exist to manipulate the XBX Index at specific times.[165]

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162 Lewis Paper, supra note 43, at 8–9.

163 The Lewis Paper notes that, since each bitcoin exchange is an independent entity, a liquidity event on one exchange does not necessarily propagate across other exchanges. This, according to the Lewis Paper, makes prices more resilient to liquidity shocks, but also slows down the transmission of fundamental information. See id. at 9. The Commission does not believe that manipulative activity propagates across trading venues solely through demands on liquidity being transferred from one venue to another. For example, regulatory events may simultaneously affect more than one bitcoin exchange, and the dissemination of pricing information from trades on one exchange may affect traders' view of supply and demand on other exchanges.

164 See supra note 16 and accompanying text.

165 The Lewis Paper argues that, because bitcoin is quoted in prices with eight decimal places, this "mitigates incentives to move prices a penny up or penny down because the potential gains from moving prices at the eighth

(footnote continued…)

Accordingly, the Commission does not believe that the record supports the claim that the unique properties of the XBX Index—or of a commodity-trust ETP based on the XBX Index—are sufficient to isolate the Shares from any manipulative activity in the underlying market or, by extension, to justify a significant departure from the standards applied to previous commodity-trust ETPs.

4. The Market for Derivatives on Bitcoin

As noted above,[166] 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. For the reasons discussed further below, the Commission believes that this proposal fails to support a finding that there are significant, regulated derivatives markets related to bitcoin with which the Exchange could enter into a surveillance-sharing agreement.

The Exchange states that the CFTC has approved the registration of TeraExchange as a SEF and has provisionally registered another SEF, LedgerX, and that these are markets where market participants can enter into bitcoin swaps and NDFs.[167] The Commission observes, however, that there is no evidence in the record that either of these venues transacts significant volume in bitcoin-related derivatives, and the Commission notes that the CFTC has, in fact, brought a settled enforcement action against one of those venues for facilitating prearranged,

(…footnote continued)

decimal point are immaterial." Lewis Paper, supra note 43, at 9. But the divisibility of bitcoin itself is not relevant, and even if it were, the incentive to move the price by one hundred-millionth of a bitcoin would increase as the price and volume of traded bitcoin increased.

166 See supra notes 125–126 and accompanying text.

167 See supra notes 34–36 and accompanying text.

offsetting "wash" transactions and issuing a press release "to create the impression of actual trading in the Bitcoin swap."[168]

The Exchange names several non-U.S. bitcoin exchanges that offer derivative products on bitcoin such as options, swaps, and futures. The Commission, however, does not believe that the existence of these markets supports a finding that there are significant, regulated markets for bitcoin derivatives with which the Exchange could enter into a surveillance-sharing agreement. The record does not contain any evidence of the trading volume of these markets, the state of regulation of these markets, or the availability of surveillance-sharing agreements with the regulators of these markets.

The Lewis Paper asserts that the existence of bitcoin derivative markets is not a necessary condition for a bitcoin ETP.[169] 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 unregulated—there must be significant, regulated derivatives markets related to the underlying asset with which the Exchange can enter into a surveillance-sharing agreement.

5. The Susceptibility of the Shares to Manipulation

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 detect and deter violations of Exchange rules and the applicable federal securities laws.[170] The Exchange further represents that trading of the Shares through the Exchange will be subject to the Exchange's surveillance

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168 See TeraExchange Settlement Order, supra note 146 and accompanying text.

169 See Lewis Paper, supra note 43, at 8.

170 See supra note 37 and accompanying text.

procedures for derivative products, including Commodity-Based Trust Shares, and that the Exchange may obtain information regarding trading in the Shares through the Intermarket Surveillance Group, from other members of that group, or from markets with which the Exchange has a surveillance-sharing agreement.[171] The Exchange also notes that, pursuant to its listing standards for Commodity-Based Trust Shares, the Exchange is able to obtain information regarding trading in the Shares and the underlying bitcoin, or any bitcoin derivative, from market makers registered with the Exchange, in connection with the market makers' proprietary or customer trades effected on any relevant market.[172]

Moreover, as noted earlier, some commenters assert that regulation by the Exchange of activity in the ETP could substitute for a lack of regulation in underlying spot or derivatives markets.[173] The Sponsor also argues that the Exchange's listing standards will provide strong protection against manipulation of the Shares.[174]

The Commission notes the Exchange's proposed surveillance procedures regarding the Shares, and the views expressed by the Lewis Paper and the Sponsor regarding the Trust's disclosures and information dissemination procedures. The Commission, however, views these procedures as necessary, but not sufficient, in light of the discussion above 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

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171 See supra note 38 and accompanying text.

172 See supra note 38. NYSE Arca Equities Rule 8.201(g) provides that a registered market maker in Commodity-Based Trust Shares must file with the Exchange and keep current a list identifying all accounts for trading in an underlying commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives that the market maker may have or over which it may exercise investment discretion and must make available to the Exchange books, records, or other information relating to transactions in the underlying physical commodity, related commodity futures, or options on commodity futures.

173 See supra notes 86–87 and accompanying text.

174 See SolidX Letter II, supra note 43, at 2–3.

bitcoin.[175] In addition, while the Exchange would, pursuant to its listing rules, be able to obtain certain information regarding trading in the Shares and the underlying bitcoin or any bitcoin derivative through Exchange-registered market makers,[176] the Commission observes that this trade information would be limited to the activities of its members that are market makers. Moreover, the Commission does not accept the premise 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. Absent the ability to detect and deter manipulation of the Shares—through surveillance sharing with significant, 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.

6. The Protection of Investors and the Public Interest

The Sponsor argues that approval of the proposed rule change is consistent with the protection of investors because investors are currently being harmed by the inability to invest in an insured bitcoin vehicle and need to be protected from "ongoing losses related to hacking, errors and other operational hazards associated with direct bitcoin ownership."[177] The Sponsor concludes that Section 6(b)(5) of the Exchange Act compels approval of the Exchange's proposal, so that investors may invest in the Trust and thereby be protected from these risks.[178] In essence, the Sponsor asserts that it is the risky nature of direct investment in the underlying bitcoin (including lack of insurance coverage) and the unregulated markets on which bitcoin trades that compel approval of the proposed rule change. The Sponsor offers no limiting

175 See supra Sections III.B.2 & III.B.4.

176 See supra note 172 and accompanying text.

177 SolidX Letter II, supra note 43, at 2.

178 See supra note 39 and accompanying text.

principle to this argument, under which, by logical extension, the Commission would be required to approve the listing and trading of any ETP that arguably presented marginally less risk to investors than a direct investment in the underlying asset.

The Commission disagrees with this reading of the Exchange Act. Pursuant to Section 19(b)(2) of the Exchange Act, the Commission must approve a proposed rule change filed by a national securities exchange if it finds that the proposed rule change is consistent with the applicable requirements of the Exchange Act—including the requirement under Section 6(b)(5) that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices—and it must disapprove the filing if it does not make such a finding.[179] Thus, even if a proposed rule change purports to protect investors from a particular type of investment risk—such as the susceptibility of an asset to loss or theft—the proposed rule change may still fail to meet other requirements under the Exchange Act.[180]

As explained above, the Commission has consistently, for commodity-trust ETPs, required that the listing exchange have surveillance-sharing agreements with significant, regulated markets related to the underlying asset. That requirement has not been met here. Therefore, the Commission—even if, for the sake of argument, it agreed that investment in the Trust might present fewer risks to investors than direct investments in bitcoin—would be unable to find that the proposed rule change is consistent with the statutory standard.

179 See Exchange Act Section 19(b)(2)(C), 15 U.S.C. 78s(b)(2)(C).

180 The Commission notes that the insurance policy for the Trust's bitcoin holdings, as described by the Exchange and the Sponsor, see Amendment No. 1, supra note 1, 82 FR at 12261; SolidX Letter, supra note 43, at 2, 5, 11–12, covers theft and loss of the bitcoin holdings, but does not insure against the risk of loss resulting from fraudulent or manipulative acts and practices with respect to the underlying bitcoins or the Shares.

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.[181] 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.[182]

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.

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. Should such markets develop, the Commission could consider whether a bitcoin ETP would, based on

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[181] See supra notes 125–126 and accompanying text. The Commission has also emphasized this requirement in the context of disapproving a proposal to list and trade shares of a commodity-trust ETP. See Bats BZX Order, supra note 6, 82 FR at 14087.

[182] 15 U.S.C. 78f(b)(5).

the facts and circumstances then presented, be consistent with the requirements of the Exchange Act.

IV. CONCLUSION

For the reasons set forth above, the Commission does not find that the proposed rule change, as modified by Amendment No. 1, 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,[183] that the proposed rule change (SR-NYSEArca-2016-101), as modified by Amendment No. 1, be, and it hereby is, disapproved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[184]

Eduardo A. Aleman
Assistant Secretary

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[183] 15 U.S.C. 78s(b)(2)

[184] 17 CFR 200.30-3(a)(12).