

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-93860; File No. SR-CboeBZX-2021-029)

December 22, 2021

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

I. INTRODUCTION

On April 9, 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 Kryptoin Bitcoin ETF 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 28, 2021.³

On June 9, 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 23, 2021, the Commission instituted proceedings under Section

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Securities Exchange Act Release No. 91646 (Apr. 22, 2021), 86 FR 22485 (“Notice”). Comments on the proposed rule change can be found at: <https://www.sec.gov/comments/sr-cboebzx-2021-029/srcboebzx2021029.htm>.

⁴ 15 U.S.C. 78s(b)(2).

⁵ See Securities Exchange Act Release No. 92131, 86 FR 31772 (June 15, 2021).

19(b)(2)(B) of the Exchange Act⁶ to determine whether to approve or disapprove the proposed 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), and 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 bitcoin¹⁰-based commodity trusts and bitcoin-based trust issued receipts.¹¹ As the Commission has explained, an exchange

⁶ 15 U.S.C. 78s(b)(2)(B).

⁷ See Securities Exchange Act Release No. 92476, 86 FR 40883 (July 29, 2021).

⁸ See Securities Exchange Act Release No. 93175, 86 FR 55092 (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 22485.

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

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

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”); 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, Securities Exchange Act Release No. 93700 (Dec. 1, 2021), 86 FR 69322 (Dec. 7, 2021) (SR-CboeBZX-2021-024) (“WisdomTree 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, 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) (SR-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”).

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 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

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.

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.

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 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

¹⁷ See USBT Order, 85 FR at 12597.

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 (“ADRs”)). 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

Listing exchanges have also attempted to demonstrate that other means besides surveillance-sharing agreements will be sufficient to prevent fraudulent and manipulative acts 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.²² No listing exchange has satisfied its burden to make such demonstration.²³

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

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”).

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 USBT Order, 85 FR at 12597.

²³ See supra note 11.

protect investors and the public interest.²⁴ 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,²⁵ and there exist other means to prevent fraudulent and manipulative acts and practices that are sufficient to justify dispensing with the requisite surveillance-sharing agreement.²⁶

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.²⁷ 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.²⁸

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.

²⁴ See Notice, 86 FR at 22495.

²⁵ See id. at 22491-92.

²⁶ See id. at 22492.

²⁷ See id. at 22487-88, 22491, 22495-96.

²⁸ See id. at 22491, 22495.

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 custodial spot bitcoin.²⁹

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).

²⁹ See id. at 22487.

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,³⁰ 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.³¹

The investment objective of the Trust is to provide exposure to bitcoin at a price that is reflective of the actual bitcoin market where investors purchase and sell bitcoin, less the expense of the Trust's operations.³² 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 administrator of the Reference Rate is CF Benchmarks Ltd. ("Benchmark Administrator"). The Reference Rate aggregates the trade flow of several

³⁰ See Notice, *supra* note 3. See also Amendment No. 2 to Registration Statement on Form S-1, dated April 9, 2021, submitted to the Commission by Kryptoin Investment Advisors, LLC ("Sponsor") on behalf of the Trust ("Registration Statement").

³¹ Although the name of the Trust is the Kryptoin Bitcoin ETF Trust, the Trust is a commodity-based ETP. The Trust is not an exchange-traded fund, *i.e.*, an "ETF," registered under the Investment Company Act of 1940, as amended ("1940 Act"), and is not subject to regulation under the 1940 Act.

³² Delaware Trust Company is the trustee, and The Bank of New York Mellon will be the administrator ("Administrator") and transfer agent. Foreside Fund Services, LLC will be the marketing agent in connection with the creation and redemption of "baskets" of Shares, and the Sponsor will provide assistance in the marketing of the Shares. Gemini Trust Company, LLC, a third-party custodian ("Custodian"), will be responsible for custody of the Trust's bitcoin. See Notice, 86 FR at 22485, 22492-93.

bitcoin spot platforms. The current platform composition of the Reference Rate is Bitstamp, Coinbase, Gemini, itBit, and Kraken. In calculating the Reference Rate, the methodology creates a joint list of certain trade prices and sizes from the constituent platforms between 3:00 p.m. E.T. and 4:00 p.m. E.T. The methodology then divides this list into 12 equally-sized time intervals of five minutes, and it calculates the volume-weighted median trade price for each of those time intervals.³³ The Reference Rate is the arithmetic mean of these 12 volume-weighted median trade prices.³⁴

Each Share represents a fractional undivided beneficial interest in the bitcoin held by the Trust. The Trust's assets will consist of bitcoin held by the 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.³⁵

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. The NAV of the Trust is the aggregate value of the Trust's assets less its liabilities (which include estimated accrued but unpaid fees and expenses). In determining the Trust's NAV, the Administrator will value the

³³ 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 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 id. at 22493.

³⁴ See id.

³⁵ See id. at 22492.

bitcoin held by the Trust on the basis of the price of bitcoin as determined by the Reference Rate.³⁶

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 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.³⁷

When the Trust sells or redeems its Shares, it will do so in “in-kind” transactions in blocks of 50,000 Shares. When creating the Shares, authorized participants will deliver, or facilitate the delivery of, bitcoin to the Trust’s account with the Custodian in exchange for the Shares, and, when redeeming the Shares, the Trust, through the Custodian, will deliver bitcoin to such authorized participants.³⁸

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.”³⁹ Under the Commission’s Rules of Practice, the

³⁶ See *id.* at 22494.

³⁷ See *id.* at 22493.

³⁸ See *id.*

³⁹ 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

“burden to demonstrate that a proposed rule change is consistent with the Exchange Act and the rules and regulations issued thereunder . . . is on the self-regulatory organization [‘SRO’] that proposed the rule change.”⁴⁰

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,⁴¹ 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.⁴² 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.⁴³

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).

⁴⁰ Rule 700(b)(3), Commission Rules of Practice, 17 CFR 201.700(b)(3).

⁴¹ See id.

⁴² See id.

⁴³ Susquehanna Int’l Group, LLP v. Securities and Exchange Commission, 866 F.3d 442, 447 (D.C. Cir. 2017) (“Susquehanna”).

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 manipulation.⁴⁴ Such resistance to fraud and manipulation must be novel and beyond those protections that exist in traditional commodities or securities markets.⁴⁵

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.⁴⁶ 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.⁴⁷ To the extent that there are bitcoin platforms engaged in or

⁴⁴ 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.

⁴⁵ See id. at 12597.

⁴⁶ See Notice, 86 FR at 22491 n.55.

⁴⁷ See id.

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.⁴⁸ 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.⁴⁹ 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 particular bitcoin trading venue.⁵⁰ 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.⁵¹

The Sponsor, in a comment letter, states that it agrees with the Exchange’s assertion that the bitcoin spot market is resistant to price manipulation. The Sponsor asserts that the trading of bitcoin on hundreds of spot platforms in geographically diverse locations, the dispersed nature of market liquidity, and the level of capital necessarily deployed across these platforms render an attempted manipulation of the global bitcoin spot market “challenging and highly unlikely, if not impossible.”⁵² The Sponsor further states that there exists a large presence of arbitrageurs in the form of automated market makers and high-frequency and algorithmic trading firms established

⁴⁸ See id.

⁴⁹ See id.

⁵⁰ See id.

⁵¹ See id.

⁵² See letter from Jason Toussaint, Chief Executive Officer, Kryptoin Investment Advisors, LLC, dated August 19, 2021 (“Kryptoin Letter”), at 3.

to specifically seek profits by actively trading any temporary dislocations in the bitcoin price between trading venues, and that any attempt to manipulate the price of bitcoin where these firms are active would require exceeding the liquidity supply of these arbitrageurs that are effectively eliminating any cross-market pricing deviations.⁵³

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. BZX and the Sponsor assert 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. Neither the Exchange nor the Sponsor, however, provides 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 arbitrated away.⁵⁴ As stated above, “unquestioning reliance” on an SRO’s representations in a proposed rule change is not sufficient to justify Commission approval of a proposed rule change.⁵⁵

⁵³ See id. The Custodian, in a comment letter, states that it believes that certain of the Commission’s historical concerns about the bitcoin markets are ameliorated by the growth of the overall bitcoin market and related growth of regulated bitcoin derivatives. See letter from Gemini Trust Company, LLC, dated August 19, 2021 (“Gemini Letter”), at 2. Another commenter, however, asserts that the bitcoin network is the preferred network for global criminals and is 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”).

⁵⁴ In addition, the Registration Statement states that bitcoin spot platforms are not subject to the same regulatory oversight as traditional equity exchanges, which could negatively impact the ability of authorized participants to implement arbitrage mechanisms. See Registration Statement at 22. See also infra note 69 and accompanying text (referencing statements made in the Registration Statement that contradict assertions made by BZX).

⁵⁵ See supra note 43.

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.⁵⁶ 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.⁵⁷ Here, neither the Exchange nor the Sponsor provides 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, neither the Exchange nor the Sponsor takes 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.⁵⁸

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

⁵⁶ See Winklevoss Order, 83 FR at 37586; SolidX Order, 82 FR at 16256-57; USBT Order, 85 FR at 12601.

⁵⁷ See, e.g., USBT Order, 85 FR at 12601.

⁵⁸ See, e.g., Winklevoss Order, 83 FR at 37584; USBT Order, 85 FR at 12600-01. See also Registration Statement at 10 (stating that, as of the date of the Registration Statement, “the largest 100 bitcoin wallets held a substantial amount of the outstanding supply of bitcoin and it is possible that some of these wallets are controlled by the same person or entity”; that “it is possible that other persons or entities control multiple wallets that collectively hold a significant number of bitcoin, even if each wallet individually only holds a small amount”; and that “[a]s a result of this concentration of ownership, large sales by such holders could have an adverse effect on the market price of bitcoin.”).

platforms engaged in or allowing wash trading or other manipulative activities, market participants will generally ignore those platforms.⁵⁹ However, without the necessary data or other evidence, 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.⁶⁰

Additionally, the continuous nature of bitcoin trading does not eliminate manipulation risk, and neither do linkages among markets, as BZX asserts.⁶¹ 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.⁶²

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.⁶³ 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

⁵⁹ See Notice, 86 FR at 22491 n.55.

⁶⁰ See USBT Order, 85 FR at 12601.

⁶¹ See Winklevoss Order, 83 FR at 37585 n.92 and accompanying text.

⁶² See id. at 37585.

⁶³ See Notice, 86 FR at 22492, 22496.

the liquidity in the bitcoin spot market increases, it follows that the impact of \$5 million and \$10 million orders will continue to decrease.⁶⁴

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.⁶⁵ 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.⁶⁶ 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

⁶⁴ See id.

⁶⁵ 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 22492 n.61.

⁶⁶ See USBT Order, 85 FR at 12601.

orders, which have included (1) “wash” trading,⁶⁷ (2) persons with a dominant position in bitcoin 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.⁶⁸

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 the “price of bitcoin as determined by the bitcoin market has experienced periods of extreme volatility and may be influenced by, among other things, trading activity and the closing of bitcoin trading platforms due to fraud, failure, security breaches or otherwise”; that the bitcoin blockchain could be vulnerable to a “51% attack,” in which a bad actor or actors that control a majority of the processing power dedicated to mining on the bitcoin network 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, that some bitcoin platforms have been the victim of cybercrimes, subject to cybersecurity breaches, or “hacked,” resulting in losses, and that “[n]o bitcoin [platform] is immune from these risks”; that bitcoin platforms on which bitcoin trade are

⁶⁷ See supra notes 59-60 and accompanying text.

⁶⁸ 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.

relatively new and, in some cases, largely unregulated, and, therefore, may be more exposed to fraud and security breaches than established, regulated exchanges for other financial assets or instruments; and that “[o]ver the past several years, a number of bitcoin [platforms] have been closed or faced issues due to fraud, failure, security breaches or governmental regulations.”⁶⁹

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.⁷⁰ The Exchange states that the Reference Rate is calculated based on the “Relevant Transactions”⁷¹ 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.⁷² For each partition separately, the volume-weighted median trade price is calculated from the trade prices and sizes of all Relevant Transactions.⁷³ The Reference Rate is then determined by the arithmetic mean of the volume-weighted medians of all

⁶⁹ See Registration Statement at 1, 11, 13. See also Winklevoss Order, 83 FR at 37585.

⁷⁰ See Notice, 86 FR at 22492, 22497.

⁷¹ 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 Bitcoin 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 22493 n.66.

⁷² See *id.* at 22493.

⁷³ 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.⁷⁴ 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.”⁷⁵ 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.”⁷⁶

The Custodian, in a comment letter, agrees that BZX’s choice of the Reference Rate, which includes a composite of bitcoin prices from underlying spot bitcoin platforms, including the Custodian’s platform, is a further factor in support of the proposed ETP.⁷⁷ The Custodian asserts that it and other “regulated digital asset exchanges” and custodians have a history of operations in compliance with a regulatory framework developed specifically to address activities in digital assets, including guidance by the New York State Department of Financial Services (“NYDFS”) regarding the implementation of anti-fraud measures. The Custodian states that it meets this obligation through automated systems and robust internal controls and surveillance, and that the growing sophistication of market surveillance tools and strategies in the bitcoin market as well as the growing proportion of bitcoin activity occurring on “regulated exchanges” is a key development to mollify concerns about price manipulation or other

⁷⁴ See id.

⁷⁵ See id.

⁷⁶ See id.

⁷⁷ See Gemini Letter at 2.

manipulative practices in the bitcoin market.⁷⁸ The Sponsor, in a comment letter, states that global bitcoin and cryptocurrency markets are subject to increasing levels of regulation, oversight, and enforcement actions by global governments and regulatory bodies.⁷⁹

Simultaneously with these 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.”⁸⁰ The Exchange elaborates further that, “because the Trust will not accept cash 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.”⁸¹ 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.⁸² As such, BZX argues that even if the price used to value the Trust’s bitcoin is manipulated, the ratio of

⁷⁸ See id. The Custodian also states that it is registered with the Financial Crimes Enforcement Network (“FinCEN”) as a money service business and maintains money transmitter licenses (or the statutory equivalent) in all states where this is required. See Gemini Letter at 3 and infra note 98.

⁷⁹ See Kryptoin Letter at 7. The Sponsor states that in January 2019, the Singapore Government enacted the Payment Services Act, bringing cryptocurrency dealing or exchange services under the supervision of the Monetary Authority of Singapore, Singapore’s central bank and financial regulator. See id. The Sponsor, however, provides no data, information, or analysis as to how such “global governments and regulatory bodies” oversee bitcoin markets in general, or the Constituent Bitcoin Platforms in particular; or how any such regulation makes the listing and trading of the Shares inherently resistant to fraud and manipulation.

⁸⁰ See Notice, 86 FR at 22492.

⁸¹ See id.

⁸² See id.

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.⁸³ 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.⁸⁴

The Sponsor, in a comment letter, agrees that the in-kind process by which the Shares will be created and redeemed makes the Shares inherently resistant to manipulation. The Sponsor states that the “creation and redemption of Trust Shares through the in-kind exchange mechanism is solely dependent on the amount of bitcoin to be received or delivered by the Trust and is completely independent of the value of bitcoin at that point in time.”⁸⁵ The Sponsor also states that, in contrast to other OTC bitcoin funds that receive cash from investors and then purchase bitcoin in the spot market, the size and timing of which can contribute to the value of these funds’ quoted prices deviating from NAV, the Trust and its Shares will not be subjected to this potential source of NAV deviation.⁸⁶ The Sponsor further states that the fact that the Trust’s expenses are paid in bitcoin, not cash, makes these expense payments “completely independent of the value of bitcoin or the Reference Rate,” which mitigates the risk associated with potential manipulation and discourages manipulation of the Reference Rate because there is little financial incentive to do so.⁸⁷

⁸³ See id.

⁸⁴ See id.

⁸⁵ See Kryptoin Letter at 1-2.

⁸⁶ See id. at 2.

⁸⁷ See id. at 14.

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.⁸⁸ Specifically, the Exchange has not assessed the possible influence that spot platforms not included among the Constituent Bitcoin Platforms would have on bitcoin prices used to calculate the Reference Rate.⁸⁹ 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

⁸⁸ The Commission has previously considered and rejected similar arguments about the valuation of bitcoin according to a benchmark or reference price. See, e.g., SolidX Order, 82 FR at 16258; Winklevoss Order, 83 FR at 37587-90; USBT Order, 85 FR at 12599-601.

⁸⁹ 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 or Reference Rate, 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 notes 59-60 and accompanying text.

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.”⁹⁰ 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 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.”⁹¹ 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.⁹²

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.

⁹⁰ See Registration Statement at 11.

⁹¹ See USBT Order, 85 FR at 12601 n.66; see also *id.* at 12607.

⁹² See WisdomTree Order, 86 FR at 69327.

Second, the Custodian asserts that the growing sophistication of market surveillance tools and strategies used by the Constituent Bitcoin Platforms, as well as the growing proportion of bitcoin activity occurring on “regulated exchanges,” “mollify concerns about price manipulation or other manipulative practices.”⁹³ However, the level of regulation on the Constituent Bitcoin Platforms is not equivalent to the obligations, authority, and oversight of national securities exchanges or futures exchanges and therefore is not an appropriate substitute.⁹⁴ National securities exchanges are required to have rules that are “designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.”⁹⁵ Moreover, national securities exchanges must file proposed rules with the Commission regarding certain material aspects of their operations,⁹⁶ and the Commission has the authority to disapprove any such rule that is not consistent with the requirements of the Exchange Act.⁹⁷ Thus, national securities exchanges are

⁹³ See Gemini Letter at 2.

⁹⁴ See also USBT Order, 85 FR at 12603-05.

⁹⁵ See 15 U.S.C. 78f(b)(5).

⁹⁶ 17 CFR 240.19b-4(a)(6)(i).

⁹⁷ 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 Commodity Futures Trading Commission (“CFTC”) must comply with, among other things, a

subject to Commission oversight of, among other things, their governance, membership qualifications, trading rules, disciplinary procedures, recordkeeping, and fees.⁹⁸

The Constituent Bitcoin Platforms, on the other hand, have none of these requirements (none are registered as a national securities exchange).⁹⁹ Further, although the Custodian claims that the Constituent Bitcoin Platforms have market surveillance tools and strategies that are growing in sophistication, the Custodian provides no supporting evidence to substantiate its claims. Moreover, even assuming that the Constituent Bitcoin Platforms are as vigilant towards fraud and manipulation as the Custodian describes, neither the Exchange nor the Custodian

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>.

⁹⁸ See Winklevoss Order, 83 FR at 37597. The Commission notes that the 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 whether the Reference Rate’s Constituent Bitcoin Platforms have complied with this NYSDFS guidance. Further, as stated previously, there are substantial differences between the NYSDFS and FinCEN versus the Commission’s regulation. Anti-Money Laundering (“AML”) and Know-Your-Customer (“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.

⁹⁹ See 15 U.S.C. 78e, 78f.

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.

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.¹⁰⁰ 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."¹⁰¹ In BZX's own words, the Trust will not accept cash to buy bitcoin in order to

¹⁰⁰ See supra notes 80-84 and accompanying text.

¹⁰¹ See Notice, 86 FR at 22492 ("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.").

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."¹⁰² If the Reference Rate that the Trust 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.¹⁰³ As neither the Exchange nor the Sponsor addresses or provides 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.

Fifth, the Commission finds that neither BZX nor the Sponsor has demonstrated that in-kind creations and redemptions provide the Shares with a unique resistance to manipulation.¹⁰⁴

¹⁰² 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 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.").

¹⁰³ Similarly, the Sponsor asserts that the Trust and the Shares are inherently resistant to manipulation due to the in-kind create/redeem process. See Kryptoin Letter at 1. Yet in the Sponsor's own words, the creation and redemption of Shares is "completely independent" of the value of bitcoin at that point in time, *i.e.*, completely independent of the Reference Rate and the Trust's NAV. See *id.* at 2. As such, going by the Sponsor's own assertion, it again follows that the Reference Rate's resistance to manipulation is not material to the Shares' susceptibility to fraud and manipulation.

¹⁰⁴ The Sponsor asserts that the in-kind create/redeem process provides for an arbitrage pricing mechanism whereby authorized participants trade the price deviations "between the Trust's secondary market prices and NAV," keeping the Shares' price "at or near NAV" (emphasis added). See Kryptoin Letter at 2. However, this assertion is also contradicted by the Sponsor's statement that the in-kind create/redeem process means that the amount of bitcoin that an authorized participant delivers to or receives from the Trust is "completely independent" of the value of bitcoin, *i.e.*, completely independent of NAV and the Reference Rate used to compute it. See *id.* Moreover, the prerequisite of an efficient arbitrage mechanism is not unique to the proposal here, as it is a fundamental premise of any ETP or exchange-traded fund, and the Commission has not previously

The Commission has previously addressed similar assertions.¹⁰⁵ 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.¹⁰⁶ Accordingly, the Commission is not persuaded here that the Trust's in-kind creations and redemptions afford it a unique resistance to manipulation.¹⁰⁷

Finally, the Sponsor, in a comment letter, cites to the Commission's 2004 approval of the SPDR Gold Trust as evidence that a combination of (1) a deep and liquid spot market, (2) an information-sharing agreement with a commodity futures exchange, and (3) exchange trading rules to govern the trading of ETP shares by liquidity providers, justify dispensing with the

dispensed with the requirement of a surveillance-sharing agreement based on an efficient arbitrage mechanism.

¹⁰⁵ See Winklevoss Order, 83 FR at 37589-90; USBT Order, 85 FR at 12607-08.

¹⁰⁶ 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).

¹⁰⁷ 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 information. See Winklevoss Order, 83 FR at 37585. See also USBT Order, 85 FR at 12600-01.

requisite surveillance-sharing agreement.¹⁰⁸ The Sponsor states that the spot bitcoin market is deep and liquid;¹⁰⁹ that the Exchange is a member of ISG, as is the CME that lists bitcoin futures; and that the Exchange has rules in place to govern the trading of the Trust's Shares.¹¹⁰ The Sponsor concludes that, therefore, there is a solid base of evidence to support the Commission's approval of the proposed ETP.¹¹¹

The Commission disagrees. The Commission considered and discussed the Gold Order at length in the Winklevoss Order. While the Gold Order observes that it is "not possible . . . to enter into an information sharing agreement with the OTC gold market," the order continues: "Nevertheless, the Commission believes that the unique liquidity and depth of the gold market, together with the MOU [Memorandum of Understanding] with NYMEX (of which COMEX is a Division) and NYSE Rules 1300(b) and 1301, create the basis for the [ETP listing exchange] to monitor for fraudulent and manipulative practices in the trading of the Shares."¹¹² Thus, even though the Commission found that the OTC market for gold was "extremely deep and

¹⁰⁸ See Krypton Letter at 13, citing Securities Exchange Act Release No. 50604 (Oct. 28, 2004), 69 FR 64614 (Nov. 5, 2004) ("Gold Order").

¹⁰⁹ The Sponsor states that, for the six-month period ending August 13, 2021, average daily spot bitcoin trading volume across approximately 40 spot exchanges was \$9.88 billion. The Sponsor compares this to estimates in the Gold Order of the 2003 high average daily gold trading volume of \$7.9 billion (19 million troy ounces) and low average of \$5.67 billion (13.6 million troy ounces). The Sponsor believes that the bitcoin spot market therefore meets, and exceeds, the Commission's "definition" of an extremely deep and liquid market. See *id.* at 4.

¹¹⁰ The Sponsor cites BZX Rule 14.11(e)(4)(G) regarding the types of records and information that registered market makers in Commodity-Based Trust Shares must provide to the Exchange. See *id.* at 13-14.

¹¹¹ See *id.* at 13.

¹¹² See Gold Order, 69 FR at 64619.

liquid,”¹¹³ the Commission’s approval of the first precious metal ETP expressly relied on an agreement to share surveillance information between the ETP listing exchange and a significant, regulated market for gold futures.¹¹⁴ The Commission continues to maintain that the Gold Order demonstrates the importance of establishing an agreement to share surveillance information between the ETP listing exchange and a significant, regulated market.¹¹⁵ Accordingly, having a surveillance-sharing agreement with CME is not sufficient—the Exchange must demonstrate that CME is “a significant, regulated market.”

(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

¹¹³ See id.

¹¹⁴ See Winklevoss Order, 83 FR at 37592-94.

¹¹⁵ See id. at 37594. The Commission further stated that “[c]onsistent with the discussion of ‘significant market’ . . . , the Commission has not previously, and does not now, require that an ETP listing exchange be able to enter into a surveillance-sharing agreement with each regulated spot or derivatives market relating to an underlying asset, provided that the market or markets with which there is such an agreement constitute a ‘significant market’.” See id. at 37595.

(ii) it is unlikely that trading in the ETP would be the predominant influence on prices in that market.¹¹⁶

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.¹¹⁷ Accordingly, based on the common membership of BZX and CME in the ISG,¹¹⁸ BZX has the equivalent of a comprehensive surveillance-sharing agreement with CME. However, while the Commission recognizes that the CFTC regulates the CME futures market,¹¹⁹ 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.¹²⁰

¹¹⁶ See *id.* 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.*

¹¹⁷ See *id.* at 37580 n.19.

¹¹⁸ See Notice, 86 FR at 22491 nn.56-57 and accompanying text.

¹¹⁹ 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.

¹²⁰ As described above (see *supra* notes 93-99 and accompanying text), in the context of the proposed ETP, the Reference Rate’s 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 the CME.

- (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 2017.¹²¹ 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 launch and/or accelerated upward in the past year.”¹²² 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.¹²³ 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 2019.¹²⁴ Similarly, BZX contends that the number of large open interest

¹²¹ According to BZX, each contract represents five bitcoin and is based on the CME CF Bitcoin Reference Rate. See Notice, 86 FR at 22489.

¹²² See id.

¹²³ See id.

¹²⁴ See id.

holders¹²⁵ has continued to increase, even as the price of bitcoin has risen, as have the number of unique accounts trading CME bitcoin futures.¹²⁶

The Sponsor, in a comment letter, adds that CME trading volume has continued to increase substantially: increasing by approximately 220 percent in July 2021 versus July 2020; increasing by approximately 156 percent year-to-date July 2021 versus year-to-date July 2020; reaching a record daily notional traded value of \$7.33 billion on February 23, 2021, and a record open interest value of \$3.17 billion on February 19, 2021; and in the six-month period ending August 13, 2021, reaching an average daily trading volume of \$2.20 billion and average open interest of \$1.98 billion.¹²⁷ The Sponsor states that this exceeds the 2003 average daily COMEX gold futures trading volume of approximately \$2.04 billion.¹²⁸

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

¹²⁵ 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 22490 n.51.

¹²⁶ See id. at 22490.

¹²⁷ See Kryptoin Letter at 5.

¹²⁸ See id. at 4.

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.¹²⁹

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 2019.¹³⁰ BZX concludes that a person attempting to manipulate the Shares would also have to trade on that market to manipulate the ETP.¹³¹

The Sponsor, in a comment letter, also argues that there is a reasonable likelihood that a person attempting to manipulate the Shares would also have to trade on the CME to manipulate the Shares.¹³² Citing Hu, Hou & Oxley as evidence that CME bitcoin futures lead the price in the bitcoin spot markets,¹³³ the Sponsor states that an attempt to manipulate the spot market would require participation in the CME bitcoin futures market.¹³⁴ The Sponsor asserts that it follows, then, that an attempted manipulation of the Shares would similarly require participation in the CME bitcoin futures market, because both the CME CF Bitcoin Real-Time Index (“BRTI”) and the BRR, upon which CME bitcoin futures are settled, are calculated by observing prices in the

¹²⁹ See Notice, 86 FR at 22491.

¹³⁰ See id. at 22491, 22496 & n.52 (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”).

¹³¹ See id. at 22491-92, 22496.

¹³² See Kryptoin Letter at 12.

¹³³ See id. at 11 n.22.

¹³⁴ See id. at 12.

underlying spot bitcoin markets.¹³⁵ The Sponsor asserts that an interrelationship between the CME bitcoin futures market and the Trust exists because the Trust's Reference Rate is based materially on the same methodology as the BRTI and BRR,¹³⁶ and therefore it is reasonable to assume that any effort to manipulate the Trust's NAV or Share price would also require an attempted manipulation of the CME bitcoin futures prices.¹³⁷ The Sponsor concludes that, because both the Exchange and the CME are members of the ISG, such attempted misconduct would be effectively detected and deterred.¹³⁸

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 and the Sponsor's assertions about the general upward trends from 2018 to August 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. While BZX and the Sponsor provide data showing absolute growth in the size of the CME bitcoin futures market, they provide no data relative to the concomitant growth in either the bitcoin spot markets or other bitcoin futures markets (including unregulated futures markets). Moreover, even if the CME has grown in relative 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

¹³⁵ See id.

¹³⁶ See id. at 2.

¹³⁷ See id. at 2-3, 12.

¹³⁸ See id. at 3, 12.

surveillance-sharing agreement and the proposed ETP.¹³⁹ 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.¹⁴⁰

Moreover, while the Sponsor asserts that an interrelationship exists between the CME bitcoin futures market and the Trust, on account of the Trust’s Reference Rate being based materially on the same methodology as the BRTI and BRR,¹⁴¹ and asserts that it is therefore reasonable to assume that any effort to manipulate the Trust’s NAV or Share price would also require an attempted manipulation of the CME bitcoin futures prices,¹⁴² the Sponsor provides no mechanism or example that would demonstrate the accuracy of the assumption. Moreover, as addressed above, the Sponsor itself undermines such an assumption by its own recognition that the Trust’s in-kind create/redeem process is “completely independent” of the value of bitcoin,¹⁴³ and thereby completely independent of the Reference Rate used to compute such a value.

Further, the econometric evidence in the record for this proposal also does not support a conclusion that an interrelationship exists between the CME bitcoin futures market and the bitcoin spot market such that it is reasonably likely that a person attempting to manipulate the proposed ETP would also have to trade on the CME bitcoin futures market to successfully

¹³⁹ See USBT Order, 85 FR at 12611.

¹⁴⁰ See id. at 12612.

¹⁴¹ See Kryptoin Letter at 2.

¹⁴² See id. at 2-3, 12.

¹⁴³ See id. at 2 and supra notes 100-104 and accompanying text.

manipulate the proposed ETP.¹⁴⁴ While BZX and the Sponsor state that CME bitcoin futures pricing leads the spot market,¹⁴⁵ they rely on the findings of a price discovery analysis in one section of a single academic paper to support the overall thesis.¹⁴⁶ However, the findings of that paper’s Granger causality analysis, which is widely used to formally test for lead-lag relationships, are concededly mixed.¹⁴⁷ In addition, the 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.¹⁴⁸ 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

¹⁴⁴ See USBT Order, 85 FR at 12611. Listing exchanges have attempted to demonstrate such an “interrelationship” by presenting the results of various econometric “lead-lag” analyses. The Commission considers such analyses to be central to understanding whether it is reasonably likely that a would-be manipulator of the ETP would need to trade on the CME bitcoin futures market. See *id.* at 12612.

¹⁴⁵ See Notice, 86 FR at 22491; Kryptoin Letter at 12.

¹⁴⁶ See *supra* note 130 and accompanying text. BZX and the Sponsor reference 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 22491 n.52; Kryptoin Letter at 11 n.22.

¹⁴⁷ 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 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 130.

¹⁴⁸ See USBT Order, 85 FR at 12609.

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.¹⁴⁹ 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.¹⁵⁰ 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.¹⁵¹ In this context, BZX’s reliance on a single paper, whose own lead-lag results are inconclusive, is especially lacking because the academic literature on the lead-lag relationship and price discovery between bitcoin spot and futures markets is unsettled.¹⁵² In the USBT Order, the Commission responded to multiple academic

¹⁴⁹ See id. at 12613 n.244.

¹⁵⁰ See id.

¹⁵¹ See Susquehanna, 866 F.3d at 447.

¹⁵² 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

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.¹⁵³ 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 that a would-be manipulator of the proposed ETP would have to trade on the CME bitcoin futures market.¹⁵⁴

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.

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); S. Aleti & B. Mizrach, Bitcoin spot and futures market microstructure, 41 J. Futures Mkts. 194 (2021) (finding that relatively more price discovery occurs on 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).

¹⁵³ See USBT Order, 85 FR at 12613 nn.239-244 and accompanying text.

¹⁵⁴ In addition, the Exchange fails to address the 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.

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.¹⁵⁵

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.¹⁵⁶ BZX provides that, according 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.¹⁵⁷ 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.¹⁵⁸ BZX further asserts that more strategic purchases or sales (such as using limit orders and executing through OTC bitcoin trade desks)

¹⁵⁵ See Winklevoss Order, 83 FR at 37594; USBT Order, 85 FR at 12596-97.

¹⁵⁶ See Notice, 86 FR at 22492, 22496.

¹⁵⁷ 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.* at 22492 n.61.

¹⁵⁸ See *id.* at 22492, 22496.

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.¹⁵⁹ 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.¹⁶⁰ The Sponsor agrees.¹⁶¹

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 assertion—that CME bitcoin futures leads price discovery¹⁶²—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

¹⁵⁹ See id.

¹⁶⁰ See id.

¹⁶¹ See Kryptoin Letter at 12.

¹⁶² See supra notes 144-154 and accompanying text.

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.¹⁶³ 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 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.¹⁶⁴ While BZX concludes by way of a \$10 million market order example that buying or selling large amounts of

¹⁶³ See Registration Statement at 18.

¹⁶⁴ See Notice, 86 FR at 22492, 22496 (“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%.”).

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.

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.¹⁶⁵ 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.¹⁶⁶ Specifically, BZX argues 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.¹⁶⁷ 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 custodial spot bitcoin; and

¹⁶⁵ 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.

¹⁶⁶ See Notice, 86 FR at 22487.

¹⁶⁷ 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.*

(iv) reducing risks associated with investing in operating companies that are imperfect proxies for bitcoin exposure.¹⁶⁸

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.”¹⁶⁹ BZX represents that, historically, OTC bitcoin funds have traded at a significant premium to NAV.¹⁷⁰ Although the Exchange concedes that trading at a premium or 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.¹⁷¹ 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

¹⁶⁸ See id.

¹⁶⁹ 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 22487 n.38.

¹⁷⁰ See id. at 22487. 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 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 22487 n.39.

¹⁷¹ See id. at 22488.

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.¹⁷²

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.¹⁷³ The Sponsor, in a comment letter, states that on a year-to-date basis through August 13, 2021, the OTC bitcoin fund's total return was 19.91 percent versus its NAV of 56.56 percent; and on a one-year basis through August 13, 2021, the fund's total return was 192.7 percent versus its NAV return of 288.6 percent.¹⁷⁴ The Sponsor also states that, because OTC bitcoin funds are not listed on an exchange, they are therefore not subject to the same transparency and regulatory oversight by a listing exchange as the Trust's Shares would be.¹⁷⁵

¹⁷² See id. The Sponsor, in a comment letter, states that sophisticated market participants have referred to this potential source of profit at the expense of retail investors as a "free put option" embedded in the OTC bitcoin funds. See Kryptoin Letter at 9.

¹⁷³ See letter from Anonymous, dated June 17, 2021.

¹⁷⁴ See Kryptoin Letter at 8. In addition to the premium/discount volatility's direct investment risk to retail investors, the Sponsor also points to two additional risks of the OTC bitcoin fund: (1) the inability to redeem or sell back shares to the fund in exchange for bitcoin or cash means that sophisticated investors who previously created shares directly with the fund at NAV before its shares began trading at a discount are now facing potentially substantial and widespread capital losses; and (2) because the fund periodically closes and does not accept any further investment through private placement, accredited and institutional investors could be unable to deploy capital in compliance with their investment mandates. See id. at 9.

¹⁷⁵ See id.

BZX also asserts that exposure to bitcoin through an ETP also presents advantages for retail investors compared to buying spot bitcoin directly.¹⁷⁶ BZX asserts that, without the advantages of an ETP, an individual retail investor holding bitcoin through a cryptocurrency trading platform lacks protections.¹⁷⁷ 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.¹⁷⁸ 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.¹⁷⁹ BZX represents that the 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.¹⁸⁰ 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.¹⁸¹

The Custodian, in a comment letter, echoes some of the descriptions of the custodial arrangement.¹⁸² The Custodian also specifies that its offline “cold” storage solution will hold the Trust’s bitcoin in Hardware Security Modules that have achieved the highest security level of

¹⁷⁶ See Notice, 86 FR at 22488.

¹⁷⁷ See *id.*

¹⁷⁸ See *id.*

¹⁷⁹ See *id.*

¹⁸⁰ See *id.*

¹⁸¹ See *id.*

¹⁸² See Gemini Letter at 2-3.

U.S. federal government standards and that are physically protected at the Custodian's network of secure facilities and that to carry out a transfer from the Trust's account, a quorum of these secure facilities must be involved to sign the transaction.¹⁸³ Also, according to the Custodian, it maintains digital asset insurance, is regularly audited by major financial and audit firms, and is subject to independent third-party verification that the Custodian's operations and security compliance structures meet the most robust of industry standards.¹⁸⁴ The Sponsor, in a comment letter, adds that the Custodian will perform its duties in a manner that meets the definition of a qualified custodian under the Investment Advisers Act of 1940, as amended.¹⁸⁵

BZX further asserts that a number of operating companies engaged in unrelated businesses have announced investments as large as \$1.5 billion in bitcoin.¹⁸⁶ 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.¹⁸⁷ 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

¹⁸³ See id.

¹⁸⁴ See id.

¹⁸⁵ See Kryptoin Letter at 10.

¹⁸⁶ See Notice, 86 FR at 22487.

¹⁸⁷ See id. at 22488-89. The Custodian, in its comment letter, agrees that the proposed ETP would offer greater investor protection and transparency than existing alternatives for retail customers to gain proxy exposure to bitcoin. See Gemini Letter at 2.

and are not fully benefitting from the risk disclosures and associated investor protections that come from the securities registration process.¹⁸⁸

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.¹⁸⁹ The Sponsor, in a comment letter, states that obtaining bitcoin exposure through CME bitcoin futures “generally remain[s] beyond the scope of comfort level of retail investors” because of, among other reasons, the risk of margin calls. The Sponsor states that this risk is eliminated entirely in the case of investors holding non-margin bitcoin investment alternatives, such as a bitcoin ETP.¹⁹⁰

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. The Commission disagrees. Pursuant to Section 19(b)(2) of the Exchange Act, the Commission must approve a proposed rule change filed by a national

¹⁸⁸ See Notice, 86 FR at 22489.

¹⁸⁹ See *id.* at 22487. 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 22487 n.36. 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 22487 n.37.

¹⁹⁰ See Kryptoin Letter at 10.

securities exchange if it finds that the proposed rule change is consistent with the applicable requirements of the Exchange Act—including the requirement under Section 6(b)(5) that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices—and it must disapprove the filing if it does not make such a finding.¹⁹¹ 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.¹⁹²

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.¹⁹³ 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.

¹⁹¹ See Exchange Act Section 19(b)(2)(C), 15 U.S.C. 78s(b)(2)(C).

¹⁹² See SolidX Order, 82 FR at 16259; WisdomTree Order, 86 FR at 69334.

¹⁹³ See supra note 165.

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.¹⁹⁴

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),¹⁹⁵ and, accordingly, the Commission must disapprove the proposal.¹⁹⁶

D. Other Comments

Comment letters also address the general nature and uses of bitcoin;¹⁹⁷ the state of development of bitcoin as a digital asset;¹⁹⁸ the inherent value of, and risks of investing in, bitcoin;¹⁹⁹ the desire of investors to gain access to bitcoin through an ETP;²⁰⁰ the retirement investment benefits of a bitcoin ETP;²⁰¹ and the bitcoin network's effect on the environment.²⁰²

¹⁹⁴ See 15 U.S.C. 78s(b)(2)(C).

¹⁹⁵ 15 U.S.C. 78f(b)(5).

¹⁹⁶ 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).

¹⁹⁷ See, e.g., Patel Letter; letter from Sam Ahn, dated April 28, 2021 (“Ahn Letter”).

¹⁹⁸ See, e.g., Ahn Letter; Gemini Letter at 2.

¹⁹⁹ See, e.g., Ahn Letter; Patel Letter; letter from Bradley M. Kuhn, dated April 25, 2021 (“Kuhn Letter”).

²⁰⁰ See, e.g., Kuhn Letter; Gemini Letter at 2; Kryptoin Letter at 7.

²⁰¹ See, e.g., Kuhn Letter.

²⁰² See, e.g., Patel Letter.

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-2021-029 be, and hereby is, disapproved.

By the Commission.

Vanessa A. Countryman
Secretary