SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-93700; File No. SR-CboeBZX-2021-024)

December 1, 2021

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Order Disapproving a Proposed Rule Change to List and Trade Shares of the WisdomTree Bitcoin Trust under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares

I. INTRODUCTION

On March 26, 2021, Cboe BZX Exchange, Inc. ("BZX" or "Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Exchange Act")[1] and Rule 19b-4 thereunder,[2] a proposed rule change to list and trade shares ("Shares") of the WisdomTree Bitcoin Trust ("Trust") under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares. The proposed rule change was published for comment in the Federal Register on April 15, 2021.[3]

On May 26, 2021, pursuant to Section 19(b)(2) of the Exchange Act,[4] the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.[5] On July 13, 2021, the Commission instituted proceedings under Section 19(b)(2)(B) of the Exchange Act[6] to determine whether to approve or disapprove the proposed

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1 15 U.S.C. 78s(b)(1).

2 17 CFR 240.19b-4.

3 See Securities Exchange Act Release No. 91521 (Apr. 9, 2021), 86 FR 19917 ("Notice"). Comments on the proposed rule change can be found at: https://www.sec.gov/comments/sr-cboebzx-2021-024/srcboebzx2021024.htm.

4 15 U.S.C. 78s(b)(2).

5 See Securities Exchange Act Release No. 92032, 86 FR 29611 (June 2, 2021).

6 15 U.S.C. 78s(b)(2)(B).

rule change.[7] On September 29, 2021, the Commission designated a longer period for Commission action on the proposed rule change.[8]

This order disapproves the proposed rule change. The Commission concludes that BZX has not met its burden under the Exchange Act and the Commission's Rules of Practice to demonstrate that its proposal is consistent with the requirements of Exchange Act Section 6(b)(5), in particular, the requirement that the rules of a national securities exchange be "designed to prevent fraudulent and manipulative acts and practices" and "to protect investors and the public interest."[9]

When considering whether BZX's proposal to list and trade the Shares is designed to prevent fraudulent and manipulative acts and practices, the Commission applies the same standard used in its orders considering previous proposals to list bitcoin[10]-based commodity trusts and bitcoin-based trust issued receipts.[11] As the Commission has explained, an exchange

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7 See Securities Exchange Act Release No. 92392, 86 FR 38154 (July 19, 2021).

8 See Securities Exchange Act Release No. 93173, 86 FR 55065 (Oct. 5, 2021).

9 15 U.S.C. 78f(b)(5).

10 Bitcoins are digital assets that are issued and transferred via a decentralized, open-source protocol used by a peer-to-peer computer network through which transactions are recorded on a public transaction ledger known as the "bitcoin blockchain." The bitcoin protocol governs the creation of new bitcoins and the cryptographic system that secures and verifies bitcoin transactions. See, e.g., Notice, 86 FR at 19918.

11 See Order Setting Aside Action by Delegated Authority and Disapproving a Proposed Rule Change, as Modified by Amendments No. 1 and 2, To List and Trade Shares of the Winklevoss Bitcoin Trust, Securities Exchange Act Release No. 83723 (July 26, 2018), 83 FR 37579 (Aug. 1, 2018) (SR-BatsBZX-2016-30) ("Winklevoss Order"); Order Disapproving a Proposed Rule Change, as Modified by Amendment No. 1, To Amend NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares) and To List and Trade Shares of the United States Bitcoin and Treasury Investment Trust Under NYSE Arca Rule 8.201-E, Securities Exchange Act Release No. 88284 (Feb. 26, 2020), 85 FR 12595 (Mar. 3, 2020) (SR-NYSEArca-2019-39) ("USBT Order"). See also 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,

that lists bitcoin-based exchange-traded products ("ETPs") can meet its obligations under Exchange Act Section 6(b)(5) by demonstrating that the exchange has a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying or reference bitcoin assets.[12]

The standard requires such surveillance-sharing agreements since they "provide a necessary deterrent to manipulation because they facilitate the availability of information needed to fully investigate a manipulation if it were to occur."[13] The Commission has emphasized that it is essential for an exchange listing a derivative securities product to enter into a surveillance-sharing agreement with markets trading the underlying assets for the listing exchange to have the ability to obtain information necessary to detect, investigate, and deter fraud and market

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Securities Exchange Act Release No. 80319 (Mar. 28, 2017), 82 FR 16247 (Apr. 3, 2017) (SR-NYSEArca-2016-101) ("SolidX Order"). The Commission also notes that orders were issued by delegated authority on the following matters: Order Disapproving a Proposed Rule Change To List and Trade the Shares of the ProShares Bitcoin ETF and the ProShares Short Bitcoin ETF, Securities Exchange Act Release No. 83904 (Aug. 22, 2018), 83 FR 43934 (Aug. 28, 2018) (NYSEArca-2017-139) ("ProShares Order"); Order Disapproving a Proposed Rule Change To List and Trade the Shares of the GraniteShares Bitcoin ETF and the GraniteShares Short Bitcoin ETF, Securities Exchange Act Release No. 83913 (Aug. 22, 2018), 83 FR 43923 (Aug. 28, 2018) (SR-CboeBZX-2018-001) ("GraniteShares Order"); Order Disapproving a Proposed Rule Change To List and Trade Shares of the VanEck Bitcoin Trust under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 93559 (Nov. 12, 2021), 86 FR 64539 (Nov. 18, 2021) (SR-CboeBZX-2021-019).

12 See USBT Order, 85 FR at 12596. See also Winklevoss Order, 83 FR at 37592 n.202 and accompanying text (discussing previous Commission approvals of commodity-trust ETPs); GraniteShares Order, 83 FR at 43925-27 nn.35-39 and accompanying text (discussing previous Commission approvals of commodity-futures ETPs).

13 See Amendment to Rule Filing Requirements for Self-Regulatory Organizations Regarding New Derivative Securities Products, Securities Exchange Act Release No. 40761 (Dec. 8, 1998), 63 FR 70952, 70959 (Dec. 22, 1998) ("NDSP Adopting Release"). See also Winklevoss Order, 83 FR at 37594; ProShares Order, 83 FR at 43936; GraniteShares Order, 83 FR at 43924; USBT Order, 85 FR at 12596.

manipulation, as well as violations of exchange rules and applicable federal securities laws and rules.[14] The hallmarks of a surveillance-sharing agreement are that the agreement provides for the sharing of information about market trading activity, clearing activity, and customer identity; that the parties to the agreement have reasonable ability to obtain access to and produce requested information; and that no existing rules, laws, or practices would impede one party to the agreement from obtaining this information from, or producing it to, the other party.[15]

In the context of this standard, the terms "significant market" and "market of significant size" include a market (or group of markets) as to which (a) there is a reasonable likelihood that a person attempting to manipulate the ETP would also have to trade on that market to successfully manipulate the ETP, so that a surveillance-sharing agreement would assist in detecting and deterring misconduct, and (b) it is unlikely that trading in the ETP would be the predominant influence on prices in that market.[16] A surveillance-sharing agreement must be entered into with a "significant market" to assist in detecting and deterring manipulation of the ETP, because a person attempting to manipulate the ETP is reasonably likely to also engage in trading activity on that "significant market."[17]

Consistent with this standard, for the commodity-trust ETPs approved to date for listing and trading, there has been in every case at least one significant, regulated market for trading

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14 See NDSP Adopting Release, 63 FR at 70959.

15 See Winklevoss Order, 83 FR at 37592-93; Letter from Brandon Becker, Director, Division of Market Regulation, Commission, to Gerard D. O'Connell, Chairman, Intermarket Surveillance Group (June 3, 1994), available at https://www.sec.gov/divisions/marketreg/mr-noaction/isg060394.htm.

16 See Winklevoss Order, 83 FR at 37594. This definition is illustrative and not exclusive. There could be other types of "significant markets" and "markets of significant size," but this definition is an example that will provide guidance to market participants. See id.

17 See USBT Order, 85 FR at 12597.

futures on the underlying commodity—whether gold, silver, platinum, palladium, or copper—and the ETP listing exchange has entered into surveillance-sharing agreements with, or held Intermarket Surveillance Group ("ISG") membership in common with, that market.[18] Moreover, the surveillance-sharing agreements have been consistently present whenever the Commission has approved the listing and trading of derivative securities, even where the underlying securities were also listed on national securities exchanges—such as options based on an index of stocks traded on a national securities exchange—and were thus subject to the Commission's direct regulatory authority.[19]

Listing exchanges have also attempted to demonstrate that other means besides surveillance-sharing agreements will be sufficient to prevent fraudulent and manipulative acts

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18 See Winklevoss Order, 83 FR at 37594.

19 See USBT Order, 85 FR at 12597; Securities 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 Depository Receipts). The Commission has also required a surveillance-sharing agreement in the context of index options even when (i) all of the underlying index component stocks were either registered with the Commission or exempt from registration under the Exchange Act; (ii) all of the underlying index component stocks traded in the U.S. either directly or as ADRs on a national securities exchange; and (iii) effective international ADR arbitrage alleviated concerns over the relatively smaller ADR trading volume, helped to ensure that ADR prices reflected the pricing on the home market, and helped to ensure more reliable price determinations for settlement purposes, due to the unique composition of the index and reliance on ADR prices. See Securities Exchange Act Release No. 26653 (Mar. 21, 1989), 54 FR 12705, 12708 (Mar. 28, 1989) (SR-Amex-87-25) (stating that "surveillance-sharing agreements between the exchange on which the index option trades and the markets that trade the underlying securities are necessary" and that "[t]he exchange of surveillance data by the exchange trading a stock index option and the markets for the securities comprising the index is important to the detection and deterrence of intermarket manipulation."). And the Commission has required a surveillance-sharing agreement even when approving options based on an index of stocks traded on a national securities exchange. See Securities Exchange Act Release No. 30830 (June 18, 1992), 57 FR 28221, 28224 (June 24, 1992) (SR-Amex-91-22) (stating that surveillance-sharing agreements "ensure the availability of information necessary to detect and deter potential manipulations and other trading abuses").

and practices, including that the bitcoin market as a whole or the relevant underlying bitcoin market is "uniquely" and "inherently" resistant to fraud and manipulation.[20] In response, the Commission has agreed that, if a listing exchange could establish that the underlying market inherently possesses a unique resistance to manipulation beyond the protections that are utilized by traditional commodity or securities markets, it would not necessarily need to enter into a surveillance-sharing agreement with a regulated significant market.[21] Such resistance to fraud and manipulation, however, must be novel and beyond those protections that exist in traditional commodity markets or equity markets for which the Commission has long required surveillance-sharing agreements in the context of listing derivative securities products. No listing exchange has satisfied its burden to make such demonstration.[22]

Here, BZX contends that approval of the proposal is consistent with Section 6(b)(5) of the Exchange Act, in particular Section 6(b)(5)'s requirement that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest.[23] As discussed in more detail below, BZX asserts that the proposal is consistent with Section 6(b)(5) of the Exchange Act because the Exchange has a comprehensive surveillance-sharing agreement with a regulated market of significant size,[24] and

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20 See USBT Order, 85 FR at 12597.

21 See Winklevoss Order, 83 FR at 37580, 37582-91 (addressing assertions that "bitcoin and bitcoin [spot] markets" generally, as well as one bitcoin trading platform specifically, have unique resistance to fraud and manipulation); see also USBT Order, 85 FR at 12597.

22 See supra note 11.

23 See Notice, 86 FR at 19924.

24 See id. at 19929-30.

there exist other means to prevent fraudulent and manipulative acts and practices that are sufficient to justify dispensing with the requisite surveillance-sharing agreement.[25]

Although BZX recognizes the Commission's focus on potential manipulation of bitcoin ETPs in prior disapproval orders, BZX argues that such manipulation concerns have been sufficiently mitigated, and that the growing and quantifiable investor protection concerns should be the central consideration of the Commission.[26] Specifically, as discussed in more detail below, the Exchange asserts that the significant increase in trading volume in bitcoin futures on the Chicago Mercantile Exchange ("CME"), the growth of liquidity in the spot market for bitcoin, and certain features of the Shares and the Reference Rate (as defined herein) mitigate potential manipulation concerns to the point that the investor protection issues that have arisen from the rapid growth of over-the-counter ("OTC") bitcoin funds, including premium/discount volatility and management fees, should be the central consideration as the Commission determines whether to approve this proposal.[27]

Further, BZX believes that the proposal would give U.S. investors access to bitcoin in a regulated and transparent exchange-traded vehicle that would act to limit risk to U.S. investors. According to BZX, the proposed listing and trading of the Shares would mitigate risk by: (i) reducing premium and discount volatility; (ii) reducing management fees through meaningful competition; (iii) reducing risks associated with investing in operating companies that are imperfect proxies for bitcoin exposure; and (iv) providing an alternative to custodying spot bitcoin.[28]

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25 See id. at 19930.

26 See id. at 19920.

27 See id. at 19929.

28 See id. at 19920.

In the analysis that follows, the Commission examines whether the proposed rule change is consistent with Section 6(b)(5) of the Exchange Act by addressing: in Section III.B.1 assertions that other means besides surveillance-sharing agreements will be sufficient to prevent fraudulent and manipulative acts and practices; in Section III.B.2 assertions that BZX has entered into a comprehensive surveillance-sharing agreement with a regulated market of significant size related to bitcoin; and in Section III.C assertions that the proposal is consistent with the protection of investors and the public interest. As discussed further below, BZX repeats various assertions made in prior bitcoin-based ETP proposals that the Commission has previously addressed and rejected—and more importantly, BZX does not respond to the Commission's reasons for rejecting those assertions but merely repeats them. The Commission concludes that BZX has not established that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with the requisite surveillance-sharing agreement. The Commission further concludes that BZX has not established that it has a comprehensive surveillance-sharing agreement with a regulated market of significant size related to bitcoin. As a result, the Commission is unable to find that the proposed rule change is consistent with the statutory requirements of Exchange Act Section 6(b)(5).

The Commission again emphasizes that its disapproval of this proposed rule change does not rest on an evaluation of whether bitcoin, or blockchain technology more generally, has utility or value as an innovation or an investment. Rather, the Commission is disapproving this proposed rule change because, as discussed below, BZX has not met its burden to demonstrate that its proposal is consistent with the requirements of Exchange Act Section 6(b)(5).

II. DESCRIPTION OF THE PROPOSED RULE CHANGE

As described in more detail in the Notice,[29] the Exchange proposes to list and trade the Shares of the Trust under BZX Rule 14.11(e)(4), which governs the listing and trading of Commodity-Based Trust Shares on the Exchange.

The investment objective of the Trust is to gain exposure to the price of bitcoin, less expenses and liabilities of the Trust's operation.[30] The Trust would hold bitcoin, and it would calculate the Trust's net asset value ("NAV") daily based on the value of bitcoin as reflected by the CF Bitcoin US Settlement Price ("Reference Rate"). The Reference Rate was created, and is administered, by CF Benchmarks Ltd. ("Benchmark Administrator"). The Reference Rate aggregates the trade flow of several bitcoin spot platforms, the composition of which currently includes Bitstamp, Coinbase, Gemini, itBit, and Kraken. In calculating the Reference Rate, the methodology creates a joint list of the trade prices and sizes from the Constituent Bitcoin Platforms (as defined herein) between 3:00 p.m. E.T. and 4:00 p.m. E.T. The methodology divides this list into 12 equally-sized time intervals of five minutes and calculates the volume-

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29 See Notice, supra note 3. See also Registration Statement on Form S-1, dated March 11, 2021 (File No. 333-254134), filed with the Commission on behalf of the Trust ("Registration Statement").

30 WisdomTree Digital Commodity Services, LLC ("Sponsor") is the sponsor of the Trust, and Delaware Trust Company is the trustee. A third-party regulated custodian ("Bitcoin Custodian") will be responsible for custody of the Trust's bitcoin. The Sponsor is responsible for selecting the Bitcoin Custodian as well as an administrator, a transfer agent, a marketing agent, and an auditor for the Trust. See Notice, 86 FR at 19918, 19925-26.

weighted median trade price for each of those time intervals.[31] The Reference Rate is the arithmetic mean of these 12 volume-weighted median trade prices.[32]

Each Share represents a fractional undivided beneficial interest in and ownership of the Trust. The Trust's assets will consist of bitcoin held by the Bitcoin Custodian on behalf of the Trust. The Trust generally does not intend to hold cash or cash equivalents. However, there may be situations where the Trust will unexpectedly hold cash on a temporary basis.[33]

The administrator will determine the NAV and NAV per Share of the Trust on each day that the Exchange is open for regular trading after 4:00 p.m. E.T. (often by 5:30 p.m. E.T. and almost always by 8:00 p.m. E.T.). The NAV of the Trust is the aggregate value of the Trust's assets, less total liabilities of the Trust. In determining the Trust's NAV, the administrator values the bitcoin held by the Trust based on the price set by the Reference Rate as of 4:00 p.m. E.T.[34]

The Trust will provide information regarding the Trust's bitcoin holdings, as well as an Intraday Indicative Value ("IIV") per Share updated every 15 seconds, as calculated by the Exchange or a third-party financial data provider during the Exchange's Regular Trading Hours (9:30 a.m. to 4:00 p.m. E.T.). The IIV will be calculated by using the prior day's closing NAV

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31 According to BZX, the Reference Rate is based on materially the same methodology (except calculation time, as described herein) as the Benchmark Administrator's CME CF Bitcoin Reference Rate ("BRR"), which was first introduced on November 14, 2016, and is the rate on which bitcoin futures contracts are cash-settled in U.S. dollars on CME. The Reference Rate is calculated as of 4:00 p.m. E.T., whereas the CME CF BRR is calculated as of 4:00 p.m. London Time. The Reference Rate aggregates the trade flow of several bitcoin platforms during an observation window between 3:00 p.m. and 4:00 p.m. E.T. into the U.S. dollar price of one bitcoin at 4:00 p.m. E.T. The current constituent bitcoin platforms of the Reference Rate are Bitstamp, Coinbase, Gemini, itBit, and Kraken ("Constituent Bitcoin Platforms"). See Notice, 86 FR at 19926 & n.70.

32 See id. at 19926.

33 See id. at 19925.

34 See id. at 19927.

per Share as a base and updating that value during Regular Trading Hours to reflect changes in the value of the Trust's bitcoin holdings during the trading day.[35]

When the Trust sells or redeems its Shares, it will do so in "in-kind" transactions in blocks of aggregations of Shares. When creating the Shares, authorized participants will deliver, or facilitate the delivery of, bitcoin to the Trust's account with the Bitcoin Custodian in exchange for the Shares, and, when redeeming the Shares, the Trust, through the Bitcoin Custodian, will deliver bitcoin to such authorized participants.[36]

III. DISCUSSION

A. The Applicable Standard for Review

The Commission must consider whether BZX's proposal is consistent with the Exchange Act. Section 6(b)(5) of the Exchange Act requires, in relevant part, that the rules of a national securities exchange be designed "to prevent fraudulent and manipulative acts and practices" and "to protect investors and the public interest."[37] Under the Commission's Rules of Practice, the "burden to demonstrate that a proposed rule change is consistent with the Exchange Act and the

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35 See id. at 19926.

36 See id. at 19925-26.

37 15 U.S.C. 78f(b)(5). Pursuant to Section 19(b)(2) of the Exchange Act, 15 U.S.C. 78s(b)(2), the Commission must disapprove a proposed rule change filed by a national securities exchange if it does not find that the proposed rule change is consistent with the applicable requirements of the Exchange Act. Exchange Act Section 6(b)(5) states that an exchange shall not be registered as a national securities exchange unless the Commission determines that "[t]he rules of the exchange 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; and are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers, or to regulate by virtue of any authority conferred by this title matters not related to the purposes of this title or the administration of the exchange." 15 U.S.C. 78f(b)(5).

rules and regulations issued thereunder . . . is on the self-regulatory organization ['SRO'] that proposed the rule change."[38]

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,[39] and any failure of an SRO to provide this information may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Exchange Act and the applicable rules and regulations.[40] Moreover, "unquestioning reliance" on an SRO's representations in a proposed rule change is not sufficient to justify Commission approval of a proposed rule change.[41]

B. Whether BZX Has Met its Burden To Demonstrate That the Proposal Is Designed to Prevent Fraudulent and Manipulative Acts and Practices

(1) Assertions That Other Means Besides Surveillance-Sharing Agreements Will Be Sufficient to Prevent Fraudulent and Manipulative Acts and Practices

As stated above, the Commission has recognized that a listing exchange could demonstrate that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with a comprehensive surveillance-sharing agreement with a regulated market of significant size, including by demonstrating that the bitcoin market as a whole or the relevant underlying bitcoin market is uniquely and inherently resistant to fraud and

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38 Rule 700(b)(3), Commission Rules of Practice, 17 CFR 201.700(b)(3).

39 See id.

40 See id.

41 Susquehanna Int'l Group, LLP v. Securities and Exchange Commission, 866 F.3d 442, 447 (D.C. Cir. 2017) ("Susquehanna").

manipulation.[42] Such resistance to fraud and manipulation must be novel and beyond those protections that exist in traditional commodities or securities markets.[43]

BZX asserts that bitcoin is resistant to price manipulation. According to BZX, the geographically diverse and continuous nature of bitcoin trading render it difficult and prohibitively costly to manipulate the price of bitcoin.[44] Fragmentation across bitcoin platforms, the relatively slow speed of transactions, and the capital necessary to maintain a significant presence on each trading platform make manipulation of bitcoin prices through continuous trading activity challenging.[45] To the extent that there are bitcoin platforms engaged in or allowing wash trading or other activity intended to manipulate the price of bitcoin on other markets, such pricing does not normally impact prices on other platforms because participants will generally ignore markets with quotes that they deem non-executable.[46] BZX further argues that the linkage between the bitcoin markets and the presence of arbitrageurs in those markets means that the manipulation of the price of bitcoin on any single venue would require manipulation of the global bitcoin price in order to be effective.[47] Arbitrageurs must have funds distributed across multiple trading platforms in order to take advantage of temporary price dislocations, thereby making it unlikely that there will be strong concentration of funds on any

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42 See USBT Order, 85 FR at 12597 n.23. The Commission is not applying a "cannot be manipulated" standard. Instead, the Commission is examining whether the proposal meets the requirements of the Exchange Act and, pursuant to its Rules of Practice, places the burden on the listing exchange to demonstrate the validity of its contentions and to establish that the requirements of the Exchange Act have been met. See id.

43 See id. at 12597.

44 See Notice, 86 FR at 19924 n.58.

45 See id.

46 See id.

47 See id.

particular bitcoin trading venue.[48] As a result, BZX concludes that the potential for manipulation on a bitcoin trading platform would require overcoming the liquidity supply of such arbitrageurs who are effectively eliminating any cross-market pricing differences.[49]

As with the previous proposals, the Commission here concludes that the record does not support a finding that the bitcoin market is inherently and uniquely resistant to fraud and manipulation.[50] BZX asserts that, because of how bitcoin trades occur, including through continuous means and through fragmented platforms, arbitrage across the bitcoin platforms essentially helps to keep global bitcoin prices aligned with one another, thus hindering manipulation. The Exchange, however, does not provide any data or analysis to support its assertions, either in terms of how closely bitcoin prices are aligned across different bitcoin trading venues or how quickly price disparities may be arbitraged away.[51] As stated above,

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48 See id.

49 See id.

50 Two commenters also question the bitcoin market's resistance to fraud and manipulation. One commenter asserts that the bitcoin network is the preferred network for global criminals, and a pyramid scheme in which the top holders encourage existing holders to keep holding and entice new retail investors to invest. See letter from Maulik Patel, dated July 4, 2021 ("Patel Letter"). Another commenter describes digital assets such as bitcoin, and the blockchains on which they rely, as having complexity that makes users vulnerable to fraud. See letter from Lourdes Ciao, dated June 24, 2021 ("Ciao Letter 3").

51 For example, the Registration Statement states that "[i]f increases in throughput on the Bitcoin network lag behind growth in usage of bitcoin, average fees and settlement times may increase considerably . . . . which could adversely impact the value of the Shares." See Registration Statement at 21. BZX does not provide data or analysis to address, among other things, whether such risks of increased fees and bitcoin transaction settlement times may affect the arbitrage effectiveness that BZX asserts. See also infra note 65 and accompanying text (referencing statements made in the Registration Statement that contradict assertions made by BZX).

"unquestioning reliance" on an SRO's representations in a proposed rule change is not sufficient to justify Commission approval of a proposed rule change.[52]

Efficient price arbitrage, moreover, is not sufficient to support the finding that a market is uniquely and inherently resistant to manipulation such that the Commission can dispense with surveillance-sharing agreements.[53] The Commission has stated, for example, that even for equity options based on securities listed on national securities exchanges, the Commission relies on surveillance-sharing agreements to detect and deter fraud and manipulation.[54] Here, the Exchange provides no evidence to support its assertion of efficient price arbitrage across bitcoin platforms, let alone any evidence that price arbitrage in the bitcoin market is novel or unique so as to warrant the Commission dispensing with the requirement of a surveillance-sharing agreement. Moreover, BZX does not take into account that a market participant with a dominant ownership position would not find it prohibitively expensive to overcome the liquidity supplied by arbitrageurs and could use dominant market share to engage in manipulation.[55]

In addition, the Exchange makes the unsupported claim that bitcoin prices on platforms with wash trades or other activity intended to manipulate the price of bitcoin do not influence the "real" price of bitcoin. The Exchange also asserts that, to the extent that there are bitcoin platforms engaged in or allowing wash trading or other manipulative activities, market participants will generally ignore those platforms. However, without the necessary data, such as lead-lag or other similar analyses, or other evidence, the Commission has no basis on which to

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52 See supra note 41.

53 See Winklevoss Order, 83 FR at 37586; SolidX Order, 82 FR at 16256-57; USBT Order, 85 FR at 12601.

54 See, e.g., USBT Order, 85 FR at 12601.

55 See, e.g., Winklevoss Order, 83 FR at 37584; USBT Order, 85 FR at 12600-01.

conclude that bitcoin platforms are insulated from prices of others that engage in or permit fraud or manipulation.[56]

Additionally, the continuous nature of bitcoin trading does not eliminate manipulation risk, and neither does linkages among markets, as BZX asserts.[57] Even in the presence of continuous trading or linkages among markets, formal (such as those with consolidated quotations or routing requirements) or otherwise (such as in the context of the fragmented, global bitcoin markets), manipulation of asset prices, as a general matter, can occur simply through trading activity that creates a false impression of supply or demand.[58]

BZX also argues that the significant liquidity in the bitcoin spot market and the impact of market orders on the overall price of bitcoin mean that attempting to move the price of bitcoin is costly and has grown more expensive over the past year.[59] According to BZX, in January 2020, for example, the cost to buy or sell $5 million worth of bitcoin averaged roughly 30 basis points (compared to 10 basis points in February 2021) with a market impact of 50 basis points (compared to 30 basis points in February 2021). For a $10 million market order, the cost to buy or sell was roughly 50 basis points (compared to 20 basis points in February 2021) with a market impact of 80 basis points (compared to 50 basis points in February 2021). BZX contends that as

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56 See USBT Order, 85 FR at 12601. See also infra notes 131-132 and accompanying text (explaining the lead-lag analysis as central to understanding whether it is reasonably likely that a would-be manipulator of the proposed ETP would have to trade on the CME bitcoin futures market to successfully manipulate the proposed ETP).

57 See Winklevoss Order, 83 FR at 37585 n.92 and accompanying text.

58 See id. at 37585.

59 See Notice, 86 FR at 19925.

the liquidity in the bitcoin spot market increases, it follows that the impact of $5 million and $10 million orders will continue to decrease.[60]

However, the data furnished by BZX regarding the cost to move the price of bitcoin, and the market impact of such attempts, are incomplete. BZX does not provide meaningful analysis pertaining to how these figures compare to other markets or why one must conclude, based on the numbers provided, that the bitcoin market is costly to manipulate. Further, BZX's analysis of the market impact of a mere two sample transactions is not sufficient evidence to conclude that the bitcoin market is resistant to manipulation.[61] Even assuming that the Commission agreed with BZX's premise, that it is costly to manipulate the bitcoin market and it is becoming increasingly so, any such evidence speaks only to establish that there is some resistance to manipulation, not that it establishes unique resistance to manipulation to warrant dispensing with the standard surveillance-sharing agreement.[62] The Commission thus concludes that the record does not demonstrate that the nature of bitcoin trading renders the bitcoin market inherently and uniquely resistant to fraud and manipulation.

Moreover, BZX does not sufficiently contest the presence of possible sources of fraud and manipulation in the bitcoin spot market generally that the Commission has raised in previous orders, which have included (1) "wash" trading,[63] (2) persons with a dominant position in bitcoin

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60 See id.

61 Aside from stating that the "statistics are based on samples of bitcoin liquidity in USD (excluding stablecoins or Euro liquidity) based on executable quotes on Coinbase Pro, Gemini, Bitstamp, Kraken, LMAX Exchange, BinanceUS, and OKCoin during February 2021," the Exchange provides no other information pertaining to the methodology used to enable the Commission to evaluate these findings or their significance. See id. at 19925 nn.64-65.

62 See USBT Order, 85 FR at 12601.

63 See supra note 56 and accompanying text.

manipulating bitcoin pricing, (3) hacking of the bitcoin network and trading platforms, (4) malicious control of the bitcoin network, (5) trading based on material, non-public information, including the dissemination of false and misleading information, (6) manipulative activity involving the purported "stablecoin" Tether (USDT), and (7) fraud and manipulation at bitcoin trading platforms.[64]

In addition, BZX does not address risk factors specific to the bitcoin blockchain and bitcoin platforms, described in the Trust's Registration Statement, that undermine the argument that the bitcoin market is inherently resistant to fraud and manipulation. For example, the Registration Statement acknowledges that "bitcoin [platforms] on which bitcoin trades are relatively new and, in some cases, unregulated, and, therefore, may be more exposed to fraud and security breaches than established, regulated exchanges for other financial assets or instruments"; that "as an intangible asset without centralized issuers or governing bodies, bitcoin has been, and may in the future be, subject to security breaches, cyberattacks or other malicious activities"; that "[t]he trading for bitcoin occurs on multiple trading venues that have various levels and types of regulation, but are not regulated in the same manner as traditional stock and bond exchanges" and if these spot markets "do not operate smoothly or face technical, security or regulatory issues, that could impact the ability of Authorized Participants to make markets in the Shares" which could lead to "trading in the Shares [to] occur at a material premium or discount against the NAV"; that the bitcoin blockchain could be vulnerable to a "51% attack," in which a bad actor that controls a majority of the processing power dedicated to mining on the bitcoin network

64 See USBT Order, 85 FR at 12600-01 & nn.66-67 (discussing J. Griffin & A. Shams, Is Bitcoin Really Untethered? (October 28, 2019), available at https://ssrn.com/abstract=3195066 and published in 75 J. Finance 1913 (2020)); Winklevoss Order, 83 FR at 37585-86.

may be able to alter the bitcoin blockchain on which the bitcoin network and bitcoin transactions rely; that the nature of the assets held at bitcoin platforms makes them "appealing targets for hackers" and that "a number of bitcoin [platforms] have been victims of cybercrimes"; and that bitcoin trading platforms "have been closed or faced issues due to fraud, failure" and "security breaches."[65]

BZX also asserts that other means to prevent fraud and manipulation are sufficient to justify dispensing with the requisite surveillance-sharing agreement. The Exchange mentions that the Reference Rate, which is used to value the Trust's bitcoin, is itself resistant to manipulation based on the Reference Rate's methodology.[66] The Exchange states that the Reference Rate is calculated based on the "Relevant Transactions"[67] of all of its Constituent Bitcoin Platforms. All Relevant Transactions are added to a joint list, recording the time of execution, trade price, and size for each transaction, and the list is partitioned by timestamp into 12 equally-sized time intervals of five minute length.[68] For each partition separately, the volume-weighted median trade price is calculated from the trade prices and sizes of all Relevant Transactions.[69] The Reference Rate is then determined by the arithmetic mean of the volume-weighted medians of all

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65 See Registration Statement at 11, 18-20, 38. See also Winklevoss Order, 83 FR at 37585.

66 See Notice, 86 FR at 19925.

67 According to the Exchange, a "Relevant Transaction" is any cryptocurrency versus U.S. dollar spot trade that occurs during the observation window between 3:00 p.m. and 4:00 p.m. E.T. on a Constituent Bitcon Platform in the BTC/USD pair that is reported and disseminated by a Constituent Bitcoin Platform and observed by the Benchmark Administrator. See id. at 19926 n.71.

68 See id. at 19926.

69 See id. According to the Exchange, a volume-weighted median differs from a standard median in that a weighting factor, in this case trade size, is factored into the calculation. See id.

partitions.[70] According to BZX, "[b]y employing the foregoing steps, the Reference Rate thereby seeks to ensure that transactions in bitcoin conducted at outlying prices do not have an undue effect on the value of a specific partition, large trades or clusters of trades transacted over a short period of time will not have an undue influence on the index level, and the effect of large trades at prices that deviate from the prevailing price are mitigated from having an undue influence on the benchmark level."[71] BZX concludes its analysis of the Reference Rate by noting that "an oversight function is implemented by the Benchmark Administrator in seeking to ensure that the Reference Rate is administered through codified policies for Reference Rate integrity."[72]

The Benchmark Administrator, in a comment letter, elaborates on how, in its view, its oversight of the Reference Rate helps to prevent fraud and manipulation.[73] The Benchmark Administrator states that it is subject to the UK Benchmarks Regulation ("BMR"), which is enforced by the UK Financial Conduct Authority ("FCA"), including requirements to surveil for attempted and actual manipulation.[74] The Benchmark Administrator further states that, in order to fulfil its regulatory obligations under the UK BMR: it only includes as "Constituent Bitcoin Platforms" those trading platforms that conform to certain criteria, including assessment of a platform's risks to market participants, compliance with law, and policies to identify and impede manipulative trading practices;[75] it has in place information-sharing agreements with each of the

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70 See id.

71 See id.

72 See id.

73 See letter from CF Benchmarks, dated April 2021 ("CF Benchmarks Letter").

74 See id. at 2.

75 See id. at 3. The Benchmark Administrator further states that the same Constituent Bitcoin Platforms are used to compute the CME CF BRR, which it also administers, and

Constituent Bitcoin Platforms;[76] and it operates a Benchmark Surveillance Program, over which the UK FCA has authority, whereby it monitors for, investigates, and reports signs of manipulation.[77]

In addition, in its comment letter, the Benchmark Administrator asserts that CME, in the course of operating and overseeing its bitcoin futures market under the regulatory oversight of the Commodity Futures Trading Commission ("CFTC"), has in place information-sharing agreements with the Constituent Bitcoin Platforms for the purposes of impeding and detecting any attempted manipulation of the futures contracts, as they are the platforms from which trade data is gathered to compute the CME CF BRR;[78] and that given such agreements, "this would allow for [potentially manipulative acts to] be detected and deterred by CME."[79] The Benchmark Administrator further asserts that, because the CME and BZX are both members of the ISG, BZX would also have access to this information to allow for detection and deterrence of manipulation should it occur.[80]

Simultaneously with the Exchange's and the Benchmark Administrator's assertions regarding the Reference Rate, the Exchange also states that, because the Trust will engage in in-kind creations and redemptions only, the "manipulability of the Reference Rate [is] significantly less important."[81] The Exchange elaborates further that, "because the Trust will not accept cash

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which is used to settle the bitcoin-USD futures contracts listed for trading on CME. See id. at 2.

76 See id. at 2.

77 See id. at 4.

78 See id. at 2.

79 See id. at 7.

80 See id.

81 See Notice, 86 FR at 19925.

to buy bitcoin in order to create new shares or… be forced to sell bitcoin to pay cash for redeemed shares, the price that the Sponsor uses to value the Trust's bitcoin is not particularly important."[82] According to BZX, when authorized participants create Shares with the Trust, they would need to deliver a certain number of bitcoin per share (regardless of the valuation used), and when they redeem with the Trust, they would similarly expect to receive a certain number of bitcoin per share.[83] As such, BZX argues that even if the price used to value the Trust's bitcoin is manipulated, the ratio of bitcoin per Share does not change, and the Trust will either accept (for creations) or distribute (for redemptions) the same number of bitcoin regardless of the value.[84] This, according to BZX, not only mitigates the risk associated with potential manipulation, but also discourages and disincentivizes manipulation of the Reference Rate because there is little financial incentive to do so.[85]

Based on assertions made and the information provided, the Commission can find no basis to conclude that BZX has articulated other means to prevent fraud and manipulation that are sufficient to justify dispensing with the requisite surveillance-sharing agreement. First, the record does not demonstrate that the proposed methodology for calculating the Reference Rate would make the proposed ETP resistant to fraud or manipulation such that a surveillance-sharing agreement with a regulated market of significant size is unnecessary. Specifically, the Exchange has not assessed the possible influence that spot platforms not included among the Constituent

82 See id.

83 See id.

84 See id.

85 See id.

Bitcoin Platforms would have on bitcoin prices used to calculate the Reference Rate.[86] And as discussed above, the record does not establish that the broader bitcoin market is inherently and uniquely resistant to fraud and manipulation. Accordingly, to the extent that trading on platforms not directly used to calculate the Reference Rate affects prices on the Constituent Bitcoin Platforms, the characteristics of those other platforms – where various kinds of fraud and manipulation from a variety of sources may be present and persist – affect whether the Reference Rate is resistant to manipulation.

Moreover, the Exchange's assertions that the Reference Rate's methodology helps make the Reference Rate resistant to manipulation are contradicted by the Registration Statement's own statements. Specifically, the Registration Statement states that "[b]itcoin [platforms] on which bitcoin trades . . . may be more exposed to fraud and security breaches than established, regulated exchanges for other financial assets or instruments, which could have a negative impact on the performance of the Trust."[87] Constituent Bitcoin Platforms are a subset of the bitcoin platforms currently in existence. Although the Sponsor raises concerns regarding fraud and security of bitcoin platforms in the Registration Statement, the Exchange does not explain how or why such concerns are consistent with its assertion that the Reference Rate is resistant to fraud and manipulation.

BZX also has not shown that its proposed use of 12 equally-sized time intervals of five minute length over the observation window between 3:00 p.m. and 4:00 p.m. E.T. to calculate

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86 As discussed above, while the Exchange asserts that bitcoin prices on platforms with wash trades or other activity intended to manipulate the price of bitcoin do not influence the "real" price of bitcoin, the Commission has no basis on which to conclude that bitcoin platforms are insulated from prices of others that engage in or permit fraud or manipulation. See supra note 56 and accompanying text.

87 See Registration Statement at 19.

the Reference Rate would effectively be able to eliminate fraudulent or manipulative activity that is not transient. Fraud and manipulation in the bitcoin spot market could persist for a "significant duration."[88] The Exchange does not connect the use of such partitions to the duration of the effects of the wash and fictitious trading that may exist in the bitcoin spot market.[89]

The Commission thus concludes that the Exchange has not demonstrated that its Reference Rate methodology makes the proposed ETP resistant to manipulation. While the proposed procedures for calculating the Reference Rate using only prices from the Constituent Bitcoin Platforms are intended to provide some degree of protection against attempts to manipulate the Reference Rate, these procedures are not sufficient for the Commission to dispense with the requisite surveillance-sharing agreement with a regulated market of significant size.

Second, the Benchmark Administrator argues that its oversight of the Reference Rate and the CME's information-sharing agreements with the Constituent Bitcoin Platforms help to prevent fraud and manipulation.[90] However, the level of oversight of the Constituent Bitcoin Platforms, whose trade flows contribute to the Reference Rate, is not equivalent to the obligations, authority, and oversight of national securities exchanges or futures exchanges and therefore is not an appropriate substitute.[91] National securities exchanges are required to have rules that are "designed to prevent fraudulent and manipulative acts and practices, to promote

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88 See USBT Order, 85 FR at 12601 n.66; see also id. at 12607.

89 The Commission has previously considered and rejected similar arguments about the valuation of bitcoin according to a benchmark or reference price. See id.; SolidX Order, 82 FR at 16258; Winklevoss Order, 83 FR at 37589-90.

90 See CF Benchmarks Letter at 2-4.

91 See also USBT Order, 85 FR at 12603-05.

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."[92] Moreover, national securities exchanges must file proposed rules with the Commission regarding certain material aspects of their operations,[93] and the Commission has the authority to disapprove any such rule that is not consistent with the requirements of the Exchange Act.[94] Thus, national securities exchanges are subject to Commission oversight of, among other things, their governance, membership qualifications, trading rules, disciplinary procedures, recordkeeping, and fees.[95]

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92 See 15 U.S.C. 78f(b)(5).

93 17 CFR 240.19b-4(a)(6)(i).

94 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 rules changes with the Commission and provides the Commission with the authority to disapprove proposed rule changes that are not consistent with the Exchange Act. Designated contract markets ("DCMs") (commonly called "futures markets") registered with and regulated by the CFTC must comply with, among other things, a similarly comprehensive range of regulatory principles and must file rule changes with the CFTC. See, e.g., Designated Contract Markets (DCMs), CFTC, available at http://www.cftc.gov/IndustryOversight/TradingOrganizations/DCMs/index.htm.

95 See Winklevoss Order, 83 FR at 37597. The Commission notes that the New York State Department of Financial Services ("NYSDFS") has issued "guidance" to supervised virtual currency business entities, stating that these entities must "implement measures designed to effectively detect, prevent, and respond to fraud, attempted fraud, and similar wrongdoing." See Maria T. Vullo, Superintendent of Financial Services, NYSDFS, Guidance on Prevention of Market Manipulation and Other Wrongful Activity (Feb. 7, 2018), available at https://www.dfs.ny.gov/docs/legal/industry/il180207.pdf. The NYSDFS recognizes that its "guidance is not intended to limit the scope or applicability of any law or regulation" (id.), which would include the Exchange Act. Nothing in the record evidences

The Constituent Bitcoin Platforms, on the other hand, have none of these requirements (none are registered as a national securities exchange)[96] – even if they may have, as the Benchmark Administrator asserts, AML/KYC compliance policies and prohibitions against wash trading and fraudulent claims of trading volume.[97] In addition, although the Commission recognizes that the CFTC maintains some jurisdiction over the bitcoin spot market, under the Commodity Exchange Act, the CFTC does not have regulatory authority over bitcoin spot trading platforms, including the Constituent Bitcoin Platforms.[98] Except in certain limited circumstances, bitcoin spot trading platforms are not required to register with the CFTC, and the CFTC does not set standards for, approve the rules of, examine, or otherwise regulate bitcoin spot markets.[99] As the CFTC itself stated, while the CFTC "has an important role to play," U.S. law "does not provide for direct, comprehensive Federal oversight of underlying Bitcoin or virtual currency spot markets."[100]

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whether the Constituent Bitcoin Platforms have complied with this NYSDFS guidance. Further, as stated previously, there are substantial differences between the NYSDFS and the Commission's regulation. AML and KYC policies and procedures, for example, have been referenced in other bitcoin-based ETP proposals as a purportedly alternative means by which such ETPs would be uniquely resistant to manipulation. The Commission has previously concluded that such AML and KYC policies and procedures do not serve as a substitute for, and are not otherwise dispositive in the analysis regarding the importance of, having a surveillance sharing agreement with a regulated market of significant size relating to bitcoin. For example, AML and KYC policies and procedures do not substitute for the sharing of information about market trading activity or clearing activity and do not substitute for regulation of a national securities exchange. See USBT Order, 85 FR at 12603 n.101.

96 See 15 U.S.C. 78e, 78f.

97 See CF Benchmarks Letter at 5.

98 See USBT Order, 85 FR at 12604.

99 See id.

100 See Winklevoss Order, 83 FR at 37599 n.288.

And while the Benchmark Administrator asserts that the CME has in place information-sharing agreements with the Constituent Bitcoin Platforms, it does not provide any information on the scope, terms, or enforcement authority for such information-sharing agreements. Nor has BZX put any information in the record as to whether and how it would use or enforce such agreements. Moreover, such agreements are contractual in nature and do not satisfy the regulatory requirements or purposes of national securities exchanges and the Exchange Act. The CME (and the CFTC, as discussed above) does not have regulatory authority over the spot bitcoin trading platforms,[101] and, while the CME is regulated by the CFTC, the CFTC's regulations do not extend to the Constituent Bitcoin Platforms by virtue of such contractual agreements.

In addition, although the Benchmark Administrator states that its oversight of the Reference Rate helps prevent fraud and manipulation, the oversight by the Benchmark Administrator does not represent a unique measure to resist manipulation beyond mechanisms that exist in securities or commodities markets. Other commodity-based and equity index ETPs approved by the Commission for listing and trading utilize reference rates or indices administered by similar benchmark administrators,[102] and the Commission has not, in those

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101 See supra notes 98-100 and accompanying text.

102 See, e.g., Securities Exchange Act Release Nos. 80840 (June 1, 2017) 82 FR 26534 (June 7, 2017) (SR-NYSEArca-2017-33) (approving the listing and trading of shares of exchange traded funds seeking to track the Solactive GLD EUR Gold Index, Solactive GLD GBP Gold Index, and the Solactive GLD JPY Gold Index); and 83046 (Apr. 13, 2018) 83 FR 17462 (Apr. 19, 2018) (SR-Nasdaq-2018-012) (approving the listing and trading of shares of an exchange-traded fund that seeks to track an equity index, the CBOE Russell 2000 30-Delta BuyWrite V2 Index).

instances, dispensed with the need for a surveillance-sharing agreement with a significant regulated market.[103]

Furthermore, the Benchmark Administrator does not itself exercise governmental regulatory authority. Rather, the Benchmark Administrator is a registered, privately-held company in England.[104] The Benchmark Administrator's relationship with the Constituent Bitcoin Platforms is based on their participation in the determination of reference rates, such as the Reference Rate. While the Benchmark Administrator is regulated by the UK FCA as a benchmark administrator, the UK FCA's regulations do not extend to the Constituent Bitcoin Platforms by virtue of their trade prices serving as input data underlying the Reference Rate.[105]

Further, the oversight performed by the Benchmark Administrator of the Constituent Bitcoin Platforms is for the purpose of ensuring the accuracy and integrity of the Reference Rate.[106] Such oversight serves a fundamentally different purpose as compared to the regulation of national securities exchanges and the requirements of the Exchange Act. While the Commission recognizes that this may be an important function in ensuring the integrity of the

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103 See USBT Order, 85 FR at 12605. See also supra note 19.

104 See https://blog.cfbenchmarks.com/legal/ (stating that the Benchmark Administrator is authorized and regulated by the UK FCA as a registered Benchmark Administrator (FRN 847100) under the EU benchmark regulation, and further noting that the Benchmark Administrator is a member of the Crypto Facilities group of companies which is in turn a member of the Payward, Inc. group of companies, and Payward, Inc. is the owner and operator of the Kraken Exchange, a venue that facilitates the trading of cryptocurrencies). The Commission notes that the Kraken is one of the Constituent Bitcoin Platforms underlying the Reference Rate.

105 See USBT Order, 85 FR at 12604. The Benchmark Administrator is also not required to apply certain provisions of EU benchmark regulation to the Constituent Bitcoin Platforms because the Reference Rate's input data is not "contributed." See Benchmark Statement, at 5 available at https://docs-cfbenchmarks.s3.amazonaws.com/CME+CF+Benchmark+Statement.pdf.

106 See supra note 72 and accompanying text.

Reference Rate, such requirements do not imbue either the Benchmark Administrator or the Constituent Bitcoin Platforms with regulatory authority similar to that the Exchange Act confers upon self-regulatory organizations such as national securities exchanges.[107]

And although the Benchmark Administrator states that it has information-sharing agreements with each Constituent Bitcoin Platform, it does not describe the scope of such agreements or what authority the Benchmark Administrator would have to compel the platforms' compliance with such agreements. Moreover, even assuming that the Constituent Bitcoin Platforms are as vigilant towards fraud and manipulation as the Benchmark Administrator describes, neither the Exchange nor the Benchmark Administrator attempts to establish that only the Constituent Bitcoin Platforms' ability to detect and deter fraud and manipulation would matter, exclusive of other bitcoin spot markets. In other words, neither addresses how fraud and manipulation on other bitcoin spot markets may influence the price of bitcoin.

Third, the Exchange does not explain the significance of the Reference Rate's purported resistance to manipulation to the overall analysis of whether the proposal to list and trade the Shares is designed to prevent fraud and manipulation. Even assuming that the Exchange's argument is that, if the Reference Rate is resistant to manipulation, the Trust's NAV, and thereby the Shares as well, would be resistant to manipulation, the Exchange has not established in the record a basis for such conclusion. That assumption aside, the Commission notes that the Shares would trade at market-based prices in the secondary market, not at NAV, which then raises the question of the significance of the NAV calculation to the manipulation of the Shares.[108]

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107 See 15 U.S.C. 78f(b).

108 One commenter states that BZX's statement that the price used to value the Trust's bitcoin "is not particularly important" focuses on the primary market and transactions with authorized participants. The commenter asserts that, for secondary market

Fourth, the Exchange's arguments are contradictory. While arguing that the Reference Rate is resistant to manipulation, the Exchange simultaneously downplays the importance of the Reference Rate in light of the Trust's in-kind creation and redemption mechanism.[109] The Exchange points out that the Trust will create and redeem Shares in-kind, not in cash, which renders the NAV calculation, and thereby the ability to manipulate NAV, "significantly less important."[110] In BZX's own words, the Trust will not accept cash to buy bitcoin in order to create shares or sell bitcoin to pay cash for redeemed shares, so the price that the Sponsor uses to value the Trust's bitcoin "is not particularly important."[111] If the Reference Rate that the Trust

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participants (e.g., retail investors), the price source used by the Sponsor should be viewed as important because the ETP's value (i.e., its NAV) "has a relationship to the secondary market trading price, including for market makers and other liquidity participants in determining ET[P] pricing levels with respect to order flow, as well as for calculating premiums/discounts between NAV and the secondary market price." The commenter asserts that this is true for any ETP in the marketplace, but "arguably the price source is even more important for a bitcoin ET[P]" given the number of platforms worldwide where bitcoin is traded, the price differences between them, and the Commission's concerns regarding potential bitcoin price manipulation. See letter from Global Digital Finance, dated August 9, 2021 ("GDF Letter"), at 6. The commenter, however, provides no further information on the relationship between NAV and secondary market prices in general, nor specifically in the context of ETPs with only in-kind create/redeem processes, nor how market makers or other liquidity participants would use NAV to determine such an ETP's "pricing levels with respect to order flow." As for the assertion that the price source is even more important for bitcoin ETPs because of the number of platforms and the price differences between them, the commenter does not elaborate further and does not explain why the opposite conclusion is not equally valid – that the price source (i.e., the Constituent Bitcoin Platforms) is less important in light of other bitcoin platforms with different prices.

109 See supra notes 81-85 and accompanying text.

110 See Notice, 86 FR at 19925 ("While the Sponsor believes that the Reference Rate which it uses to value the Trust's bitcoin is itself resistant to manipulation based on the methodology further described below, the fact that creations and redemptions are only available in-kind makes the manipulability of the Reference Rate significantly less important.").

111 See id. (concluding that "because the Trust will not accept cash to buy bitcoin in order to create new shares or, barring a forced redemption of the Trust or under other

uses to value the Trust's bitcoin "is not particularly important," it follows that the Reference Rate's resistance to manipulation is not material to the Shares' susceptibility to fraud and manipulation. As the Exchange does not address or provide any analysis with respect to these issues, the Commission cannot conclude that the Reference Rate aids in the determination that the proposal to list and trade the Shares is designed to prevent fraudulent and manipulative acts and practices.

Finally, the Commission finds that BZX has not demonstrated that in-kind creations and redemptions provide the Shares with a unique resistance to manipulation. The Commission has previously addressed similar assertions.[112] As the Commission stated before, in-kind creations and redemptions are a common feature of ETPs, and the Commission has not previously relied on the in-kind creation and redemption mechanism as a basis for excusing exchanges that list ETPs from entering into surveillance-sharing agreements with significant, regulated markets related to the portfolio's assets.[113] Accordingly, the Commission is not persuaded here that the Trust's in-kind creations and redemptions afford it a unique resistance to manipulation.[114]

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extraordinary circumstances, be forced to sell bitcoin to pay cash for redeemed shares, the price that the Sponsor uses to value the Trust's bitcoin is not particularly important.").

112 See Winklevoss Order, 83 FR at 37589-90; USBT Order, 85 FR at 12607-08.

113 See, e.g., iShares COMEX Gold Trust, Securities Exchange Act Release No. 51058 (Jan. 19, 2005), 70 FR 3749, 3751-55 (Jan. 26, 2005) (SR-Amex-2004-38); iShares Silver Trust, Securities Exchange Act Release No. 53521 (Mar. 20, 2006), 71 FR 14969, 14974 (Mar. 24, 2006) (SR-Amex-2005-072).

114 Putting aside the Exchange's various assertions about the nature of bitcoin and the bitcoin market, the Reference Rate, and the Shares, the Exchange also does not address concerns the Commission has previously identified, including the susceptibility of bitcoin markets to potential trading on material, non-public information (such as plans of market participants to significantly increase or decrease their holdings in bitcoin; new sources of demand for bitcoin; the decision of a bitcoin-based investment vehicle on how to respond to a "fork" in the bitcoin blockchain, which would create two different, non-interchangeable types of bitcoin), or to the dissemination of false or misleading

(2) Assertions That BZX Has Entered Into a Comprehensive Surveillance-Sharing Agreement with a Regulated Market of Significant Size

As BZX has not demonstrated that other means besides surveillance-sharing agreements will be sufficient to prevent fraudulent and manipulative acts and practices, the Commission next examines whether the record supports the conclusion that BZX has entered into a comprehensive surveillance-sharing agreement with a regulated market of significant size relating to the underlying assets. In this context, the term "market of significant size" includes a market (or group of markets) as to which (i) there is a reasonable likelihood that a person attempting to manipulate the ETP would also have to trade on that market to successfully manipulate the ETP, so that a surveillance-sharing agreement would assist in detecting and deterring misconduct, and (ii) it is unlikely that trading in the ETP would be the predominant influence on prices in that market.[115]

As the Commission has stated in the past, it considers two markets that are members of the ISG to have a comprehensive surveillance-sharing agreement with one another, even if they do not have a separate bilateral surveillance-sharing agreement.[116] Accordingly, based on the common membership of BZX and the CME in the ISG,[117] BZX has the equivalent of a comprehensive surveillance-sharing agreement with CME. However, while the Commission

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information. See Winklevoss Order, 83 FR at 37585. See also USBT Order, 85 FR at 12600-01.

115 See Winklevoss Order, 83 FR at 37594. This definition is illustrative and not exclusive. There could be other types of "significant markets" and "markets of significant size," but this definition is an example that provides guidance to market participants. See id.

116 See id. at 37580 n.19.

117 See Notice, 86 FR at 19924 n.60 and accompanying text.

recognizes that the CFTC regulates the CME futures market,[118] including the CME bitcoin futures market, and thus such market is "regulated," in the context of the proposed ETP, the record does not, as explained further below, establish that the CME bitcoin futures market is a "market of significant size" as that term is used in the context of the applicable standard here.[119]

(i) Whether There is a Reasonable Likelihood That a Person Attempting to Manipulate the ETP Would Also Have to Trade on the CME Bitcoin Futures Market to Successfully Manipulate the ETP

The first prong in establishing whether the CME bitcoin futures market constitutes a "market of significant size" is the determination that there is a reasonable likelihood that a person attempting to manipulate the ETP would have to trade on the CME bitcoin futures market to successfully manipulate the ETP.

BZX notes that the CME began to offer trading in bitcoin futures in 2017.[120] According to BZX, nearly every measurable metric related to CME bitcoin futures contracts, which trade and settle like other cash-settled commodity futures contracts, has "trended consistently up since

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118 While the Commission recognizes that the CFTC regulates the CME, the CFTC is not responsible for direct, comprehensive regulation of the underlying bitcoin spot market. See Winklevoss Order, 83 FR at 37587, 37599. See also supra notes 98-100 and accompanying text.

119 A commenter asserts that CME, Bakkt, and Crypto Facilities are the only venues that offer bitcoin futures trading under "relevant capital markets regulation." See CF Benchmarks Letter at 6. BZX, however, argues only that the CME is a regulated market of significant size. In addition, as described above (see supra notes 91-100 and accompanying text), in the context of the proposed ETP, the Constituent Bitcoin Platforms are not "regulated." They are not registered as "exchanges" and lack the obligations, authority, and oversight of national securities exchanges. Thus the Commission limits the scope of its analysis to CME.

120 According to BZX, each contract represents five bitcoin and is based on the CME CF BRR. See Notice, 86 FR at 19922.

launch and/or accelerated upward in the past year."[121] For example, according to BZX, there was approximately $28 billion in trading in CME bitcoin futures in December 2020 compared to $737 million, $1.4 billion, and $3.9 billion in total trading in December 2017, December 2018, and December 2019, respectively.[122] Additionally, CME bitcoin futures traded over $1.2 billion per day in December 2020 and represented $1.6 billion in open interest compared to $115 million in December 2019.[123] Similarly, BZX contends that the number of large open interest holders[124] has continued to increase, even as the price of bitcoin has risen, as have the number of unique accounts trading CME bitcoin futures.[125]

BZX argues that the significant growth in CME bitcoin futures across each of trading volumes, open interest, large open interest holders, and total market participants since the USBT Order was issued is reflective of that market's growing influence on the spot price. BZX asserts that where CME bitcoin futures lead the price in the spot market such that a potential manipulator of the bitcoin spot market (beyond just the Constituent Bitcoin Platforms) would have to participate in the CME bitcoin futures market, it follows that a potential manipulator of the Shares would similarly have to transact in the CME bitcoin futures market.[126]

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121 See id.

122 See id.

123 See id.

124 BZX represents that a large open interest holder in CME bitcoin futures is an entity that holds at least 25 contracts, which is the equivalent of 125 bitcoin. According to BZX, at a price of approximately $30,000 per bitcoin on December 31, 2020, more than 80 firms had outstanding positions of greater than $3.8 million in CME bitcoin futures. See id. at 19922 n.54.

125 See id. at 19922.

126 See id. at 19924, 19929.

BZX further states that academic research corroborates the overall trend outlined above and supports the thesis that CME bitcoin futures pricing leads the spot market. BZX asserts that academic research demonstrates that the CME bitcoin futures market was already leading the spot price in 2018 and 2019.[127] BZX concludes that a person attempting to manipulate the Shares would also have to trade on that market to manipulate the ETP.[128]

The Commission disagrees. The record does not demonstrate that there is a reasonable likelihood that a person attempting to manipulate the proposed ETP would have to trade on the CME bitcoin futures market to successfully manipulate it. Specifically, BZX's assertions about the general upward trends from 2018 to February 2021 in trading volume and open interest of, and in the number of large open interest holders and number of unique accounts trading in, CME bitcoin futures do not establish that the CME bitcoin futures market is of significant size. As the Commission has previously articulated, the interpretation of the term "market of significant size" or "significant market" depends on the interrelationship between the market with which the listing exchange has a surveillance-sharing agreement and the proposed ETP.[129] BZX's recitation of data reflecting the size of the CME bitcoin futures market, alone, either currently or in relation to previous years, is not sufficient to establish an interrelationship between the CME bitcoin futures market and the proposed ETP.[130]

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127 See id. at 19923 & n.55 (citing Y. Hu, Y. Hou & L. Oxley, What role do futures markets play in Bitcoin pricing? Causality, cointegration and price discovery from a time-varying perspective, 72 Int'l Rev. of Fin. Analysis 101569 (2020) (available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7481826/) ("Hu, Hou & Oxley")).

128 See id. at 19923.

129 See USBT Order, 85 FR at 12611.

130 See id. at 12612.

Further, the evidence in the record for this proposal also does not support a conclusion that the CME bitcoin futures market leads the bitcoin spot market in such a manner that the CME bitcoin futures market is a "market of significant size." As the Commission has previously explained, establishing a lead-lag relationship between the bitcoin futures market and the spot market is "central to understanding whether it is reasonably likely that a would-be manipulator of the ETP would need to trade on the bitcoin futures market to successfully manipulate prices on those spot platforms that feed into the proposed ETP's pricing mechanism."[131] The Commission has previously stated that, in particular, if the spot market leads the futures market, this would indicate that it would not be necessary to trade on the futures market to manipulate the proposed ETP, because the futures price would move to meet the spot price.[132]

While BZX states that CME bitcoin futures pricing leads the spot market,[133] it relies on the findings of a price discovery analysis in one section of a single academic paper to support the overall thesis.[134] However, the findings of that paper's Granger causality analysis, which is widely used to formally test for lead-lag relationships, are concededly mixed.[135] In addition, the

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131 See id.

132 See id.

133 See Notice, 86 FR at 19923.

134 See supra note 127 and accompanying text. BZX references the following conclusion from the "time-varying price discovery" section of Hu, Hou & Oxley: "There exist no episodes where the Bitcoin spot markets dominates the price discovery processes with regard to Bitcoin futures. This points to a conclusion that the price formation originates solely in the Bitcoin futures market. We can, therefore, conclude that the Bitcoin futures markets dominate the dynamic price discovery process based upon time-varying information share measures. Overall, price discovery seems to occur in the Bitcoin futures markets rather than the underlying spot market based upon a time-varying perspective…" See Notice, 86 FR at 19923 n.55.

135 The paper finds that the CME bitcoin futures market dominates the spot markets in terms of Granger causality, but that the causal relationship is bi-directional, and a Granger causality episode from March 2019 to June/July 2019 runs from bitcoin spot prices to

Commission considered an unpublished version of the paper in the USBT Order, as well as a comment letter submitted by the authors on that record.[136] In the USBT Order, as part of the Commission's conclusion that "mixed results" in academic studies failed to demonstrate that the CME bitcoin futures market constitutes a market of significant size, the Commission noted the paper's inconclusive evidence that CME bitcoin futures prices lead spot prices – in particular that the months at the end of the paper's sample period showed that the spot market was the leading market – and stated that the record did not include evidence to explain why this would not indicate a shift towards prices in the spot market leading the futures market that would be expected to persist into the future.[137] The Commission also stated that the paper's use of daily price data, as opposed to intraday prices, may not be able to distinguish which market incorporates new information faster.[138] BZX has not addressed either issue.

Moreover, BZX does not provide results of its own analysis and does not present any other data supporting its conclusion. BZX's unsupported representations constitute an insufficient basis for approving a proposed rule change in circumstances where, as here, the Exchange's assertion would form such an integral role in the Commission's analysis and the assertion is subject to several challenges.[139] In this context, BZX's reliance on a single paper, whose own lead-lag results are inconclusive, is especially lacking because the academic

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CME bitcoin futures prices. The paper concludes: "[T]he Granger causality episodes are not constant throughout the whole sample period. Via our causality detection methods, market participants can identify when markets are being led by futures prices and when they might not be." See Hu, Hou & Oxley, supra note 127.

136 See USBT Order, 85 FR at 12609.

137 See id. at 12613 n.244.

138 See id.

139 See Susquehanna, 866 F.3d at 447.

literature on the lead-lag relationship and price discovery between bitcoin spot and futures markets is unsettled.[140] In the USBT Order, the Commission responded to multiple academic papers that were cited and concluded that, in light of the mixed results found, the exchange there had not demonstrated that it is reasonably likely that a would-be manipulator of the proposed ETP would transact on the CME bitcoin futures market.[141] Likewise, here, given the body of academic literature to indicate to the contrary, the Commission concludes that the information that BZX provides is not a sufficient basis to support a determination that it is reasonably likely

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140 See, e.g., D. Baur & T. Dimpfl, Price discovery in bitcoin spot or futures?, 39 J. Futures Mkts. 803 (2019) (finding that the bitcoin spot market leads price discovery); O. Entrop, B. Frijns & M. Seruset, The determinants of price discovery on bitcoin markets, 40 J. Futures Mkts. 816 (2020) (finding that price discovery measures vary significantly over time without one market being clearly dominant over the other); J. Hung, H. Liu & J. Yang, Trading activity and price discovery in Bitcoin futures markets, 62 J. Empirical Finance 107 (2021) (finding that the bitcoin spot market dominates price discovery); B. Kapar & J. Olmo, An analysis of price discovery between Bitcoin futures and spot markets, 174 Econ. Letters 62 (2019) (finding that bitcoin futures dominate price discovery); E. Akyildirim, S. Corbet, P. Katsiampa, N. Kellard & A. Sensoy, The development of Bitcoin futures: Exploring the interactions between cryptocurrency derivatives, 34 Fin. Res. Letters 101234 (2020) (finding that bitcoin futures dominate price discovery); A. Fassas, S. Papadamou, & A. Koulis, Price discovery in bitcoin futures, 52 Res. Int'l Bus. Fin. 101116 (2020) (finding that bitcoin futures play a more important role in price discovery) ("Fassas et al"); S. Aleti & B. Mizrach, Bitcoin spot and futures market microstructure, 41 J. Futures Mkts. 194 (2021) (finding that relatively more price discovery occurs on the CME as compared to four spot exchanges); J. Wu, K. Xu, X. Zheng & J. Chen, Fractional cointegration in bitcoin spot and futures markets, 41 J. Futures Mkts. 1478 (2021) (finding that CME bitcoin futures dominate price discovery). See also C. Alexander & D. Heck, Price discovery in Bitcoin: The impact of unregulated markets, 50 J. Financial Stability 100776 (2020) (finding that, in a multi-dimensional setting, including the main price leaders within futures, perpetuals, and spot markets, CME bitcoin futures have a very minor effect on price discovery; and that faster speed of adjustment and information absorption occurs on the unregulated spot and derivatives platforms than on CME bitcoin futures) ("Alexander & Heck").

141 See USBT Order, 85 FR at 12613 nn.239-244 and accompanying text.

that a would-be manipulator of the proposed ETP would have to trade on the CME bitcoin futures market.[142]

The Benchmark Administrator, in a comment letter, also asserts that a body of research from both academic and commercial sources "has amply demonstrated that price discovery for bitcoin is largely achieved through the CME BTC-USD futures market as opposed to the spot markets," and that such conclusions "have not been widely challenged in the academic literature."[143] This commenter argues that the combination of (1) the CME bitcoin futures market leading price formation, (2) the CME bitcoin futures market constituting a "significant proportion" of the bitcoin futures market,[144] (3) the Constituent Bitcoin Platforms accounting for

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142 In addition, the Exchange fails to address the lead-lag relationship (if any) between prices on other bitcoin futures markets and the CME bitcoin futures market, the bitcoin spot market, and/or the particular Constituent Bitcoin Platforms, or where price formation occurs when the entirety of bitcoin futures markets, not just CME, is considered.

143 See CF Benchmarks Letter at 6 (citing Fassas et al and A. Chang, W. Herrmann & W. Cai, Efficient Price Discovery in the Bitcoin Markets, Wilshire Phoenix, Oct. 14, 2020 ("Wilshire Phoenix")). Another commenters also argues that the CME is a market of significant size. See GDF Letter at 5. This commenter states that there is "no doubt" that the CME represents a market of significant size because, as of May 2021, it had the second-largest amount of open interest, and represented roughly 15.5 percent of total open interest in bitcoin futures. The commenter also references the Wilshire Phoenix working paper which suggests that the CME bitcoin futures market contribute more to price discovery than its related spot markets. The commenter, however, also states that "the crypto markets do change rapidly," and cites Alexander & Heck (see also supra note 140) for an opposing view that the CME bitcoin futures contribute far less than spot markets to price discovery. The Commission finds that this additional information is not sufficient to establish that the CME is a market of "significant size." As noted above, data reflecting the size of the CME bitcoin futures market, alone, is not sufficient to establish an interrelationship between the CME bitcoin futures market and the proposed ETP, and the papers cited by the commenter evidences the unsettled nature of the academic literature.

144 The commenter states that the CME accounts for approximately 15 percent of all bitcoin futures open interest, and asserts that, while it is difficult to ascertain what proportion of the total bitcoin derivatives market is represented by CME, it is likely that it constitutes

a "significant proportion" of the bitcoin spot markets,[145] (4) the Trust striking its NAV to the Reference Rate, which is calculated using transaction data from the Constituent Bitcoin Platforms, and (5) the Shares being traded by authorized participants who will use the CME bitcoin futures market and underlying bitcoin spot markets as "liquidity rails" for pricing and arbitrage, means that any attempted manipulator of the Trust will have to undertake trading on both the CME and at least one, likely more than one, of the five Constituent Bitcoin Platforms to engage in potentially manipulative acts.[146] The commenter states that this demonstrates that the CME bitcoin futures market can be considered a "significant market."[147]

The Commission does not agree. The Commission has already addressed and rejected three of these assertions—that CME bitcoin futures lead price discovery,[148] the size of the CME bitcoin futures market,[149] and the relevance of using the Reference Rate to compute NAV.[150] As with the size of the CME market, data reflecting the size of the Constituent Bitcoin Platforms as a proportion of all bitcoin spot trading also does not help to establish an interrelationship

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significantly more than the 15 percent—"very likely 30 percent plus"—of all bona fide bitcoin futures trading. See CF Benchmarks Letter at 6.

145 The commenter states that, although difficult to fully verify due to the distributed nature of cryptocurrency trading and the difficulting identifying bona fide trading volumes, the BTC-USD markets of the Constituent Bitcoin Platforms constitute roughly 76 percent of all BTC-USD trading from cryptocurrency trading platforms whose volumes are publicly available during the period January 2020-March 2021. The commenter further estimates that the Constituent Bitcoin Platforms account for 15 percent of all bitcoin trading and "very likely 25 percent plus" of all bona fide bitcoin trading conducted on trading platforms. See id. at 4-5.

146 See id. at 7.

147 See id.

148 See supra notes 134-142 and accompanying text.

149 See supra notes 129-130 and accompanying text.

150 See supra notes 86-111 and accompanying text.

between the CME bitcoin futures market and the proposed ETP. Nor does it establish how fraud and manipulation on other bitcoin spot markets may influence the price of bitcoin. Finally, the commenter assumes, without any supporting evidence, that authorized participants will use the CME bitcoin futures market (as well as underlying bitcoin spot market) "for pricing and arbitrage." Even assuming the commenter is correct that authorized participants would transact on bitcoin futures markets, the commenter does not explain why they would transact on the CME rather than on any other bitcoin futures markets.

The Commission accordingly concludes that the information provided in the record does not establish a reasonable likelihood that a would-be manipulator of the proposed ETP would have to trade on the CME bitcoin futures market to successfully manipulate the proposed ETP. Therefore, the information in the record also does not establish that the CME bitcoin futures market is a "market of significant size" with respect to the proposed ETP.

(ii) Whether It is Unlikely that Trading in the Proposed ETP Would Be the Predominant Influence on Prices in the CME Bitcoin Futures Market

The second prong in establishing whether the CME bitcoin futures market constitutes a "market of significant size" is the determination that it is unlikely that trading in the proposed ETP would be the predominant influence on prices in the CME bitcoin futures market.[151]

BZX asserts that trading in the Shares would not be the predominant force on prices in the CME bitcoin futures market (or spot market) because of the significant volume in the CME bitcoin futures market, the size of bitcoin's market capitalization, which is approximately $1 trillion, and the significant liquidity available in the spot market.[152] BZX provides that, according

151 See Winklevoss Order, 83 FR at 37594; USBT Order, 85 FR at 12596-97.

152 See Notice, 86 FR at 19925.

to February 2021 data, the cost to buy or sell $5 million worth of bitcoin averages roughly 10 basis points with a market impact of 30 basis points.[153] For a $10 million market order, the cost to buy or sell is roughly 20 basis points with a market impact of 50 basis points. Stated another way, BZX states that a market participant could enter a market buy or sell order for $10 million of bitcoin and only move the market 0.5 percent.[154] BZX further asserts that more strategic purchases or sales (such as using limit orders and executing through OTC bitcoin trade desks) would likely have less obvious impact on the market, which is consistent with MicroStrategy, Tesla, and Square being able to collectively purchase billions of dollars in bitcoin.[155] Thus, BZX concludes that the combination of CME bitcoin futures leading price discovery, the overall size of the bitcoin market, and the ability for market participants (including authorized participants creating and redeeming in-kind with the Trust) to buy or sell large amounts of bitcoin without significant market impact, will help prevent the Shares from becoming the predominant force on pricing in either the bitcoin spot or the CME bitcoin futures market.[156]

The Commission does not agree. The record does not demonstrate that it is unlikely that trading in the proposed ETP would be the predominant influence on prices in the CME bitcoin futures market. As the Commission has already addressed and rejected one of the bases of BZX's

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153 See id. According to BZX, these statistics are based on samples of bitcoin liquidity in U.S. dollars (excluding stablecoins or Euro liquidity) based on executable quotes on Coinbase Pro, Gemini, Bitstamp, Kraken, LMAX Exchange, BinanceUS, and OKCoin during February 2021. See id. nn.64-65.

154 See id. at 19925.

155 See id.

156 See id.

assertion—that CME bitcoin futures leads price discovery[157]—it will only address below the other two bases: the overall size of, and the impact of buys and sells on, the bitcoin market.

BZX's assertions about the potential effect of trading in the Shares on the CME bitcoin futures market and bitcoin spot market are general and conclusory, repeating the aforementioned trade volume of the CME bitcoin futures market and the size and liquidity of the bitcoin spot market, as well as the market impact of a large transaction, without any analysis or evidence to support these assertions. For example, there is no limit on the amount of mined bitcoin that the Trust may hold. Yet BZX does not provide any information on the expected growth in the size of the Trust and the resultant increase in the amount of bitcoin held by the Trust over time, or on the overall expected number, size, and frequency of creations and redemptions – or how any of the foregoing could (if at all) influence prices in the CME bitcoin futures market. Moreover, in the Trust's Registration Statement, the Sponsor acknowledges that the Trust may acquire large size positions in bitcoin, which would increase the risk of illiquidity in the underlying bitcoin. Specifically, the Sponsor, in the Registration Statement, states that the Trust may acquire large size positions in bitcoin, which will increase the risk of illiquidity by both making the positions more difficult to liquidate and increasing the losses incurred while trying to do so, or by making it more difficult for authorized participants to acquire or liquidate bitcoin as part of the creation and/or redemption of Shares of the Trust.[158] Although the Trust's Registration Statement concedes that the Trust could negatively affect the liquidity of bitcoin, BZX does not address this in the proposal or discuss how impacting the liquidity of bitcoin can be consistent with the assertion that the Shares are unlikely to be the predominant influence on the prices of the CME

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157 See supra notes 134-142 and accompanying text.

158 See Registration Statement at 32.

bitcoin futures market. Thus, the Commission cannot conclude, based on BZX's statements alone and absent any evidence or analysis in support of BZX's assertions, that it is unlikely that trading in the ETP would be the predominant influence on prices in the CME bitcoin futures market.

The Commission also is not persuaded by BZX's assertions about the minimal effect a large market order to buy or sell bitcoin would have on the bitcoin market.[159] While BZX concludes by way of a $10 million market order example that buying or selling large amounts of bitcoin would have insignificant market impact, the conclusion does not analyze the extent of any impact on the CME bitcoin futures market. Even assuming that BZX is suggesting that a single $10 million order in bitcoin would have immaterial impact on the prices in the CME bitcoin futures market, this prong of the "market of significant size" determination concerns the influence on prices from trading in the proposed ETP, which is broader than just trading by the proposed ETP. While authorized participants of the Trust might only transact in the bitcoin spot market as part of their creation or redemption of Shares, the Shares themselves would be traded in the secondary market on BZX. The record does not discuss the expected number or trading volume of the Shares, or establish the potential effect of the Shares' trade prices on CME bitcoin futures prices. For example, BZX does not provide any data or analysis about the potential effect the quotations or trade prices of the Shares might have on market-maker quotations in CME bitcoin futures contracts and whether those effects would constitute a predominant influence on the prices of those futures contracts.

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159 See Notice, 86 FR at 19929 ("For a $10 million market order, the cost to buy or sell is roughly 20 basis points with a market impact of 50 basis points. Stated another way, a market participant could enter a market buy or sell order for $10 million of bitcoin and only move the market 0.5%.").

Thus, because BZX has not provided sufficient information to establish both prongs of the "market of significant size" determination, the Commission cannot conclude that the CME bitcoin futures market is a "market of significant size" such that BZX would be able to rely on a surveillance-sharing agreement with the CME to provide sufficient protection against fraudulent and manipulative acts and practices.

The requirements of Section 6(b)(5) of the Exchange Act apply to the rules of national securities exchanges. Accordingly, the relevant obligation for a comprehensive surveillance-sharing agreement with a regulated market of significant size, or other means to prevent fraudulent and manipulative acts and practices that are sufficient to justify dispensing with the requisite surveillance-sharing agreement, resides with the listing exchange. Because there is insufficient evidence in the record demonstrating that BZX has satisfied this obligation, the Commission cannot approve the proposed ETP for listing and trading on BZX.

C. Whether BZX Has Met Its Burden to Demonstrate That the Proposal Is Designed to Protect Investors and the Public Interest

BZX contends that, if approved, the proposed ETP would protect investors and the public interest. However, the Commission must consider these potential benefits in the broader context of whether the proposal meets each of the applicable requirements of the Exchange Act.[160] Because BZX has not demonstrated that its proposed rule change is designed to prevent fraudulent and manipulative acts and practices, the Commission must disapprove the proposal.

BZX asserts that, with the growth of U.S. investor exposure to bitcoin through OTC bitcoin funds, so too has grown the potential risk to U.S. investors.[161] Specifically, BZX argues

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160 See Winklevoss Order, 83 FR at 37602. See also GraniteShares Order, 83 FR at 43931; ProShares Order, 83 FR at 43941; USBT Order, 85 FR at 12615.

161 See Notice, 86 FR at 19920.

that premium and discount volatility, high fees, insufficient disclosures, and technical hurdles are putting U.S. investor money at risk on a daily basis and that such risk could potentially be eliminated through access to a bitcoin ETP.[162] As such, the Exchange believes that approving this proposal (and comparable proposals submitted hereafter) would give U.S. investors access to bitcoin in a regulated and transparent exchange-traded vehicle that would act to limit risk to U.S. investors by: (i) reducing premium and discount volatility; (ii) reducing management fees through meaningful competition; (iii) providing an alternative to custodying spot bitcoin; and (iv) reducing risks associated with investing in operating companies that are imperfect proxies for bitcoin exposure.[163]

According to BZX, OTC bitcoin funds are generally designed to provide exposure to bitcoin in a manner similar to the Shares. However, unlike the Shares, BZX states that "OTC bitcoin funds are unable to freely offer creation and redemption in a way that incentivizes market participants to keep their shares trading in line with their NAV and, as such, frequently trade at a price that is out-of-line with the value of their assets held."[164] BZX represents that, historically, OTC bitcoin funds have traded at a significant premium to NAV.[165] Although the Exchange

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162 See id. BZX states that while it understands the Commission's previous focus on potential manipulation of a bitcoin ETP in prior disapproval orders, it now believes that "such concerns have been sufficiently mitigated and that the growing and quantifiable investor protection concerns should be the central consideration as the Commission reviews this proposal." See id.

163 See id.

164 See id. BZX also states that, unlike the Shares, because OTC bitcoin funds are not listed on an exchange, they are not subject to the same transparency and regulatory oversight by a listing exchange. BZX further asserts that the existence of a surveillance-sharing agreement between BZX and the CME bitcoin futures market would result in increased investor protections for the Shares compared to OTC bitcoin funds. See id. at 19920 n.39.

165 See id. at 19920. BZX further represents that the inability to trade in line with NAV may at some point result in OTC bitcoin funds trading at a discount to their NAV. According

concedes that trading at a premium (or potentially a discount) is not unique to OTC bitcoin funds and not inherently problematic, BZX believes that it raises certain investor protections issues. First, according to BZX, investors are buying shares of a fund for a price that is not reflective of the per share value of the fund's underlying assets.[166] Second, according to BZX, because only accredited investors, generally, are able to create or redeem shares with the issuing trust and can buy or sell shares directly with the trust at NAV (in exchange for either cash or bitcoin) without having to pay the premium or sell into the discount, these investors that are allowed to interact directly with the trust are able to hedge their bitcoin exposure as needed to satisfy holding requirements and collect on the premium or discount opportunity. BZX argues, therefore, that the premium in OTC bitcoin funds essentially creates a direct payment from retail investors to more sophisticated investors.[167]

One commenter expresses support for the approval of bitcoin ETPs because they believe such ETPs would have lower premium/discount volatility and lower management fees than an OTC bitcoin fund.[168] Another commenter asserts that the reality is that many U.S. investors are investing in products overseas, which complicates U.S. regulatory reach, or investing in U.S. bitcoin products that have historically exhibited significant premiums or discounts to net asset value, among other issues; and that to the extent that U.S. investors are able to use U.S. regulated products, that should increase investor protection.[169]

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to BZX, while that has not historically been the case, trading at a discount would give rise to nearly identical potential issues related to trading at a premium. See id. at 19920 n.40.

166 See id. at 19920.

167 See id. at 19921.

168 See letter from Anonymous, dated June 17, 2021 ("Anonymous Letter").

169 See GDF Letter at 4.

BZX also asserts that exposure to bitcoin through an ETP also presents advantages for retail investors compared to buying spot bitcoin directly.[170] BZX asserts that, without the advantages of an ETP, an individual retail investor holding bitcoin through a cryptocurrency trading platform lacks protections.[171] BZX explains that, typically, retail platforms hold most, if not all, retail investors' bitcoin in "hot" (Internet-connected) storage and do not make any commitments to indemnify retail investors or to observe any particular cybersecurity standard.[172] Meanwhile, a retail investor holding spot bitcoin directly in a self-hosted wallet may suffer from inexperience in private key management (e.g., insufficient password protection, lost key, etc.), which could cause them to lose some or all of their bitcoin holdings.[173] BZX represents that the Bitcoin Custodian would, by contrast, use "cold" (offline) storage to hold private keys, employ a certain degree of cybersecurity measures and operational best practices, be highly experienced in bitcoin custody, and be accountable for failures.[174] In addition, BZX explains that retail investors would be able to hold the Shares in traditional brokerage accounts, which provide SIPC protection if a brokerage firm fails.[175] Thus, with respect to custody of the Trust's bitcoin assets, BZX concludes that, compared to owning spot bitcoin directly, the Trust presents advantages from an investment protection standpoint for retail investors.[176]

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170 See Notice, 86 FR at 19921.

171 See id.

172 See id.

173 See id.

174 See id.

175 See id.

176 See id. One commeter agrees that there are certain advantages, particularly for "average" and first-time crypto investors, to bitcoin ETPs, including not having to secure keys or digital wallets, and greater protection from online hacking or theft if funds are secured offline in cold storage. See GDF Letter at 1-2. Another commenter is a NYSDFS-

BZX further asserts that a number of operating companies engaged in unrelated businesses have announced investments as large as $1.5 billion in bitcoin.[177] Without access to bitcoin ETPs, BZX argues that retail investors seeking investment exposure to bitcoin may purchase shares in these companies in order to gain the exposure to bitcoin that they seek.[178] BZX contends that such operating companies, however, are imperfect bitcoin proxies and provide investors with partial bitcoin exposure paired with additional risks associated with whichever operating company they decide to purchase. BZX concludes that investors seeking bitcoin exposure through publicly traded companies are gaining only partial exposure to bitcoin and are not fully benefitting from the risk disclosures and associated investor protections that come from the securities registration process.[179]

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chartered trust company for purposes of providing non-discretionary fiduciary custody of digital assets. This commenter agrees that regulated, secure custodial solutions exist in the marketplace to support the Trust's operations. The commenter states that NYSDFS subjects it to additional controls tailored to the risks presented by digital asset custody, including robust review of its wallet environment, capitalization, AML procedures, confidentiality, security, and storage architecture. The commenter states that its cold storage solution is the same architecture used by its affiliated trading platform, is built on best practices across both cyber and physical security, and has not lost any customer funds due to a security breach over the past eight years. The commenter specifies that this solution employs proprietary key generation ceremonies, a geographically distributed network of vaults to store the keys, and multiple levels of technical and protocol-specific consensus and security requirements. According to the commenter, it offers broad and deep digital asset insurance, and is regularly audited by major financial and security audit firms. See letter from Coinbase Custody Trust Company, LLC, dated May 7, 2021.

177 See Notice, 86 FR at 19921.

178 See id.

179 See id. at 19922.

BZX also states that investors in many other countries, including Canada, are able to use more traditional exchange-listed and traded products to gain exposure to bitcoin, disadvantaging U.S. investors and leaving them with more risky means of getting bitcoin exposure.[180]

In essence, BZX asserts that the risky nature of direct investment in the underlying bitcoin and the unregulated markets on which bitcoin and OTC bitcoin funds trade compel approval of the proposed rule change. BZX, however, offers no limiting 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 presents marginally less risk to investors than a direct investment in the underlying asset or in an OTC-traded product.

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

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180 See id. at 19920. BZX represents that the Purpose Bitcoin ETF, a retail bitcoin-based ETP launched in Canada, reportedly reached $421.8 million in assets under management in two days, demonstrating the demand for a North American market listed bitcoin ETP. BZX contends that the Purpose Bitcoin ETF also offers a class of units that is U.S. dollar denominated, which could appeal to U.S. investors. BZX also argues that without an approved bitcoin ETP in the U.S. as a viable alternative, U.S. investors could seek to purchase these shares in order to get access to bitcoin exposure. BZX believes that, given the separate regulatory regime and the potential difficulties associated with any international litigation, such an arrangement would create more risk exposure for U.S. investors than they would otherwise have with a U.S. exchange-listed ETP. See id. at 19920 n.37. BZX also notes that regulators in other countries have either approved or otherwise allowed the listing and trading of bitcoin-based ETPs. See id. at 19920 n.38.

finding.[181] 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 the requirements under the Exchange Act.[182]

Here, even if it were true that, compared to trading in unregulated bitcoin spot markets, trading a bitcoin-based ETP on a national securities exchange provides some additional protection to investors, the Commission must consider this potential benefit in the broader context of whether the proposal meets each of the applicable requirements of the Exchange Act.[183] As explained above, for bitcoin-based ETPs, the Commission has consistently required that the listing exchange have a comprehensive surveillance-sharing agreement with a regulated market of significant size related to bitcoin, or demonstrate that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with the requisite surveillance-sharing agreement. The listing exchange has not met that requirement here. Therefore, the Commission is unable to find that the proposed rule change is consistent with the statutory standard.

Pursuant to Section 19(b)(2) of the Exchange Act, the Commission must disapprove a proposed rule change filed by a national securities exchange if it does not find 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.[184]

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

182 See SolidX Order, 82 FR at 16259.

183 See supra note 160.

184 See 15 U.S.C. 78s(b)(2)(C).

For the reasons discussed above, BZX has not met its burden of demonstrating that the proposal is consistent with Exchange Act Section 6(b)(5),[185] and, accordingly, the Commission must disapprove the proposal.[186]

D. Other Comments

Comment letters also address the general nature and uses of bitcoin;[187] the state of development of bitcoin as a digital asset;[188] the state of regulation of bitcoin markets;[189] the inherent value of, and risks of investing in, bitcoin;[190] the desire of investors to gain access to bitcoin through an ETP;[191] the potential impact of Commission approval of the proposed ETP on the price of bitcoin and on bitcoin markets;[192] the potential impact of Commission approval of bitcoin ETPs on the economy, U.S. monetary policy, U.S. innovation, and/or U.S. geopolitical

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185 15 U.S.C. 78f(b)(5).

186 In disapproving the proposed rule change, the Commission has considered its impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f). A commenter argues, for efficiency reasons, against approving a bitcoin ETP. This commenter asserts that the adoption of multiple digital assets would force merchants to deal with "complexity [that] doesn't foster [the] modularity which is needed to gain economic efficiency." See Ciao Letter 3 at 1. For the reasons discussed throughout, however, see supra note 37, the Commission is disapproving the proposed rule change because it does not find that the proposed rule change is consistent with the Exchange Act. See also USBT Order, 85 FR at 12615.

187 See, e.g., Ciao Letter 3; Patel Letter; letters from: Lourdes Ciao, dated June 2, 2021 ("Ciao Letter 1"); Lourdes Ciao, dated June 2, 2021 ("Ciao Letter 2").

188 See, e.g., GDF Letter.

189 See, e.g., GDF Letter; letter from Douglas Slemmer, dated July 23, 2021 ("Slemmer Letter").

190 See, e.g., Ciao Letter 1; Ciao Letter 3; Patel Letter; Slemmer Letter; letters from: Sam Ahn, dated April 12, 2021; Bradley M. Kuhn, dated April 25, 2021 ("Kuhn Letter").

191 See, e.g., Kuhn Letter; GDF Letter.

192 See, e.g., GDF Letter.

position;[193] the tax and/or retirement investment benefits or risks of a bitcoin ETP;[194] and the bitcoin network's effect on the environment.[195] Ultimately, however, additional discussion of these topics is unnecessary, as they do not bear on the basis for the Commission's decision to disapprove the proposal.

IV. CONCLUSION

For the reasons set forth above, the Commission does not find, pursuant to Section 19(b)(2) of the Exchange Act, that the proposed rule change is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to a national securities exchange, and in particular, with Section 6(b)(5) of the Exchange Act.

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Exchange Act, that proposed rule change SR-CboeBZX-2021-024 be, and hereby is, disapproved.

By the Commission.

J. Matthew DeLesDernier
Assistant Secretary

193 See, e.g., Ciao Letter 1; Ciao Letter 2; Ciao Letter 3.

194 See, e.g., Kuhn Letter; Ciao Letter 2; Ciao Letter 3.

195 See, e.g., Patel Letter.