

SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-96751; File No. SR-CboeBZX-2022-031)

January 26, 2023

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Order Disapproving a Proposed Rule Change to List and Trade Shares of the ARK 21Shares Bitcoin ETF under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares

**I. INTRODUCTION**

On May 13, 2022, 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”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to list and trade shares (“Shares”) of the ARK 21Shares Bitcoin ETF (“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 June 1, 2022.<sup>3</sup>

On July 12, 2022, pursuant to Section 19(b)(2) of the Exchange Act,<sup>4</sup> 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

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See Securities Exchange Act Release No. 94982 (May 25, 2022), 87 FR 33250 (“Notice”). BZX previously filed, and the Commission disapproved, a substantially similar proposal to list and trade the Shares of the Trust. See Notice of Filing of Amendment No. 1 to a Proposed Rule Change To List and Trade Shares of the ARK 21Shares Bitcoin ETF Under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 93822 (Dec. 17, 2021), 86 FR 73360 (Dec. 27, 2021) (“Previous ARK Filing”); Order Disapproving a Proposed Rule Change, as Modified by Amendment No. 1, To List and Trade Shares of the ARK 21Shares Bitcoin ETF Under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 94571 (Mar. 31, 2022), 87 FR 20014 (Apr. 6, 2022) (SR-CboeBZX-2021-051) (“ARK 21Shares Order”).

<sup>4</sup> 15 U.S.C. 78s(b)(2).

rule change.<sup>5</sup> On August 29, 2022, the Commission instituted proceedings under Section 19(b)(2)(B) of the Exchange Act<sup>6</sup> to determine whether to approve or disapprove the proposed rule change,<sup>7</sup> and on November 15, 2022, the Commission designated a longer period for Commission action on the proposed rule change.<sup>8</sup>

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), which 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.”<sup>9</sup>

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 analytical framework used in its orders considering previous proposals to list bitcoin<sup>10</sup>-based commodity trusts and bitcoin-based trust issued receipts to assess whether a listing exchange of an exchange-traded product (“ETP”) can meet its obligations under Exchange Act Section

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<sup>5</sup> See Securities Exchange Act Release No. 95257, 87 FR 42530 (July 15, 2022).

<sup>6</sup> 15 U.S.C. 78s(b)(2)(B).

<sup>7</sup> See Securities Exchange Act Release No. 95622, 87 FR 54270 (Sept. 2, 2022).

<sup>8</sup> See Securities Exchange Act Release No. 96312, 87 FR 70886 (Nov. 21, 2022).

<sup>9</sup> 15 U.S.C. 78f(b)(5).

<sup>10</sup> 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, 87 FR at 33251-52.

6(b)(5).<sup>11</sup> As the Commission has explained, an exchange that lists bitcoin-based ETPs<sup>12</sup> can meet its obligations under Exchange Act Section 6(b)(5) by demonstrating that the exchange has

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<sup>11</sup> See Order Setting Aside Action by Delegated Authority and Disapproving a Proposed Rule Change, as Modified by Amendments No. 1 and 2, To List and Trade Shares of the Winklevoss Bitcoin Trust, Securities Exchange Act Release No. 83723 (July 26, 2018), 83 FR 37579 (Aug. 1, 2018) (SR-BatsBZX-2016-30) (“Winklevoss Order”); Order Disapproving a Proposed Rule Change, as Modified by Amendment No. 1, To Amend NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares) and To List and Trade Shares of the United States Bitcoin and Treasury Investment Trust Under NYSE Arca Rule 8.201-E, Securities Exchange Act Release No. 88284 (Feb. 26, 2020), 85 FR 12595 (Mar. 3, 2020) (SR-NYSEArca-2019-39) (“USBT Order”); 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”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the Valkyrie Bitcoin Fund Under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares), Securities Exchange Act Release No. 93859 (Dec. 22, 2021), 86 FR 74156 (Dec. 29, 2021) (SR-NYSEArca-2021-31) (“Valkyrie Order”); 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, Securities Exchange Act Release No. 93860 (Dec. 22, 2021), 86 FR 74166 (Dec. 29, 2021) (SR-CboeBZX-2021-029) (“Kryptoin Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the First Trust SkyBridge Bitcoin ETF Trust Under NYSE Arca Rule 8.201-E, Securities Exchange Act Release No. 94006 (Jan. 20, 2022), 87 FR 3869 (Jan. 25, 2022) (SR-NYSEArca-2021-37) (“SkyBridge Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the Wise Origin Bitcoin Trust Under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 94080 (Jan. 27, 2022), 87 FR 5527 (Feb. 1, 2022) (SR-CboeBZX-2021-039) (“Wise Origin Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the NYDIG Bitcoin ETF Under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares), Securities Exchange Act Release No. 94395 (Mar. 10, 2022), 87 FR 14932 (Mar. 16, 2022) (SR-NYSEArca-2021-57) (“NYDIG Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the Global X Bitcoin Trust Under BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, Securities Exchange Act Release No. 94396 (Mar. 10, 2022), 87 FR 14912 (Mar. 16, 2022) (SR-CboeBZX-2021-052) (“Global X Order”); ARK 21Shares Order; Order Disapproving a Proposed Rule Change To List and Trade Shares of the One River Carbon Neutral Bitcoin Trust Under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares), Securities Exchange Act Release No. 94999 (May 27, 2022), 87 FR 33548 (June 2, 2022) (SR-NYSEArca-2021-67) (“One River Order”); Order Disapproving a Proposed Rule Change To List and Trade Shares of the Bitwise Bitcoin ETP Trust Under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares), Securities Exchange Act Release No. 95179 (June 29, 2022), 87 FR 40282 (July 6, 2022) (SR-NYSEArca-2021-89) (“Bitwise Order”); Order Disapproving a Proposed

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Rule Change, as Modified by Amendment No. 1, To List and Trade Shares of Grayscale Bitcoin Trust under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares), Securities Exchange Act Release No. 95180 (June 29, 2022), 87 FR 40299 (July 6, 2022) (SR-NYSEArca-2021-90) (“Grayscale 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. 96011 (Oct. 11, 2022), 87 FR 62466 (Oct. 14, 2022) (SR-CboeBZX-2022-006) (“WisdomTree Order II”). In addition, orders were issued by delegated authority on the following matters: 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”); 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) (“VanEck Order”); Order Granting Approval of a Proposed Rule Change, as Modified by Amendment No. 2, To List and Trade Shares of the Teucrium Bitcoin Futures Fund Under NYSE Arca Rule 8.200-E, Commentary .02 (Trust Issued Receipts), Securities Exchange Act Release No. 94620 (Apr. 6, 2022), 87 FR 21676 (Apr. 12, 2022) (SR-NYSEArca-2021-53) (“Teucrium Order”); Order Granting Approval of a Proposed Rule Change, as Modified by Amendment Nos. 1 and 2, To List and Trade Shares of the Valkyrie XBTO Bitcoin Futures Fund Under Nasdaq Rule 5711(g), Securities Exchange Act Release No. 94853 (May 5, 2022), 87 FR 28848 (May 11, 2022) (SR-NASDAQ-2021-066) (“Valkyrie XBTO Order”).

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As used in this order, the term “ETFs” refers to open-end exchange-traded funds that register the offer and sale of their shares under the Securities Act of 1933 (“Securities Act”) and are regulated as investment companies under the Investment Company Act of 1940 (“1940 Act”). The term “ETPs” refers to exchange-traded products that register the offer and sale of their shares under the Securities Act but are not regulated under the 1940 Act, such as commodity trusts and trust issued receipts. Although the name of the Trust is the ARK 21Shares Bitcoin ETF, the Trust is a commodity-based ETP. The Trust is not an ETF and is not subject to regulation under the 1940 Act.

a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying or reference bitcoin assets.<sup>13</sup>

In this context, 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.<sup>14</sup> A surveillance-sharing agreement entered into with a “significant market” assists in detecting and deterring manipulation of the ETP, because a person attempting to manipulate the ETP is reasonably likely to also engage in trading activity on that “significant market.”<sup>15</sup>

Although surveillance-sharing agreements are not the exclusive means by which a listing exchange of a commodity-trust ETP can meet its obligations under Exchange Act Section 6(b)(5), such agreements have previously provided the basis for the exchanges that list commodity-trust ETPs to meet those obligations, and the Commission has historically recognized their importance. And where, as here, a listing exchange fails to establish that other means to prevent fraudulent and manipulative acts and practices will be sufficient, the listing

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<sup>13</sup> 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).

<sup>14</sup> See Winklevoss Order, 83 FR at 37594. See also USBT Order, 85 FR at 12596-97; WisdomTree Order, 86 FR at 69322; ARK 21Shares Order, 87 FR at 20015.

<sup>15</sup> See USBT Order, 85 FR at 12597.

exchange must enter into a surveillance-sharing agreement with a regulated market of significant size because such agreements detect and deter fraudulent and manipulative activity.<sup>16</sup>

The Commission has long recognized that surveillance-sharing agreements “provide a necessary deterrent to manipulation because they facilitate the availability of information needed to fully investigate a manipulation if it were to occur” and thus “enable the Commission to continue to effectively protect investors and promote the public interest.”<sup>17</sup> As the Commission has emphasized, it is essential for an exchange listing a derivative securities product to have the ability that surveillance-sharing agreements provide 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.<sup>18</sup> 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

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<sup>16</sup> 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, 70954, 70959 (Dec. 22, 1998) (File No. S7-13-98) (“NDSP Adopting Release”). See also Winklevoss Order, 83 FR at 37593-94; ProShares Order, 83 FR at 43936; GraniteShares Order, 83 FR at 43924; USBT Order, 85 FR at 12596.

<sup>17</sup> NDSP Adopting Release, 63 FR at 70954, 70959. See also *id.* at 70959 (“It is essential that the SRO [self-regulatory organization] have the ability to obtain the information necessary to detect and deter market manipulation, illegal trading and other abuses involving the new derivative securities product. Specifically, there should be a comprehensive ISA [information-sharing agreement] that covers trading in the new derivative securities product and its underlying securities in place between the SRO listing or trading a derivative product and the markets trading the securities underlying the new derivative securities product.”).

<sup>18</sup> See NDSP Adopting Release, 63 FR at 70959.

practices would impede one party to the agreement from obtaining this information from, or producing it to, the other party.<sup>19</sup>

The Commission has explained that the ability of a national securities exchange to enter into surveillance-sharing agreements “furthers the protection of investors and the public interest because it will enable the [e]xchange to conduct prompt investigations into possible trading violations and other regulatory improprieties.”<sup>20</sup> The Commission has also long taken the position that surveillance-sharing agreements are important in the context of exchange listing of derivative security products, such as equity options, because a surveillance-sharing agreement “permits the sharing of information” that is “necessary to detect” manipulation and “provide[s] an important deterrent to manipulation because [it] facilitate[s] the availability of information needed to fully investigate a potential manipulation if it were to occur.”<sup>21</sup> With respect to ETPs, when approving the listing and trading of one of the first commodity-linked ETPs—a

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<sup>19</sup> See Winklevoss Order, 83 FR at 37592-93 (discussing 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>).

<sup>20</sup> Securities Exchange Act Release No. 27877 (Apr. 4, 1990), 55 FR 13344 (Apr. 10, 1990) (Notice of Filing and Order Granting Accelerated Approval to Proposed Rule Change Regarding Cooperative Agreements With Domestic and Foreign Self-Regulatory Organizations) (SR-NYSE-90-14).

<sup>21</sup> 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 Depositary Receipts (“ADR”)) (“ADR Option Order”). The Commission further stated that it “generally believes that having a comprehensive surveillance sharing agreement in place, between the exchange where the ADR option trades and the exchange where the foreign security underlying the ADR primarily trades, will ensure the integrity of the marketplace. The Commission further believes that the ability to obtain relevant surveillance information, including, among other things, the identity of the ultimate purchasers and sellers of securities, is an essential and necessary component of a comprehensive surveillance sharing agreement.” Id.

commodity-linked exchange-traded note—on a national securities exchange, the Commission continued to emphasize the importance of surveillance-sharing agreements, stating that the listing exchange had entered into surveillance-sharing agreements with each of the futures markets on which pricing of the ETP would be based and stating that “[t]hese agreements should help to ensure the availability of information necessary to detect and deter potential manipulations and other trading abuses, thereby making [the commodity-linked notes] less readily susceptible to manipulation.”<sup>22</sup>

Consistent with these statements, 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 and the ETP listing exchange has entered into surveillance-sharing agreements with, or held Intermarket Surveillance Group (“ISG”) membership in common with, that market.<sup>23</sup> Moreover, the surveillance-sharing agreements have

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<sup>22</sup> Securities Exchange Act Release No. 35518 (Mar. 21, 1995), 60 FR 15804, 15807 (Mar. 27, 1995) (SR-Amex-94-30). See also Winklevoss Order, 83 FR at 37593 n.206.

<sup>23</sup> See Winklevoss Order, 83 FR at 37594. See also SolidX Order, 82 FR at 16254-55 n.125 for a discussion of the representations the Commission has received from listing exchanges in connection with proposals to list commodity-trust ETPs about the existence of a significant, regulated market for trading futures on the underlying commodity and the listing exchanges’ ability to obtain trading information with respect to such market. Furthermore, the Commission notes that each of those cases dealt with a futures market that had been trading for a long period of time before an exchange proposed a commodity-trust ETP based on the asset underlying those futures. For example, silver futures and gold futures began trading in 1933 and 1974, respectively, see <https://www.cmegroup.com/media-room/historical-first-trade-dates.html>, and the first ETPs based on spot silver and gold were approved for listing and trading in 2006 and 2004. See Securities Exchange Act Release No. 53521 (Mar. 20, 2006), 71 FR 14967 (Mar. 24, 2006) (SR-Amex-2005-072) (order approving iShares Silver Trust); Securities Exchange Act Release No. 50603 (Oct. 28, 2004), 69 FR 64614 (Nov. 5, 2004) (SR-NYSE-2004-22) (order approving streetTRACKS Gold Shares). Platinum futures and palladium futures began trading in 1956 and 1968, respectively, see <https://www.cmegroup.com/media-room/historical-first-trade-dates.html>, and the first ETPs based on spot platinum and palladium were approved for listing and trading in



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.<sup>24</sup>

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

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2009. See Securities Exchange Act Release No. 61220 (Dec. 22, 2009), 74 FR 68895 (Dec. 29, 2009) (SR-NYSEArca-2009-94) (order approving ETFS Palladium Trust); Securities Exchange Act Release No. 61219 (Dec. 22, 2009), 74 FR 68886 (Dec. 29, 2009) (SR-NYSEArca-2009-95) (order approving ETFS Platinum Trust). Copper futures began trading in 1988, see <https://www.cmegroup.com/media-room/historical-first-trade-dates.html#metals>, and the first ETPs based on spot copper were approved for listing and trading in 2012. See Securities Exchange Act Release No. 68440 (Dec. 14, 2012), 77 FR 75468 (Dec. 20, 2012) (SR-NYSEArca-2012-28) (order approving JPM XF Physical Copper Trust).

<sup>24</sup> See USBT Order, 85 FR at 12597; ADR Option Order, 59 FR at 5621. The Commission has also recognized that surveillance-sharing agreements provide a necessary deterrent to fraud and manipulation 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 were traded in the U.S. either directly or as ADRs on a national securities exchange; and (iii) effective international ADR arbitrage alleviated concerns over the relatively smaller ADR trading volume, helped to ensure that ADR prices reflected the pricing on the home market, and helped to ensure more reliable price determinations for settlement purposes, due to the unique composition of the index and reliance on ADR prices. See Securities Exchange Act Release No. 26653 (Mar. 21, 1989), 54 FR 12705, 12708 (Mar. 28, 1989) (SR-Amex-87-25) (stating that “surveillance-sharing agreements between the exchange on which the index option trades and the markets that trade the underlying securities are necessary” and that “[t]he exchange of surveillance data by the exchange trading a stock index option and the markets for the securities comprising the index is important to the detection and deterrence of intermarket manipulation”). And the Commission has explained that surveillance-sharing agreements “ensure the availability of information necessary to detect and deter potential manipulations and other trading abuses” 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).

market is “uniquely” and “inherently” resistant to fraud and manipulation.<sup>25</sup> In response, the Commission has stated 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, the listing market would not necessarily need to enter into a surveillance-sharing agreement with a regulated significant market.<sup>26</sup> Such resistance to fraud and manipulation, however, must be novel and beyond those protections that exist in traditional commodity markets or securities markets for which surveillance-sharing agreements in the context of listing derivative securities products have been consistently present.<sup>27</sup>

Here, BZX contends that approval of the proposal is consistent with Section 6(b)(5) of the Exchange Act, and, in particular, Section 6(b)(5)’s requirement that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest.<sup>28</sup> 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,<sup>29</sup> and there exist other means to prevent fraudulent and manipulative acts and practices that are sufficient to justify dispensing with the detection and deterrence of fraud and manipulation

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<sup>25</sup> See USBT Order, 85 FR at 12597.

<sup>26</sup> See Winklevoss Order, 83 FR at 37580, 37582-91 (addressing assertions that “bitcoin and [spot] bitcoin 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.

<sup>27</sup> See USBT Order, 85 FR at 12597, 12599.

<sup>28</sup> See Notice, 87 FR at 33261-68; 33272-33280.

<sup>29</sup> See id. at 33262; 33273.

provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to spot bitcoin.<sup>30</sup>

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 spot bitcoin; in Section III.B.3 assertions that the Commission must approve the proposal because the Commission has approved the listing and trading of ETFs and ETPs that hold Chicago Mercantile Exchange (“CME”) bitcoin futures; and in Section III.C assertions that the proposal is consistent with the protection of investors and the public interest.

Based on its analysis, 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 detection and deterrence of fraud and manipulation provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to spot bitcoin. 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 spot bitcoin, the underlying bitcoin assets that would be held by the Trust. As discussed further below, BZX repeats various assertions made in prior bitcoin-based ETP proposals, including in the Previous ARK Filing, that the Commission has previously addressed and rejected, including in the prior ARK 21Shares Order—and more importantly, BZX does not respond to many of the Commission’s reasons for rejecting those assertions. As a result, the

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<sup>30</sup> See id. at 33262-33268; 33273-80.

Commission is unable to find that the proposed rule change is consistent with the statutory requirements of Exchange Act Section 6(b)(5).

The Commission emphasizes that its disapproval of this proposed rule change does not rest on an evaluation of the relative investment quality of a product holding spot bitcoin versus a product holding CME bitcoin futures, or an assessment 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,<sup>31</sup> the Exchange proposes to list and trade the Shares of the Trust under BZX Rule 14.11(e)(4), which governs the listing and trading of Commodity-Based Trust Shares on the Exchange.

The investment objective of the Trust is to seek to track the performance of bitcoin, as measured by the performance of the S&P Bitcoin Index (“Index”), adjusted for the Trust’s expenses and other liabilities.<sup>32</sup> Each Share would represent a fractional undivided beneficial

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<sup>31</sup> See supra note 3. According to the Exchange, the Sponsor (as defined herein), on behalf of the Trust, submitted a draft registration statement on Form S-1 under the Securities Act dated June 28, 2021 (“Registration Statement”). See Notice, 87 FR at 33250 n.7.

<sup>32</sup> See id. at 33269. 21Shares US LLC (“Sponsor”) is the sponsor of the Trust, Delaware Trust Company is the trustee, and The Bank of New York Mellon would be the administrator (“Administrator”) and transfer agent. Foreside Global Services, LLC would be the marketing agent in connection with the creation and redemption of Shares. ARK Investment Management LLC would provide assistance in the marketing of the Shares. Coinbase Custody Trust Company, LLC (“Custodian”), would be responsible for custody of the Trust’s bitcoin. See id. at 33250, 33268.

interest in the bitcoin held by the Trust. The Trust’s assets would 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 would unexpectedly hold cash on a temporary basis.<sup>33</sup>

In seeking to achieve its investment objective, the Trust would hold bitcoin and would value the Shares daily based on the Index. The Index is a U.S. dollar-denominated composite reference rate for the price of bitcoin. The Index price is currently sourced from the following platforms: Binance, Bitfinex, Bitflyer, Bittrex, Bitstamp, Coinbase Pro, Gemini, HitBTC, Huobi, Kraken, KuCoin, and Poloniex.<sup>34</sup> The Index methodology is intended to determine the fair market value for bitcoin by determining the principal market for bitcoin as of 4:00 p.m. E.T. daily.<sup>35</sup>

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<sup>33</sup> See id. at 33268-69.

<sup>34</sup> The underlying platforms are sourced by Lukka Inc. (“Data Provider”), an independent third-party digital asset data company engaged by the Sponsor, based on a combination of qualitative and quantitative metrics to analyze a comprehensive data set and evaluate factors including legal/regulation, Know-Your-Customer/transaction risk, data provision, security, team/exchange, asset quality/diversity, market quality, and negative events. As the digital ecosystem continues to evolve, the Data Provider can add or remove platforms based on the processes established by Lukka’s Pricing Integrity Oversight Board. See id. at 33269 and n.72.

<sup>35</sup> The Index methodology uses a ranking approach that considers several characteristics of the trading platforms, including oversight and intra-day trading volume. Specifically, to rank the credibility and quality of each trading platform, the Data Provider dynamically assigns a Base Exchange Score (“BES”) to the key characteristics for each platform. The BES reflects the fundamentals of a platform and determines which platform should be designated as the principal market at a given point of time. This score is determined by computing a weighted average of the values assigned to four different trading platform characteristics: (i) oversight; (ii) microstructure efficiency; (iii) data transparency; and (iv) data integrity. The methodology then applies a five-step weighting process for identifying a principal trading platform and the last price on that platform. Following this weighting process, an executed trading platform price is assigned for bitcoin as of 4:00 p.m. E.T. See id. at 33269.

The Net Asset Value (“NAV”) of the Trust means the total assets of the Trust including, but not limited to, all bitcoin and cash, if any, less total liabilities of the Trust, each determined on the basis of generally accepted accounting principles. The NAV of the Trust is the aggregate value of the Trust’s assets less its estimated accrued but unpaid liabilities (which include accrued expenses). In determining the Trust’s NAV, the Administrator would value the bitcoin held by the Trust based on the price set by the Index as of 4:00 p.m. E.T. The Administrator would determine the NAV of the Trust on each day that the Exchange is open for regular trading, as promptly as practical after 4:00 p.m. E.T.<sup>36</sup>

The Trust would 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. E.T. to 4:00 p.m. E.T.). The IIV would 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.<sup>37</sup>

When the Trust sells or redeems its Shares, it would do so in “in-kind” transactions in blocks of 5,000 Shares. Authorized participants will deliver, or facilitate the delivery of, bitcoin to the Trust’s account with the Custodian in exchange for Shares when they purchase Shares, and the Trust, through the Custodian, will deliver bitcoin to such authorized participants when they redeem Shares with the Trust.<sup>38</sup>

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<sup>36</sup> See id. at 33271.

<sup>37</sup> See id. at 33270.

<sup>38</sup> See id. at 33269.

### 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.”<sup>39</sup> Under the Commission’s Rules of Practice, the “burden to demonstrate that a proposed rule change is consistent with the Exchange Act and the rules and regulations issued thereunder . . . is on the self-regulatory organization [‘SRO’] that proposed the rule change.”<sup>40</sup>

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,<sup>41</sup> 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

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<sup>39</sup> 15 U.S.C. 78f(b)(5). Pursuant to Section 19(b)(2) of the Exchange Act, 15 U.S.C. 78s(b)(2), the Commission must disapprove a proposed rule change filed by a national securities exchange if it does not find that the proposed rule change is consistent with the applicable requirements of the Exchange Act. Exchange Act Section 6(b)(5) states that an exchange shall not be registered as a national securities exchange unless the Commission determines that “[t]he rules of the exchange are designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers, or to regulate by virtue of any authority conferred by this title matters not related to the purposes of this title or the administration of the exchange.” 15 U.S.C. 78f(b)(5).

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

<sup>41</sup> See id.

applicable rules and regulations.<sup>42</sup> 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.<sup>43</sup>

**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

(i) Assertions Regarding the Bitcoin Market

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 the detection and deterrence of fraud and manipulation provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying bitcoin assets, 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.<sup>44</sup> Such resistance to fraud and manipulation, however, must be novel and beyond those protections that exist in traditional commodities or securities markets.<sup>45</sup>

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<sup>42</sup> See id.

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

<sup>44</sup> 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.

<sup>45</sup> See id. at 12597.



(a) BZX's Assertions

BZX asserts that bitcoin is resistant to price manipulation.<sup>46</sup> According to BZX, the geographically diverse and continuous nature of bitcoin trading render it difficult and prohibitively costly to manipulate the price of bitcoin.<sup>47</sup> BZX asserts that 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.<sup>48</sup> In addition, BZX states that, to the extent that there are bitcoin platforms engaged in or allowing wash trading<sup>49</sup> or other activity intended to manipulate the price of bitcoin on other markets, such activity does not normally impact prices on other platforms because participants will generally ignore markets with quotes that they deem non-executable.<sup>50</sup> BZX further argues that the linkage between the bitcoin markets and the presence

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<sup>46</sup> See Notice, 87 FR at 33261 n.62 & 33272 n.84.

<sup>47</sup> See *id.*

<sup>48</sup> See *id.*

<sup>49</sup> A “wash trade” is a transaction such as a purchase and sale simultaneously or within a short period of time, that involves no changes in beneficial ownership, and is a means of creating artificial market activity. See *Silseth*, Admin. Proc. File No. 3-9001, Securities Act Release No. 7317, Securities Exchange Act Release No. 37493, at 2 and n.3 (July 30, 1996); *Reddy v. CFTC*, 191 F.3d 109, 115 (2d Cir. 1999). Wash trading is manipulative and defrauds investors. See *id.* See also *Santa Fe Indus. v. Green*, 430 U.S. 462, 476-77 (1977); *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 199 (1976). Bitcoin spot markets are subject to such “usual market manipulation tactics.” Kevin Dowd & Martin Hutchinson, *Bitcoin Will Bite the Dust*, 35 *Cato J.* 357, 374 n.13 (2015), available at <https://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2015/5/cj-v35n2-12.pdf>.

<sup>50</sup> See Notice, 87 FR at 33261 n.62. According to BZX, the reason why wash trading does not normally impact prices on other platforms is because wash trading aims to manipulate the volume rather than the price of an asset to give the impression of heightened market activity in hopes of attracting investors to that asset. According to BZX, wash trades are executed within a bitcoin platform rather than cross platform “since the entity executing the wash trades would aim to trade against itself, and as such, this can only happen within [a bitcoin platform].” Should the wash trades of that entity result in a deviation of the

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.<sup>51</sup>

According to BZX, 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.<sup>52</sup> 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.<sup>53</sup>

In addition, BZX provides results of statistical analysis by the Sponsor in support of its assertions regarding linkages between bitcoin markets and efficient arbitrage across such markets.<sup>54</sup> First, according to BZX, using daily bitcoin prices from January 1, 2018, to October 1, 2021,<sup>55</sup> the Sponsor calculated the Pearson correlation<sup>56</sup> of returns across certain bitcoin spot markets, non-U.S. bitcoin ETPs, and the CME, and concluded that there is a high degree of

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price on that platform relative to others, BZX argues that arbitrageurs would then be able to capitalize on this mispricing, and bring the manipulated price back to equilibrium, resulting in a loss to the entity executing the wash trades. See id. at 33272 n.84.

<sup>51</sup> See id. at 33261 n.62 & 33272 n.84.

<sup>52</sup> See id.

<sup>53</sup> See id.

<sup>54</sup> See id. at 33256-61.

<sup>55</sup> The Previous ARK Filing provided similar statistical analysis using data from January 1, 2018, to December 1, 2021. See Previous ARK Filing, 86 FR at 73368. In this filing, BZX does not explain the Sponsor's use of the sample period of January 1, 2018, to October 1, 2021, or why the Sponsor used a more limited time period for the current proposal.

<sup>56</sup> The Pearson correlation is a measure of linear association between two variables and indicates the magnitude as well as direction of this relationship. See Notice, 87 FR at 33256 n.56.

correlation across these markets.<sup>57</sup> BZX argues that, in markets that are globally and efficiently integrated, one would expect changes in prices of an asset across all markets to be highly correlated, and that “the rationale behind this is that quick and efficient arbitrageurs would capture potentially profitable opportunities, consequently converging prices to the average intrinsic value very rapidly.”<sup>58</sup> Further, BZX states that pair-wise correlations of bitcoin returns were also calculated on hourly and minute-by-minute sampling frequencies in order to estimate the intra-day associations across the different bitcoin markets, and that the results remain largely the same, with correlations ranging between 70% and 97% among the centralized markets, and between 55% and 72% between non-U.S. bitcoin ETPs and centralized markets. BZX asserts that this suggests that bitcoin prices across all considered markets move very similarly and in a very efficient manner to quickly reflect changes in market conditions, not only on a daily basis, but also at much higher intra-day frequencies.<sup>59</sup>

Second, BZX asserts that, according to the Sponsor’s research, this high correlation holds true during periods of extreme price volatility.<sup>60</sup> Employing a “statistical comoment called cokurtosis,” which, according to BZX, measures to what extent two random variables change

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<sup>57</sup> See id. at 33256. BZX represents that correlations are between 57% and 99%, with the latter found mainly across centralized market venues due to their higher level of interconnectedness and the lower correlations pertaining mainly to the non-U.S. bitcoin ETPs, which are relatively newer products and are mainly offered by a few competing market makers who are required to trade in large blocks, thus making it, according to BZX, economically infeasible to capture small mispricings. According to BZX, as additional investors and arbitrageurs enter the market and capture the mispricing opportunities between these markets, it is likely that there will be much higher levels of correlations across all markets. See id.

<sup>58</sup> See id.

<sup>59</sup> See id. at 33257-59.

<sup>60</sup> See id. at 33259.

together,<sup>61</sup> the Sponsor found, using hourly bitcoin returns and minute-by-minute returns, that the bitcoin markets tend to move very similarly, especially for extreme price deviations.<sup>62</sup> BZX states that this is evidence of a robust global bitcoin market “that quickly reacts in a unanimous manner to extreme price movements across both the spot markets, futures and [non-U.S.] ETP markets.”<sup>63</sup> According to BZX, this implies that “no single [b]itcoin market can deviate significantly from the consensus, such that the market is sufficiently large and has an inherent unique resistance to manipulation.”<sup>64</sup>

Third, based on the Sponsor’s research using daily bitcoin price series, BZX argues that cross-platform spreads in bitcoin have been declining consistently over the past several years.<sup>65</sup> BZX contends that the “clear and sharp” decline in the spread indicates that the bitcoin market

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<sup>61</sup> According to BZX: “Coskewness and Cokurtosis are higher order cross-moments used in finance to examine how assets move together. Coskewness measures the extent to which two variables undergo extreme deviations at the same time, whereby a positive (negative) value means that both values exhibit positive (negative) values simultaneously. While this measure is useful for estimating comovements in one direction or the other, it does not allow us to test whether two variables comove similarly in either direction. For that, we apply the cokurtosis, which measures the extent to which two variables undergo both extreme positive and negative deviations at the same time.” Id. at 33259 n.57.

<sup>62</sup> See id. at 33259-61.

<sup>63</sup> Id. at 33261. According to BZX, if two returns series exhibit a high degree of cokurtosis, this means that they tend to undergo extreme positive and negative changes simultaneously. A cokurtosis value larger than +3 or less than -3 is considered statistically significant. See id. at 33259.

<sup>64</sup> Id. at 33259.

<sup>65</sup> Id. at 33262-63; 33273-74. According to BZX, the Sponsor calculated the largest cross-platform percentage spread (defined as “%C-Spread”) at a given time by subtracting the highest price across all platforms at that time from the lowest price across all platforms at that time, and dividing the result by that lowest price. BZX represents that, for this calculation, the Sponsor used daily bitcoin price series from Binance, Bitfinex, Bithumb, Bitstamp, Cexio, Coinbase, Coinone, Gateio, Gemini, HuobiPro, itBit, Kraken, Kucoin, and OKEX. See id. at 33263 & n.69; 33273 & n.91.

has become more efficient over time.<sup>66</sup> In addition, based on the Sponsor’s research, BZX argues that the magnitude of outlier spreads have also declined over time, and that the market has experienced a 38% year-on-year decline in the annual median spread, indicating “a greater degree of [b]itcoin price convergence across [platforms] and a more efficient market.”<sup>67</sup> Further, based on the Sponsor’s calculations of a 7-day rolling standard deviation of the spread from January 1, 2017, to October 1, 2021,<sup>68</sup> BZX asserts that the dispersion in bitcoin prices across all platforms has decreased over time, indicating that prices on all the considered platforms converge towards the “intrinsic average” much more efficiently, and suggesting that the market has become better at quickly reaching a “consensus price” for bitcoin.<sup>69</sup> BZX posits that, as the pricing of the “crypto market” becomes increasingly efficient, pricing methodologies become “more accurate and less susceptible to manipulation.”<sup>70</sup> BZX further asserts that the “clustering of prices across a variety of sources within the primary market” points towards robust price discovery mechanisms and efficient arbitrage.<sup>71</sup> BZX states that the cross-platform spreads, and therefore the process of price discovery in the bitcoin market, “has improved significantly over time despite the market experiencing rather uniform albeit sinusoidal volatility.”<sup>72</sup> BZX argues that this further supports the argument that the bitcoin market has exhibited significant

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<sup>66</sup> See id. at 33263; 33274.

<sup>67</sup> See id.

<sup>68</sup> The Previous ARK Filing provided similar statistical analysis using data from January 1, 2017, to December 1, 2021. See Previous ARK Filing, 86 FR at 73374. BZX does not explain the Sponsor’s use of the sample period of January 1, 2018, to October 1, 2021, or why the Sponsor used a more limited time period for the current proposal.

<sup>69</sup> See Notice, 87 FR at 33264-65; 33275-76.

<sup>70</sup> See id. at 33264; 33275.

<sup>71</sup> Id.

<sup>72</sup> Id. at 33276.

improvements in terms of price discovery over time, irrespective of and despite the volatility of the asset itself, which can be attributed to efficient arbitrage operations.<sup>73</sup>

Fourth, BZX asserts that one factor that has contributed to the overall efficiency of, and improved price discovery within, the bitcoin market is the increase in the number of participants, and subsequently, “the total dollar amount allocated to this market.”<sup>74</sup> BZX’s measure of participation is based on the increase from January 2016 to June 2021 in the number of wallet addresses holding bitcoin.<sup>75</sup>

Finally, BZX contends that this increase in the number of participants has resulted in higher liquidity in the bitcoin market, as exhibited by the “daily aggregated dollar notional of the bid and ask order books within the first 100 price levels across several of the largest centralized crypto [platforms] from October 2020 to April 2021.”<sup>76</sup> According to BZX, “the dollar notional that is allocated closest to the mid price has increased from around \$230 million to \$860 million over that period, representing a 270% increase in half a year.”<sup>77</sup> BZX states that the “increased notional order book” indicates that there is a “higher degree of consensus” among investors regarding the price of bitcoin, and that this “hampers any attempt of price manipulation by any single large entity.”<sup>78</sup> Additionally, according to BZX, the Sponsor found that movements in the bid and ask dollar notional of the “bitcoin order book” within a six-hour window around

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<sup>73</sup> See id. at 33276-77.

<sup>74</sup> Id. at 33265; 33277.

<sup>75</sup> See id.

<sup>76</sup> See id. at 33265-66; 33277-78.

<sup>77</sup> See id. at 33265; 33277.

<sup>78</sup> See id. at 33266; 33278.

“extreme”<sup>79</sup> price events were indicative of an efficient market, whereby large market movements are “quickly and dynamically absorbed” by a “thick order book” and market participants’ reactions are “quick to restore the market back to its equilibrium level.”<sup>80</sup>

(b) Analysis

As with the previous proposals, including the Previous ARK Filing, 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 such that the Commission can dispense with the detection and deterrence of fraud and manipulation provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying bitcoin assets.

BZX asserts that, because of how bitcoin trades occur, including through continuous means and through fragmented platforms, arbitrage across the bitcoin platforms essentially helps to keep global bitcoin prices aligned with one another, thus hindering manipulation. The Exchange also provides various statistics from the Sponsor, including pairwise correlations and cokurtosis estimates using minute-level data, which purport to show that bitcoin prices are closely and increasingly aligned across markets and that any price disparities are quickly arbitrated away. However, even accepting at face value the Sponsor’s statistical results that, through October 1, 2021, spot bitcoin prices exhibited high correlation<sup>81</sup> and high cokurtosis on a

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<sup>79</sup> According to BZX, the Sponsor used the top and bottom 0.1% of hourly price changes from October 2020 to April 2021 as events of extreme upward and downward market movements. See id.

<sup>80</sup> See id. at 33266-68; 33278-80.

<sup>81</sup> The Exchange states that the hourly and minute-by-minute Pearson correlations ranged between 70% and 97% among the “centralized” platforms. While the Notice provides a graphical representation of each pairwise result, the Notice does not indicate what the

pairwise basis across the selected spot bitcoin markets, this would only indicate that spot bitcoin prices during the sample period tended to move in tandem. Such data do not provide any information on how large price disparities typically are among such markets, or on how long price disparities typically persist. Nor do the Sponsor's statistics or BZX's assertions provide any insight into what size or duration of price disparities would be profitable for a would-be manipulator, and thus they do not inform BZX's conclusion that bitcoin pricing has become "less susceptible to manipulation."<sup>82</sup> The Commission is thus unable to conclude from the evidence

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particular correlation is for any particular pair. In addition, the Exchange does not explain why those correlations around 70% are evidence of "highly" correlated markets.

<sup>82</sup> See Notice, 87 FR at 33264. Several other deficiencies in the Sponsor's methodological choices prevent the Commission from agreeing with the Exchange's conclusions. The Commission raised these issues in the ARK 21Shares Order, but the Exchange does not address them in the Notice. For example, one measure of cokurtosis uses the square of the difference of two random variables from their means, and the squares of the two variables' standard deviations, and as such, the statistic calculates magnitude, but not direction. If this is the cokurtosis statistic that was used by the Sponsor (the Notice does not specify), then while the results may show that the two variables move together, it would not necessarily mean that the two variables move in the same direction "in a unanimous manner" (see id. at 33261). In addition, by design, the Sponsor's "%C-Spread" statistic measures the maximum difference among prices (i.e., the highest and lowest) across bitcoin platforms at a given point in time. However, such statistic does not provide any information about the extent of price dispersion among the intermediary prices across bitcoin platforms or whether there is any "intrinsic average" or "consensus price" of bitcoin towards which prices are converging (see id. at 33264). Moreover, the Commission is not able to assess the validity of the Sponsor's claims regarding "higher liquidity" in the bitcoin market, based upon the Sponsor's calculations of "increased notional order book" and reactions to "extreme" price events, because of insufficient detail in the proposal on the process the Sponsor used to calculate the "dollar notional" of a bitcoin platform's order book, the "mid price" on a bitcoin platform, and the "first 100 price levels" across bitcoin platforms (see id. at 33265-66). Further, even if the calculations performed by the Sponsor show, as BZX claims, that "there is a higher degree of consensus among investors regarding the price of [b]itcoin" and that "market participants' reactions are quick to restore the market back to its equilibrium level," the Exchange has not demonstrated how either purported showing leads to its conclusion that this "hampers any attempt of price manipulation by any single large entity" (see id. at 33266). In particular, the Exchange has not addressed the concerns raised by the Commission in previous proposals, including in the ARK 21Shares Order, as well as risk



provided that arbitrage across bitcoin markets is efficient, let alone so efficient as to make the markets inherently resistant to fraud and manipulation.<sup>83</sup>

In any event, the Commission has explained that efficient price arbitrage is not sufficient to support the finding that a market is uniquely or inherently resistant to manipulation such that the Commission can dispense with surveillance-sharing agreements.<sup>84</sup> 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

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factors raised by the Sponsor in the Registration Statement, that actions by a single large, dominant market participant could “have an adverse effect on the market price of bitcoin” (see Registration Statement at 25). That is, even if, as the Exchange claims, there is a “high degree of consensus” among investors and market participants are “quick to restore” the market back to its equilibrium level, the trading activity of a dominant market participant could, itself, impact what that consensus/equilibrium will be. These deficiencies undermine the Exchange’s arguments that linkages between bitcoin markets, and increasingly efficient arbitrage across such markets, make such markets less susceptible to manipulation.

<sup>83</sup> In addition, the Registration Statement states: “As the use of digital asset networks increases without a corresponding increase in transaction processing speed of the networks, average fees and settlement times can increase significantly. Bitcoin’s network has been, at times, at capacity, which has led to increased transaction fees. . . . Increased fees and decreased settlement speeds . . . could adversely impact the value of the Shares.” See Registration Statement at 21. The Registration Statement further states that “the [b]itcoin network faces significant obstacles to increasing the usage of bitcoin without resulting in higher fees or slower transaction settlement times, and attempts to increase the volume of transactions may not be effective . . . which may adversely affect the price of bitcoin and therefore an investment in the Shares.” See Registration Statement at 14. BZX does not provide data or analysis to address, among other things, whether such risks of increased fees and bitcoin transaction settlement times may affect the arbitrage effectiveness that BZX asserts. See also *infra* note 97 and accompanying text (referencing statements made in the Registration Statement that contradict assertions made by BZX). And without such data or analysis, the Commission cannot accept BZX’s assertions. See *Susquehanna*, 866 F.3d at 447.

<sup>84</sup> See *Winklevoss Order*, 83 FR at 37586; *SolidX Order*, 82 FR at 16256-57; *USBT Order*, 85 FR at 12601; *WisdomTree Order*, 86 FR at 69325; *Valkyrie Order*, 86 FR at 74159-60; *Kryptoin Order*, 86 FR at 74170; *Wise Origin Order*, 87 FR at 5531; *ARK 21Shares Order*, 87 FR at 20019; *Grayscale Order*, 87 FR at 40306.

and manipulation.<sup>85</sup> Equities that underlie such options trade on U.S. equity markets that are deep, liquid, and highly interconnected.<sup>86</sup> Moreover, BZX’s data regarding the increase in the number of wallet addresses holding bitcoin do not provide any information on the concentration of bitcoin within or among such wallets, or take into account that a market participant with a dominant ownership position would not find it prohibitively expensive to overcome the liquidity supplied by arbitrageurs and could use dominant market share to engage in manipulation.<sup>87</sup>

In addition, the Exchange makes the unsupported claim that, to the extent that there are bitcoin platforms engaged in or allowing wash trading or other activity intended to manipulate the price of bitcoin on other markets, market participants will generally ignore those platforms.<sup>88</sup> However, the record does not demonstrate that wash trading and other possible sources of fraud and manipulation in the broader bitcoin spot market will be ignored by market participants.<sup>89</sup>

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<sup>85</sup> See, e.g., USBT Order, 85 FR at 12601; WisdomTree Order, 86 FR at 69329; Valkyrie Order, 86 FR at 74160; Kryptoin Order, 86 FR at 74170; Wise Origin Order, 87 FR at 5531; ARK 21Shares Order, 87 FR at 20019; Grayscale Order, 87 FR at 40306-07.

<sup>86</sup> See Market Data Infrastructure Adopting Release, Securities Exchange Act Release No. 90610 (Dec. 9, 2020); 86 FR 18596, 18606-07 (Apr. 9, 2021); Market Data Infrastructure Proposing Release, Securities Exchange Act Release No. 88216 (Feb. 14, 2020), 85 FR 16726, 16728 (Mar. 24, 2020); Concept Release on Equity Market Structure, Securities Exchange Act Release No. 61358 (Jan. 14, 2010), 75 FR 3594 (Jan. 21, 2010). See also ARK 21Shares Order, 87 FR at 20019 n.70.

<sup>87</sup> See, e.g., Winklevoss Order, 83 FR at 37584; USBT Order, 85 FR at 12600-01; WisdomTree Order, 86 FR at 69325.

<sup>88</sup> See supra note 50 and accompanying text.

<sup>89</sup> See infra note 115 and accompanying text. In addition, the Exchange claims that wash trading on one platform does not normally impact prices on other platforms because wash trading aims to manipulate the volume rather than the price of an asset to give the impression of heightened market activity in hopes of attracting investors to that asset. See supra note 50. As discussed, the Exchange provides no data or evidence to support this assertion. Moreover, wash trading, which can have the effect of distorting the volume with respect to a particular security or instrument, can also induce others to trade by giving false impression of demand, which can affect prices in such security or instrument. Further, contrary to the Exchange’s premise that wash trading only “aims to manipulate

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.<sup>90</sup> Indeed, the notion that a platform would be insulated from prices on other platforms is contradicted by the Exchange’s assertions and the Sponsor’s statistical evidence that bitcoin markets are “highly correlated,” including during periods of extreme price volatility.<sup>91</sup>

Further, the continuous nature of bitcoin trading does not support the finding that the bitcoin market is uniquely or inherently resistant to manipulation, and neither do linkages among markets, as BZX asserts.<sup>92</sup> 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.<sup>93</sup>

In addition, BZX does not sufficiently contest the presence of possible sources of fraud and manipulation in the spot bitcoin market that the Commission has identified in previous orders, including: (1) as discussed above, “wash” trading;<sup>94</sup> (2) persons with a dominant position

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volume,” wash trading can also involve a series of trades between related persons to increase the value of a particular security or instrument, which can also induce others to trade. See, e.g., Aggarwal, R. K., and Wu, G. (2006), “Stock Market Manipulations,” *The Journal of Business*, 79, 1915-1953 (available at: <https://www.jstor.org/stable/10.1086/503652>).

<sup>90</sup> See USBT Order, 85 FR at 12601; WisdomTree Order, 86 FR at 69325.

<sup>91</sup> See supra notes 58-63 and accompanying text.

<sup>92</sup> See Winklevoss Order, 83 FR at 37585 n.92 and accompanying text.

<sup>93</sup> See id. at 37585. See also, e.g., WisdomTree Order, 86 FR at 69325-26; ARK 21Shares Order, 87 FR at 20019.

<sup>94</sup> See supra notes 88 to 91 and accompanying text. See also *CFTC v. Gemini Trust Co., LLC*, No. 22-cv-4563 (S.D.N.Y. filed June 2, 2022) (alleging, among other things, failure

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 (for example, plans of market participants to significantly increase or decrease their holdings in bitcoin, new sources of demand for bitcoin, or 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 based on the dissemination of false and misleading information; (6) manipulative activity involving purported “stablecoins,” including Tether (USDT); and (7) fraud and manipulation at bitcoin trading platforms.<sup>95</sup>

Finally, 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.<sup>96</sup> For example, the Registration Statement acknowledges that “it may be possible for a bad actor to manipulate the [b]itcoin network and hinder transactions”; that “[s]pot markets on which bitcoin trades are relatively new and largely unregulated, and, therefore, 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”; that “[o]ver the past several years, a number of bitcoin spot markets have been closed or faced issues due to fraud, failure, security breaches

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by Gemini personnel to disclose to the Commodity Futures Trading Commission (“CFTC”) that Gemini customers could and did engage in collusive or wash trading).

<sup>95</sup> See USBT Order, 85 FR at 12600-01 & nn.66-67 (discussing J. Griffin & A. Shams, Is Bitcoin Really Untethered? (Oct. 28, 2019), available at <https://ssrn.com/abstract=3195066> and published in 75 J. Finance 1913 (2020)); Winklevoss Order, 83 FR at 37585-86; WisdomTree Order, 86 FR at 69326; Global X Order, 87 FR at 14916; ARK 21Shares Order, 87 FR at 20019; One River Order, 87 FR at 33554; Bitwise Order, 87 FR at 40283-84; Grayscale Order, 87 FR at 40305.

<sup>96</sup> See ARK 21Shares Order, 87 FR at 20019-20.

or governmental regulations”; that “[t]he nature of the assets held at bitcoin spot markets makes them appealing targets for hackers and a number of bitcoin spot markets have been victims of cybercrimes” and “[n]o bitcoin [platform] is immune from these risks”; that “[t]he potential consequences of a spot market’s failure or failure to prevent market manipulation could adversely affect the value of the Shares[,] . . . . [t]he blockchain infrastructure could be used by certain market participants to exploit arbitrage opportunities through schemes such as front-running, spoofing, pump-and-dump and fraud across different systems, platforms or geographic locations” . . . . and “[a]s a result of reduced oversight, these schemes may be more prevalent in digital asset markets than in the general market for financial products”; that “many [bitcoin] spot markets and over-the-counter market venues . . . do not provide the public with significant information regarding their ownership structure, management teams, corporate practices or oversight of customer trading” and “many [bitcoin] spot markets lack certain safeguards put in place by more traditional exchanges to enhance the stability of trading on the exchange”; that “[s]ecurity breaches, cyber-attacks, computer malware and computer hacking attacks have been a prevalent concern in relation to digital assets”; and 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.<sup>97</sup> The Exchange also acknowledges in the proposed rule change that “largely unregulated currency and spot commodity markets do not provide the same protections as the markets that are subject to the Commission’s oversight.”<sup>98</sup>

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<sup>97</sup> See Registration Statement at 4, 12-14, 18-20, 28. See also Winklevoss Order, 83 FR at 37585.

<sup>98</sup> Notice, 87 FR at 33251.

(ii) Assertions Regarding the Index and the Create/Redeem Process

(a) BZX's Assertions

BZX also argues that the Index, which would be used to value the Trust's bitcoin, is itself resistant to manipulation based on the Index's methodology.<sup>99</sup> BZX states that the Index is a U.S. dollar-denominated composite reference rate for the price of bitcoin. The Index price is currently sourced from the following bitcoin platforms selected by the Data Provider based on a combination of qualitative and quantitative metrics: Binance, Bitfinex, Bitflyer, Bittrex, Bitstamp, Coinbase Pro, Gemini, HitBTC, Huobi, Kraken, KuCoin, and Poloniex.<sup>100</sup> According to BZX, the Index methodology is intended to determine the fair market value for bitcoin by determining the "principal market" for bitcoin as of 4:00 p.m. E.T. daily. To rank the credibility and quality of each underlying bitcoin platform, the Data Provider dynamically assigns a score to the key characteristics for each platform.<sup>101</sup> BZX states that the score determines which platform should be designated as the "principal market" at a given point of time by computing a weighted average of the values assigned to four different platform characteristics: (i) oversight; (ii) microstructure efficiency; (iii) data transparency; and (iv) data integrity.<sup>102</sup> The methodology then applies a five-step weighting process for identifying a principal market and the last price on that market.<sup>103</sup> Following this weighting process, an "executed exchange price" is assigned for

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<sup>99</sup> See id. at 33268, 33280.

<sup>100</sup> See id. at 33269.

<sup>101</sup> See id.

<sup>102</sup> See id.

<sup>103</sup> See id.

bitcoin as of 4:00 p.m. E.T. The Data Provider takes the last traded prices at that moment in time on that trading venue for the relevant pair (bitcoin/USD) when determining the Index price.<sup>104</sup>

BZX asserts that, because there are multiple bitcoin spot markets that may contribute prices to the Index price, in a well-arbitrated and fractured market, manipulation is more difficult as a malicious actor would need to manipulate multiple spot markets simultaneously to impact the Index price or dramatically skew the historical distribution of volume between the various platforms.<sup>105</sup> In addition, BZX asserts that the Data Provider has dedicated resources and established committees to ensure all prices are representative of the market, and that any price challenges will result in an independent analysis of the price. This includes assessing whether the price from the selected platform is biased according to analyses designed to recognize patterns consistent with manipulative activity, such as a quick reversion to previous traded levels following a sharp price change or any significant deviations from the volume weighted average price on a particular platform or pricing on any other eligible platform.<sup>106</sup> BZX further represents that, after the “Lukka Prime price”<sup>107</sup> is generated, the S&P DJI (“Index Provider”) performs

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<sup>104</sup> See id. at 33269-70.

<sup>105</sup> See id. at 33270.

<sup>106</sup> See id. BZX states that, upon detection or external referral of suspect manipulative activities, the case is raised to the Price Integrity Oversight Board. These checks occur on an on-going, intraday basis, and any investigations are typically resolved promptly, in clear cases within minutes and in more complex cases same business day. According to BZX, the evidence uncovered will be turned over to the Data Provider’s Price Integrity Oversight Board for final decision and action. The Price Integrity Oversight Board may choose to pick an alternative “primary market” and may exclude such market from future inclusion in the Index methodology or choose to stand by the original published price upon fully evaluating all available evidence. It may also initiate an investigation of prior prices from such markets and shall evaluate evidence presented on a case-by-case basis. See id.

<sup>107</sup> The Exchange appears to use the terms “Lukka Prime price,” “Lukka price,” and “Index price” interchangeably. The Commission understands these terms to be interchangeable.

independent quality checks as a second layer of validation to those employed by the Data Provider, and may submit a price challenge to the Data Provider. In such circumstances, according to BZX, the Data Provider will “perform an independent review of the price challenge to ensure the price is representative of the fair value of a particular cryptocurrency.”<sup>108</sup>

Simultaneously with its assertions regarding the Index, BZX also states that, because the Trust will engage in in-kind creations and redemptions only, the “manipulability of the Index [is] significantly less important.”<sup>109</sup> The Exchange elaborates 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.”<sup>110</sup> 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.<sup>111</sup> As such, BZX argues that, even if the price used to value the Trust’s bitcoin is manipulated, the ratio of bitcoin per Share does not change, and the Trust will either accept (for creations) or distribute (for redemptions) the same number of bitcoin regardless of the value.<sup>112</sup> This, according to BZX, not only mitigates the risk associated with potential

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<sup>108</sup> See Notice, 87 FR at 33270. BZX also notes that the Index Provider provides certain quality assurance mechanisms with respect to “crypto price validation” based on current market conditions, internal system processes, and other assessments. See id.

<sup>109</sup> See id. at 33268; 33280.

<sup>110</sup> See id.

<sup>111</sup> See id.

<sup>112</sup> See id.



manipulation, but also discourages and disincentivizes manipulation of the Index because there is little financial incentive to do so.<sup>113</sup>

(b) Analysis

Based on the assertions made and the information provided with respect to the Index and the create/redeem process, the record is inadequate to conclude that BZX has articulated other means to prevent fraud and manipulation that are sufficient to justify dispensing with the detection and deterrence of fraud and manipulation provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to spot bitcoin.

The record does not demonstrate that the proposed methodology for calculating the Index would make the proposed ETP resistant to fraud or manipulation sufficient to dispense with the ability to detect and deter fraud and manipulation that is provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to spot bitcoin. Specifically, BZX has not assessed the possible influence that spot platforms not included among the Index's underlying platforms would have on bitcoin prices used to calculate the Index.<sup>114</sup> As discussed above, BZX does not sufficiently contest the presence of possible sources of fraud and manipulation in the spot bitcoin market generally.<sup>115</sup> Instead, BZX focuses its analysis on the eligibility and attributes of the Index's underlying platforms, the Index's methodology for identifying a "principal market," and the procedures for determining whether an Index pricing

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<sup>113</sup> See id.

<sup>114</sup> 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 would generally be ignored, the Commission has no basis on which to conclude that bitcoin platforms are insulated from prices of others that engage in or permit fraud or manipulation. See supra note 90 and accompanying text.

<sup>115</sup> See supra notes 89-90 and accompanying text.

input was subject to manipulation. In doing so, what the Exchange does not address is that, to the extent that trading on spot bitcoin platforms not directly used to calculate the Index affects prices on the Index’s underlying platforms, the activities on those other platforms—where various kinds of fraud and manipulation from a variety of sources may be present and persist—may affect whether the Index is resistant to manipulation. Importantly, the record does not demonstrate that these possible sources of fraud and manipulation in the broader spot bitcoin market do not affect the Index’s underlying platforms that represent a portion of the spot bitcoin market. To the extent that fraudulent and manipulative trading on the broader bitcoin market could influence prices or trading activity on the platforms underlying the Index, the platforms underlying the Index (and thus the Index) would not be inherently resistant to manipulation.<sup>116</sup>

Moreover, the Exchange’s assertions that the Index’s methodology helps make the Index resistant to manipulation conflict with the Registration Statement. Specifically, the Registration Statement represents, among other things, that “[s]pot markets on which bitcoin trades are relatively new and 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 “[t]he potential consequences of a spot market’s failure or failure to prevent market manipulation could adversely affect the value of the Shares[,] . . . [t]he blockchain infrastructure could be used by certain market participants to exploit arbitrage opportunities through schemes such as front-running, spoofing, pump-and-dump and fraud across different systems, platforms or geographic locations” . . . and “[a]s a result of reduced oversight, these

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<sup>116</sup> See USBT Order, 85 FR at 12601; WisdomTree Order, 86 FR at 69327; Kryptoin Order, 86 FR at 74172; Valkyrie Order, 86 FR at 74161; SkyBridge Order, 87 FR at 3873; Ark 21Shares Order, 87 FR at 20021; Grayscale Order, 87 FR at 40309.

schemes may be more prevalent in digital asset markets than in the general market for financial products.”<sup>117</sup> The Index’s underlying bitcoin platforms are a subset of the bitcoin trading venues currently in existence.

The Registration Statement also states, specifically with respect to the Index, that “[p]ricing sources used by the Index are digital asset spot markets that facilitate the buying and selling of bitcoin and other digital assets” and that “[a]lthough many pricing sources refer to themselves as ‘exchanges,’ they are not registered with, or supervised by, the [Commission] or [Commodity Futures Trading Commission] and do not meet the regulatory standards of a national securities exchange or designated contract market,” and “[f]or these reasons, among others, purchases and sales of bitcoin may be subject to temporary distortions or other disruptions . . . . [which] could affect the price of bitcoin used in Index calculations and, therefore, could adversely affect the bitcoin price as reflected by the Index.”<sup>118</sup> The Sponsor further states in the Registration Statement that “[t]he Index is based on various inputs which include price data from various third-party bitcoin spot markets” and that “[t]he Index Provider does not guarantee the validity of any of these inputs, which may be subject to technological error, manipulative activity, or fraudulent reporting from their initial source.”<sup>119</sup> Moreover, the Exchange describes a process through which the Data Provider may select an “alternative primary market” upon detection or referral of suspect manipulative activities.<sup>120</sup> Although the Sponsor raises concerns regarding fraud and security of bitcoin platforms in the Registration Statement, as well as concerns specific to the Index’s underlying bitcoin platforms, leading to the

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<sup>117</sup> See Registration Statement at 4, 12-13.

<sup>118</sup> See id. at 32.

<sup>119</sup> See id.

<sup>120</sup> See Notice, 87 FR at 33270.

potential need for an “alternative” basis for the Index price, the Exchange does not explain how or why such concerns are consistent with its assertion that the Index is resistant to fraud and manipulation.

In addition, BZX represents that, to rank the credibility and quality of each underlying bitcoin platform, the Data Provider dynamically assigns a score to the key characteristics for each platform, namely: (i) oversight; (ii) microstructure efficiency; (iii) data transparency; and (iv) data integrity. BZX states that the score determines which platform should be designated as the “principal market” and derives the Index price from such market. However, the existing level of oversight of the Index’s underlying bitcoin platforms, whose trade flows might contribute to the Index, is not equivalent to the obligations, authority, and oversight of national securities exchanges or futures exchanges and therefore is not an appropriate substitute.<sup>121</sup> For example, the Commission’s market oversight of national securities exchanges includes substantial requirements, including the requirement to have rules that are “designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.”<sup>122</sup> Moreover, national securities exchanges must file proposed rules with the Commission regarding certain material aspects of their

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<sup>121</sup> See also USBT Order, 85 FR at 12603-05; VanEck Order, 86 FR at 64545; WisdomTree Order, 86 FR at 69328; Kryptoin Order, 86 FR at 74173.

<sup>122</sup> 15 U.S.C. 78f(b)(5).

operations,<sup>123</sup> and the Commission has the authority to disapprove any such rule that is not consistent with the requirements of the Exchange Act.<sup>124</sup> Thus, national securities exchanges are subject to Commission oversight of, among other things, their governance, membership qualifications, trading rules, disciplinary procedures, recordkeeping, and fees.<sup>125</sup> The Index's

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<sup>123</sup> 17 CFR 240.19b-4(a)(6)(i).

<sup>124</sup> Section 6 of the Exchange Act, 15 U.S.C. 78f, requires national securities exchanges to register with the Commission and requires an exchange's registration to be approved by the Commission, and Section 19(b) of the Exchange Act, 15 U.S.C. 78s(b), requires national securities exchanges to file proposed rule changes with the Commission and provides the Commission with the authority to disapprove proposed rule changes that are not consistent with the Exchange Act. Designated contract markets ("DCMs") (commonly called "futures markets") registered with and regulated by the CFTC must comply with, among other things, a similarly comprehensive range of regulatory principles and must file rule changes with the CFTC. See, e.g., Designated Contract Markets (DCMs), CFTC, available at <http://www.cftc.gov/IndustryOversight/TradingOrganizations/DCMs/index.htm>.

<sup>125</sup> See Winklevoss Order, 83 FR at 37597. The Commission notes that the New York State Department of Financial Services ("NYSDFS") has issued "guidance" to supervised virtual currency business entities, stating that these entities must "implement measures designed to effectively detect, prevent, and respond to fraud, attempted fraud, and similar wrongdoing." See Maria T. Vullo, Superintendent of Financial Services, NYSDFS, Guidance on Prevention of Market Manipulation and Other Wrongful Activity (Feb. 7, 2018), available at <https://www.dfs.ny.gov/docs/legal/industry/il180207.pdf>. The NYSDFS recognizes that its "guidance is not intended to limit the scope or applicability of any law or regulation" (id.), which would include the Exchange Act. Nothing in the record evidences whether the Index's underlying bitcoin platforms have complied with this NYSDFS guidance. Further, as stated previously, there are substantial differences between the NYSDFS and 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

underlying spot bitcoin platforms have none of these requirements—none are registered as a national securities exchange and none are comparable to a national securities exchange or futures exchange.<sup>126</sup>

In addition, although BZX argues that the Data Provider’s various procedures of Index oversight helps to identify patterns consistent with manipulative activity, the record does not suggest that the purported oversight represents a unique measure to resist or prevent fraud or manipulation beyond protections that exist in traditional securities or commodities markets.<sup>127</sup> Rather, the oversight performed by the Data Provider of the Index’s underlying bitcoin platforms appears to be for the purpose of ensuring the accuracy and integrity of the Index. Such Index accuracy and integrity oversight serves a fundamentally different purpose as compared to the regulation of national securities exchanges and the requirements of the Exchange Act. While the Commission recognizes that this may be an important function in ensuring the integrity of the Index, such requirements do not imbue the Data Provider or the Index’s underlying platforms with regulatory authority similar to that which the Exchange Act confers upon self-regulatory organizations such as national securities exchanges.<sup>128</sup> Furthermore, other commodity-based

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12603 n.101. See also, e.g., WisdomTree Order, 86 FR at 69328 n.95; Kryptoin Order, 86 FR at 74173 n.98.

<sup>126</sup> See USBT Order, 85 FR at 12603-05 and n.101; VanEck Order, 86 FR at 64545 and n.89; WisdomTree Order, 86 FR at 69328 and n.95; Kryptoin Order, 86 FR at 74173 and n.98; ARK 21Shares Order, 87 FR at 20021-22 and n.107; Grayscale Order, 87 FR at 40308 and n.110.

<sup>127</sup> See, e.g., WisdomTree Order, 86 FR at 69328; Valkyrie Order, 86 FR at 74162; ARK 21Shares Order, 87 FR at 20022.

<sup>128</sup> See WisdomTree Order, 86 FR at 69329; One River Order, 87 FR at 33556; Grayscale Order, 87 FR at 40310. The Data Provider does not itself exercise governmental regulatory authority. Rather, the Data Provider is a privately-held company that provides crypto asset data products. See <https://lukka.tech/>. The Sponsor has engaged the Data

ETPs approved by the Commission for listing and trading utilize reference rates or indices administered by similar data providers or benchmark administrators,<sup>129</sup> and the Commission has not, in those instances, dispensed with the detection and deterrence of fraud and manipulation provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying assets.

The Commission thus concludes that the Exchange has not demonstrated that its Index methodology makes the proposed ETP resistant to manipulation. While the proposed procedures for calculating the Index using only prices from the Index's underlying platforms are intended to provide some degree of protection against attempts to manipulate the Index, these procedures are not sufficient for the Commission to dispense with the detection and deterrence of fraud and manipulation provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to spot bitcoin.<sup>130</sup>

Further, BZX does not explain the significance of the Index'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.<sup>131</sup> To the extent that BZX's argument is that the

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Provider in a commercial relationship to provide inputs for the Index. See Notice, 87 FR at 33269 n.72.

<sup>129</sup> See, e.g., Securities Exchange Act Release Nos. 80840 (June 1, 2017) 82 FR 26534 (June 7, 2017) (SR-NYSEArca-2017-33) (approving the listing and trading of shares of certain trusts seeking to track the Solactive GLD EUR Gold Index, Solactive GLD GBP Gold Index, and the Solactive GLD JPY Gold Index).

<sup>130</sup> See WisdomTree Order, 86 FR at 69327-28; ARK 21Shares Order, 87 FR at 20021-22.

<sup>131</sup> 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; WisdomTree Order, 86 FR at 69327-29; Valkyrie Order, 86 FR at 74162; ARK 21Shares Order, 87 FR at 20022; Grayscale Order, 87 FR at 40310.

price of the Trust's Shares would be resistant to manipulation if the Index is resistant to manipulation, BZX has not established in the record a basis for this conclusion because BZX has not established a link between the price of the Shares and the Index, either in the primary or secondary market. The Trust uses the Index to calculate the value of the bitcoin it holds according to the methodology discussed above.<sup>132</sup> However, the Trust will create or redeem baskets in the primary market only upon the receipt or distribution of bitcoins from/to authorized participants, and only for the amount of bitcoin represented by the Shares in such baskets, without reference to the value of such bitcoin as determined by the Index or otherwise.<sup>133</sup> In the secondary market, the Shares would trade at market-based prices, and market participants may or may not take into account the value of bitcoin as measured by the Index in determining such prices. The Exchange provides no information on the relationship between the Index and secondary market prices generally, or how the use of the Index would mitigate fraud and manipulation of the Shares in the secondary market.<sup>134</sup>

Moreover, the Exchange's arguments are contradictory. While arguing that the Index is resistant to manipulation, the Exchange simultaneously downplays the importance of the Index

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<sup>132</sup> See supra note 36 and accompanying text.

<sup>133</sup> See Notice, 87 FR at 33271. According to the Exchange, to create, "the total deposit of bitcoin required is an amount of bitcoin that is in the same proportion to the total assets of the Trust, net of accrued expenses and other liabilities, on the date the order to purchase is properly received, as the number of Shares to be created under the purchase order is in proportion to the total number of Shares outstanding on the date the order is received." The required deposit is determined "for a given day by dividing the number of bitcoin held by the Trust as of the opening of business on that business day, adjusted for the amount of bitcoin constituting estimated accrued but unpaid fees and expenses of the Trust as of the opening of business on that business day, by the quotient of the number of Shares outstanding at the opening of business divided by 5,000."

<sup>134</sup> See WisdomTree Order, 86 FR at 69329 and n.108; Valkyrie Order, 86 FR at 74162; ARK 21Shares Order, 87 FR at 20022; Grayscale Order, 87 FR at 40310.



in light of the Trust’s in-kind creation and redemption mechanism.<sup>135</sup> 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.”<sup>136</sup> In BZX’s own words, the Trust will not accept cash to buy bitcoin in order to create Shares or sell bitcoin to pay cash for redeemed Shares, so the price that the Sponsor uses to value the Trust’s bitcoin “is not particularly important.”<sup>137</sup> If the Index that the Trust uses to value the Trust’s bitcoin “is not particularly important,” it follows that the Index’s resistance to manipulation is not material to the Shares’ susceptibility to fraud and manipulation. As the Exchange does not address or provide any analysis with respect to these issues, the Commission cannot conclude that the Index aids in the determination that the proposal to list and trade the Shares is designed to prevent fraudulent and manipulative acts and practices.<sup>138</sup>

Finally, the Commission finds that BZX has not demonstrated that in-kind creations and redemptions provide the Shares with a unique resistance to manipulation. The Commission has previously addressed similar assertions.<sup>139</sup> As the Commission stated before, in-kind creations and redemptions are a common feature of ETPs, and the Commission has not previously relied

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<sup>135</sup> See supra notes 109-113 and accompanying text.

<sup>136</sup> Notice, 87 FR at 33280 (“While the Sponsor believes that the Index 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 Index significantly less important.”).

<sup>137</sup> 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”).

<sup>138</sup> See WisdomTree Order, 86 FR at 69329; ARK 21Shares Order, 87 FR at 20022.

<sup>139</sup> See Winklevoss Order, 83 FR at 37589-90; USBT Order, 85 FR at 12607-08; WisdomTree Order, 86 FR at 69329; ARK 21Shares Order, 87 FR at 20022.

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.<sup>140</sup> Accordingly, the Commission is not persuaded here that the Trust's in-kind creations and redemptions afford it a unique resistance to manipulation.<sup>141</sup>

(2) Assertions That BZX Has Entered Into a Comprehensive Surveillance-Sharing Agreement with a Regulated Market of Significant Size Related to the Underlying Bitcoin Assets

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 related to the underlying bitcoin 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

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<sup>140</sup> 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).

<sup>141</sup> Putting aside the Exchange's various assertions about the nature of bitcoin and the bitcoin market, the Index, 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.

(ii) it is unlikely that trading in the ETP would be the predominant influence on prices in that market.<sup>142</sup>

As the Commission has explained, 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.<sup>143</sup> Accordingly, based on the common membership of BZX and the CME in the ISG,<sup>144</sup> BZX has the equivalent of a comprehensive surveillance-sharing agreement with the CME. However, while the Commission recognizes that the CFTC regulates the CME futures market,<sup>145</sup> 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” related to spot bitcoin, the underlying bitcoin assets that would be held by the Trust.

- (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” related to spot bitcoin is the determination that there is a reasonable likelihood that a person attempting to manipulate the ETP would have to trade on the CME

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<sup>142</sup> See Winklevoss Order, 83 FR at 37594.

<sup>143</sup> See *id.* at 37580 n.19.

<sup>144</sup> See Notice, 87 FR at 33262.

<sup>145</sup> While the Commission recognizes that the CFTC regulates the CME, the CFTC is not responsible for direct, comprehensive regulation of the underlying spot bitcoin market. See Winklevoss Order, 83 FR at 37587, 37599. See also WisdomTree Order, 86 FR at 69330 n.118; Kryptoin Order, 86 FR at 74174 n.119; SkyBridge Order, 87 FR at 3874 n.80; Wise Origin Order, 87 FR at 5534 n.93; ARK 21Shares Order, 87 FR at 20023 n.121; Bitwise Order, 87 FR at 40286 n.54; Grayscale Order, 87 FR at 40311 n.138.

bitcoin futures market to successfully manipulate the ETP. In previous Commission orders, the Commission explained that the lead-lag relationship between the bitcoin futures market and the spot market is “central” to understanding this first prong.<sup>146</sup>

(a) BZX’s Assertions

According to the Exchange, “academic research . . . supports the thesis that [CME bitcoin futures] pricing leads the spot market and, thus, a person attempting to manipulate the Shares would also have to trade on that market to manipulate the ETP.”<sup>147</sup> The Exchange further asserts

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<sup>146</sup> See, e.g., USBT Order, 85 FR at 12612 (“[E]stablishing a lead-lag relationship between the bitcoin futures market and the spot market is central to understanding whether it is reasonably likely that a would-be manipulator of the ETP would need to trade on the bitcoin futures market to successfully manipulate prices on those spot platforms that feed into the proposed ETP’s pricing mechanism. In particular, if the spot market leads the futures market, this would indicate that it would not be necessary to trade on the futures market to manipulate the proposed ETP, even if arbitrage worked efficiently, because the futures price would move to meet the spot price.”). When considering past proposals for spot bitcoin ETPs, the Commission has discussed whether there is a lead-lag relationship between the regulated market (e.g., the CME) and the market on which the assets held by the ETP would have traded (i.e., spot bitcoin platforms), as part of an analysis of whether a would-be manipulator of the spot bitcoin ETP would need to trade on the regulated market to effect such manipulation. See, e.g., USBT Order, 85 FR at 12612. See also VanEck Order, 86 FR at 64547; WisdomTree Order, 86 FR at 69330-31; Kryptoin Order, 86 FR at 74175-76; SkyBridge Order, 87 FR at 3875-76; Wise Origin Order, 87 FR at 5535-36, 5539-40; ARK 21Shares Order, 87 FR at 20023-24; Bitwise Order, 87 FR at 40287-89; Grayscale Order, 87 FR at 40311-13.

<sup>147</sup> See Notice, 87 FR at 33261 (citing to Hu, Y., Hou, Y. and Oxley, L. (2019), “What role do futures markets play in Bitcoin pricing? Causality, cointegration and price discovery from a time-varying perspective” (available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7481826/>) (“Hu, Hou & Oxley”)). The Exchange references the following conclusion from the “time-varying price discovery” section of Hu, Hou & Oxley: “There exist no episodes where the Bitcoin spot markets dominates the price discovery processes with regard to Bitcoin futures. This points to a conclusion that the price formation originates solely in the Bitcoin futures market. We can, therefore, conclude that the Bitcoin futures markets dominate the dynamic price discovery process based upon time-varying information share measures. Overall, price discovery seems to occur in the Bitcoin futures markets rather than the underlying spot market based upon a time-varying perspective.” *Id.* at n.59.

that, “[a]ccording to the Sponsor’s research presented above,”<sup>148</sup> the CME bitcoin futures market “is the leading market for bitcoin price formation.”<sup>149</sup> BZX argues 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 constituents of the Index) would have to participate in the CME bitcoin futures market, it follows that a potential manipulator of the Shares would similarly have to transact in the CME bitcoin futures market “because the Index is based on spot prices.”<sup>150</sup> Further, BZX asserts that the Trust only allows for in-kind creation and redemption, which reduces the potential for manipulation of the Shares through manipulation of the Index or any of its individual constituents, again emphasizing that a potential manipulator of the Shares would have to manipulate the entirety of the bitcoin spot market, which is led by the CME bitcoin futures market.<sup>151</sup> As such, BZX believes that the significant market test outlined above is satisfied and that common membership in ISG between the Exchange and the CME would assist the listing exchange in detecting and deterring misconduct in the Shares.<sup>152</sup>

(b) Analysis

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 the proposed ETP. First, the econometric evidence in the

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<sup>148</sup> Although it is unclear in the filing, the Commission believes the Exchange is referring to the Sponsor’s research discussed above relating to correlation of the bitcoin markets (see supra notes 54-64 and accompanying text).

<sup>149</sup> See Notice, 87 FR at 33262; 33273.

<sup>150</sup> See id.

<sup>151</sup> See id.

<sup>152</sup> Id.

record for the proposal does not support the conclusion that an interrelationship exists between the CME bitcoin futures market and the spot bitcoin 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.<sup>153</sup> The Exchange and the Sponsor exclusively rely on the findings of one section of the Hu, Hou & Oxley paper;<sup>154</sup> however, they do not address issues that the Commission has previously raised with respect to this single paper.<sup>155</sup> As the Commission previously explained, including in the ARK 21Shares Order, the findings of this paper’s Granger causality analysis, which is widely used to formally test for lead-lag relationships, are concededly mixed.<sup>156</sup>

Moreover, BZX does not present any other data supporting its conclusion. Specifically, the Exchange does not provide any additional evidence of an interrelationship between the CME

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<sup>153</sup> See also USBT Order, 85 FR at 12611; WisdomTree Order, 86 FR at 69330-31; Wise Origin Order, 87 FR at 5535; NYDIG Order, 87 FR at 14938; Global X Order, 87 FR at 14920; ARK 21Shares, 87 FR at 20024; Bitwise Order, 87 FR at 40288-89; Grayscale Order, 87 FR at 40312-13.

<sup>154</sup> See supra note 147.

<sup>155</sup> See, e.g., WisdomTree Order, 86 FR at 69331 (discussing 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; and discussing that the paper found inconclusive evidence that futures prices lead spot bitcoin prices—in particular, that the months at the end of the paper’s sample period showed, using Granger causality methodology, that the spot market was the leading market—and 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). See also USBT Order, 85 FR at 12613 n.244.

<sup>156</sup> See ARK 21Shares Order, 87 FR at 20024; WisdomTree Order, 86 FR at 69331. 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.

bitcoin futures market, which is the regulated market, and spot bitcoin platforms, which are the markets on which the assets held by the proposed ETP would trade.<sup>157</sup> As discussed in previous disapprovals, including the ARK 21Shares Order, analyses regarding whether the CME bitcoin futures market leads the spot market remain inconclusive.<sup>158</sup> Thus, as in previous disapprovals, because the lead-lag analysis regarding whether the CME bitcoin futures market leads the spot market is “central” to understanding the first prong,<sup>159</sup> the Commission determines that the evidence in the record is inadequate to conclude that an interrelationship exists between the CME bitcoin futures market and the spot bitcoin market such that it is reasonably likely that a person attempting to manipulate the proposed ETP would have to trade on the CME bitcoin futures market to successfully manipulate the proposed ETP.<sup>160</sup>

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<sup>157</sup> Although the Exchange points to the Sponsor’s research discussed above relating to correlation of the bitcoin markets (see supra notes 54-64 and accompanying text) to support the conclusion that the CME bitcoin futures market “is the leading market for bitcoin price formation,” (see Notice, 87 FR at 33262) the Sponsor’s analysis does not appear to reach any conclusions regarding the lead-lag relationship between the CME bitcoin futures market and the spot bitcoin market. Moreover, as discussed above, even accepting at face value the Sponsor’s statistical results, such results would only indicate that spot bitcoin prices during the sample period tended to move in tandem, not that the CME bitcoin futures market leads bitcoin price formation. See supra notes 81-82 and accompanying text. See also infra note 198 and accompanying paragraph regarding the contradictory conclusions that the Exchange appears to make with the Sponsor’s statistical results.

<sup>158</sup> As the academic literature and listing exchanges’ analyses pertaining to the pricing relationship between the CME bitcoin futures market and spot bitcoin market have developed, the Commission has critically reviewed those materials. See WisdomTree Order II, 87 FR at 62476-77; Grayscale Order, 87 FR at 40311-13; Bitwise Order, 87 FR at 40286-89; ARK 21Shares Order, 87 FR at 20024; Global X Order, 87 FR at 14920; Wise Origin Order, 87 FR at 5535-36, 5539-40; Kryptoin Order, 86 FR at 74176; WisdomTree Order, 86 FR at 69330-32; VanEck Order, 86 FR at 64547-48; USBT Order, 85 FR at 12613.

<sup>159</sup> See supra note 146.

<sup>160</sup> In addition, BZX 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

The Exchange also makes additional assertions<sup>161</sup> that are conclusory and presuppose, without additional supporting evidence, that the CME bitcoin futures market leads the price in the spot bitcoin market. For example, the Exchange’s assertion that “a potential manipulator of the Shares would... have to transact in the CME [b]itcoin [f]utures market because the Index is based on spot prices”<sup>162</sup> presupposes that “[CME] [b]itcoin [f]utures lead the price in the spot market”<sup>163</sup> and assumes a link between the Index and the Shares that, as discussed above,<sup>164</sup> the Exchange has not established. Likewise, the Exchange states that the Trust’s in-kind create/redeem process supports the conclusion that a would-be manipulator would have to trade on the CME bitcoin futures market to successfully manipulate the proposed ETP because the spot bitcoin market “is led by the CME [b]itcoin [f]utures market.”<sup>165</sup> However, as discussed already, the evidence in the record is inadequate to conclude that CME bitcoin futures prices lead spot bitcoin prices, and, as also discussed further above, BZX has not demonstrated that in-kind creations and redemptions provide the Shares with a unique resistance to manipulation.

The Commission thus concludes that the information that BZX provides is not sufficient to support a determination that it is reasonably likely that a would-be manipulator of the

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bitcoin platforms underlying the Index, or where price formation occurs when the entirety of bitcoin futures markets, not just the CME, is considered. See ARK 21Shares Order, 87 FR at 20024 n.147; VanEck Order, 86 FR at 64547-48; WisdomTree Order, 86 FR at 69331; Kryptoin Order, 86 FR at 74176; Wise Origin Order, 87 FR at 5535.

<sup>161</sup> See supra notes 149-152.

<sup>162</sup> Notice, 87 FR at 33262.

<sup>163</sup> See id.

<sup>164</sup> See supra notes 131-134 and accompanying text.

<sup>165</sup> Notice, 87 FR at 33262 (“the Trust only allows for in-kind creation and redemption, which reduces the potential for manipulation of the Shares through manipulation of the Index or any of its individual constituents, again emphasizing that a potential manipulator of the Shares would have to manipulate the entirety of the bitcoin spot market, which is led by the [CME] [b]itcoin [f]utures market.”).



proposed ETP would have to trade on the CME bitcoin futures market to successfully manipulate the proposed ETP. Therefore, the information in the record also does not establish that the CME bitcoin futures market is a “market of significant size” related to the assets to be held by 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” related to spot bitcoin 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.<sup>166</sup>

(a) BZX’s Assertions

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

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<sup>166</sup> See Winklevoss Order, 83 FR at 37594; USBT Order, 85 FR at 12596-97.

bitcoin futures market,<sup>167</sup> the size of bitcoin’s market capitalization,<sup>168</sup> and the significant liquidity available in the spot market.<sup>169</sup> BZX further 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.<sup>170</sup> 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. According to the Exchange, “[s]tated 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%.”<sup>171</sup> BZX further asserts that more strategic purchases or sales (such as using limit orders and executing through over-the-counter (“OTC”) bitcoin trade desks) would likely have less obvious impact on the market, which is consistent with MicroStrategy, Tesla, and Square being able to collectively purchase billions of dollars in

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<sup>167</sup> BZX states that the CME began to offer trading in bitcoin futures in 2017. See Notice, 87 FR at 33256. 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.” See id. For example, according to BZX, from March 28, 2022, through April 22, 2022, there was approximately \$1.3 billion in notional trading volume in CME bitcoin futures on a daily basis, and notional volume was never below \$670 million. See id. at 33252. Additionally, BZX states that open interest was over \$2 billion for the entirety of the period, and at one point was over \$3 billion. See id. According to the Sponsor, the increase in the volume on the CME is reflected in a higher proportion of the bitcoin market share, based on the proportion of the total monthly volume of bitcoin futures traded on the CME in relation to the total spot bitcoin volume on digital asset platforms. See id. at 33256. BZX states that that proportion of volume traded on CME has increased from less than 5% at inception, to more than 20% over three and a half years. See id.

<sup>168</sup> According to BZX, as of December 1, 2021, the total market cap of all bitcoin in circulation was approximately \$1.08 trillion. See id. at 33250 n.25.

<sup>169</sup> See id. at 33262, 33273.

<sup>170</sup> 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 33262 n.68; 33273 n.90.

<sup>171</sup> Id. at 33262, 33273.

bitcoin.<sup>172</sup> 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.<sup>173</sup>

(b) Analysis

The Commission does not agree with BZX's assertions, which are substantially the same assertions that BZX made, and the Commission discussed, in the ARK 21Shares Order. Now, as then, 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 lead price discovery<sup>174</sup>—the Commission 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 spot bitcoin market are general and conclusory, citing to the aforementioned trade volume of the CME bitcoin futures market and the size and liquidity of the spot bitcoin market, as well as the market impact of a single transaction in spot bitcoin, 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

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<sup>172</sup> See id.

<sup>173</sup> See id.

<sup>174</sup> See supra Section III.B.2.i.b.

growth in the size of the Trust and the resultant increase in the amount of bitcoin held by the Trust over time, or on the overall expected number, size, and frequency of creations and redemptions—or how any of the foregoing could (if at all) influence prices in the CME bitcoin futures market. 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.<sup>175</sup>

The Commission also is not persuaded by BZX’s assertions about the minimal effect a market order to buy or sell bitcoin would have on the bitcoin market.<sup>176</sup> While BZX concludes by way of an example of a \$10 million market order that buying or selling large amounts of bitcoin would have insignificant market impact, the conclusion does not analyze the extent of any impact on the CME bitcoin futures market or the CME bitcoin futures market’s prices. Accordingly, such statistics, without more, are not relevant to the Commission’s consideration of whether trading in the ETP would be the predominant influence on prices in the CME bitcoin futures market.

To the extent 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, the Exchange has not adequately explained why a single market order in spot bitcoin is an appropriate proxy for trading in the Shares. As stated above, the second prong in establishing whether the CME bitcoin futures market constitutes a “market of significant size” is the determination that it is unlikely

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<sup>175</sup> See VanEck Order, 86 FR at 64548-59; WisdomTree Order, 86 FR at 69332-33; Kryptoin Order, 86 FR at 74177; SkyBridge Order, 87 FR at 3879; Wise Origin Order, 87 FR at 5537; ARK 21Shares Order, 87 FR at 20025; Global X Order, 87 FR at 14921.

<sup>176</sup> See Notice, 87 FR at 33262 (“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%.”).

that trading in the proposed ETP would be the predominant influence on prices in the CME bitcoin futures market. While authorized participants of the Trust might transact in the spot bitcoin market as part of their creation or redemption of Shares, the Shares themselves would be traded in the secondary market on BZX. Furthermore, 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.<sup>177</sup>

Thus, the Commission cannot conclude, based on the assertions in the filing and absent sufficient evidence or analysis in support of these assertions, that it is unlikely that trading in the proposed ETP would be the predominant influence on prices in the CME bitcoin futures market.

Therefore, 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" related to spot bitcoin 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.

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<sup>177</sup> See VanEck Order, 86 FR at 64549; WisdomTree Order, 86 FR at 69333; Kryptoin Order, 86 FR at 74177; SkyBridge Order, 87 FR at 3879; Wise Origin Order, 87 FR at 5537; ARK 21Shares Order, 87 FR at 20025; Global X Order, 87 FR at 14921.

(3) Assertions That the Proposed Spot Bitcoin ETP is Comparable to Bitcoin Futures-Based ETFs

(i) BZX's Assertions

BZX asserts that, after allowing the listing and trading of bitcoin futures ETFs and ETPs that hold primarily CME bitcoin futures, disapproving spot bitcoin ETPs “seems... arbitrary and capricious.”<sup>178</sup> BZX asserts that CME bitcoin futures pricing is based on pricing from spot bitcoin markets and that the pricing mechanism applicable to the Shares is similar to that of CME bitcoin futures.<sup>179</sup> BZX argues that a statement in the Commission’s prior approval of CME bitcoin futures ETPs “makes clear that the Commission believes that CME’s surveillance can capture the effects of trading on the relevant spot markets on the pricing of CME [b]itcoin [f]utures.”<sup>180</sup> BZX asserts that it is “not logically possible” for the Commission to conclude that the CME bitcoin futures market represents a significant market for CME bitcoin futures ETPs, but also conclude that the CME bitcoin futures market does not represent a significant market for a spot bitcoin ETP.<sup>181</sup> BZX also states that CME bitcoin futures ETFs and ETPs are potentially more susceptible to potential manipulation than a spot bitcoin ETP that offers only in-kind

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<sup>178</sup> See Notice, 87 FR at 33255.

<sup>179</sup> See *id.* at 33254.

<sup>180</sup> *Id.* (citing Teucrium Order, 87 FR at 21679 (“The CME ‘comprehensively surveils futures market conditions and price movements on a real-time and ongoing basis in order to detect and prevent price distortions, including price distortions caused by manipulative efforts.’ Thus the CME’s surveillance can reasonably be relied upon to capture the effects on the CME bitcoin futures market caused by a person attempting to manipulate the proposed futures ETP by manipulating the price of CME bitcoin futures contracts, whether that attempt is made by directly trading on the CME bitcoin futures market or indirectly by trading outside of the CME bitcoin futures market. As such, when the CME shares its surveillance information with Arca, the information would assist in detecting and deterring fraudulent or manipulative misconduct related to the non-cash assets held by the proposed ETP.”)).

<sup>181</sup> See *id.* at 33254-55.

creation and redemption.<sup>182</sup> BZX asserts that any objective review of the proposals to list spot bitcoin ETPs compared to the CME bitcoin futures ETFs and ETPs would lead to the conclusion that spot bitcoin ETPs should be available to U.S. investors because “any concerns related to preventing fraudulent and manipulative acts and practices related to [s]pot [b]itcoin ETPs would apply equally to the spot markets underlying the futures contracts held by a [CME] [b]itcoin [f]utures ETF.”<sup>183</sup>

(ii) Analysis

The Commission disagrees with these assertions and conclusions. The proposed rule change does not relate to the same underlying holdings as ETFs regulated under the 1940 Act that provide exposure to bitcoin through CME bitcoin futures, or CME bitcoin futures-based ETPs that have registered their offerings under the Securities Act but are not regulated under the 1940 Act. The Commission considers the proposed rule change on its own merits and under the standards applicable to it. Namely, with respect to this proposed rule change, the Commission must apply the standards as provided by Section 6(b)(5) of the Exchange Act, which it has

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<sup>182</sup> See id. at 33254. BZX states that settlement of CME bitcoin futures (and thus the value of the underlying holdings of a bitcoin futures ETF/ETP) occurs at a single price derived from spot bitcoin pricing, while shares of a spot bitcoin ETP would represent interest in bitcoin directly, and that authorized participants for a spot bitcoin ETP would be able to source bitcoin from any exchange and create or redeem with the applicable trust regardless of the price of the underlying index. See id. BZX also argues that “the structure of [CME] [b]itcoin [f]utures ETFs provides negative outcomes for buy and hold investors as compared to a [s]pot [b]itcoin ETP” and that any concerns about the custody of physical bitcoin that a spot bitcoin ETP would hold (as compared to cash-settled futures contracts that a CME bitcoin futures ETF/ETP would hold) is mitigated by the custodial arrangements the Trust has in place. See id. at 33255.

<sup>183</sup> Id. at 33255. BZX states that while the 1940 Act “does offer certain investor protections, those protections do not relate to mitigating potential manipulation of the holdings of an ETF in a way that warrants distinction between [CME] [b]itcoin [f]utures ETFs and [s]pot [b]itcoin ETPs.” Id.

applied in connection with its orders considering previous proposals to list bitcoin-based commodity trusts and bitcoin-based trust issued receipts.<sup>184</sup>

In focusing on whether “concerns related to preventing fraudulent and manipulative acts and practices related to [s]pot [b]itcoin ETPs would apply equally to the spot markets underlying the futures contracts held by a [CME] [b]itcoin [f]utures ETF,”<sup>185</sup> the Exchange mischaracterizes the framework that the Commission has articulated in the Winklevoss Order. As stated in the Winklevoss Order, the Commission is not applying a “cannot be manipulated” approach—either on the CME bitcoin futures market or the spot bitcoin markets. Rather, as the Commission has repeatedly emphasized, and also summarized above, the Commission is examining whether the proposal meets the requirements of the Exchange Act and, pursuant to its Rules of Practice, is placing the burden on BZX to demonstrate the validity of its contention that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with the detection and deterrence of fraud and manipulation provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to spot bitcoin,<sup>186</sup> or to establish that it has entered into such a surveillance-sharing agreement.

Consistent with this approach, the Commission’s consideration (and thus far, disapproval) of proposals to list and trade spot bitcoin ETPs does not focus on an assessment of the overall risk of fraud and manipulation in the spot bitcoin or futures markets, or on the extent to which such risks are similar.<sup>187</sup> Rather, the Commission’s focus has been consistently on

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<sup>184</sup> See supra note 11 and accompanying text.

<sup>185</sup> See Notice, 87 FR at 33255.

<sup>186</sup> See supra notes 39-42 and accompanying text.

<sup>187</sup> The Commission’s past general discussion on the risk of fraud and manipulation in the spot bitcoin or futures markets is only in response to arguments raised by the proposing



whether the listing exchange has a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying bitcoin assets of the ETP under consideration, so that it would have the ability to detect and deter manipulative activity. For reasons articulated in the orders approving proposals to list and trade CME bitcoin futures-based ETPs (i.e., the Teucrium Order and the Valkyrie XBTO Order), the Commission found that in each such case the listing exchange has entered into such a surveillance-sharing agreement.<sup>188</sup> Applying the same framework to this proposed spot bitcoin ETP, however, as discussed and explained above, the Commission finds that BZX has not.

Moreover, for the CME bitcoin futures ETPs under consideration in the Teucrium Order and the Valkyrie XBTO Order, the proposed “significant” regulated market (i.e., the CME) with which the listing exchange has a surveillance-sharing agreement is the same market on which the underlying bitcoin assets (i.e., CME bitcoin futures contracts) trade. Thus, the CME’s surveillance can reasonably be relied upon to detect and deter manipulative activity caused by a person attempting to manipulate the CME bitcoin futures ETP through directly trading on the CME bitcoin futures market. Additionally, as explained in the Teucrium and the Valkyrie XBTO Orders, the CME’s surveillance can also reasonably be relied upon to capture the effects on the

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listing exchanges (or commenters) that mitigating factors against fraud and manipulation in the spot bitcoin or futures markets should compel the Commission to dispense with the detection and deterrence of fraud and manipulation provided by a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying bitcoin assets. See, e.g., Winklevoss Order, 83 FR at 37580, 37582-91 (addressing assertions that “bitcoin and [spot] bitcoin 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, 12599-12608. But even in such instance, the central issue was about the need for such a surveillance-sharing agreement, not the overall risk of fraud and manipulation in the spot bitcoin or futures markets, or the extent to which such risks are similar.

<sup>188</sup> See Teucrium Order, 87 FR at 21678-81; Valkyrie XBTO Order, 87 FR at 28850-53.

CME bitcoin futures market caused by a person attempting to manipulate the CME bitcoin futures ETP by manipulating the price of CME bitcoin futures contracts when that attempt is made indirectly by trading outside of the CME bitcoin futures market.<sup>189</sup> Regarding the approved Teucrium Bitcoin Futures Fund in the Teucrium Order (“Teucrium Fund”), for example, when the CME shares its surveillance information with the listing exchange, the information would assist in detecting and deterring fraudulent or manipulative misconduct related to the non-cash assets held by the Teucrium Fund.<sup>190</sup> Accordingly, the Commission explains in the Teucrium Order and the Valkyrie XBTO Order that it is unnecessary for a listing exchange to establish a reasonable likelihood that a would-be manipulator would have to trade on the CME itself to manipulate a proposed ETP whose only non-cash holdings would be CME bitcoin futures contracts.<sup>191</sup>

However, as the Commission also states in those Orders, this reasoning does not extend to spot bitcoin ETPs. Spot bitcoin markets are not currently “regulated.”<sup>192</sup> If an exchange seeking to list a spot bitcoin ETP relies on the CME as the regulated market with which it has a comprehensive surveillance-sharing agreement, the assets held by the spot bitcoin ETP would not be traded on the CME. Because of this significant difference, with respect to a spot bitcoin ETP, there would be reason to question whether a surveillance-sharing agreement with the CME would, in fact, assist in detecting and deterring fraudulent and manipulative misconduct affecting the price of the spot bitcoin held by that ETP. If, however, an exchange proposing to list and

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<sup>189</sup> See Teucrium Order, 87 FR at 21679; Valkyrie XBTO Order, 87 FR at 28851.

<sup>190</sup> See Teucrium Order, 87 FR at 21679.

<sup>191</sup> See *id.*

<sup>192</sup> See *id.* at 21679 n.46 (citing USBT Order, 85 FR at 12604; NYDIG Order, 87 FR at 14936 nn.65-67). See also Valkyrie XBTO Order, 87 FR at 28851 n.42.

trade a spot bitcoin ETP identifies the CME as the regulated market with which it has a comprehensive surveillance-sharing agreement, the exchange could overcome the Commission's concern by demonstrating that there is a reasonable likelihood that a person attempting to manipulate the spot bitcoin ETP would have to trade on the CME in order to manipulate the ETP, because such demonstration would help establish that the exchange's surveillance-sharing agreement with the CME would have the intended effect of aiding in the detection and deterrence of fraudulent and manipulative misconduct related to the spot bitcoin held by the ETP.<sup>193</sup>

Because, here, BZX is seeking to list a spot bitcoin ETP that relies on the CME as the purported "significant" regulated market with which it has a comprehensive surveillance-sharing agreement, the assets held by the proposed ETP would not be traded on the CME. Thus there is reason to question whether a surveillance-sharing agreement with the CME would, in fact, assist in detecting and deterring fraudulent and manipulative misconduct affecting the price of the spot bitcoin held by the proposed ETP.<sup>194</sup> An exchange can overcome this concern by demonstrating

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<sup>193</sup> See Teucrium Order, 87 FR at 21679 n.46; Valkyrie XBTO Order, 87 FR at 28851 n.42.

<sup>194</sup> See Teucrium Order, 87 FR at 21679 n.46; Valkyrie XBTO Order, 87 FR at 28851 n.42. The Exchange mischaracterizes the Commission's statement in the Teucrium Order when the Exchange asserts that "the Commission believes that CME's surveillance can capture the effects of trading on the relevant spot markets on the pricing of CME [b]itcoin [f]utures." Notice, 87 FR at 33254. What the Commission stated in the Teucrium Order is that for the Teucrium Fund (1) the proposed "significant" regulated market (i.e., the CME) with which the listing exchange has a surveillance-sharing agreement is the same market on which the underlying assets trade; and (2) therefore that the CME's surveillance can reasonably be relied upon to capture the effects on the CME bitcoin futures market (i.e., its own market) caused by a person attempting to manipulate the CME bitcoin futures ETP by manipulating the price of CME bitcoin futures contracts, whether that attempt is made by directly trading on the CME bitcoin futures market or indirectly by trading outside of the CME bitcoin futures market. See Teucrium Order, 87 FR at 21679. Importantly, the Commission did not state that, for spot bitcoin ETPs such as the one proposed here, where the underlying asset would not trade on the CME, the

that there is a reasonable likelihood that a person attempting to manipulate the proposed ETP would have to trade on the CME in order to manipulate the ETP because such demonstration would help establish that an exchange's surveillance-sharing agreement with the CME would have the intended effect of aiding in the detection and deterrence of fraudulent and manipulative misconduct related to the spot bitcoin held by the proposed ETP.<sup>195</sup> As discussed and explained above,<sup>196</sup> the Commission finds that BZX has not made such demonstration.

To the extent that the Exchange is arguing that the CME's surveillance would, in fact, assist in detecting and deterring fraudulent and manipulative misconduct that impacts spot bitcoin ETPs in the same way as it would for misconduct that impacts the CME bitcoin futures ETFs/ETPs, the information in the record for this filing does not support such a claim. BZX asserts that CME bitcoin futures pricing "is based on pricing from spot bitcoin markets;" that "the pricing mechanism applicable to the Shares is similar to that of the CME [b]itcoin [f]utures;" and that "this view is also consistent with the Advisor's research," which the Commission assumes is a reference to the Sponsor's statistical claims that crypto markets are

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CME's surveillance can be similarly relied upon to capture the effects of a person attempting to manipulate a spot bitcoin ETP by manipulating the price of spot bitcoin when the attempt is made by trading outside of the CME bitcoin futures market. Indeed, there is reason to question whether the CME's surveillance would capture manipulation of spot bitcoin that occurs off of the CME, if, for example, off-CME manipulation of spot bitcoin does not also similarly impact CME bitcoin futures contracts. And as discussed below, the Exchange has not provided any data or analysis to show that CME bitcoin futures would be impacted by instances of fraud and manipulation in the spot bitcoin market that occurs off of the CME.

<sup>195</sup> See Teucrium Order, 87 FR at 21679 n.46; Valkyrie XBTO Order, 87 FR at 28851 n.42.

<sup>196</sup> See supra Section III.B.2.i.

“highly correlated.”<sup>197</sup> However, even accepting at face value the Sponsor’s statistical claim that, minute-by-minute, CME bitcoin futures prices are highly correlated with spot bitcoin prices, such a result provides no support for the causal connection that the Exchange asserts here—namely, that CME bitcoin futures pricing “is based on” pricing from spot bitcoin markets. Moreover, if, as the Exchange claims here in the context of its arbitrary/capricious argument, CME bitcoin futures prices are “based on” spot bitcoin prices, the Exchange does not explain how this is consistent with, and indeed how it does not contradict, the Exchange’s claims in the context of its “significant market” arguments that CME bitcoin futures prices “lead” spot bitcoin prices.<sup>198</sup>

Moreover, even if the Exchange had demonstrated, statistically, a causal connection between spot bitcoin prices and CME bitcoin futures prices, which it has not, it does not necessarily follow that the CME’s surveillance would, in fact, assist in detecting and deterring

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<sup>197</sup> See Notice, 87 FR at 33254; 33256. The Commission assumes that the Exchange means the Sponsor when it uses the term “Advisor” as that latter term is not defined and mentioned only once.

<sup>198</sup> In addition, to the extent the Exchange is asserting that CME bitcoin futures pricing “is based on” spot bitcoin pricing because of the CME CF Bitcoin Reference Rate (BRR), this is also not supported by the evidence in the record for this proposal. While the BRR is used to value the final cash settlement of CME bitcoin futures contracts, it is not generally used for daily cash settlement of such contracts, nor is it claimed to be used for any intra-day trading of such contracts. See, e.g., Grayscale Order, 87 FR at 40317-18. Moreover, the shares of CME bitcoin futures ETFs/ETPs trade in secondary markets, as would the Shares, and there is no evidence in the record for this filing that such intra-day, secondary market trading prices are, or would be, determined by the BRR. Further, the Commission’s determination in the Teucrium Order and the Valkyrie XBTO Order to approve the listing and trading of the relevant CME bitcoin futures ETPs was not based on either the ETPs’ or the underlying CME bitcoin futures contracts’ pricing mechanism. Rather, as discussed above, the Commission approved the listing and trading of such CME bitcoin futures ETPs because the Commission found that the listing exchanges have a surveillance-sharing agreement with a regulated market of significant size related to the underlying bitcoin assets—which for such ETPs are CME bitcoin futures contracts, not spot bitcoin.

fraudulent and manipulative misconduct that impacts spot bitcoin ETPs in the same way as it would for misconduct that impacts the CME bitcoin futures ETFs/ETPs—particularly when such misconduct occurs off of the CME itself.<sup>199</sup> This is because it does not—absent supporting data—necessarily follow that any manipulation that impacts spot bitcoin also similarly impacts CME bitcoin futures contracts. The Exchange has not provided analysis or data that assesses the reaction (if any) of CME bitcoin futures contracts to instances of fraud and manipulation in spot bitcoin markets.

In addition, the disapproval of the proposal would not constitute an “arbitrary and capricious” administrative action in violation of the Administrative Procedure Act.<sup>200</sup> Importantly, the issuers are not similarly situated. The issuers of CME bitcoin futures-based ETFs/ETPs propose to hold only CME bitcoin futures contracts (which are traded on the CME itself) as their only non-cash holdings, and the Trust proposes to hold only spot bitcoin (which is not traded on the CME). As explained in detail above, and in the Teucrium Order, the Valkyrie XBTO Order, and the Grayscale Order, because of this important difference, for a spot bitcoin ETP, there is reason to question whether a surveillance-sharing agreement with the CME would, in fact, assist in detecting and deterring fraudulent and manipulative misconduct affecting the price of the spot bitcoin held by that ETP.<sup>201</sup> And as discussed above, neither the Exchange nor

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<sup>199</sup> See also supra note 194.

<sup>200</sup> The Commission is disapproving this proposed rule change because BZX has not met its burden to demonstrate that its proposal is consistent with the requirements of Exchange Act Section 6(b)(5). The Commission’s disapproval of this proposed rule change does not rest on an evaluation of the relative investment quality of a product holding spot bitcoin versus a product holding CME bitcoin futures, or an assessment of whether bitcoin, or blockchain technology more generally, has utility or value as an innovation or an investment. See, e.g., Winklevoss Order, 83 FR at 37580; USBT Order, 85 FR at 12597; One River Order, 87 FR at 33550; Grayscale Order, 87 FR at 40318 n.227.

<sup>201</sup> See supra note 194 and accompanying text.

any other evidence in the record for this filing, sufficiently demonstrates that the CME's surveillance can be reasonably relied upon to capture the effects of manipulation of the spot bitcoin assets underlying the proposed ETP when such manipulation is not attempted on the CME itself.

Moreover, the analytical framework for assessing compliance with the requirements of Exchange Act Section 6(b)(5) that the Commission applies here (i.e., comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying bitcoin assets) is the same one that the Commission has applied in each of its orders considering previous proposals to list bitcoin-based commodity trusts and trust issued receipts.<sup>202</sup> The Commission has applied this framework to each proposal by analyzing the evidence presented by the listing exchange and statements made by commenters.<sup>203</sup> Exchange Act Section 6(b)(5) can be satisfied by a proper showing; the Commission has in fact recently approved proposals by NYSE Arca, Inc. and the Nasdaq Stock Market to list and trade shares of ETPs holding CME bitcoin futures as their only non-cash holdings.<sup>204</sup> And in the orders approving the CME bitcoin futures-based ETPs, the Commission explicitly discussed how an exchange seeking to list and trade a spot bitcoin ETP could overcome the lack of a one-to-one relationship between the regulated market with which it has a surveillance-sharing agreement and the market(s) on which the assets held by a spot bitcoin ETP could be traded: by demonstrating that there is a

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<sup>202</sup> See supra notes 11-24 and accompanying text.

<sup>203</sup> See supra note 11.

<sup>204</sup> See Teucrium Order and Valkyrie XBTO Order, supra note 11.

reasonable likelihood that a person attempting to manipulate the spot bitcoin ETP would have to trade on the regulated market (i.e., on the CME) to manipulate the spot bitcoin ETP.<sup>205</sup>

When considering past proposals for spot bitcoin ETPs, the Commission has, in particular, reviewed the econometric and/or statistical evidence in the record to determine whether the listing exchange's proposal has met the applicable standard.<sup>206</sup> The Commission's assessment fundamentally presents quantitative, empirical questions, but, as discussed above, the Exchange has not provided evidence sufficient to support its arguments.<sup>207</sup>

The requirements of Section 6(b)(5) of the Exchange Act apply to the rules of national securities exchanges. Accordingly, the relevant obligation to have a comprehensive surveillance-sharing agreement with a regulated market of significant size related to spot bitcoin, or other means to prevent fraudulent and manipulative acts and practices that are sufficient to justify dispensing with such a 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

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<sup>205</sup> See supra note 193 and accompanying text.

<sup>206</sup> See, e.g., USBT Order, 85 FR at 12612-13; VanEck Order, 86 FR at 64547-48; WisdomTree Order, 86 FR at 69330-32; Kryptoin Order, 86 FR at 74175-76; NYDIG Order, 87 FR at 14938-39; Wise Origin Order, 87 FR at 5534-36; Global X Order, 87 FR at 14919-20; ARK 21Shares Order, 87 FR at 20023-24; Bitwise Order, 87 FR at 40286-92; Grayscale Order, 87 FR at 40311-14.

<sup>207</sup> See supra Sections III.B.1 & III.B.2.



of whether the proposal meets each of the applicable requirements of the Exchange Act.<sup>208</sup> 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.

(1) BZX's Assertions

The Exchange states that the proposal is designed to protect investors and the public interest. BZX asserts that access for U.S. retail investors to gain exposure to bitcoin via a transparent and U.S. regulated, exchange-traded vehicle remains limited.<sup>209</sup> According to the Exchange, current options include: (i) OTC bitcoin funds with high management fees and potentially volatile premiums and discounts;<sup>210</sup> (ii) facing the technical risk, complexity, and generally high fees associated with buying spot bitcoin; (iii) purchasing shares of operating companies that they believe will provide proxy exposure to bitcoin with limited disclosure about the associated risks; or (iv) purchasing CME bitcoin futures ETFs that represent a sub-optimal investment for long-term investors.<sup>211</sup> BZX explains that over the past several years, U.S. investor exposure to bitcoin through OTC bitcoin funds has grown into the tens of billions of dollars and more than a billion dollars of exposure through CME bitcoin futures ETFs.<sup>212</sup> BZX

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<sup>208</sup> 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; WisdomTree Order, 86 FR at 69333; Valkyrie Order, 86 FR at 74163; Kryptoin Order, 86 FR at 74178; SkyBridge Order, 87 FR at 3880; Wise Origin Order, 87 FR at 5537; ARK 21Shares Order, 87 FR at 20026; Global X Order, 87 FR at 14921; Bitwise Order, 87 FR at 40292; Grayscale Order, 87 FR at 40319.

<sup>209</sup> See Notice, 87 FR at 33253.

<sup>210</sup> BZX states that “[t]he largest OTC [b]itcoin [f]und has an [assets under management or “AUM”] of \$23 billion.” See id. at 33253 n.42. According to BZX, “investors are buying shares of a fund that experiences significant volatility in its premium and discount outside of the fluctuations in price of the underlying asset.” See id.

<sup>211</sup> See id. at 33253-54.

<sup>212</sup> See id. at 33268; 33280.

states that with that growth, so too has grown the quantifiable investor protection issues to U.S. investors through roll costs for bitcoin futures ETFs and premium/discount volatility and management fees for OTC bitcoin funds. BZX asserts that the concerns related to the prevention of fraudulent and manipulative acts and practices have been sufficiently addressed to be consistent with the Exchange Act and, as such, approving the proposal (and comparable proposals) would provide 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) reducing risks and costs associated with investing in CME bitcoin futures ETFs and operating companies that are imperfect proxies for bitcoin exposure; and (iv) providing an alternative to custodial spot bitcoin.<sup>213</sup>

BZX states that a number of operating companies engaged in unrelated businesses have announced investments as large as \$5.3 billion in bitcoin.<sup>214</sup> BZX argues that, without access to bitcoin ETPs, retail investors seeking investment exposure to bitcoin may purchase shares in these companies in order to gain exposure to bitcoin.<sup>215</sup> BZX contends that such operating companies, however, are imperfect bitcoin proxies and provide investors with partial bitcoin exposure paired with additional risks associated with whichever operating company they decide to purchase. BZX concludes that investors seeking bitcoin exposure through publicly traded companies are gaining only partial exposure to bitcoin and are not fully benefitting from the risk

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<sup>213</sup> See id.

<sup>214</sup> See id. at 33253 n.43.

<sup>215</sup> See id.

disclosures and associated investor protections that come from the securities registration process.<sup>216</sup>

BZX also states that investors in many other countries, including Canada and Brazil, are able to use more traditional exchange-listed and traded products (including exchange-traded funds holding spot bitcoin) to gain exposure to bitcoin, disadvantaging U.S. investors and leaving them with more risky means of getting bitcoin exposure.<sup>217</sup>

(2) Analysis

The Commission disagrees that the proposal should be approved because it is designed to protect investors and the public interest. Here, even if it were true that, compared to trading in unregulated spot bitcoin markets or OTC bitcoin funds, trading a spot bitcoin-based ETP on a national securities exchange could provide some additional protection to investors, or that the Shares would provide more efficient exposure to bitcoin than other products on the market such as CME bitcoin futures ETFs/ETPs, the Commission must consider this potential benefit in the

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<sup>216</sup> See id.

<sup>217</sup> See id. at 33254. BZX represents that investors in other countries, specifically Canada, generally pay lower fees than U.S. retail investors that invest in OTC bitcoin funds due to the fee pressure that results from increased competition among available bitcoin investment options. BZX also argues that, without an approved spot bitcoin ETP in the U.S. as a viable alternative, U.S. investors could seek to purchase shares of non-U.S. bitcoin vehicles in order to gain 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. BZX further contends that the lack of a U.S.-listed spot bitcoin ETP is not preventing U.S. funds from gaining exposure to bitcoin—several U.S. exchange-traded funds are using Canadian bitcoin ETPs to gain exposure to spot bitcoin—and that approving this proposal “would provide U.S. exchange-traded funds and mutual funds with a U.S.-listed and regulated product to provide such access rather than relying on either flawed products or products listed and primarily regulated in other countries.” See id. BZX also states that regulators in other countries have either approved or otherwise allowed the listing and trading of bitcoin-based ETPs. See id. at 33254 n.44.

broader context of whether the proposal meets each of the applicable requirements of the Exchange Act.<sup>218</sup> Pursuant to Section 19(b)(2) of the Exchange Act, the Commission must approve a proposed rule change filed by a national securities exchange if it finds that the proposed rule change is consistent with the applicable requirements of the Exchange Act—including the requirement under Section 6(b)(5) that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices—and it must disapprove the filing if it does not make such a finding.<sup>219</sup> Thus, even if a proposed rule change purports to protect investors from a particular type of investment risk—such as experiencing a potentially high premium/discount by investing in OTC bitcoin funds or roll costs by investing in bitcoin futures ETFs/ETPs—or purports to provide benefits to investors and the public interest—such as enhancing competition—the proposed rule change may still fail to meet the requirements under the Exchange Act.<sup>220</sup>

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),<sup>221</sup> and, accordingly, the Commission must disapprove the proposal.<sup>222</sup>

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<sup>218</sup> See supra note 208.

<sup>219</sup> See Exchange Act Section 19(b)(2)(C), 15 U.S.C. 78s(b)(2)(C). See also Affiliated Ute Citizens of Utah v. United States, 406 U.S. 128, 151 (1972) (Congress enacted the Exchange Act largely “for the purpose of avoiding frauds”); Gabelli v. SEC, 568 U.S. 442, 451 (2013) (The “SEC’s very purpose” is to detect and mitigate fraud.).

<sup>220</sup> See SolidX Order, 82 FR at 16259; VanEck Order, 86 FR at 54550-51; WisdomTree Order, 86 FR at 69344; Kryptoin Order, 86 FR at 74179; Valkyrie Order, 86 FR at 74163; SkyBridge Order, 87 FR at 3881; Wise Origin Order, 87 FR at 5538.

<sup>221</sup> 15 U.S.C. 78f(b)(5).

<sup>222</sup> 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).

#### **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-2022-031 be, and it hereby is, disapproved.

By the Commission.

Sherry R. Haywood,

Assistant Secretary.