SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-93859; File No. SR-NYSEArca-2021-31)

December 22, 2021

Self-Regulatory Organizations; NYSE Arca, Inc.; 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)

I. INTRODUCTION

On April 23, 2021, NYSE Arca, Inc. (“NYSE Arca” or “Exchange”) filed with the
Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the
Securities Exchange Act of 1934 (“Exchange Act”)1 and Rule 19b-4 thereunder,2 a proposed rule
change to list and trade shares (“Shares”) of the Valkyrie Bitcoin Fund (“Trust”) under NYSE
Arca Rule 8.201-E (Commodity-Based Trust Shares). The proposed rule change was published
for comment in the Federal Register on May 12, 2021.3

On June 22, 2021, pursuant to Section 19(b)(2) of the Exchange Act,4 the Commission
designated a longer period within which to approve the proposed rule change, disapprove the
proposed rule change, or institute proceedings to determine whether to disapprove the proposed
rule change.5 On August 9, 2021, the Commission instituted proceedings under Section
19(b)(2)(B) of the Exchange Act6 to determine whether to approve or disapprove the proposed

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   Comments on the proposed rule change can be found at:
rule change. On November 1, 2021, the Commission designated a longer period for Commission action on the proposed rule change.

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

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

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10 Bitcoins are digital assets that are issued and transferred via a decentralized, open-source protocol used by a peer-to-peer computer network through which transactions are recorded on a public transaction ledger known as the “bitcoin blockchain.” The bitcoin protocol governs the creation of new bitcoins and the cryptographic system that secures and verifies bitcoin transactions. See, e.g., Notice, 86 FR at 26074-75.
that lists bitcoin-based exchange-traded products ("ETPs") can meet its obligations under
Exchange Act Section 6(b)(5) by demonstrating that the exchange has a comprehensive
surveillance-sharing agreement with a regulated market of significant size related to the
underlying or reference bitcoin assets.\footnote{12}

The standard requires such surveillance-sharing agreements since they "provide a
necessary deterrent to manipulation because they facilitate the availability of information needed
to fully investigate a manipulation if it were to occur."\footnote{13} The Commission has emphasized that it
is essential for an exchange listing a derivative securities product to enter into a surveillance-

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

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

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

14 See NDSP Adopting Release, 63 FR at 70959.
16 See Winklevoss Order, 83 FR at 37594. This definition is illustrative and not exclusive. There could be other types of “significant markets” and “markets of significant size,” but this definition is an example that will provide guidance to market participants. See id.
17 See USBT Order, 85 FR at 12597.
Consistent with this standard, for the commodity-trust ETPs approved to date for listing and trading, there has been in every case at least one significant, regulated market for trading futures on the underlying commodity—whether gold, silver, platinum, palladium, or copper—and the ETP listing exchange has entered into surveillance-sharing agreements with, or held Intermarket Surveillance Group (“ISG”) membership in common with, that market. Moreover, the surveillance-sharing agreements have been consistently present whenever the Commission has approved the listing and trading of derivative securities, even where the underlying securities were also listed on national securities exchanges—such as options based on an index of stocks traded on a national securities exchange—and were thus subject to the Commission’s direct regulatory authority.

18 See Winklevoss Order, 83 FR at 37594.

19 See USBT Order, 85 FR at 12597; Securities Exchange Act Release No. 33555 (Jan. 31, 1994), 59 FR 5619, 5621 (Feb. 7, 1994) (SR-Amex-93-28) (order approving listing of options on American Depository Receipts (“ADRs”)). The Commission has also required a surveillance-sharing agreement in the context of index options even when (i) all of the underlying index component stocks were either registered with the Commission or exempt from registration under the Exchange Act; (ii) all of the underlying index component stocks traded in the U.S. either directly or as ADRs on a national securities exchange; and (iii) effective international ADR arbitrage alleviated concerns over the relatively smaller ADR trading volume, helped to ensure that ADR prices reflected the pricing on the home market, and helped to ensure more reliable price determinations for settlement purposes, due to the unique composition of the index and reliance on ADR prices. See Securities Exchange Act Release No. 26653 (Mar. 21, 1989), 54 FR 12705, 12708 (Mar. 28, 1989) (SR-Amex-87-25) (stating that “surveillance-sharing agreements between the exchange on which the index option trades and the markets that trade the underlying securities are necessary” and that “[t]he exchange of surveillance data by the exchange trading a stock index option and the markets for the securities comprising the index is important to the detection and deterrence of intermarket manipulation.”). And the Commission has required a surveillance-sharing agreement even when approving options based on an index of stocks traded on a national securities exchange. See Securities Exchange Act Release No. 30830 (June 18, 1992), 57 FR 28221, 28224 (June 24, 1992) (SR-Amex-91-22) (stating that surveillance-sharing agreements “ensure the availability of information necessary to detect and deter potential manipulations and other trading abuses”).
Listing exchanges have also attempted to demonstrate that other means besides surveillance-sharing agreements will be sufficient to prevent fraudulent and manipulative acts and practices, including that the bitcoin market as a whole or the relevant underlying bitcoin market is “uniquely” and “inherently” resistant to fraud and manipulation.\(^{20}\) In response, the Commission has agreed that, if a listing exchange could establish that the underlying market inherently possesses a unique resistance to manipulation beyond the protections that are utilized by traditional commodity or securities markets, it would not necessarily need to enter into a surveillance-sharing agreement with a regulated significant market.\(^{21}\) Such resistance to fraud and manipulation, however, must be novel and beyond those protections that exist in traditional commodity markets or equity markets for which the Commission has long required surveillance-sharing agreements in the context of listing derivative securities products.\(^{22}\) No listing exchange has satisfied its burden to make such demonstration.\(^{23}\)

Here, NYSE Arca contends that approval of the proposal is consistent with Section 6(b)(5) of the Exchange Act, in particular Section 6(b)(5)’s requirement that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest.\(^{24}\) Although NYSE Arca recognizes the Commission’s concern with potential manipulation of bitcoin ETPs in prior disapproval orders,

\(^{20}\) See USBT Order, 85 FR at 12597.

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

\(^{22}\) See USBT Order, 85 FR at 12597.

\(^{23}\) See supra note 11.

\(^{24}\) See Notice, 86 FR at 26080-81.
NYSE Arca argues that the proposal is consistent with Section 6(b)(5) of the Exchange Act because the growth of liquidity and presence of arbitrage in the spot market for bitcoin as well as the methodology and framework of the Index (as defined below) that is used to determine the value of the assets and net asset value (“NAV”) of the Trust sufficiently mitigate effects of potential manipulation in the bitcoin market. Further, NYSE Arca believes that the proposal would provide investors a more convenient, more efficient, and less risky way to invest in bitcoin than the purchase of a standalone bitcoin.

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 relating to NYSE Arca’s surveillance-sharing agreements related to bitcoin; and in Section III.C assertions that the proposal is consistent with the protection of investors and the public interest. As discussed further below, NYSE Arca repeats various assertions made in prior bitcoin-based ETP proposals that the Commission has previously addressed and rejected—and more importantly, NYSE Arca does not respond to the Commission’s reasons for rejecting those assertions but merely repeats them. The Commission concludes that NYSE Arca has not established that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with the requisite surveillance-sharing agreement. The Commission further concludes that NYSE Arca has not established that it has a comprehensive surveillance-sharing agreement with a regulated market of significant size related to bitcoin. As a result, the Commission is unable to

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25 See id. at 26078-80.
26 See id. at 26073, 26080.
find that the proposed rule change is consistent with the statutory requirements of Exchange Act Section 6(b)(5).

The Commission again emphasizes that its disapproval of this proposed rule change does not rest on an evaluation of whether bitcoin, or blockchain technology more generally, has utility or value as an innovation or an investment. Rather, the Commission is disapproving this proposed rule change because, as discussed below, NYSE Arca 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, the Exchange proposes to list and trade the Shares of the Trust under NYSE Arca Rule 8.201-E, which governs the listing and trading of Commodity-Based Trust Shares on the Exchange.

The investment objective of the Trust will be for the Shares to reflect the performance of the value of a bitcoin as represented by the CF Bitcoin US Settlement Price (“Index”), less the Trust’s liabilities and expenses. The Trust will use the Index to calculate the Trust’s NAV. The Index was created and is administered by CF Benchmarks Ltd. (“Benchmark Administrator”) and serves as a once-a-day benchmark rate of the U.S. dollar price of bitcoin (USD/BTC),

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27 See Notice, supra note 3. See also Registration Statement on Form S-1/A, dated April 30, 2021 (File No. 333-252344), filed with the Commission on behalf of the Trust (“Registration Statement”).

28 Valkyrie Digital Assets LLC is the sponsor of the Trust (“Sponsor”) and Delaware Trust Company is the trustee. Coinbase Custody Trust Company, LLC (“Custodian”) will act as custodian for the Trust’s bitcoins. U.S. Bancorp Fund Services, LLC (“Administrator”) will act as the transfer agent and administrator of the Trust. See Notice, 86 FR at 26073.
calculated as of 4:00 p.m. E.T.\textsuperscript{29} The Index aggregates the trade flow of several bitcoin platforms during an observation window between 3:00 p.m. and 4:00 p.m. E.T. into the U.S. dollar price of one bitcoin at 4:00 p.m. E.T. The current constituent bitcoin platforms of the Index are Bitstamp, Coinbase, Gemini, itBit, and Kraken ("Constituent Bitcoin Platforms"). The Index is calculated based on the “Relevant Transactions”\textsuperscript{30} of all of its Constituent Bitcoin Platforms. All Relevant Transactions are added to a joint list, recording the time of execution, trade price, and size for each transaction, and the list is partitioned by timestamp into 12 equally-sized time intervals of five minute length.\textsuperscript{31} For each partition separately, the volume-weighted median trade price is calculated from the trade prices and sizes of all Relevant Transactions.\textsuperscript{32} The Index is then determined by the arithmetic mean of the volume-weighted medians of all partitions.\textsuperscript{33}

\textsuperscript{29} According to NYSE Arca, the Index is based on materially the same methodology (except calculation time, as described herein) as the Benchmark Administrator’s CME CF Bitcoin Reference Rate ("BRR"), which was first introduced on November 14, 2016, and is the rate on which bitcoin futures contracts are cash-settled in U.S. dollars on the Chicago Mercantile Exchange ("CME"). The Index is calculated as of 4:00 p.m. E.T., whereas the BRR is calculated as of 4:00 p.m. London Time. See id. at 26076 & n.9.

\textsuperscript{30} According to the Exchange, a “Relevant Transaction” is any cryptocurrency versus U.S. dollar spot trade that occurs during the observation window between 3:00 p.m. and 4:00 p.m. E.T. on a Constituent Bitcoin Platform in the BTC/USD pair that is reported and disseminated by a Constituent Bitcoin Platform and observed by the Benchmark Administrator. See id. at 26076 n.10.

\textsuperscript{31} See id. at 26076.

\textsuperscript{32} See id. According to the Exchange, a volume-weighted median differs from a standard median in that a weighting factor, in this case trade size, is factored into the calculation. See id.

\textsuperscript{33} See id.
The Shares of the Trust represent units of fractional undivided beneficial interest in, and ownership of, the Trust. The Trust will only hold bitcoin. The Custodian will establish accounts that hold the bitcoins deposited with the Custodian on behalf of the Trust.\footnote{See id. at 26073.}

The Administrator will calculate the NAV of the Trust once each Exchange trading day. The Sponsor will publish the NAV and NAV per Share as soon as practicable after their determination and availability, and the NAV will be released after the end of the Core Trading Session (4:00 p.m. E.T.). The NAV of the Trust is not officially struck until later in the day (often by 5:30 p.m. E.T, and usually by 8:00 p.m. E.T.). The Trust’s NAV per Share is calculated by taking the current market value of its total assets, less any liabilities of the Trust, and dividing that total by the total number of outstanding Shares. The bitcoin held by the Trust will be valued based on the price set by the Index.\footnote{See id. at 26076.}

The Trust will provide website disclosure of its bitcoin holdings daily.\footnote{See id. at 26081.} The Trust will also disseminate an intraday indicative value (“IIV”) per Share updated every 15 seconds by one or more major market data vendors during the Exchange’s Core Trading Session (normally 9:30 a.m. to 4:00 p.m. E.T.). The IIV will be calculated by a third-party financial data provider using the prior day’s closing NAV per Share of the Trust as a base and updating that value throughout the trading day to reflect changes in the most recently reported price level of the CME CF
Bitcoin Real-Time Index ("BRTI"), as reported by CME Group, Inc., Bloomberg, L.P., or another reporting service.\textsuperscript{37}

The Trust will issue and redeem Shares to authorized participants on an ongoing basis in one or more “Baskets” of 50,000 Shares. The creation and redemption of a Basket requires the delivery to the Trust, or the distribution by the Trust, of the number of whole and fractional bitcoins represented by each Basket being created or redeemed.\textsuperscript{38} Creation orders and redemption orders may be placed either “in-kind” or “in-cash.” Although the Trust will create Baskets only upon the receipt of bitcoins, and will redeem Baskets only by distributing bitcoins, an authorized participant may deposit cash with the Administrator, which will facilitate the purchase or sale of bitcoins through a liquidity provider on behalf of an authorized participant ("Conversion Procedures”).\textsuperscript{39}

III. DISCUSSION

A. The Applicable Standard for Review

The Commission must consider whether NYSE Arca’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.”\textsuperscript{40} Under the Commission’s Rules of

\textsuperscript{37} According to NYSE Arca, the BRTI is calculated in real time based on the universe of the currently unmatched limit orders to buy or sell in the BTC/USD pair of all Constituent Bitcoin Platforms. See id. at 26076.

\textsuperscript{38} See id. at 26076-77.

\textsuperscript{39} The Conversion Procedures will be facilitated by a single liquidity provider, which will be selected by the Sponsor on an order-by-order basis. In the event that an order cannot be filled in its entirety by a single liquidity provider, additional liquidity provider(s) will be selected by the Sponsor to fill the remaining amount. See id. at 26076-78.

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.”

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, and any failure of an SRO to provide this information may result in the Commission not having a sufficient basis to make an affirmative finding that a proposed rule change is consistent with the Exchange Act and the applicable rules and regulations. 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.

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).


See id.

See id.

B. Whether NYSE Arca Has Met Its Burden to Demonstrate That the Proposal Is Designed to Prevent Fraudulent and Manipulative Acts and Practices

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

As stated above, the Commission has recognized that a listing exchange could demonstrate that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with a comprehensive surveillance-sharing agreement with a regulated market of significant size, including by demonstrating that the bitcoin market as a whole or the relevant underlying bitcoin market is uniquely and inherently resistant to fraud and manipulation.\(^{45}\) Such resistance to fraud and manipulation must be novel and beyond those protections that exist in traditional commodities or securities markets.\(^ {46}\)

NYSE Arca asserts that the bitcoin marketplace has matured rapidly in recent years regarding user growth, market capitalization, volume, market participants, and liquidity shifts, such that billion-dollar bitcoin transactions have occurred without significantly distorting the marketplace.\(^{47}\) NYSE Arca further asserts that bitcoin trades in a well-arbitrage and distributed market.\(^ {48}\) NYSE Arca concludes that, due to the linkage between the bitcoin markets and the presence of arbitrageurs in those markets, the manipulation of the price of bitcoin on any

\(^{45}\) 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.

\(^{46}\) See id. at 12597.

\(^{47}\) See Notice, 86 FR at 26078.

\(^{48}\) See id. at 26080.
Constituent Bitcoin Platform would likely require overcoming the liquidity supply of such arbitrageurs who are potentially eliminating any cross-market pricing differences.\textsuperscript{49}

As with the previous proposals, the Commission here concludes that the Exchange’s assertions about the nature of the bitcoin market do not constitute other means to prevent fraud and manipulation sufficient to justify dispensing with the requisite surveillance-sharing agreement.\textsuperscript{50} The Exchange argues that the maturation of the bitcoin market mitigates against the Commission’s concerns about fraud and manipulation,\textsuperscript{51} but NYSE Arca provides no evidence for how such maturation serves to detect and deter potential fraud and manipulation. Nor does the Exchange provide any data or analysis to support its assertions regarding efficient price arbitrage across bitcoin platforms, either in terms of how closely bitcoin prices are aligned across different bitcoin trading venues or how quickly price disparities may be arbitraged away. Indeed, NYSE Arca concedes that “the global [b]itcoin market is not inherently resistant to fraud and manipulation.”\textsuperscript{52} As stated above, “unquestioning reliance” on an SRO’s representations in a proposed rule change is not sufficient to justify Commission approval of a proposed rule change.\textsuperscript{53}

\textsuperscript{49} See id.

\textsuperscript{50} One commenter describes digital assets such as bitcoin, and the blockchains on which they rely, as having complexity that makes users vulnerable to fraud. See letter from JC, dated June 24, 2021 (“JC Letter”).

\textsuperscript{51} The Commission notes that the Exchange does not explicitly tie the asserted maturation of the bitcoin market to an argument that such market evolution provides sufficient means besides surveillance-sharing agreements to prevent fraud and manipulation.

\textsuperscript{52} See Notice, 86 FR at 26080. See also id. at 26078 (“There has been concern over whether cryptocurrency exchanges have mechanisms in place to report and remediate price and overall, ensure integrity.”).

\textsuperscript{53} See supra note 44.
Efficient price arbitrage, moreover, is not sufficient to dispense with surveillance-sharing agreements.\textsuperscript{54} The Commission has stated, for example, that even for equity options based on securities listed on national securities exchanges, the Commission relies on surveillance-sharing agreements to detect and deter fraud and manipulation.\textsuperscript{55} Here, the Exchange provides no evidence to support its assertion of efficient price arbitrage across bitcoin platforms, let alone any evidence that price arbitrage in the bitcoin market is novel or unique so as to warrant the Commission dispensing with the requisite surveillance-sharing agreement. Moreover, NYSE Arca does not take into account that a market participant with a dominant ownership position would not find it prohibitively expensive to overcome the liquidity supplied by arbitrageurs and could use dominant market share to engage in manipulation.\textsuperscript{56}

Furthermore, NYSE Arca concedes that the global bitcoin market is not inherently resistant to fraud and manipulation and that concerns exist over whether bitcoin trading platforms “have mechanisms in place to report and remediate price and overall, ensure market integrity.”\textsuperscript{57} In addition, the Trust’s Registration Statement acknowledges that “[bitcoin platforms] are relatively new and, in some cases, largely unregulated, and, therefore, may be more exposed to fraud and security breaches than established, regulated exchanges for other financial assets or instruments;” that the bitcoin network is currently 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 gain full control of the network and the ability

\textsuperscript{54} See Winklevoss Order, 83 FR at 37586; SolidX Order, 82 FR at 16256-57; USBT Order, 85 FR at 12601.

\textsuperscript{55} See, e.g., USBT Order, 85 FR at 12601.

\textsuperscript{56} See, e.g., Winklevoss Order, 83 FR at 37584; USBT Order, 85 FR at 12600-01.

\textsuperscript{57} See supra note 52 and accompanying text.
to manipulate the bitcoin blockchain; that “in 2019 there were reports claiming that 80-95% of Bitcoin trading volume on [bitcoin platforms] was false or non-economic in nature;” and that “over the past several years, some [bitcoin trading platforms] have been closed due to fraud and manipulative activity, business failure or security breaches.”58

NYSE Arca also does not contest the presence of possible sources of fraud and manipulation in the bitcoin spot market generally that the Commission has raised in previous orders, which have included (1) “wash” trading, (2) persons with a dominant position in bitcoin manipulating bitcoin pricing, (3) hacking of the bitcoin network and trading platforms, (4) malicious control of the bitcoin network, (5) trading based on material, non-public information (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 based on the dissemination of false and misleading information, (6) manipulative activity involving the purported “stablecoin” Tether (USDT), and (7) fraud and manipulation at bitcoin trading platforms.59

Instead, NYSE Arca asserts that the methodology and framework of the Index used by the Trust to determine the value of its bitcoin assets and its NAV serve to mitigate against fraud and manipulation.60 First, NYSE Arca asserts that the methodology employed in constructing the

58 See Registration Statement at 14, 17, 36.
60 See Notice, 86 FR at 26078, 26080.
Index makes the Index more resistant to manipulation than other measurements that employ different methodologies and that the Benchmark Administrator aggregates the trade data from the Constituent Bitcoin Platforms in a manner designed to resist manipulation. NYSE Arca states that the Index utilizes partitions to ensure large individual trades have a limited effect on the price of the Index, and the Index utilizes volume-weighted medians to ensure that outlying prices do not have an excessive effect on the value of a partition. NYSE Arca also states that transactions from a Constituent Bitcoin Platform may be excluded from the Index calculation if they are deemed potentially erroneous.

Second, NYSE Arca argues that the Index’s exclusive use of transactions from Constituent Bitcoin Platforms mitigates the effects of potential manipulation of the bitcoin market. NYSE Arca states that, to be eligible for inclusion in the Index, a Constituent Bitcoin Platform must make trade and order data available through an Automatic Programming Interface with sufficient reliability, relevant data, and appropriate speed, and must meet a minimum trading volume threshold. In addition, NYSE Arca states that a Constituent Bitcoin Platform must enforce policies to ensure fair and transparent market conditions; have processes in place to

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61 See id. at 26076, 26079.
62 See id. at 26079.
63 See id. The Exchange states that, where a Constituent Bitcoin Platform’s volume-weighted median transaction price exhibits an absolute percentage deviation from the volume-weighted median price of other Constituent Bitcoin Platform transactions greater than the potentially erroneous data parameter (10%), then transactions from that Constituent Bitcoin Platform are deemed potentially erroneous and excluded from the index calculation. See id.
64 See id. at 26080.
65 See id. at 26078. The Exchange states that the Index included over $133,293,551,000 in bitcoin trades (approximately 16,304,168 bitcoins) during the one-year period ended December 31, 2020. See id. at 26076.
impede illegal or manipulative trading practices; and comply with applicable law and regulation, including proper Anti-Money Laundering (“AML”) and Know-Your-Customer (“KYC”) procedures. NYSE Arca states that the calculation agent of the Index conducts a thorough review of any bitcoin trading platform under consideration and the arrangements of all Constituent Bitcoin Platforms are reviewed regularly to ensure they continue to meet all criteria.

Third, NYSE Arca asserts that the Commodity Futures Trading Commission (“CFTC”) has been successfully exercising its enforcement authority related to fraud and manipulation on the Constituent Bitcoin Platforms. In addition, the Exchange asserts that the Constituent Bitcoin Platforms must enter into a data sharing agreement with the CME, cooperate with inquiries and investigations of regulators and the Benchmark Administrator, and submit each of their clients to their KYC procedures. According to the Exchange, in the case of any suspicious trades on the Constituent Bitcoin Platforms, the CME would therefore be able to discover all material trade information, including the identities of the customers placing the trades.

Finally, NYSE Arca asserts that the oversight of the Index by the Benchmark Administrator and the CME mitigates concerns relating to manipulation. The Exchange states that, to date, there has been no evidence that the Index has been subject to manipulation or that

66 See id. at 26078.
67 See id. at 26079.
68 See id.
69 See id.
70 See id.
71 See id. at 26076, 26079.
the “Index provider”\textsuperscript{72} has been failing to maintain processes and controls to prevent manipulation by its organization. It further asserts that the CME participates in an oversight committee of the Index that is responsible for regularly reviewing and overseeing the methodology, practice, standards, and scope of the Index to ensure that it continues to accurately track the spot prices of bitcoin.\textsuperscript{73} According to the Exchange, given that the Index formula and data sources are publicly available, if manipulation of the Index were to occur, it would be quickly detected by the CME and hundreds of sophisticated market participants.\textsuperscript{74}

Based on assertions made and the information provided, the Commission can find no basis to conclude that NYSE Arca has articulated other means to prevent fraud and manipulation that are sufficient to justify dispensing with the requisite surveillance-sharing agreement. First, the record does not demonstrate that the proposed methodology for calculating the Index would make the proposed ETP resistant to fraud or manipulation such that a surveillance-sharing agreement with a regulated market of significant size is unnecessary.\textsuperscript{75} Specifically, the Exchange has not assessed the possible influence that spot platforms not included among the Constituent Bitcoin Platforms would have on bitcoin prices used to calculate the Index. As discussed above, NYSE Arca does not contest the presence of possible sources of fraud and

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\textsuperscript{72} See id. at 26079. The Exchange uses the term “Index provider” with respect to this particular assertion. The Commission understands the term to mean the Benchmark Administrator.

\textsuperscript{73} See id. at 26076, 26079.

\textsuperscript{74} See id. at 26079.

\textsuperscript{75} 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.
manipulation in the bitcoin spot market generally.\(^{76}\) Instead, NYSE Arca focuses its analysis on the Constituent Bitcoin Platforms. Importantly, however, the record does not demonstrate that these possible sources of fraud and manipulation in the broader bitcoin spot market do not affect the Constituent Bitcoin Platforms that represent a slice of the bitcoin spot market. To the extent that fraudulent and manipulative trading on the broader bitcoin market could influence prices or trading activity on the Constituent Bitcoin Platforms, the Constituent Bitcoin Platforms would not be inherently resistant to manipulation.\(^{77}\)

Moreover, the Exchange’s assertions that the Index’s methodology helps make the Index resistant to manipulation are contradicted by the Registration Statement’s own statements. The Sponsor raises, but does not address here, concerns regarding the Index in the Registration Statement, stating that “the [Index] has a limited history and there are limitations with the price of bitcoin reflected there.”\(^{78}\) And while the Exchange asserts that the Index’s exclusive use of Constituent Bitcoin Platforms helps make the Index resistant to manipulation, such assertions are called into question by the Sponsor’s own statements in the Registration Statement that “[b]itcoin [platforms] on which users trade bitcoin . . . 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.”\(^{79}\) Constituent Bitcoin Platforms are a subset of the existing bitcoin platforms. Although the Sponsor raises concerns regarding fraud and security of bitcoin platforms in the Registration Statement, the Exchange

\(^{76}\) See supra notes 57-59 and accompanying text.

\(^{77}\) See USBT Order, 85 FR at 12601.

\(^{78}\) See Registration Statement at 30.

\(^{79}\) See id. at 14.
does not explain how or why such concerns are consistent with its assertion that the Index is resistant to fraud and manipulation.

NYSE Arca also has not shown that its proposed use of 12 equally-sized time intervals of five minute length over the observation window between 3:00 p.m. and 4:00 p.m. E.T. to calculate the Index would effectively be able to eliminate fraudulent or manipulative activity that is not transient. Fraud and manipulation in the bitcoin spot market could persist for a “significant duration.”\(^80\) The Exchange does not connect the use of such partitions to the duration of the effects of the wash and fictitious trading that may exist in the bitcoin spot market.\(^81\) Thus, the Exchange fails to establish how the Index’s methodology eliminates fraudulent or manipulative activity that is not transient.\(^82\)

While the Exchange asserts that the oversight of the Constituent Bitcoin Platforms helps to prevent and detect manipulation, the level of regulation of the Constituent Bitcoin Platforms is not equivalent to the obligations, authority, and oversight of national securities exchanges or futures exchanges and therefore is not an appropriate substitute.\(^83\) National securities exchanges are required to have rules that are “designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect

\(^{80}\) See USBT Order, 85 FR at 12601 n.66; see also id. at 12607.
\(^{81}\) See WisdomTree Order, 86 FR at 69327.
\(^{82}\) See USBT Order, 85 FR at 12607.
\(^{83}\) See also id. at 12603-05.
investors and the public interest." Moreover, national securities exchanges must file proposed rules with the Commission regarding certain material aspects of their operations, and the Commission has the authority to disapprove any such rule that is not consistent with the requirements of the Exchange Act. Thus, national securities exchanges are subject to Commission oversight of, among other things, their governance, membership qualifications, trading rules, disciplinary procedures, recordkeeping, and fees.

The Constituent Bitcoin Platforms, on the other hand, have none of these requirements (none are registered as a national securities exchange). While the Exchange asserts that various entities require the Constituent Bitcoin Platforms to adopt certain policies and processes, including AML/KYC compliance policies, such requirements are fundamentally different from the Exchange Act’s requirements for national securities exchanges.

86 Section 6 of the Exchange Act, 15 U.S.C. 78f, requires national securities exchanges to register with the Commission and requires an exchange’s registration to be approved by the Commission, and Section 19(b) of the Exchange Act, 15 U.S.C. 78s(b), requires national securities exchanges to file proposed rules changes with the Commission and provides the Commission with the authority to disapprove proposed rule changes that are not consistent with the Exchange Act. Designated contract markets (“DCMs”) (commonly called “futures markets”) registered with and regulated by the CFTC must comply with, among other things, a similarly comprehensive range of regulatory principles and must file rule changes with the CFTC. See, e.g., Designated Contract Markets (DCMs), CFTC, available at http://www.cftc.gov/IndustryOversight/TradingOrganizations/DCMs/index.htm.
87 See Winklevoss Order, 83 FR at 37597.
89 See USBT Order, 85 FR at 12603. 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...
NYSE Arca’s further assertions regarding CFTC’s enforcement authority with respect to the Constituent Bitcoin Platforms also do not establish a level of oversight sufficient to dispense with the requisite surveillance-sharing agreement. While the Commission recognizes that the CFTC maintains some jurisdiction over the bitcoin spot market, under the Commodity Exchange Act, the CFTC does not have regulatory authority over bitcoin spot trading platforms, including the Constituent Bitcoin Platforms.\(^ {90}\) Except in certain limited circumstances, bitcoin spot trading platforms are not required to register with the CFTC, and the CFTC does not set standards for, approve the rules of, examine, or otherwise regulate bitcoin spot markets.\(^ {91}\) As the CFTC itself stated, while the CFTC “has an important role to play,” U.S. law “does not provide for direct, comprehensive Federal oversight of underlying Bitcoin or virtual currency spot markets.”\(^ {92}\)

Further, although NYSE Arca states that the Constituent Bitcoin Platforms must cooperate with inquiries and investigations of regulators and the Benchmark Administrator, it does not describe the scope of such requirements or what authority the Benchmark Administrator or regulators would have to compel the platforms’ cooperation. And while NYSE Arca asserts that the CME has in place information-sharing agreements with the Constituent Bitcoin Platforms, it does not provide any information on the scope, terms, or enforcement authority for such agreements. Nor has NYSE Arca put any information in the record as to whether and how it would use or enforce such agreements. Moreover, such agreements are contractual in nature and do not satisfy the regulatory requirements or purposes of national securities exchanges and the

\(^{90}\) See id. at 12604.

\(^{91}\) See id.

\(^{92}\) See Winklevoss Order, 83 FR at 37599 n.288.
Exchange Act. The CME (and the CFTC, as discussed above) does not have regulatory authority over the spot bitcoin trading platforms, and, while the CME is regulated by the CFTC, the CFTC’s regulations do not extend to the Constituent Bitcoin Platforms by virtue of such contractual agreements.

While NYSE Arca asserts the Benchmark Administrator oversees the integrity of the Index, the oversight by the Benchmark Administrator does not represent a unique measure to resist manipulation beyond mechanisms that exist in securities or commodities markets. Other commodity-based and equity index ETPs approved by the Commission for listing and trading utilize reference rates or indices administered by similar benchmark administrators, and the Commission has not, in those instances, dispensed with the need for a surveillance-sharing agreement with a significant regulated market. For the same reason, even if, as the Exchange claims, there is no evidence that the Index has been subject to manipulation or that the Benchmark Administrator ever failed to maintain processes and controls to prevent manipulation by its organization, such lack of evidence is not a basis for the Commission to disregard the need for a surveillance-sharing agreement.

Moreover, the Benchmark Administrator does not itself exercise governmental regulatory authority. Rather, the Benchmark Administrator is a registered, privately-held company in

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93 See supra notes 90-92 and accompanying text.


95 See USBT Order, 85 FR at 12605. See also supra note 19.
England. The Benchmark Administrator’s relationship with the Constituent Bitcoin Platforms is based on their participation in the determination of reference rates, such as the Index. While the Benchmark Administrator is regulated by the UK FCA as a benchmark administrator, the UK FCA’s regulations do not extend to the Constituent Bitcoin Platforms by virtue of their trade prices serving as input data underlying the Index.

Further, the oversight performed by the Benchmark Administrator of the Constituent Bitcoin Platforms is for the purpose of ensuring the accuracy and integrity of the Index. Such oversight serves a fundamentally different purpose as compared to the regulation of national securities exchanges and the requirements of the Exchange Act. Likewise, while the Exchange states that the CME participates in an oversight committee for the Index, the purpose of such committee is to ensure that the Index continues to accurately track the spot prices of bitcoin. While the Commission recognizes that these oversight functions may be important in ensuring the integrity of the Index, such requirements do not imbue either the Benchmark Administrator,

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

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

98 See Notice, 86 FR at 26077 (“... an oversight function is implemented by the Benchmark Administrator in seeking to ensure that the Index is administered through codified policies for Index integrity.”).
the CME with respect to the Constituent Bitcoin Platforms, or the Constituent Bitcoin Platforms themselves, with regulatory authority similar to that the Exchange Act confers upon self-regulatory organizations such as national securities exchanges.99

Finally, the Exchange does not sufficiently 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. The Index is used by the Trust to value its bitcoin and to calculate its NAV. However, the Shares would trade at market-based prices in the secondary market, not at NAV.

In sum, none of NYSE Arca’s assertions suggests that other means to prevent fraud and manipulation are sufficient to justify dispensing with the requisite surveillance-sharing agreement. Importantly, even if NYSE Arca had provided evidence to establish its assertions addressed above regarding the robustness of the Index methodology and framework and the regulation and oversight of the Constituent Bitcoin Platforms and Index, such assertions would render the proposed ETP no more resistant to manipulation than derivative products based on traditional commodities or securities markets.100 Thus, the record does not establish that NYSE Arca may satisfy Section 6(b)(5) of the Exchange Act without entering into a surveillance-sharing agreement with a regulated market of significant size.

(2) Assertions Relating to Surveillance-Sharing Agreements

As NYSE Arca 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 NYSE Arca has

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100 See USBT Order, 85 FR at 12599.
entered into a comprehensive surveillance-sharing agreement with a regulated market of significant size relating to the underlying assets. In this context, the term “market of significant size” includes a market (or group of markets) as to which (i) there is a reasonable likelihood that a person attempting to manipulate the ETP would also have to trade on that market to successfully manipulate the ETP, so that a surveillance-sharing agreement would assist in detecting and deterring misconduct, and (ii) it is unlikely that trading in the ETP would be the predominant influence on prices in that market.101

However, NYSE Arca does not identify any market as a “market of significant size” and accordingly makes no assertions regarding, and provides no information to establish, either prong of the “market of significant size” determination.

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

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

NYSE Arca 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

101 See Winklevoss Order, 83 FR at 37594. This definition is illustrative and not exclusive. There could be other types of “significant markets” and “markets of significant size,” but this definition is an example that provides guidance to market participants. See id.
context of whether the proposal meets each of the applicable requirements of the Exchange Act.\textsuperscript{102} Because NYSE Arca has not demonstrated that its proposed rule change is designed to prevent fraudulent and manipulative acts and practices, the Commission must disapprove the proposal.

NYSE Arca asserts that the Trust will provide investors with exposure to bitcoin in a manner that is more efficient and convenient than the purchase of stand-alone bitcoin, while also mitigating some of the risk by reducing the volatility typically associated with the purchase of stand-alone bitcoin and without the uncertain and often complex requirements relating to acquiring and/or holding bitcoin.\textsuperscript{103} NYSE Arca concludes that the manipulation concerns previously articulated by the Commission are mitigated by investor protection issues.\textsuperscript{104}

In essence, NYSE Arca asserts that the risky nature of a direct investment in the underlying bitcoin compels approval of the proposed rule change. The Commission disagrees. Pursuant to Section 19(b)(2) of the Exchange Act, the Commission must approve a proposed rule change filed by a national 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.\textsuperscript{105} Thus, even if a proposed rule change purports to protect investors from a particular type of investment risk—such as complexity to acquire and/or hold the underlying

\textsuperscript{102} See id. at 37601. See also GraniteShares Order, 83 FR at 43931; ProShares Order, 83 FR at 43941; USBT Order, 85 FR at 12615.

\textsuperscript{103} See Notice, 86 FR at 26073.

\textsuperscript{104} See id. at 26078.

asset—the proposed rule change may still fail to meet the requirements under the Exchange Act.\textsuperscript{106}

Here, even if it were true that, compared to trading in unregulated bitcoin spot markets, trading a bitcoin-based ETP on a national securities exchange provides some additional protection to investors, the Commission must consider this potential benefit in the broader context of whether the proposal meets each of the applicable requirements of the Exchange Act.\textsuperscript{107} As explained above, for bitcoin-based ETPs, the Commission has consistently required that the listing exchange have a comprehensive surveillance-sharing agreement with a regulated market of significant size related to bitcoin, or demonstrate that other means to prevent fraudulent and manipulative acts and practices are sufficient to justify dispensing with the requisite surveillance-sharing agreement. The listing exchange has not met that requirement here. Therefore, the Commission is unable to find that the proposed rule change is consistent with the statutory standard.

Pursuant to Section 19(b)(2) of the Exchange Act, the Commission must disapprove a proposed rule change filed by a national securities exchange if it does not find that the proposed rule change is consistent with the applicable requirements of the Exchange Act—including the requirement under Section 6(b)(5) that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices.\textsuperscript{108}

\textsuperscript{106} See SolidX Order, 82 FR at 16259; WisdomTree Order, 86 FR at 69334.

\textsuperscript{107} See supra note 102.

For the reasons discussed above, NYSE Arca has not met its burden of demonstrating that the proposal is consistent with Exchange Act Section 6(b)(5),\textsuperscript{109} and, accordingly, the Commission must disapprove the proposal.\textsuperscript{110}

\textbf{D. Other Comments}

Comment letters address the general nature and value of bitcoin;\textsuperscript{111} the inherent value of, and risks of investing in, bitcoin;\textsuperscript{112} the potential impact of Commission approval of bitcoin ETPs on the U.S. economy and financial system;\textsuperscript{113} and the retirement investment risks of a bitcoin ETP.\textsuperscript{114} Ultimately, however, additional discussion of these topics is unnecessary, as they do not bear on the basis for the Commission’s decision to disapprove the proposal.

\section*{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.

\textsuperscript{110} In disapproving the proposed rule change, the Commission has considered its impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f). A commenter argues, for efficiency reasons, against approving a bitcoin ETP. This commenter asserts that the adoption of multiple digital assets would force merchants to deal with “complexity [that] doesn’t foster [the] modularity which is needed to gain economic efficiency.” See JC Letter at 1. For the reasons discussed throughout, however, see supra note 40, the Commission is disapproving the proposed rule change because it does not find that the proposed rule change is consistent with the Exchange Act. See also USBT Order, 85 FR at 12615.
\textsuperscript{111} See JC Letter; letter from Sam Ahn, dated May 26, 2021 (“Ahn Letter”).
\textsuperscript{112} See JC Letter; Ahn Letter.
\textsuperscript{113} See JC Letter.
\textsuperscript{114} See id.
IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Exchange Act, that proposed rule change SR-NYSEArca-2021-31 be, and hereby is, disapproved.

By the Commission.

Vanessa A. Countryman
Secretary