conjunction with the same or similar proposed rule changes being made by other DCMs. To further consistency with the jurisdictional rules of other DCMs and to avoid any potential ambiguity that may be created by having two differently worded provisions intended to accomplish the same result, CFE is deleting Rule 308(e)(i). Because CFE is deleting Rule 308(e)(i), CFE is changing the rule number for current Rule 308(e)(ii) to Rule 308(e)(i) and is changing the rule number for current Rule 308(e)(iii) to Rule 308(e)(ii) without changing the text of either rule provision.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[7] in general, and furthers the objectives of Sections 6(b)(1)[8] and 6(b)(5)[9] in particular, in that it is designed:

- To enable the Exchange to enforce compliance by its Market Participants with the provisions of the rules of the Exchange,
- to prevent fraudulent and manipulative acts and practices,
- to promote just and equitable principles of trade,
- 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.

The Exchange believes that the proposed rule change would strengthen CFE's ability to carry out its responsibilities as a self-regulatory organization by providing further clarity and guidance with regard to provisions of the Exchange's rules that relate to trading conduct by Market Participants. In particular, the proposed rule change would clarify the definition of Person for purposes of, among other things, applying CFE's rule provisions relating to Exchange jurisdiction and would further clarify when intermediaries become subject to the Exchange's jurisdiction. Accordingly, the proposed rule change enhances the Exchange's ability to enforce compliance with its rules and to protect the market and participants in the market from abusive practices. In addition, the Exchange believes that the proposed rule change will promote just and equitable principles of trade because it would apply equally to all Market Participants.

[7] 15 U.S.C. 78f(b).

[8] 15 U.S.C. 78f(b)(1).

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

B. Self-Regulatory Organization's Statement on Burden on Competition

CFE does not believe that the proposed rule change will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act, in that the proposed rule change will enhance CFE's ability to carry out its responsibilities as a self-regulatory organization. The Exchange believes that the proposed rule change is equitable and not unfairly discriminatory in that it would apply equally to all Market Participants.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The proposed rule change will become operative on March 2, 2020. At any time within 60 days of the date of effectiveness of the proposed rule change, the Commission, after consultation with the CFTC, may summarily abrogate the proposed rule change and require that the proposed rule change be refiled in accordance with the provisions of Section 19(b)(1) of the Act.[10]

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–CFE–2020–002 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.

All submissions should refer to File Number SR–CFE–2020–002. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–CFE–2020–002, and should be submitted on or before March 24, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[11]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2020–04286 Filed 3–2–20; 8:45 am]

BILLING CODE 8011–01–P

[10] 15 U.S.C. 78s(b)(1).

[11] 17 CFR 200.30–3(a)(73).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88284; File No. SR–NYSEArca–2019–39]

Self-Regulatory Organizations; NYSE Arca, Inc.; 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

February 26, 2020.

I. Introduction

On June 12, 2019, NYSE Arca, Inc. (''NYSE Arca'') 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 amend NYSE Arca Rule 8.201–E and to list and trade shares (''Shares'') of the United States Bitcoin and Treasury Investment Trust (''Trust'') under NYSE Arca Rule 8.201–E. The proposed rule change was published for comment in the **Federal Register** on July 1, 2019.[3] On August 12, 2019, 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 September 24, 2019, the Commission instituted proceedings under Section 19(b)(2)(B) of the Act [6] to determine whether to approve or disapprove the proposed rule change.[7] On October 4, 2019, the Exchange filed Amendment No. 1 to the proposed rule change, which replaced and superseded the proposed rule change as originally filed.[8] The Commission published the proposed rule change, as modified by Amendment No. 1, for comment in the **Federal Register** on October 21, 2019.[9] And on December 20, 2019, the Commission designated a longer period for Commission action on the proposed rule change.[10]

This order disapproves the proposed rule change, as modified by Amendment No. 1. 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.'' [11]

When considering whether NYSE Arca's proposal to list 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 commodity-based exchange-traded products (''ETPs''), including bitcoin [12]-based commodity trusts and bitcoin-based trust issued receipts.[13] As the Commission has explained, exchanges that list ETPs can meet their obligations under Exchange Act Section 6(b)(5) by demonstrating that there is a comprehensive surveillance-sharing agreement with a regulated market of significant size relating to the underlying assets.[14] Neither NYSE Arca nor the Sponsor challenges this standard.

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.'' [15] The Commission has emphasized that it is essential for an exchange listing a derivative securities product to enter into a surveillance-sharing agreement with markets trading underlying securities 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.[16] 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.[17]

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

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

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 86195 (June 25, 2019), 84 FR 31373 (''Original Notice'').

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

[5] *See* Securities Exchange Act Release No. 86631, 84 FR 42028 (Aug. 16, 2019). The Commission designated September 29, 2019, as the date by which it should approve, disapprove, or institute proceedings to determine whether to disapprove the proposed rule change.

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

[7] *See* Securities Exchange Act Release No. 87071, 84 FR 51646 (Sept. 30, 2019) (''Order Instituting Proceedings'').

[8] Amendment No. 1 is available at: *https://www.sec.gov/comments/sr-nysearca-2019-39/srnysearca201939.htm.*

[9] *See* Securities Exchange Act Release No. 87301 (Oct. 15, 2019), 84 FR 56219 (''Notice''). Comments received are available at *https://www.sec.gov/comments/sr-nysearca-2019-39/srnysearca201939.htm.*

[10] *See* Securities Exchange Act Release No. 87813, 84 FR 71993 (Dec. 30, 2019).

[11] 15 U.S.C. 78f(b)(5).

[12] 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, 84 FR at 56222.

[13] *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, Relating to the Listing and Trading of Shares of the Bitwise Bitcoin ETF Trust Under NYSE Arca Rule 8.201–E, Securities Exchange Act Release No. 87267 (Oct. 9, 2019), 84 FR 55382 (Oct. 16, 2019) (''Bitwise Order''). *See also* Order Disapproving a Proposed Rule Change, as Modified by Amendment No. 1, Relating to the Listing and Trading of Shares of the SolidX Bitcoin Trust Under NYSE Arca Equities Rule 8.201, Securities Exchange Act Release No. 80319 (Mar. 28, 2017), 82 FR 16247 (Apr. 3, 2017) (SR–NYSEArca–2016–101) (''SolidX Order''). The Commission also notes that orders were issued by delegated authority on the following matters, which are under review before the Commission: Order Disapproving a Proposed Rule Change to List and Trade the Shares of the ProShares Bitcoin ETF and the ProShares Short Bitcoin ETF, Securities Exchange Act Release No. 83904 (Aug. 22, 2018), 83 FR 43934 (Aug. 28, 2018) (NYSEArca–2017–139) (''ProShares Order''); Order Disapproving a Proposed Rule Change Relating to Listing and Trading of the Direxion Daily Bitcoin Bear 1X Shares, Direxion Daily Bitcoin 1.25X Bull Shares, Direxion Daily Bitcoin 1.5X Bull Shares, Direxion Daily Bitcoin 2X Bull Shares, and Direxion Daily Bitcoin 2X Bear Shares Under NYSE Arca Rule 8.200–E, Securities Exchange Act Release No. 83912 (Aug. 22, 2018), 83 FR 43912 (Aug. 28, 2018) (SR–NYSEArca–2018–02) (''Direxion 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'').

[14] *See* Winklevoss Order, 83 FR at 37580. *See also id.* 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). The Commission has stated that it considers two markets that are members of the Intermarket Surveillance Group to have a comprehensive surveillance-sharing agreement with one another, even if they do not have a separate bilateral surveillance-sharing agreement. *See* Winklevoss Order, 83 FR at 37580 n.19.

[15] Amendment to Rule Filing Requirements for Self-Regulatory Organizations Regarding New Derivative Securities Products, Exchange Act Release No. 40761 (Dec. 8, 1998), 63 FR 70952, 70959 (Dec. 22, 1998) (''NDSP Adopting Release''). *See also* Winklevoss Order, 83 FR at 37594; ProShares Order, 83 FR at 43936; Direxion Order, 83 FR at 43914; GraniteShares Order, 83 FR at 43924; Bitwise Order, 84 FR 55383.

[16] *See* NDSP Adopting Release, 63 FR at 70959.

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

market.[18] 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.''

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.[19] Moreover, the Commission notes that surveillance-sharing agreements have been consistently present whenever it 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.[20]

Sponsors of proposed bitcoin-based ETPs in particular have 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 manipulation.[21] For example, the Winklevoss Order addressed an assertion that ''bitcoin and bitcoin [spot] markets'' generally, as well as one bitcoin trading platform specifically, have unique resistance to fraud and manipulation; and the Bitwise Order addressed the assertion that prices from at least certain bitcoin trading platforms (''the 'real' bitcoin spot market as opposed to the 'fake' and non-economic bitcoin spot market'') possessed such unique resistance.[22] While the listing exchanges there failed to satisfy their burden to demonstrate the validity of these contentions, the Commission agreed that if a listing exchange could establish that the underlying market inherently possessed 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.[23] Such resistance to fraud and manipulation 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.[24]

Here, Wilshire Phoenix Funds, LLC (''Sponsor'') would base the pricing mechanism for the proposed ETP on the Chicago Mercantile Exchange (''CME'') CF Bitcoin Reference Rate (''CME CF BRR'' or ''Bitcoin Reference Rate''). As discussed further below, the Bitcoin Reference Rate is derived from trade prices of bitcoin on certain bitcoin spot platforms (''Constituent Platforms''). NYSE Arca and the Sponsor contend that the proposal satisfies the Commission's standard, as set forth in its prior orders, because (1) the segment of the bitcoin spot market represented by the spot bitcoin platforms that contribute to the Bitcoin Reference Rate is uniquely and inherently resistant to manipulation; and (2) NYSE Arca has entered into a surveillance-sharing agreement with a regulated bitcoin market of significant size.[25] NYSE Arca also asserts that approval of the proposal is consistent with Section 6(b)(5) of the Exchange Act because it would protect investors and the public interest.[26]

In the analysis that follows, the Commission examines whether the proposed rule change, as modified by Amendment No. 1, is consistent with Section 6(b)(5) of the Exchange Act by addressing in Section III.B.1 assertions that the relevant bitcoin market inherently possesses a unique resistance to manipulation; addressing in Section III.B.2 assertions that NYSE Arca has entered into a surveillance-sharing agreement with a regulated market of significant size related to bitcoin; and addressing in Section III.C assertions that the proposal is consistent with the protection of investors and the public interest. The Commission concludes that NYSE Arca has not established that the relevant bitcoin market possesses a resistance to manipulation that is unique beyond that of traditional security or commodity markets such that it is inherently resistant to manipulation. The Commission further concludes that NYSE Arca has not established that an actor trying to manipulate the proposed ETP would be reasonably likely to trade in the CME bitcoin futures market. And the Commission concludes that NYSE Arca has not established that it has a surveillance-sharing agreement with the Constituent Platforms or that the Constituent Platforms constitute a regulated market, such that it has established that it has entered into a surveillance-sharing agreement with a regulated market of significant size with respect to bitcoin.

The Commission 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

[18] *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.*

[19] *See* Winklevoss Order, 84 FR at 37593–94.

[20] *See* Bitwise Order, 84 FR at 55386, 55390 (citing Winklevoss Order, 84 FR at 37593); Securities Exchange Act Release No. 33555 (Jan. 31, 1994), 59 FR 5619, 5621 (Feb. 7, 1994) (SR–Amex–93–28) (order approving listing of options on American Depository Receipts). The Commission has also required a surveillance-sharing agreement in the context of index options even when (i) all of the underlying index component stocks were either registered with the Commission or exempt from registration under the Exchange Act; (ii) all of the underlying index component stocks traded in the U.S. either directly or as ADRs on a national securities exchange; and (iii) effective international ADR arbitrage alleviated concerns over the relatively smaller ADR trading volume, helped to ensure that ADR prices reflected the pricing on the home market, and helped to ensure more reliable price determinations for settlement purposes, due to the unique composition of the index and reliance on ADR prices. *See* Securities Exchange Act Release No. 26653 (Mar. 21, 1989), 54 FR 12705, 12708 (Mar. 28, 1989) (SR–Amex–87–25) (stating that ''surveillance-sharing agreements between the exchange on which the index option trades and the markets that trade the underlying securities are necessary'' and that ''[t]he exchange of surveillance data by the exchange trading a stock index option and the markets for the securities comprising the index is important to the detection and deterrence of intermarket manipulation.''). And the Commission has required a surveillance-sharing agreement even when approving options based on an index of stocks traded on a national securities exchange. *See* Securities Exchange Act Release No. 30830 (June 18, 1992), 57 FR 28221, 28224 (June 24, 1992) (SR–Amex–91–22) (stating that surveillance-sharing agreements ''ensure the availability of information necessary to detect and deter potential manipulations and other trading abuses'').

[21] *See* Winklevoss Order, 84 FR at 37580, 37582–91; *see also* Bitwise Order, 84 FR at 55383, 55385–406.

[22] *See id.*

[23] *See id.* The Commission has also 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 requisite surveillance-sharing agreement. Winklevoss Order, 84 FR at 37580. 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. *Id.* at 37582.

[24] *See supra* notes 19 and 20.

[25] *See* Notice, 84 FR at 56225–26.

[26] *See id.* at 56230.

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).

Finally, the Commission recognizes that over time, bitcoin-related markets may develop in a way that would make it possible for a bitcoin-based ETP to satisfy the requirements of the Exchange Act. For example, existing or newly created bitcoin futures markets that are regulated may achieve significant size, and an ETP listing exchange may be able to demonstrate in a proposed rule change that it will be able to address the risk of fraud and manipulation by sharing surveillance information with a regulated market of significant size related to bitcoin, as well as, where appropriate, with the relevant spot markets underlying such bitcoin derivatives. Should these circumstances develop, or conditions otherwise change in a manner that affects the Exchange Act analysis, the Commission would then have the opportunity to consider whether a particular bitcoin-based ETP would be consistent with the requirements of the Exchange Act.

II. Description of the Proposed Rule Change, as Modified by Amendment No. 1

As described in detail in the Notice, NYSE Arca proposes to amend NYSE Arca Rule 8.201–E, which governs the listing and trading of Commodity-Based Trust Shares on the Exchange,[27] and to list and trade Shares of the Trust under NYSE Arca Rule 8.201–E, as proposed to be amended.

Proposed Amendments to NYSE Arca Rule 8.201–E

NYSE Arca Rule 8.201–E(c)(1) currently states that Commodity-Based Trust Shares are issued by a trust in a specified aggregate minimum number in return for a deposit of a quantity of the underlying commodity, and may be redeemed in the same specified minimum number by a holder for the quantity of the underlying commodity. NYSE Arca proposes to amend Rule 8.201–E(c)(1) to provide that Commodity-Based Trust Shares may be issued and redeemed for the underlying commodity and/or cash. NYSE Arca further proposes to amend Rule 8.201–E(c)(2) to state that the term ''commodity'' is defined in Section 1(a)(9) of the Commodity Exchange Act.

Proposal To List and Trade Shares of the Trust

The Shares would be issued by the Trust, a Delaware statutory trust. The Trust would operate pursuant to a trust agreement between the Sponsor and Delaware Trust Company. UMB Bank N.A. would act as custodian for the Trust's cash and U.S. treasury assets (''Cash and Treasury Custodian''), UMB Fund Services, Inc. would act as administrator of the Trust, and Broadridge Corporate Issuer Solutions, Inc. would act as the transfer agent for the Trust's Shares. Coinbase Custody Trust Company, LLC would act as the Bitcoin custodian for the Trust (''Bitcoin Custodian'').[28]

The investment objective of the Trust would be for the Shares to closely reflect the Bitcoin Treasury Index (''Index''), less the Trust's liabilities and expenses. The Trust would have no assets other than (a) bitcoin and (b) short-term U.S. Treasury securities with a maturity of less than one year (''T-Bills''). The Trust would also hold U.S. dollars for short periods of time in connection with (i) the maturity of any T-Bills, (ii) the purchase and sale of bitcoin and/or T-Bills, and (iii) the payment of redemptions, if any, and fees and expenses of the Trust. Bitcoin would be held by the Bitcoin Custodian on behalf of the Trust, and T-Bills and U.S. dollars would be held by the Cash and Treasury Custodian on behalf of the Trust. The amount of bitcoin and T-Bills held by the Trust would be determined by the Index.[29]

The Index is calculated and published by Solactive AG (''Index Calculation Agent'').[30] The level of the Index is published on each business day at approximately 5:00 p.m. Eastern time and has two components: (1) A notional component representing bitcoin (''Bitcoin Component''); and (2) a notional component representing T-Bills (''Treasury Component''). On a monthly basis, the Index rebalances its weighting of the Bitcoin Component and the Treasury Component utilizing a mathematically derived passive rules-based methodology that is based on the daily volatility of the ''Bitcoin Price.'' The Bitcoin Price, which will be the price of bitcoin used to determine the weighting of the Bitcoin component and the Treasury Component of the Index, as well as the value of bitcoin held by the Trust, would be based on the Bitcoin Reference Rate. Following the calculation of the weighting of the components of the Index, the Trust would rebalance its holdings in bitcoin and T-Bills in order to closely replicate the Index.[31]

According to the proposal, the Trust may offer and sell Shares from time to time through underwriters, placement agents, or distributors, or such other means as the Sponsor may determine. The Sponsor also reserves the right to issue Shares of the Trust from time to time through direct placements. In addition, upon at least five business days' prior written notice, a shareholder may redeem all or a portion of its Shares on the last business day of each calendar month. All redemptions will be based on the net asset value (''NAV'') of Shares submitted for redemption, determined as of the last business day of the applicable calendar month. In general, redemptions would be deemed to occur on a ''first-in first-out'' basis among Shares held by a particular shareholder.[32]

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.'' [33] Under the Commission's

[27] NYSE Arca Rule 8.201–E defines the term ''Commodity-Based Trust Shares'' as a security (a) that is issued by a trust that holds a specified commodity deposited with the trust; (b) that is issued by such trust in a specified aggregate minimum number in return for a deposit of a quantity of the underlying commodity; and (c) that, when aggregated in the same specified minimum number, may be redeemed at a holder's request by such trust, which will deliver to the redeeming holder the quantity of the underlying commodity.

[28] *See* Notice, 84 FR at 56221.

[29] *See id.*

[30] According to the Exchange, the Index is a passive, rules-based index, and the Index Calculation Agent provides calculation services only. The Index Calculation Agent is not affiliated with the Sponsor and has represented that it and its employees are subject to market abuse laws and that the Index Calculation Agent has established and maintains processes and procedures to prevent the use and dissemination of material, non-public information regarding the Index. *See* Notice, 84 FR at 56222 n.17.

[31] *See id.* at 56222.

[32] *See id.* at 56224. Further details regarding the Trust and the Shares, including investment strategies, calculation of the NAV and indicative fund value, creation and redemption procedures, and additional background information about bitcoins and the bitcoin network, among other things, can be found in the Notice and the registration statement filed with the Commission on Form S–1/A (File No. 333–229187) under the Securities Act of 1933 (''Registration Statement''), as applicable.

[33] 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

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.'' [34]

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,[35] 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.[36] 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.[37]

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 the Bitcoin Market Is Inherently or Uniquely Resistant to Manipulation

In analyzing whether NYSE Arca has met its burden to demonstrate that its proposal is consistent with Exchange Act Section 6(b)(5), the Commission first examines whether the record supports the Sponsor's assertions that the segment of the bitcoin spot market that the Sponsor asserts is relevant for purposes of the proposed ETP is inherently resistant to manipulation and fraudulent activity, such that a surveillance-sharing agreement with a regulated market of significant size is unnecessary. To do so, the Commission assesses whether the record establishes that the relevant segment of the bitcoin spot market possesses unique means to resist manipulation that are novel beyond those protections found in traditional securities or commodities markets.

NYSE Arca and the Sponsor do not contest the general presence of manipulation in the bitcoin spot market; however, the Sponsor states that, for purposes of the proposed ETP, the relevant segment of the bitcoin spot market is composed of the Constituent Platforms and that an assessment of the trading activity on these platforms supports a conclusion that they are inherently resistant to manipulation.[38] In addition, the Sponsor asserts that the regulation of the Constituent Platforms further establishes they are inherently resistant to manipulation.[39] The Sponsor also states that the Bitcoin Reference Rate, which serves as the proposed ETP's bitcoin pricing mechanism, is inherently resistant to manipulation [40] and that certain features of the proposed ETP establish its inherent resistance to manipulation.[41]

The Commission concludes that the record does not establish that the segment of the bitcoin spot market made up of the Constituent Platforms is inherently resistant to manipulation, and therefore does not support the claim that the relevant underlying bitcoin market is inherently and uniquely resistant to manipulation such that the Commission should dispense with the need to require NYSE Arca to enter into a surveillance-sharing agreement with a regulated market of significant size. While mechanisms such as the use of the Bitcoin Reference Rate serve to mitigate the potential for manipulation of the proposed ETP, none of the Sponsor's assertions suggest that the underlying market possesses any unique measures to resist manipulation that are not present in other security or commodity markets, where the Commission has long concluded that surveillance-sharing agreements are necessary even when listing a derivative security whose underlying components are securities listed on national securities exchanges. Importantly, even if the Sponsor and NYSE Arca established each of the contentions addressed below, such assertions would render the proposed ETP as based on the relevant underlying bitcoin market no more resistant to manipulation than derivative products based on traditional commodities or securities markets. 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.

(a) Assertions About the Nature of the Bitcoin Spot Market

(i) Assertions Regarding Trading Characteristics

(A) Representations Made and Comments Received

The Sponsor asserts that, when determining whether the market for the asset underlying the proposed ETP is inherently resistant to manipulation, the relevant ''market'' is the segment of the bitcoin spot market formed by the Constituent Platforms, and that this spot market segment is inherently resistant to manipulation.[42] The Sponsor states that its own analysis and an analysis performed by CME both show that the Constituent Platforms consistently exhibit prices that are closely aligned.[43] The Sponsor asserts that this data implies the presence of market participants on the Constituent Platforms that are maintaining uniform pricing across the Constituent Platforms through the near-simultaneous buying and selling of bitcoin on different platforms to take advantage of any temporary price dislocations between those platforms (*i.e.,* market arbitrage).[44] As a result, according to the Sponsor, a would-be manipulator that places a trade on a Constituent Platform would often see any price dislocation eliminated by arbitrageurs that bring bitcoin prices on that platform in line with bitcoin prices on the other Constituent Platforms.[45] NYSE Arca also asserts that the linkage between the bitcoin markets and the presence of arbitrageurs in those markets means that the manipulation of the price of bitcoin on any Constituent Platform would

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. 78(f)(b)(5).

[34] Rule 700(b)(3), Commission Rules of Practice, 17 CFR 201.700(b)(3).

[35] *See id.*

[36] *See id.*

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

[38] *See* Notice, 84 FR at 56224–25; Wilshire Phoenix Submission II at 3–4, 8; Registration Statement at 32.

[39] *See* Wilshire Phoenix Submission II at 6–7, 12–13.

[40] *See* Wilshire Phoenix Submission I at 5.

[41] *See* Notice, 84 FR at 56228; Wilshire Phoenix Submission II at 28–29.

[42] *See* Notice, 84 FR at 56225; Letter from Wilshire Phoenix Funds, LLC (Dec. 18, 2019) (''Wilshire Phoenix Submission II'') at 4–5. NYSE Arca, the Sponsor, and other commenters may refer to the spot trading of bitcoin on ''exchanges.'' The platforms that trade bitcoin in the bitcoin spot market are not registered with the Commission as national securities exchanges. *See* 15 U.S.C. 78e, 78f.

[43] *See* Wilshire Phoenix Submission II at 8. *See also* Notice, 84 FR at 56225 (stating that, according to analysis performed by the Sponsor, price discovery is substantially similar among each of the Constituent Platforms).

[44] *See* Wilshire Phoenix Submission II at 8.

[45] *See* Wilshire Phoenix Submission II at 8.

likely require a large amount of capital to maintain a significant presence on the Constituent Platforms and thus outweigh trading by arbitrageurs who are potentially eliminating any pricing differences across platforms.[46] NYSE Arca further states, in describing the Sponsor's analysis, that none of the Constituent Platforms exhibit a statistically significant average difference from the Bitcoin Reference Rate.[47] The Constituent Platforms also show, according to NYSE Arca, a substantially similar degree of price volatility.[48] Therefore, the Sponsor and NYSE Arca assert that the Sponsor's data supports the conclusion that robust arbitrage trading and sufficient liquidity provision occurs among the Constituent Platforms, which would reduce the possibility of manipulation in that segment of the bitcoin market.[49]

In addition, the administrator of the Bitcoin Reference Rate, CF Benchmarks, Ltd. (''CF Benchmarks''), conducted an analysis of how closely the Constituent Platforms tracked each other during the period January 2018 through September 2019.[50] CF Benchmarks states that the analysis showed an average variance of between 0.000% and 0.008% when a single Constituent Platform was omitted, and that this analysis seems to support NYSE Arca's assertion that there is substantially similar price discovery among the Constituent Platforms.[51] In addition, CF Benchmarks states that it conducted an analysis of the correlation of prices observed among Constituent Platform pairs on a per minute basis during the Bitcoin Reference Rate's observation window over the previous twelve months.[52] According to CF Benchmarks, this analysis showed mean correlations from 85.45% to 90.72% and median correlations from 90.25% to 94.73%, and these results indicate that the correlation is very strong, which therefore supports NYSE Arca's view that the degree of price volatility is substantially similar.[53] The Sponsor also asserts that CF Benchmarks' analysis supports the Sponsor's conclusions regarding arbitrage and liquidity, which could reduce the likelihood of manipulation on the Constituent Platforms.[54]

The Sponsor also states that it is widely acknowledged that numerous markets have historically been subject to manipulation by ''bad actors'' and that, despite continual efforts by regulators and other market participants, it is highly unlikely that all such ''bad actors'' and manipulation attempts can be fully mitigated in markets, including in the bitcoin markets.[55] NYSE Arca and the Sponsor cite to the Commission's previous disapproval of proposals to list bitcoin-based commodity trusts and bitcoin-based trust issued receipts, and note that the Commission has expressed concern that the bitcoin market at issue in such proposals may be subject to manipulation.[56] In addition, as NYSE Arca states, the Sponsor recognizes that some of the Commission's concerns are that a significant portion of bitcoin trading occurs on unregulated platforms and that there is a concentration of a significant number of bitcoin in the hands of a small number of holders.[57] NYSE Arca asserts that these aspects are not unique to bitcoin and are present in a number of markets, including commodity markets.[58]

Several other commenters also address manipulation in the bitcoin market. One commenter states that ''[t]here is no doubt'' that the bitcoin market is insecure and manipulated, even with the recent introduction of a physically-settled futures product.[59] Another commenter asserts that the proposal should be rejected because it is highly risky to build an ETP on bitcoin.[60] A third commenter states that the proposal has not comprehensively or convincingly addressed the issues surrounding manipulation in the bitcoin market.[61]

(B) Analysis

The record does not establish that the segment of the bitcoin spot market made up of the Constituent Platforms is inherently and uniquely resistant to manipulation. The Sponsor and other commenters state that manipulation is present in the spot bitcoin market generally.[62] The Trust's Registration Statement concedes that ''the price of Bitcoin may be influenced by fraud and manipulation for a number of reasons,'' including that ''many Bitcoin spot markets are not regulated or supervised by a government agency.'' [63] The Trust's Registration Statement also states that a ''bad actor could manipulate the Bitcoin Blockchain to adversely affect an investment in the Shares . . . if such a bad actor were to obtain control of more than fifty percent (50%) of the processing power on the Bitcoin Network.'' [64] And the Trust's Registration Statement recognizes that it is ''reasonably likely'' that ''a small group of early Bitcoin adopters hold a significant proportion of the Bitcoin that has thus far been created,'' ''[t]here are no regulations in place that would prevent a large holder of Bitcoin from selling their Bitcoin,'' and that such sales could ''affect the price of Bitcoin.'' [65]

NYSE Arca and the Sponsor also do 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,

[46] *See* Notice, 84 FR at 56225. *See also* Wilshire Phoenix Submission II at 7–8 (asserting that the capital necessary to maintain a significant presence on the Constituent Platforms renders manipulative trading prohibitively expensive).

[47] *See* Notice, 84 FR at 56225. NYSE Arca also states that, during one Bitcoin Reference Rate observation window, the volume of bitcoin trading among the five Constituent Platforms ranged from 10.7% to 33.1%. *See id.*

[48] *See* Notice, 84 FR at 56225 (stating that the standard deviation of the difference of prices at 4:00 p.m. London time on the Constituent Platforms was 1.12% to 1.13% and that when prices deviate from the Bitcoin Reference Rate, 86.5% of the time they deviate in the same direction).

[49] *See* Wilshire Phoenix Submission II at 9. *See also* Notice, 84 FR at 56225.

[50] *See* Letter from CF Benchmarks LTD (Oct. 28, 2019) (''CF Benchmarks Letter'') at 5.

[51] *See* CF Benchmarks Letter at 5–6. This analysis also showed a maximum variance of between 0.049% and 1.079% when one of the Constituent Platforms was omitted. *See id.* at 6.

[52] *See id.* at 6.

[53] *See* CF Benchmarks Letter at 6.

[54] *See* Wilshire Phoenix Submission II at 9.

[55] *See* Wilshire Phoenix Submission II at 3. *See also* Notice, 84 FR at 56224 (stating that the Sponsor acknowledges that numerous markets have historically been subject to manipulation).

[56] *See* Notice, 84 FR at 56224; Wilshire Phoenix Submission II at 3.

[57] *See* Notice, 84 FR at 56225.

[58] *See* Notice 84 FR at 56225 (comparing bitcoin context to the trading of gold bullion on unregulated OTC markets and citing statistics that a significant percentage of gold is held by a relatively small number of holders).

[59] *See* Letter from Jenny Thompson (Oct. 12, 2019) (''Thompson Letter'').

[60] *See* Letter from Robert Musgrove (Oct. 12, 2019).

[61] *See* Letter from Avinash Shenoy (Oct. 16, 2019) (stating that there are similar problems in the traditional market).

[62] *See supra* notes 55, 59–61, and accompanying text (discussing comments regarding bitcoin's susceptibility to manipulation).

[63] Registration Statement at 32 (also stating that additional reasons include that ''certain platforms may lack critical system safeguards, including customer protections; volatile market price swings or flash crashes; cyber risks, such as hacking customer wallets; and/or platforms selling from their own accounts and putting customers at an unfair disadvantage''). *See also* Registration Statement at 18–19 (stating that the ''Trust may be the target of malicious cyber-attacks'').

[64] Registration Statement at 26. *See also supra* note 57 and accompanying text.

[65] Registration Statement at 29. *See also id.* at 49 (''because the Bitcoin Blockchain records ownership of Bitcoin by reference to the unique addresses of each Bitcoin 'wallet,' a certain pseudo-anonymity of ownership is created'').

non-public information, including the dissemination of false and misleading information, (6) manipulative activity involving Tether, and (7) fraud and manipulation at Mt. Gox, a bitcoin trading platform.[66] Instead, NYSE Arca and the Sponsor focus their analysis on the Constituent Platforms, which the Sponsor asserts represent a segment of the bitcoin spot market that is inherently resistant to manipulation.[67]

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 Platforms that represent a slice of the bitcoin spot market.[68] In the Bitwise Order, the Commission stated that, in the absence of a showing that fraudulent, manipulative, fake, or otherwise non-economic trading in the broader bitcoin market does not affect the smaller segment of the bitcoin market on which the proposed ETP was based, the listing exchange and the proposal's sponsor ''will not be able to establish that the identified [segment of the] bitcoin market is uniquely resistant to fraud and manipulation, because prices based on fraudulent and manipulative activity on platforms with fake or non-economic volume could be used to affect prices on the identified . . . platforms.'' [69] Similarly, with the current proposal, to the extent that fraudulent and manipulative trading on the broader bitcoin market could influence prices or trading activity on the Constituent Platforms, the Constituent Platforms would not be inherently resistant to manipulation.

NYSE Arca, the Sponsor, and CF Benchmarks discuss evidence of a correlation of bitcoin prices among the Constituent Platforms,[70] but do not address whether or not there is any lead/lag relationship between prices on the Constituent Platforms and prices on other bitcoin spot market platforms or where price formation occurs as between the Constituent Platforms and the rest of the spot market.[71] Absent any evidence about the relationship between the Constituent Platforms and the rest of the spot market, as in the Bitwise Order, NYSE Arca and the Sponsor cannot establish that the Constituent Platforms are uniquely resistant to manipulation.

In addition, the record does not contain any evidence that demonstrates that the asserted effectiveness of arbitrage in the identified segment of the spot bitcoin market would, by itself, provide unique resistance to manipulation sufficient to do away with the need for a surveillance-sharing agreement with a significant, regulated market.[72] In the Bitwise Order, the Commission stated that its reliance on surveillance-sharing agreements for derivative securities products has not been limited to ETPs based on commodities, but has also extended to equity options based on securities listed on national securities exchanges.[73] Accordingly, even efficient price arbitrage may not eliminate the need for surveillance-sharing agreements. As in the Bitwise Order, there is no evidence in the record here that arbitrage in the Constituent Platforms is of such unique effectiveness that it would essentially insulate the proposed ETP from attempts at manipulation.[74]

Moreover, the record does not demonstrate that arbitrage among the Constituent Platforms is as ''robust'' as the Sponsor claims. The Sponsor and CF Benchmarks (the administrator of the Bitcoin Reference Rate) provide certain metrics regarding price correlations, spread, and volatility,[75] but these figures alone present a selective and incomplete analysis. The record does not provide any evidence about how these figures compare to other markets or how they might vary over time. Absent such context, the Commission concludes that these figures represent an insufficient basis upon which to justify a conclusion about a relevant market's inherent resistance to manipulation. Further, even if the record demonstrated that the quality of arbitrage and the depth of liquidity on the Constituent Platforms made manipulation more difficult or costly than it would be otherwise, that would, as the Commission stated in the Bitwise Order, speak to providing some resistance to manipulation. However, the presence of these factors would not be sufficient to establish a unique resistance to manipulation that would justify dispensing with the standard surveillance-sharing agreement with a significant, regulated market.[76]

(ii) Assertions Regarding Regulation of the Constituent Platforms

(A) Representations Made and Comments Received

NYSE Arca and the Sponsor assert that each of the Constituent Platforms is regulated by various federal, state, and international regulators that impose a variety of obligations designed to, among other things, protect the Constituent Platforms from fraud and manipulation.

NYSE Arca states that all of the Constituent Platforms are registered with the U.S. Department of the Treasury's Financial Crimes Enforcement Network (''FinCEN'') as money services businesses (''MSB''); three of the five Constituent Platforms have obtained state money transmitter licenses; and the other two Constituent Platforms are operated by trust companies chartered by the State of New York, which subjects them to New York anti-money-laundering (''AML'') requirements and enables them to operate in other states without separate money transmitter licenses.[77] NYSE Arca and the Sponsor state that, as MSBs, the Constituent Platforms must fully comply with U.S. Bank Secrecy Act (''BSA'') and AML requirements, which include developing, implementing, and maintaining an

[66] *See supra* note 56 and accompanying text; Winklevoss Order, 83 FR at 37585–86; Bitwise Order, 84 FR at 55391 n.140, 55402 & n.331 (discussing pending litigation against a bitcoin trading platform for fraudulent conduct relating to Tether). *See also* Winklevoss Order, 83 FR at 37584–86 (discussing potential types of manipulation in the bitcoin spot market); Bitwise Order, 84 FR at 55383 (stating that the sponsor of the proposed ETP presented an analysis of the bitcoin spot market that asserts that 95% of the spot market is dominated by fake and non-economic activity, such as wash trades), 55391 (discussing possible sources of fraud and manipulation in the bitcoin spot market). The Commission has also noted that fraud and manipulation in the bitcoin spot market could persist for a significant duration. *See* Bitwise Order, 84 FR at 55405 & n.379.

[67] *See supra* note 42. The Commission notes that an academic paper, the ''Griffin-Shams Paper,'' suggesting that the price of bitcoin was manipulated with Tether, that the Commission cited in the Winklevoss Order and the Bitwise Order has recently been updated. *See* Griffin, John M. and Shams, Amin, *Is Bitcoin Really Un-Tethered?* (October 28, 2019), *available at https://ssrn.com/abstract=3195066. See also* Winklevoss Order, 83 FR at 37585–86; Bitwise Order, 84 FR at 55405 n.379.

[68] In fact, NYSE Arca or the Sponsor did not discuss the percentage of overall bitcoin spot market trading volume conducted on the Constituent Platforms nor did they attempt to verify previously established spot market volume figures showing the percentage of trading conducted on the Constituent Platforms. *See, e.g.,* Bitwise Order, 84 FR at 55393.

[69] Bitwise Order, 84 FR at 55398.

[70] *See supra* notes 43–54 and accompanying text.

[71] Reinforcing the Commission's conclusion, a recent study provides a preliminary indication that a significant degree of bitcoin price formation may occur on spot market platforms other than the Constituent Platforms. *See* An Analysis of Price Discovery in Bitcoin Spot Markets (Jan. 15, 2020), *available at https://medium.com/digitalassetresearch/an-analysis-of-price-discovery-in-bitcoin-spot-markets-7563fbf1c890.*

[72] *See* Bitwise Order, 84 FR at 55390.

[73] *See* Bitwise Order, 84 FR at 55390 (citing Winklevoss Order, 84 FR at 37593; 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)). *See also supra* note 20 and accompanying text.

[74] *See* Bitwise Order, 84 FR at 55391.

[75] *See supra* notes 43, 48, 50–53 and accompanying text.

[76] *See* Bitwise Order, 84 FR at 55391.

[77] *See* Notice, 84 FR at 56227 n.61.

effective AML program.[78] NYSE Arca represents that the Sponsor concludes that the presence of robust AML and know-your-customer (''KYC'') policies and procedures should lead to robust trading data and may inhibit trading on the Constituent Platforms that is intended to manipulate the Bitcoin Price.[79]

In addition, the Sponsor asserts that by virtue of being Constituent Platforms for calculation of the Bitcoin Reference Rate, the CME and, in turn, the Commodity Futures Trading Commission (''CFTC'') oversee the activity on the Constituent Platforms in a manner that renders them inherently resistant to manipulation. The Sponsor states that the CME CF Oversight Committee (''CME Committee'') determines the membership of platforms used to calculate the Bitcoin Reference Rate.[80] NYSE Arca states that, according to the Sponsor, CME's criteria for each of the Constituent Platforms requires that the platform facilitate spot trading of the relevant cryptocurrency against the corresponding fiat currency (''Relevant Pair'') and make trade data and order data available through an Automatic Programming Interface (''API'') with sufficient reliability, detail, and timeliness.[81] In addition, (1) the platform's Relevant Pair spot trading volume must meet minimum thresholds; (2) the platform must publish policies to ensure fair and transparent market conditions at all times and have processes in place to identify and impede illegal, unfair, or manipulative trading practices; (3) the platform must not impose undue barriers to entry or restrictions on market participants, and utilizing the platform must not expose market participants to undue credit risk, operational risk, legal risk, or other risks; (4) the platform must comply with applicable law and regulation, including, but not limited to, capital markets regulations, money transmission regulations, client money custody regulations, KYC regulations, and AML regulations; and (5) the platform must cooperate with inquiries and investigations of regulators and CF Benchmarks upon request and must execute data-sharing agreements with CME.[82] Furthermore, the Sponsor asserts that, as an additional protection from fraud and manipulation, the Constituent Platforms are required to maintain transparent and accurate trade and order data, and that compliance with this requirement is under the oversight of the CME Committee.[83]

The Sponsor also states that CF Benchmarks, among other things, must establish appropriate monitoring processes and procedures designed to identify any breaches of its practice standards and any attempted manipulation or manipulative behavior and report any such incidents in a timely manner.[84] The Sponsor states that pursuant to this authority, Constituent Platforms must make trade and order data available through an API with sufficient reliability, detail, and timeliness to meet CF Benchmarks' standards.[85] Furthermore, according to the Sponsor, Constituent Platforms must have processes to detect and prevent manipulative trading.[86]

Adherence to the membership eligibility criteria is monitored by CF Benchmarks and the CME Committee, and the CME Committee may remove or suspend a Constituent Platform from the Bitcoin Reference Rate in the event such criteria are not being met.[87] According to the Sponsor, the CME Committee was established to protect the integrity of the methodology and calculation process, and is responsible for reviewing and ''providing challenge on'' all aspects of the methodology and calculation process and providing effective oversight of CF Benchmarks as it relates to the Bitcoin Reference Rate, including CF Benchmarks' manipulation surveillance.[88] In addition, the CME Committee is responsible for reviewing reports on any complaints or concerns regarding the Bitcoin Reference Rate's relevance, resistance to manipulation, ''replicability,'' transparency and/or compliance with the applicable methodology, and overseeing the related investigation and remedial actions, if any.[89] As such, the Sponsor states that the CME Committee is responsible for reviewing and enforcing CF Benchmarks' manipulation surveillance and enforcement as it relates to the Constituent Platforms.[90]

The Sponsor further asserts that the CME, as a designated contract market (''DCM''), is required, among other things, to ensure appropriate mechanisms to surveil, detect, and share information regarding any manipulation or price distortion on its market.[91] The Sponsor states that the CME uses a combination of real-time monitoring, position limits, and information-sharing agreements with underlying cash markets to prevent and detect manipulative practices.[92] In addition, the Sponsor states that as part of the CFTC staff's heightened review of CME bitcoin futures, CME, among other things, monitors data from cash markets with respect to price settlements and other bitcoin prices more broadly, and identifies anomalies and disproportionate moves in the cash markets as compared to the futures markets.[93] Lastly, NYSE Arca and the Sponsor assert that the CFTC, by virtue of its oversight of the CME, has anti-fraud and anti-manipulation authority over the spot bitcoin markets, including the Constituent Platforms.[94]

Finally, the Sponsor states that surveillance of the Constituent Platforms is further reinforced by the UK Financial Conduct Authority's (''FCA'') oversight of CF Benchmarks and CF Benchmarks' obligations as a benchmark administrator under European Union regulations.[95] According to the Sponsor, under the EU Benchmark Regulation (''EU BMR''), CF Benchmarks must establish adequate systems and effective controls to detect any attempted manipulation on each of the Constituent Platforms and report

[78] *See id.* at 56227; *see also* Wilshire Phoenix Submission II at 12. According to the Sponsor, recent guidance issued by the Financial Action Task Force (''FATF'') also requires the Constituent Platforms to comply with AML regulations. *See* Wilshire Phoenix Submission II at 6, 12.

[79] *See* Notice, 84 FR at 56227 n.64.

[80] *See* Wilshire Phoenix Submission II at 6.

[81] *See* Notice, 84 FR at 56227.

[82] *See* Notice, 84 FR at 56227. *See also* Wilshire Phoenix Submission II at 7. NYSE Arca states that the CME monitors the Constituent Platforms to ensure compliance with its criteria and removed two platforms in April 2017 for failing to meet its criteria. *See* Notice, 84 FR at 56227 n.60.

[83] *See* Wilshire Phoenix Submission II at 7.

[84] *See* Wilshire Phoenix Submission II at 6, 16.

[85] *See id.* at 5, 7.

[86] *See id.* at 5, 6. The Sponsor argues that such rules, and the review of such rules by CF Benchmarks, are comparable to those used by a national securities exchanges or the futures exchanges associated with the assets underlying the commodity-trust ETPs approved to date. *See id.* at 14.

[87] *See* Wilshire Phoenix Submission II at 6, 15.

[88] *See* Wilshire Phoenix Submission II at 16–17.

[89] *See* Wilshire Phoenix Submission II at 17.

[90] *See* Wilshire Phoenix Submission II at 17.

[91] *See* Wilshire Phoenix Submission II at 23. The Sponsor asserts that a DCM may not list a contract that is readily susceptible to manipulation and that, pursuant to the Commodity Exchange Act, ''a DCM must establish, monitor and enforce rules of trading on its contract market, including access requirements, terms and conditions for trading, and rules prohibiting manipulation on the contract market.'' *See* Wilshire Phoenix Submission II at 23.

[92] *See* Wilshire Phoenix Submission II at 23–24.

[93] *See id.* at 24.

[94] *See* Notice, 84 FR at 56226 n.43; Wilshire Phoenix Submission II at 12–13.

[95] *See* Wilshire Phoenix Submission II at 17 (further noting that CF Benchmarks was authorized by the United Kingdom FCA and was granted permission to carry on the regulated activity of administering a benchmark, and that, as a result, CF Benchmarks is subject to regulatory oversight by the FCA).

any such attempts to the FCA.[96] The Sponsor argues that, like the Commission's regulation of national securities exchanges, the requirements of the EU BMR are designed to detect and deter manipulation on the Constituent Platforms and that, by requiring CF Benchmarks to establish procedures to identify and report such manipulation to the FCA, the EU BMR increases market surveillance and deters would-be manipulators by mandating information sharing through governmental oversight of the Bitcoin Reference Rate.[97] According to the Sponsor, the EU BMR also fosters information flow, cooperation, and coordination between the Constituent Platforms, CME, and ultimately NYSE Arca.[98]

(B) Analysis

The record does not demonstrate that the level of regulation present with respect to the Constituent Platforms makes that segment of the bitcoin spot market inherently and uniquely resistant to fraud and manipulation. The Sponsor concedes that, despite the efforts of regulators or other market participants, bad actors and manipulation attempts may continue to exist in the bitcoin markets.[99] The Sponsor likewise admits that the price of bitcoin may be influenced by fraud and manipulation because, among other things, ''many bitcoin spot markets are not regulated or supervised by a government agency,'' and because ''certain platforms may lack critical system safeguards, including customer protections.'' [100]

In addition, the record establishes that the level of regulation on the Constituent Platforms is not equivalent to the obligations and oversight of national securities exchanges or futures exchanges. While the Sponsor points to the Constituent Platforms' registrations with FinCEN as money services businesses, and two Constituent Platforms that are chartered by New York, the Commission stated in the Bitwise Order that there are substantial differences between FinCEN and New York state regulation compared to the Commission's regulation of the national securities exchanges.[101] For example, while there may be some overlap,[102] national securities exchanges are also, among other things, required to have rules that are ''designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.'' [103] Moreover, national securities exchanges must file proposed rules with the Commission regarding certain material aspects of their operations,[104] and the Commission has the authority to disapprove any such rule that is not consistent with the requirements of the Exchange Act.[105] Thus, national securities exchanges are subject to Commission oversight of, among other things, their governance, membership qualifications, trading rules, disciplinary procedures, recordkeeping, and fees.[106]

The Commission finds that the Constituent Platforms are materially different. While the Sponsor asserts that various regulatory entities require the Constituent Platforms to adopt certain policies and processes, such requirements are fundamentally different from the Exchange Act's requirements for national securities exchanges, and it is unclear the extent to which a federal regulator must approve or disapprove of the rules of the Constituent Platforms and directly oversee their implementation and enforcement. Thus, the Exchange Act explicitly tasks the Commission with the responsibility of ensuring that the rules of a national securities exchange, as an SRO, are fully responsive to regulatory needs and that there is no decrement between regulatory needs and SRO performance.[107] Currently, there is no regulatory authority that maintains similar obligations with respect to any policies or processes adopted by bitcoin spot trading platforms. Furthermore, unlike national

[96] *See* Wilshire Phoenix Submission II at 13. According to CF Benchmarks, any cases of suspected benchmark manipulation are escalated through the appropriate regulatory channels in accordance with its obligations under EU BMR. *See* CF Benchmarks Letter at 5.

[97] *See* Wilshire Phoenix Submission II at 13.

[98] *See* Wilshire Phoenix Submission II at 13.

[99] *See* Wilshire Phoenix Submission II at 3. The Sponsor acknowledges that any of the foregoing issues ''may adversely affect an investment in the Shares.'' *See id. See also* Registration Statement at 26 (acknowledging that a bad actor may be able to, among other things, alter the bitcoin blockchain on which the bitcoin network and most bitcoin transactions rely, control, exclude, or modify the ordering of bitcoin transactions, ''double-spend'' its own bitcoin (*i.e.,* spend the same bitcoin in more than one transaction) and prevent the confirmation of other users' transactions).

[100] Registration Statement at 32.

[101] *See* Bitwise Order, 84 FR at 55392 (''[t]here are substantial differences between the NYSDFS and FinCEN regulation versus the Commission's regulation of the national securities exchanges.''). The Commission notes that AML and KYC policies and procedures have been referenced in other bitcoin-based ETP proposals as a purportedly alternative means by which such ETPs would be uniquely resistant to manipulation. *See, e.g.,* Bitwise Order, 84 FR at 55386 n.55 & 55390. The Commission concludes here that such AML and KYC policies and procedures do not serve as a substitute for, and are not otherwise the dispositive factor 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 national securities exchanges.

[102] *See CFTC* v. *McDonnell,* 287 F. Supp. 3d 213, 220–23, 228 (E.D.N.Y.), adhered to on denial of reconsideration, 321 F. Supp. 3d 366 (E.D.N.Y. 2018).

[103] 15 U.S.C. 78f(b)(5).

[104] 17 CFR 240.19b–4(a)(6)(i).

[105] 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. 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.*

[106] *See* Winklevoss Order, 83 FR at 37597. The Commission notes that the NYSDFS has issued ''guidance'' to supervised virtual currency business entities, stating that these entities must ''implement measures designed to effectively detect, prevent, and respond to fraud, attempted fraud, and similar wrongdoing.'' *See* Maria T. Vullo, Superintendent of Financial Services, NYSDFS, *Guidance on Prevention of Market Manipulation and Other Wrongful Activity* (Feb. 7, 2018), *available at https://www.dfs.ny.gov/docs/legal/industry/il180207.pdf.* The NYSDFS recognizes that its ''guidance is not intended to limit the scope or applicability of any law or regulation'' (*id.*), which would include the Exchange Act. The Commission further notes that nothing in the record evidences whether the Constituent Platforms have complied with this NYSDFS guidance. FinCEN's guidance regarding the application of its regulations to digital assets notes that its guidance does not ''affect the obligations of any of the participants described herein under other regulatory frameworks,'' for example, obligations under ''federal securities law.'' FinCEN Guidance No. FIN–2019–G001: Application of FinCEN's Regulation to Certain Business Models Involving Convertible Virtual Currencies, at 24 n.75 (May 9, 2019), *available at https://www.fincen.gov/sites/default/files/2019-05/FinCEN%20Guidance%20CVC%20FINAL%20508.pdf. See also* FinCEN Guidance No. FIN–2013–G001: Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies, at 1 n.1 (Mar. 18, 2013), *available at https://www.fincen.gov/sites/default/files/shared/FIN-2013-G001.pdf* (noting that FinCEN's guidance ''should not be interpreted as a statement by FinCEN about the extent to which [certain] activities comport with other federal or state statutes, rules, regulations, or orders'').

[107] *See* 15 U.S.C. 78s(b). *See also* S. Rep. No. 94–75, at 30 (1975).

securities exchanges, the Constituent Platforms are not SROs and therefore do not have authority to impose discipline upon their participants. Accordingly, the Commission maintains that the level of regulation on the Constituent Platforms, as asserted by the Sponsor, is not equivalent to the obligations and oversight of national securities exchanges, and the Commission likewise rejects the Sponsor's factual assertion that this level of regulation present with respect to the Constituent Platforms makes that segment of the bitcoin spot market inherently or uniquely resistant to fraud and manipulation.

As to the Sponsor's contention that the self-certification of bitcoin futures establishes the oversight of the Constituent Platforms by the CFTC, as an initial matter, the Commission observed in the Winklevoss Order, the CFTC's statutory authority to review new derivative products differs substantially from the Commission's authority, under Section 19(b) of the Exchange Act,[108] with respect to the review of proposed rule changes by SROs.[109] For example, while there are ''limited grounds'' for the CFTC to take affirmative action to stay new product self-certifications,[110] the Commission must, to approve a proposed rule change, make an affirmative finding that the proposed rule change is consistent with the Exchange Act, with the burden of demonstrating consistency with the Exchange Act resting with the SRO proposing the rule change.[111] The Commission is also mindful that the primarily institutional markets that the CFTC supervises are materially different from the securities markets in which many retail investors participate directly.[112] The Exchange Act's requirements for SROs, who serve as ''front-line'' regulators in the protection of retail investors,[113] to establish rules that protect investors and promote the public interest reflects the extent of such retail participation in our public equity markets. In contrast, the CFTC acknowledges that ''[m]ost participants in the futures markets are commercial or institutional commodities producers or consumers'' and ''[t]rading commodity futures and options is a volatile, complex and risky venture that is rarely suitable for individual investors or 'retail customers.' '' [114] The Commission concludes that the Sponsor's assertions that oversight by the CFTC establishes that the Constituent Platforms are regulated markets are not supported by the record. 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 Platforms.[115] 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.[116] 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.'' [117] Based on the foregoing differences in the types and levels of regulations governing the bitcoin spot market, the Commission cannot conclude that the record has adequately demonstrated that the level of regulation present with respect to the Constituent Platforms' segment of the bitcoin spot market renders such segment of the spot market inherently or uniquely resistant to fraud and manipulation.

The Commission similarly is not persuaded by the Sponsor's assertions that oversight by CF Benchmarks establishes that the Constituent Platforms are regulated markets. CF Benchmarks—the administrator of the Bitcoin Reference Rate—does not itself exercise governmental regulatory authority. Rather, CF Benchmarks is a registered, privately-held company in England.[118] CF Benchmarks' relationship with the Constituent Platforms is based on the Constituent Platforms' participation in the determination of CF Benchmarks' reference rates, such as the Bitcoin Reference Rate. While CF Benchmarks is regulated by the FCA as a benchmark administrator, FCA regulations do not extend to the Constituent Platforms by virtue of their trade prices serving as the input data underlying the Bitcoin Reference Rate.[119]

According to the Sponsor, the oversight performed by CF Benchmarks of the Constituent Platforms is contractual in nature and is for the purpose of CF Benchmarks satisfying its obligations under EU regulations designed to ensure the accuracy and integrity of benchmarks.[120] Such oversight serves a fundamentally different purpose as compared to the regulation of national securities exchanges and the mandates of the Exchange Act, because, as the Sponsor explains, the purpose of oversight by a benchmark administrator is to ensure that the data provided to calculate the benchmark rate accurately reflects the prices that were traded, or available to trade, on trading venues.[121] While the Commission recognizes that this may be an important function in ensuring the integrity of reference rates, such requirements do not imbue either CF Benchmarks or the Constituent Platforms with regulatory authority similar to that the Exchange Act confers upon SROs such as national securities exchanges.[122]

The Sponsor also asserts that CF Benchmarks reviews the ''rules'' (meaning policies and procedures, rather than regulatory obligations) of the Constituent Platforms in a manner comparable to the Commission's oversight of national securities exchanges. However, neither the Sponsor nor NYSE Arca has provided evidence establishing matters such as the specific regulatory requirements applicable to the Constituent Platforms' rules, the process for codifying such

[108] 15 U.S.C. 78s(b).

[109] *See* Winklevoss Order, 83 FR at 37587.

[110] *See* CFTC Backgrounder on Oversight of and Approach to Virtual Currency Futures Markets (Jan. 4, 2018) at 2, *available at http://www.cftc.gov/idc/groups/public/@newsroom/documents/file/backgrounder_virtualcurrency01.pdf* (''Virtual Currency Backgrounder''). *See also* Winklevoss Order, 83 FR at 37587.

[111] *See supra* notes 33–34 and accompanying text. *Compare* 7 U.S.C. 7a–2(c) *and* 17 CFR 40.6 *with* 15 U.S.C. 78(b)(1) *and* 17 CFR 240.19b–4.

[112] *See* Winklevoss Order, 83 FR at 37587.

[113] *See* Securities Exchange Act Release No. 12737 (Aug. 25, 1976), 41 FR 38847, 38854 (Sept. 13, 1976); Securities Exchange Act Release No. 50699 (Nov. 18, 2004), 69 FR 71126, 71132 (Dec. 8, 2004).

[114] Futures Market Basics, CFTC, *available at http://www.cftc.gov/ConsumerProtection/EducationCenter/FuturesMarketBasics/index.htm. See also* Winklevoss Order, 83 FR at 37587.

[115] *See* Written Testimony of J. Christopher Giancarlo, Chairman, Commodity Futures Trading Commission, Before the Senate Banking Committee (Feb. 6, 2018) (''Giancarlo Testimony''), *available at https://cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo37.*

[116] *See* Winklevoss Order, 83 FR at 37599.

[117] *See* Winklevoss Order, 83 FR at 37599 n.288.

[118] *See https://www.cfbenchmarks.com/legal* (stating that CF Benchmarks is authorized and regulated by the UK FCA as a registered Benchmark Administrator (FRN 847100) under the EU BMR, and further noting that CF Benchmarks 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 Exchange is a source of input data for CF Benchmarks indices and is one of the Constituent Platforms underlying the Bitcoin Reference Rate.

[119] CF Benchmarks is also not required to apply certain provisions of EU benchmark regulation to the Constituent Platforms because the Bitcoin Reference Rate's input data is not ''contributed.'' *See* Benchmark Statement, at 4 *available at https://www.cryptofacilities.com/cms/storage/resources/cme-cf-benchmark-statement.pdf.*

[120] *See supra* note 95 and accompanying text.

[121] *See infra* note 207 and accompanying text.

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

rules, the requirement of a regulatory body to approve or disapprove rules pursuant to a statutory mandate, and the ability of Constituent Platforms and regulatory authorities to enforce such rules.[123] National securities exchanges are entities that possess governmental authority such that they must carry out their self-regulatory responsibilities effectively and fairly while protecting investors and promoting the public trust.[124] Accordingly, the Exchange Act subjects the rules of national securities exchanges to the same standards of policy justification as those which apply to the Commission and also specifically requires the Commission to approve or disapprove rules in accordance with articulated statutory mandates.[125] The record does not establish that, due to CF Benchmarks' oversight, the Constituent Platforms are subject to a regulatory regime that includes, at a minimum, requirements comparable to these core elements of national securities exchange regulation such that Constituent Platforms are regulated markets.

Furthermore, because the purported oversight by CF Benchmarks, does not represent a unique measure to resist manipulation beyond mechanisms that exist in securities or commodities markets, the record does not establish that the Constituent Platforms are inherently resistant to manipulation such that it would justify dispensing with a surveillance-sharing agreement with a significant, regulated market.[126] 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 did not dispense with the need for a surveillance-sharing agreement with a significant, regulated market in those instances.[127] Thus, while measures such as those represented by the Sponsor may facilitate detection or perhaps even deterrence of fraud and manipulation, they do not render those markets inherently or uniquely resistant to manipulation.

The Commission also notes that NYSE Arca has not stated that it has entered into surveillance-sharing agreements with each of the individual Constituent Platforms that utilize surveillance tools. Moreover, even if NYSE Arca did enter into such agreements, it is not clear what ability NYSE Arca would have to compel the sharing of surveillance data, and NYSE Arca has not established that it would be able to compel such sharing. Unlike national securities exchanges, the bitcoin spot platforms are not self-regulatory organizations, and therefore do not have authority to impose discipline upon their participants.

The Commission thus concludes that the record does not demonstrate that the current oversight of the Constituent Platforms renders the bitcoin spot market uniquely resistant to manipulation, such that a surveillance-sharing agreement with a significant, regulated market would not be needed to adequately deter and detect fraud and manipulation.

(b) Assertions About the Design of the Bitcoin Reference Rate (the CME CF BRR)

(i) Representations Made and Comments Received

The Sponsor asserts that the Bitcoin Reference Rate methodology makes the Bitcoin Reference Rate inherently resistant to manipulation.[128] The Sponsor and NYSE Arca state that CME's own analysis and an independent examination of the Bitcoin Reference Rate methodology support this assertion.[129] In particular, NYSE Arca and the Sponsor state that the Bitcoin Reference Rate aggregates the bitcoin-to-U.S. dollar trade flow of its Constituent Platforms during a one-hour calculation window, partitions that window into twelve, five-minute intervals, calculates a volume-weighted median price for each partition, and then calculates an equally-weighted average of the volume-weighted median of all partitions.[130] The Sponsor argues that, because of these design choices, influencing the Bitcoin Reference Rate would require price manipulation on multiple exchanges over an extended period of time, which, according to the Sponsor, would be unreasonably costly and operationally intensive.[131] Further, NYSE Arca states that the Bitcoin Reference Rate's use of a volume-weighted average median price, determined over twelve five-minute windows in a specific 60-minute period, and the capital necessary to maintain a significant presence on any Constituent Platform would make any attempted manipulation of the Bitcoin Reference Rate unlikely.[132]

In addition, CF Benchmarks states that, while ''[a]ll benchmarks are susceptible to manipulation,'' the design of the Bitcoin Reference Rate methodology provides several benefits related to manipulation resistance.[133] According to CF Benchmarks, the use of partitions, as well as the use of equal-weighting instead of volume-weighting among the partitions, limits the influence of individual trades of large size or a cluster of trades in a short period of time because such trades would only influence the level of the

[123] *See* Registration Statement at 31–32 (describing the Sponsor's own acknowledgement of the lack of regulation and transparency with respect to bitcoin spot markets, specifically noting that many bitcoin spot markets ''are not regulated or supervised by a government agency,'' and that ''certain platforms may lack critical system safeguards, including customer protections'').

[124] 15 U.S.C. 78f(b)(5). *See also* S. Rep. No. 94–75, at 29–30 (1975).

[125] 15 U.S.C. 78s(b).

[126] *See also supra* notes 101–107 and accompanying text finding that the purported oversight by NYSDFS and FinCEN does not establish that the Constituent Platforms are inherently or uniquely resistant to manipulation.

[127] *See, e.g.,* Securities Exchange Act Release No. 80840 (June 1, 2017) 82 FR 26534 (June 7, 2017) (NYSEArca–2017–33) (approving the listing and trading of shares of the Euro Gold Trust, Pound Gold Trust, and the Yen Gold Trust); Securities Exchange Act Release No. 83046 (Apr. 13, 2018) 83 FR 17462 (Apr. 19, 2018) (Nasdaq–2018–012) (approving the listing and trading of shares of an exchange-traded fund that seeks to track an equity index, the CBOE Russell 2000 30-Delta BuyWrite V2 Index).

[128] The Sponsor provided the Commission with a written presentation at a meeting on October 16, 2019. *See* Commission Staff Memorandum to File re: Meeting with Wilshire Phoenix, Mayer Brown LLP, NYSE Arca, Inc., and Seward & Kissel LLP (Oct. 16, 2019) (attaching Presentation to the Commission by Wilshire Phoenix (''Wilshire Phoenix Submission I'')), *available at https://www.sec.gov/comments/sr-nysearca-2019-39/srnysearca201939-6297119-193433.pdf. See* Wilshire Phoenix Submission I at 5. According to the Sponsor, development of the Bitcoin Reference Rate relied on recognized best principles for financial benchmarks and the expert oversight committee oversees the scope of the Index to ensure it remains relevant and robust. *See* Wilshire Phoenix Submission I at 5.

[129] *See* Wilshire Phoenix Submission I at 8 (citing Wilshire Phoenix Submission I at Appendix 1); Notice, 84 FR at 56225 (citing Andrew Paine and William J. Knottenbelt, *Analysis of the CME CF Bitcoin Reference Rate and Real Time Index,* Section 2.2.2, Oct. 2016, *available at https://www.cmegroup.com/trading/files/bitcoin-white-paper.pdf* (''Paine & Knottenbelt'')). The Sponsor includes in its first submission an analysis of the Bitcoin Reference Rate written by the CME Group that describes the Bitcoin Reference Rate and its methodology, and analyzes the degree to which Bitcoin Reference Rate is representative of the underlying spot market that it tracks. *See* Wilshire Phoenix Submission I at 11–57.

[130] *See* Notice, 84 FR at 56223, 56225; Wilshire Phoenix Submission I at 5.

[131] *See* Wilshire Phoenix Submission I at 5. *See also* Notice, 84 FR at 56225 (citing Paine & Knottenbelt, Section 2.2.2) (''The chosen specification makes the [Bitcoin Reference Rate] highly resistant against manipulation. . . . Influencing the [Bitcoin Reference Rate] would therefore require price manipulation . . . over an extended period of time.''); Wilshire Phoenix Submission I at 12.

[132] *See* Notice, 84 FR at 56225. The Sponsor asserts that the interconnectivity required to be eligible to be a Constituent Platform, combined with the volume and depth of liquidity among the Constituent Platforms and capital necessary to maintain a significant presence on the Constituent Platforms, makes manipulation prohibitively expensive because a would be manipulator would need to influence multiple platforms. *See* Wilshire Phoenix Submission II at 8.

[133] *See* CF Benchmarks Letter at 3–4.

volume-weighted mean for the partition or partitions in which they were conducted and as such would not have undue influence on the overall benchmark price.[134]

CF Benchmarks also asserts that, due to the Bitcoin Reference Rate methodology ''certain types of manipulative trading would have little or no impact on the level of the [Bitcoin Reference Rate].'' [135] As examples, CF Benchmarks states that the influence of a single large volume trade placed during the observation window would be confined due to the averaging component of the methodology, and that the influence of twelve large-volume trades placed in each five-minute partition during the observation window would be nullified due to the use of volume-weighted means.[136] CF Benchmarks further asserts that, to be sure to have a meaningful impact on the Bitcoin Reference Rate, a trader would need to be responsible for more than 50% of the volume of a partition through trades executed at a significant deviation to the prevailing price, for a period of 45 minutes—in other words, for nine of the twelve partitions—to overcome the averaging effect of the methodology.[137] CF Benchmarks estimates that the capital required to manipulate the Bitcoin Reference Rate would likely exceed $20 million, and asserts that the presence of arbitrageurs would likely require the commitment of additional capital depending on the degree of impact the manipulator sought to make.[138] CF Benchmarks also asserts that a manipulator would need to maintain a significant presence across all Constituent Platforms.[139]

In addition, according to CF Benchmarks, use of the Bitcoin Reference Rate would mitigate against potential manipulation that could arise if an alternative pricing source or index used a wider set of markets and trading pairs that did not offer the traceability of the Bitcoin Reference Rate.[140] CF Benchmarks states that only manipulation of the bitcoin-U.S. dollar markets operated by the Constituent Platforms can impact the integrity of the Bitcoin Reference Rate, because the benchmark exclusively uses transaction data in bitcoin-U.S. dollar trading pairs from the Constituent Platforms and does not use transaction data from transactions conducted in parallel markets, such as bitcoin trading against ''stablecoins'' or other cryptocurrencies.[141]

(ii) Analysis

The Commission concludes that NYSE Arca and the Sponsor have not demonstrated that the design of the Bitcoin Reference Rate makes the underlying market of the proposed ETP inherently and uniquely resistant to manipulation. The Commission recognizes that the Bitcoin Reference Rate is the U.S. dollar rate used to settle the CME's cash-settled bitcoin futures contracts, and that the Commodity Exchange Act and CFTC regulations require futures contracts and their cash-settlement processes to not be ''readily susceptible to manipulation.'' [142] The Commission does not assert that the Bitcoin Reference Rate fails to meet that standard. Rather, the Commission finds that the record does not establish that the underlying market is uniquely and inherently resistant to manipulation such that it would be consistent with the Exchange Act for NYSE Arca to dispense with entering into a surveillance-sharing agreement with a regulated market of significant size.

The Commission's conclusion on this point is consistent with the CFTC's actions with respect to bitcoin futures products. CFTC regulations require a designated contract market (DCM) like CME's cash-settled bitcoin futures market to enter into information-sharing agreements with settlement rate providers to detect and deter manipulative behavior.[143] Specifically with respect to bitcoin futures products, the CFTC further requires such DCMs to enter into information-sharing agreements with spot market platforms that make up the underlying settlement price index to allow DCMs access to pertinent trade and trader data.[144] Accordingly, in the case of bitcoin futures products, not only has the CFTC employed its traditional standards of entering into information-sharing agreements with settlement rate providers, but it also has required DCMs to enter into data-sharing agreements with spot market platforms to facilitate the detection and deterrence of manipulative behavior.

The Commission concludes that the CFTC's heightened review specific to bitcoin futures, including the information-sharing requirements that it imposes despite the use of the Bitcoin Reference Rate, underscore that the Bitcoin Reference Rate does not possess unique characteristics such that a surveillance-sharing agreement would not be necessary to list the proposed ETP in a manner that satisfies the requirements of the Exchange Act.[145] While the methodologies of the Bitcoin Reference Rate could provide protections that mitigate the potential effects of certain types of manipulation, as identified by CF Benchmarks, the Commission concludes that neither the evidence in the record, nor the actions of the CFTC, establish that either the Bitcoin Reference Rate or the relevant segment of the bitcoin spot market maintains a unique resistance to manipulation such that there would be no need to enter into a surveillance-sharing agreement with a regulated significant market to detect and deter fraudulent and manipulative activity.[146]

In any event, the Commission is unpersuaded that CF Benchmarks' assertions about the Bitcoin Reference

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[134] *See* CF Benchmarks Letter at 4. CF Benchmarks also cites the use of volume-weighted medians (instead of volume-weighted means), the arithmetic mean of the partitions, and equal weighting of Constituent Platforms as preventing the undue influence of trades at outlier prices or large trades and the ability of potential manipulators from targeting one platform. *See id.* In addition, CF Benchmarks states that the Bitcoin Reference Rate methodology will identify a Constituent Platform with trades over a certain deviation from the volume-weighted median and exclude transactions from such Constituent Platform from the benchmark calculation. *See id.* at 5.

[135] CF Benchmarks Letter at 2.

[136] *See* CF Benchmarks Letter at 2–3.

[137] *See* CF Benchmarks Letter at 3.

[138] *See* CF Benchmarks Letter at 3.

[139] *See* CF Benchmarks Letter at 3. *Cf.* Notice, 84 FR at 56225.

[140] *See* CF Benchmarks Letter at 1–2.

[141] *See id.* at 1. CF Benchmarks states that bitcoin-U.S. dollar markets rely on traditional banking operators to facilitate deposits and withdrawals of U.S. dollars, and that this facilitation requires disclosure of users' personal information. *See id.* at 1–2. According to CF Benchmarks, this disclosure requirement would act as a deterrent to manipulation that would likely be absent where alternative trading pairs that utilize ''stablecoins'' and other cryptocurrencies are utilized as input data to the calculations. *See id.* at 2. The term ''stablecoin'' is a marketing term broadly used in the industry to refer to a digital asset that purports to minimize price volatility. However, the Commission notes that the use of the term to refer to a digital asset does not mean that the asset does in fact exhibit stability. *See* Bitwise Order, 84 FR at 55389 n.101.

[142] 7 U.S.C. 7(d)(3); 17 CFR 38.200.

[143] *See* 17 CFR 38.253; Appendix C to Part 38 of CFTC's regulations.

[144] *See* Giancarlo Testimony; Virtual Currency Backgrounder at 3.

[145] *See* Giancarlo Testimony (explaining that heightened review included ''a set of enhanced monitoring and risk management steps'' to ensure that the bitcoin futures products and their cash-settlement processes were not readily susceptible to manipulation); Virtual Currency Backgrounder at 3 (listing the terms and conditions of heightened review, including DCMs entering into agreements with spot market platforms to allow access to trade and trader data).

[146] The Commission concludes that the methodologies of the Bitcoin Reference Rate as other means of preventing fraud and manipulation taken by itself or in combination with any of the other means described in this Order are not sufficient to dispense with the need for a comprehensive surveillance-sharing agreement with a regulated market of significant size relating to the underlying assets.

Rate's resistance to manipulation dispense with the need for the requisite surveillance-sharing agreement. As analyzed above in Section III.B.1.(a)(i)(B), the record does not establish that the Constituent Platforms are inherently or uniquely resistant to fraud and manipulation because the record does not address the influence of the broader bitcoin spot market—where various kinds of fraud and manipulation from a variety of sources may be present and persist for a substantial duration—on the Constituent Platforms.[147]

(c) Other Features of the Trust

(i) Representations Made and Comments Received

According to NYSE Arca, the Sponsor maintains that certain aspects of the Trust enhance its resistance to market manipulation. Specifically, NYSE Arca represents that the Trust was created as a way for market participants to gain reasonable exposure to bitcoin through a vehicle that mitigates the volatility that has historically been associated with bitcoin.[148] NYSE Arca states the Trust will have no assets other than (a) bitcoin and (b) T-Bills in proportions that seek to closely replicate the Index, which is calculated and published by the Index Calculation Agent.[149] NYSE Arca asserts that T-Bills are among the most liquid and widely traded assets in the world and are deemed to be risk free.[150] According to the Sponsor, the selection of T-Bills as a constituent of the Trust will dampen the volatility of bitcoin as it relates to the Trust, and consequently the Shares.[151] The Sponsor states that, because bitcoin is not the only constituent of the Trust (and the other constituent, T-Bills, has historically been a stable and risk-free investment), any potential manipulation of the Trust and the Shares would be extremely difficult and therefore unlikely.[152]

The Sponsor also asserts that the ability of a holder of Shares to redeem only monthly affects the Shares' resistance to manipulation because (i) of the significant passage of time between when a redemption request must be submitted and when the redemption is priced and distributed and (ii) it limits the window during which someone could successfully manipulate the Shares in order to profit from such redemption.[153] The Sponsor further argues that this redemption method also reduces operational risk, counterparty risk, and other risks thus increasing investor protection.[154]

(ii) Analysis

NYSE Arca has not demonstrated that these additional features of the Trust, such as its T-Bills holdings and its redemption method, would render the relevant segment of the underlying bitcoin market uniquely resistant to manipulation, such that it would be consistent with the Exchange Act to dispense with the need for the listing exchange to enter into a surveillance-sharing agreement with a significant regulated market to detect and deter fraudulent and manipulative activity.

While the proposed ETP would hold T-Bills in addition to bitcoin, this aspect is insufficient to support a finding that the bitcoin held in the Trust would be inherently or uniquely resistant to manipulation. Previously disapproved bitcoin-based ETP proposals, including proposals to list and trade bitcoin futures-based ETPs, have contemplated holdings in similarly liquid instruments, such as government securities and cash.[155] There is nothing in the record to suggest that including holdings in assets more liquid than bitcoin would render the bitcoin assets to be inherently or uniquely resistant to manipulation, such that there would be no need for a surveillance-sharing agreement with a regulated market of significant size. Furthermore, even if the Sponsor were correct in its assertion that holding T-Bills might make the proposed ETP more resistant to volatility,[156] there is nothing in the record to suggest that the percentage of the Trust's holdings comprised of bitcoin would be of such size that it would meaningfully reduce the potential to manipulate the Trust.

With respect to redemption of the Shares, the Sponsor's assertions that the proposed ETP's redemption method positively affects the Shares' resistance to manipulation do not support a finding that the bitcoin held in the Trust would be inherently or uniquely resistant to manipulation. The proposed ETP's monthly redemption method is not novel. Previously, the Commission has approved the listing and trading of several commodity-based trust ETPs with a monthly redemption feature.[157] However, in each instance the Commission noted that the listing

[147] *See supra* note 66 and accompanying text.

[148] *See* Notice, 84 FR at 56228.

[149] *See id.*

[150] *See id.*

[151] *See id.*

[152] *See id.*

[153] *See* Wilshire Phoenix Submission II at 28–29. The Sponsor states that it is critical that the redemption order cutoff time, which is five (5) business days prior to the applicable redemption date, be prior to any of the daily valuation determination times of the assets of the Trust (*i.e.,* bitcoin and T-Bills). If this is not the case, the Sponsor asserts that a potential manipulator could redeem the Trust's Shares at the prior price at the time of the asset value determination versus the current trading price, which would allow the potential manipulator to reap a benefit to the detriment of others. If the redemption order cut-off is properly set before any asset value determination times, then there is no possibility of redeeming Shares of the Trust after any of the asset valuation times, regardless of when NAV itself is actually published. The Sponsor concludes that this is accomplished in the Trust's case because the redemption order cut-off is five (5) business days before the determination of the NAV on the redemption date. *See* Wilshire Phoenix Submission II at 27.

[154] *See* Wilshire Phoenix Submission II at 29.

[155] *See, e.g.,* SolidX Order, 82 FR at 16247 (describing the holdings to include bitcoin and cash); Notice of Filing of Proposed Rule Change To List and Trade the Shares of the ProShares Bitcoin ETF and the ProShares Short Bitcoin ETF Under NYSE Arca Rule 8.200–E, Commentary .02, Securities Exchange Act Release No. 82350 (Dec. 19, 2017), 82 FR 61100, 61102 (Dec. 26, 2017) (SR–NYSEArca–2017–139) (describing the holdings to include, in addition to bitcoin futures contracts, cash or cash equivalents and/or U.S. Treasury securities or other high credit quality, short-term fixed-income or similar securities); Notice of Filing of Proposed Rule Change Relating to Listing and Trading of the Direxion Daily Bitcoin Bear 1X Shares, Direxion Daily Bitcoin 1.25X Bull Shares, Direxion Daily Bitcoin 1.5X Bull Shares, Direxion Daily Bitcoin 2X Bull Shares and Direxion Daily Bitcoin 2X Bear Shares Under NYSE Arca Rule 8.200–E, Securities Exchange Act Release No. 82532 (Jan. 18, 2018), 83 FR 3380, 3383 (Jan. 24, 2018) (SR–NYSEArca–2018–02) (describing the holdings to include, in addition to bitcoin futures contracts, cash or cash equivalents, such as U.S. Treasury Securities or other high credit quality short-term fixed-income or similar securities); and Notice of Filing of a Proposed Rule Change To List and Trade Shares of the GraniteShares Bitcoin ETF and the GraniteShares Short Bitcoin ETF, a Series of the GraniteShares ETP Trust, Under Rule 14.11(f)(4), Trust Issued Receipts, Securities Exchange Act Release No. 82484 (Jan. 11, 2018), 83 FR 2704, 2705–06 (Jan.18, 2018) (SR–CboeBZX–2018–001) (describing the holdings to include, in addition to bitcoin futures contracts, cash and cash equivalents).

[156] *See supra* note 151 and accompanying text.

[157] *See, e.g.,* Notice of Filing of Amendment No. 2 and Order Approving on an Accelerated Basis a Proposed Rule Change, as Modified by Amendment No. 2, To List and Trade Shares of the Sprott Physical Gold and Silver Trust Under NYSE Arca Rule 8.201–E, Securities Exchange Act Release No. 82448 (Jan. 5, 2018), 83 FR 1428 (Jan. 11, 2018) (SR–NYSEArca–2017–131) (''Gold and Silver Order''); Order Approving a Proposed Rule Change, as Modified by Amendment No. 1, To List and Trade Units of the Sprott Physical Platinum and Palladium Trust Pursuant to NYSE Arca Equities Rule 8.201, Securities Exchange Act Release No. 68430 (Dec. 13, 2012), 77 FR 75239 (Dec. 19, 2012) (SR–NYSEArca–2012–111) (''Platinum and Palladium Order''); Notice of Filing and Order Granting Accelerated Approval of a Proposed Rule Change To List and Trade Shares of the Sprott Physical Silver Trust, Securities Exchange Act Release No. 63043 (Oct. 5, 2010), 75 FR 62615 (Oct. 12, 2010) (SR–NYSEArca–2010–84) (''Silver Order''); and Order Granting Approval of a Proposed Rule Change To List and Trade the Sprott Physical Gold Trust, Securities Exchange Act Release No. 61496 (Feb. 4, 2010), 75 FR 6758 (Feb. 10, 2010) (SR–NYSEArca–2009–113) (''Gold Order'').

market had a surveillance-sharing agreement in place, or had common membership in ISG, with a regulated market of significant size related to the underlying commodity or commodities.[158] Moreover, establishing a period of time, whether it be significant or not, between the time of receipt of the redemption request and the time of pricing of the redemption is not a unique feature that would distinguish the proposed ETP from other bitcoin-related ETP proposals where the Commission likewise did not find the underlying market to be inherently or uniquely resistant to manipulation.[159]

2. Assertions That NYSE Arca Has Entered Into a Surveillance-Sharing Agreement With a Regulated Market of Significant Size

The Commission next examines whether the record supports the assertion by NYSE Arca and the Sponsor that NYSE Arca has entered into a surveillance-sharing agreement with a regulated market of significant size by virtue of NYSE Arca's surveillance-sharing agreement with the CME bitcoin futures market.[160] As was the case in the Bitwise Order, based on the common membership of NYSE Arca and CME in the ISG,[161] NYSE Arca has the equivalent of a comprehensive surveillance-sharing agreement with CME.[162] While the Commission recognizes that the CFTC regulates the CME futures market,[163] the record does not, as explained further below, establish that the CME bitcoin futures market is a ''market of significant size'' in the context of the proposed ETP.[164]

In addition, the Sponsor points to the group of Constituent Platforms as providing an avenue for the proposal to satisfy the requirement that NYSE Arca enter into a surveillance-sharing agreement with a regulated market of significant size.[165] According to NYSE Arca, while it has not entered into a surveillance-sharing agreement with any spot bitcoin platform, each Constituent Platform has entered into a data-sharing agreement with CME.[166] The Sponsor asserts that CME can share any information that it receives from the Constituent Platforms with NYSE Arca.[167] However, as discussed below, this arrangement does not satisfy the standard articulated by the Commission in its prior orders that the listing exchange for a proposed ETP may satisfy its obligations under Section 6(b)(5) of the Exchange Act by entering into bilateral surveillance-sharing agreements with regulated markets of significant size relating to underlying assets.[168] Moreover, the record does not support a conclusion that the regulation of the Constituent Platforms is comparable to the obligations and oversight of national securities exchanges or futures exchanges.[169] Given that the record does not establish that NYSE Arca has a surveillance-sharing agreement with the Constituent Platforms or that the Constituent Platforms constitute a ''regulated market,'' the Commission does not reach the question of whether the Constituent Platforms represent a market of significant size.

(a) Representations Made and Comments Received

(i) CME as a Regulated Market of Significant Size

NYSE Arca and the Sponsor assert that the CME bitcoin futures market is a regulated market of significant size with which NYSE Arca has a surveillance-sharing agreement.[170] NYSE Arca and the Sponsor assert that the CME bitcoin futures market is a market of significant size because it is the main market for bitcoin futures and compares favorably to other markets that were deemed to be markets of significant size in previous approvals of commodity-based trust ETPs.[171] In particular, the Sponsor argues that the size of the bitcoin futures market as a percentage of bitcoin spot trading represented by trading on the Constituent Platforms is larger than the size of the gold futures market as a percentage of the gold OTC market.[172] According to NYSE Arca, the Sponsor also represents that the volume of the bitcoin futures market is comparable with volumes on other markets deemed to be markets of significant size in a previous approval order by the Commission.[173]

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[158] *See, e.g.,* Gold and Silver Order, 83 FR at 1436 & n.43; Platinum and Palladium Order, 77 FR at 75240–21 n.21; Silver Order, 75 FR at 62621; and Gold Order, 75 FR at 6760 & n.18.

[159] *See, e.g.,* Notice of Filing of a Proposed Rule Change to BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, To List and Trade Winklevoss Bitcoin Shares Issued by the Winklevoss Bitcoin Trust, Securities Exchange Act Release No. 78262 (July 8, 2016), 81 FR 45554, 45569 (July 14, 2016) (SR–BatsBZX–2016–30) (describing the redemption settlement to be no more than five business days following the redemption order date).

[160] *See* Notice, 84 FR at 56225–26; Wilshire Phoenix Submission II at 19–24.

[161] *See* Notice, 84 FR at 56226; Wilshire Phoenix Submission II at 24.

[162] *See supra* note 14. *See also* Notice, 84 FR at 56226 & n.43; Wilshire Phoenix Submission II at 23–24.

[163] While the Commission recognizes that the CFTC regulates the CME, the CFTC is not responsible for direct, comprehensive regulation of the underlying bitcoin spot market. *See* Bitwise Order, 84 FR at 55410 n.456; Winklevoss Order, 83 FR at 37587, 37599.

[164] The Commission notes that the ICE Futures U.S. exchange began offering bitcoin futures contracts as of September 2019. *See* Bakkt Bitcoin (USD) Monthly And Daily Futures Contracts Trading to Begin on Monday, September 23, 2019, ICE Futures U.S. (Aug. 16, 2019), *available at https://www.theice.com/publicdocs/futures_us/exchange_notices/ICE_Futures_US_BTC_Launch2019_20190816.pdf* (last visited Jan. 14, 2020). However, the record contains no information about the volume of ICE Futures U.S.'s bitcoin futures product or whether the Sponsor has a relevant surveillance-sharing agreement with ICE Futures U.S. Also, the CME began offering options on bitcoin futures contracts as of January 13, 2020. See FAQ: CME Options on Bitcoin Futures (Oct. 29, 2019), *available at https://www.cmegroup.com/trading/cryptocurrency-indices/cme-options-bitcoin-futures-frequently-asked-questions.html.* Trading began after the comment period for this proposed rule change ended and there is no data in the record regarding such options trading.

[165] *See* Wilshire Phoenix Submission II at 11–19.

[166] *See* Notice, 84 FR at 56225 n.41. *See also* Wilshire Phoenix Submission II at 15 (stating that each Constituent Platform must enter into surveillance-sharing agreements with CME).

[167] *See* Wilshire Phoenix Submission II at 15–16.

[168] *See supra* notes 14, 19–20 and accompanying text. For a discussion about why the surveillance-sharing agreements between CME and the Constituent Platforms, along with NYSE Arca's and the CME's common membership in the ISG, do not suffice to make the spot bitcoin market inherently or uniquely resistant to manipulation, *see supra* Section III.B.1(a)(ii).

[169] *See supra* Section III.B.1(a)(ii). *See also* Winklevoss Order, 83 FR at 37597 (''The record, however, does not support a conclusion that the Gemini Exchange is a 'regulated market' comparable to a national securities exchange or to the futures exchanges that are associated with the underlying assets of the commodity-trust ETPs approved to date.''). For a discussion about why regulation of the Constituent Platforms does not suffice to make the spot bitcoin market inherently or uniquely resistant to manipulation, *see supra* Section III.B.1(a)(ii).

[170] *See* Notice, 84 FR at 56226; Wilshire Phoenix Submission II at 10–11, 19–24. NYSE Arca and the Sponsor state that NYSE Arca and the CME are both members of the ISG. *See* Notice, 84 FR at 56226; Wilshire Phoenix Submission II at 24. NYSE Arca and the Sponsor also state that the CME is regulated by the CFTC. *See* Notice, 84 FR at 56226; Wilshire Phoenix Submission II at 23–24.

[171] *See* Notice, 84 FR at 56226. NYSE Arca states that on September 12, 2019, the CME notified the CFTC that it was increasing the spot month position limits for bitcoin futures contracts from 1,000 to 2,000 net contracts, or a notionally deliverable quantity of 10,000 bitcoins. *See id.* at 56226 n.48.

[172] *See* Notice, 84 FR at 56226 (stating that in 2016 the daily trading volume of gold futures on the COMEX was $28.9 billion and the daily trading volume on gold OTC markets was $167.9 billion, for a ratio of 17.2%; and that from October 1, 2018 to March 31, 2019, the daily trading volume of bitcoin futures on the CME was $90.4 million and the daily trading volume of bitcoin-U.S. dollar spot was $149.5 million, for a ratio of 60.5%); Wilshire Phoenix Submission II at 19–20 (also stating the cited bitcoin-U.S. dollar spot volume is based on the Constituent Platforms).

[173] *See* Notice, 84 FR at 56226 n.56. The Sponsor made a third submission in which it sought to compare the size, liquidity, and transparency of the CME bitcoin futures market to other futures markets on which the underlying components of approved ETPs trade. *See* Letter from Marlon Q. Paz, Partner, Mayer Brown (Feb. 20, 2020) (''Wilshire Phoenix Submission III'').

The Sponsor acknowledges that the Commission's interpretation of the term ''market of significant size'' depends on the interrelationship between the market with which the listing exchange has a surveillance-sharing agreement and the proposed ETP.[174] This interrelationship must be such that there is a reasonable likelihood that a person attempting to manipulate the proposed ETP would also have to trade on that market to successfully manipulate the ETP.[175] To demonstrate the existence of an interrelationship between the CME and the Constituent Platforms, the Sponsor states that it conducted an independent analysis of bitcoin price discovery and that this analysis, along with the findings of multiple publications, shows that the contribution from CME bitcoin futures to price formation is greater than the contribution from the Constituent Platforms and has increased over time.[176] Said another way, the Sponsor asserts that in most instances prices on the CME bitcoin futures market lead prices on the Constituent Platforms, and that this underscores that a would-be manipulator of the Trust would need to trade on the CME bitcoin futures market to successfully manipulate prices on the Constituent Platforms, which are used to price the Trust's bitcoin.[177]

The Sponsor states that for its analysis it has used CME bitcoin futures trades and the CME CF Bitcoin Real Time Index (''CME CF BRTI''), which is a real-time intraday spot rate constructed from the real-time spot prices on the Constituent Platforms.[178] According to the Sponsor, using a two-component model of futures and spot markets, the component share of CME bitcoin futures contracts as compared to the CME CF BRTI spot rate to bitcoin price formation was 62.69% in the second half of 2019, ''indicating that futures contracts contributed more to price formation than spot.'' [179]

The Sponsor asserts that its finding corroborates several recent journal articles that also have found that the CME bitcoin futures have a larger component share contribution to bitcoin price formation than the bitcoin spot market.[180] According to the Sponsor, this research confirms that the majority of price discovery for bitcoin takes place in the futures market.[181] The Sponsor states that research indicates that the bitcoin futures market often leads the spot market due to inherent leverage, low transaction costs, the absence of short-selling transactions, and greater transparency.[182] The Sponsor also states that research suggests that a majority of long run price information is derived from the futures market and that price movements in the futures market are often accompanied or followed by price movements of the spot market in the same direction.[183] And the Sponsor points to conclusions that the CME futures market has become a major driver of bitcoin spot prices and that high-volume trades from large institutional investor clients effectively arbitrage away spikes in the basis within seconds or minutes.[184]

In addition to the static time invariant approaches used in the research discussed above, the Sponsor cites research using a time-varying approach that it states confirms that bitcoin futures consistently lead the bitcoin spot market in price formation.[185] The authors of this research paper separately comment that their analysis of data from the CME and Cboe Futures Exchange (''CFE'') [186] from December 2017 through June/July 2019 found that the CME and CFE bitcoin futures prices generally cause the underlying spot prices.[187] This commenter states that with respect to CFE bitcoin futures, the futures market caused the underlying spot market prices between August/November 2018 and June 2019, and that there was no evidence of causality running from the spot market to the futures market.[188] This commenter further states that with respect to CME bitcoin futures, there was a very short causality episode that ran from spot prices to futures prices between March and June 2019, but that such episodes in which causality runs from the spot market to futures prices are short and occasionally bi-directional.[189] According to this commenter, except for some short periods, the ''overwhelming evidence'' is that bitcoin futures prices cause or lead bitcoin spot prices, as one would expect in an informationally efficient market.[190]

The Sponsor also asserts that trade volume and trade size can be determinants of price discovery, and that the Constituent Platforms have a higher average trade volume than the CME bitcoin futures market, while the average size of trades on the CME bitcoin futures market is much larger than the average size of trades on the

[174] *See id.* at 19.

[175] *See id.* at 19 (citing Winklevoss Order, 83 FR at 37594; Bitwise Order, 84 FR at 55410).

[176] *See* Wilshire Phoenix Submission II at 20–21.

[177] *See* Wilshire Phoenix Submission II at 23.

[178] *See* Wilshire Phoenix Submission II at 20. The Sponsor states that market data for bitcoin futures, the Bitcoin Reference Rate, and the CME CF BRTI are available via the CME DataMine market data facility. *See id.* at 20 n.90. The Sponsor also states that rolling futures trade prices and CME CF BRTI levels are aggregated into 1-minute intervals using the respective median value in each interval during trading hours, with previous values used if data is unavailable. *See id.*

[179] *See* Wilshire Phoenix Submission II at 21. The Sponsor states that the methodology that it has used to analyze the contribution of the futures and the spot markets to bitcoin price formation is based on the price discovery methodology utilized in other bitcoin price formation studies. *See id.* at 20–21 (citing Edwin Hu, *Securities and Exchange Commission Department of Economic Risk Analysis, Intentional Access Delays, Market Quality, and Price Discovery: Evidence from IEX Becoming an Exchange,* Mar. 15, 2019; S. Ozturk et al., *Intraday Price Discovery in Fragmented Markets,* 32 J. Fin. Markets 28 (2017); F. De Jong & P. Schotman, *Price discovery in fragmented markets,* 8 J. Fin. Econometrics 1 (2010); Jesus Gonzalo & Clive Granger, *Estimation of common long-memory components in cointegrated systems,* 13 J. Bus. & Econ. Stat. 27 (1995), *available at https://www.jstor.org/stable/1392518*).

[180] *See id.* (citing Bruce Mizrach & Saketh Aleti, *Bitcoin Spot and Futures Market Microstructure,* Sept. 24, 2019, *available at https://ssrn.com/abstract=3459111*) (''Mizrach & Aleti''); Carol Alexander & Daniel F. Heck, *Price Discovery, High-Frequency Trading and Jumps in Bitcoin Markets,* May 5, 2019, *available at https://ssrn.com/abstract=3383147* (''Alexander & Heck''); Oliver Entrop et al., *The Determinants of Price Discovery on Bitcoin Markets,* July 2019, *available at https://acfr.aut.ac.nz/_data/assets/pdf_file/0009/296424/B-Frijns-Bitcoin_Paper.pdf* (''Entrop et al.''); Burcu Kapar & Jose Olmo, *An analysis of price discovery between Bitcoin futures and spot markets,* 174 Econ. Letters 62 (2019), *available at https://www.sciencedirect.com/science/article/pii/S0165176518304440* (''Kapar & Olmo''); Erdinc Akyildirim et al., *The development of Bitcoin futures: Exploring the interactions between cryptocurrency derivatives,* Fin. Res. Letters, July 10, 2019, *available at https://www.sciencedirect.com/science/article/pii/S1544612319304714;* Athanasios P. Fassas et al., *Price discovery in bitcoin futures,* 52 Res. Int'l Bus. Fin. 101116 (2020), *available at https://www.sciencedirect.com/science/article/abs/pii/S0275531919305628*).

[181] *See id.* at 21–22. The Sponsor also asserts that its conclusions are consistent with research about price formation about futures and spot prices generally that often finds that the futures market leads price formation. *See id.* at 21.

[182] *See id.* at 22 (citing Alexander & Heck; Kapar & Olmo at 62–64).

[183] *See id.* at 22.

[184] *See id.*

[185] *See id.* (citing Yang Hu et al., *What Role Do Futures Markets Play in Bitcoin Pricing? Causality, Cointegration and Price Discovery From a Time-Varying Perspective,* Aug. 26, 2019, *available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3442706*).

[186] The Commission notes that CFE ceased offering new bitcoin futures contracts as of March 2019. *See* New CFE Products Being Added in March 2019—Update, Cboe (Mar. 14, 2019), *available at https://markets.cboe.com/resources/product_update/2019/New-CFE-Products-Being-Added-in-March-2019-Update.pdf* (last visited Jan. 14, 2020).

[187] *See* Letter from Dr. Yang Hu, Dr. Greg (Yang) Hou, & Professor Les Oxley (Jan. 7, 2020).

[188] *See id.*

[189] *See id.*

[190] *See id.* This commenter also states that the bitcoin futures markets dominate the price discovery process using a time-varying version of an information share measure of two types, and that both types indicate that bitcoin price discovery takes place in the futures market rather than the spot market. *See id.*

Constituent Platforms.[191] According to the Sponsor, a relative number of small trades in a given bitcoin market is statistically insignificant for purposes of price discovery.[192] The Sponsor argues that the average trade size on the CME futures market facilitates its lead in price discovery versus the Constituent Platforms.[193] The Sponsor also states that the trading volume of the CME bitcoin futures market is higher than the trading volume on each Constituent Platform when considered individually, and that this also facilitates price discovery within the futures market.[194]

(ii) Constituent Platforms as a Regulated Market of Significant Size

The Sponsor also asserts that the Constituent Platforms constitute a regulated market of significant size and that surveillance-sharing agreements are in place to give NYSE Arca the ability to obtain the information necessary to detect and deter market manipulation.[195] The Constituent Platforms compose a market of significant size, according to the Sponsor, because there is a reasonable likelihood that a would-be manipulator would have to trade on the Constituent Platforms to successfully manipulate the Shares.[196] The Sponsor states that trading data from the Constituent Platforms is used to derive the Bitcoin Reference Rate and the Bitcoin Reference Rate is used by the Trust to value the Trust's bitcoin assets.[197] Therefore, according to the Sponsor, the most direct way to attempt to manipulate the Shares is to manipulate the Constituent Platforms and thereby manipulate the price of bitcoin utilized by the Trust to value its assets.[198] The Sponsor further states that potential countervailing forces in the CME futures market make it more difficult to manipulate the Constituent Platforms, and therefore a would-be manipulator would likely need to trade in the CME bitcoin futures market and on the Constituent Platforms.[199]

The Sponsor asserts that the Constituent Platforms are regulated because each of the Constituent Platforms uses established, non-discretionary methods under which orders interact with each other and buyers and sellers entering such orders must agree to these terms, and each of the Constituent Platforms is regulated by federal and state regulators.[200] The Sponsor states that the Constituent Platforms are each registered with FinCEN as an MSB, and that as a result the Constituent Platforms must fully comply with BSA and AML requirements.[201] According to the Sponsor, the CFTC has jurisdiction to police fraud and manipulation in the cash or spot markets, including the Constituent Platforms, and the CME has executed contracts with the Constituent Platforms to explicitly adhere to the regulations.[202] The Sponsor states that the Constituent Platforms are subject to regulatory oversight by the FCA because CF Benchmarks is a registered benchmark administrator under the EU BMR, and CF Benchmarks has executed contracts with the Constituent Platforms to explicitly adhere to those regulations, which include requirements designed to detect manipulation of a benchmark.[203] With respect to the rules concerning the processes of the Constituent Platforms, the Sponsor states that these rules must be in line with CME standards for inclusion in the reference rate calculation.[204] The Sponsor states that these non-discretionary rules explicitly address manipulation and fraudulent activity, and that these rules and the review of such rules by CF Benchmarks are comparable to those used by national securities exchanges or the futures exchanges associated with the underlying assets of the commodity-trust ETPs approved to date.[205]

The Sponsor states that to be eligible for consideration as a Constituent Platform, a platform must comply with specific eligibility criteria established by CF Benchmarks, which provides each Constituent Platform with all material trade information, including information that can identify customers placing trades.[206] The Sponsor states that the Constituent Platforms must make trade data and order book data available to CF Benchmarks, have controls and processes in place against, among other things, market abuse, and ensure that the data provided to CF Benchmarks accurately represents the prices that were available or traded on their trading venues at the relevant times.[207] CF Benchmarks and the CME Committee, according to the Sponsor, monitor each Constituent Platform for continued compliance with these requirements.[208]

The Sponsor and NYSE Arca also state that each Constituent Platform is required to enter into data-sharing agreements with the CME.[209] The Sponsor states that, through these surveillance-sharing agreements, the

[191] *See* Wilshire Phoenix Submission II at 22–23.

[192] *See id.* at 23.

[193] *See id.*

[194] *See id.*

[195] *See* Wilshire Phoenix Submission II at 10–19. *See also* Notice, 84 FR at 56226 (asserting that the CME bitcoin futures market alone or as a group of markets together with the Constituent Platforms is a ''market of significant size'').

[196] *See* Wilshire Phoenix Submission II at 12.

[197] *See* Wilshire Phoenix Submission II at 12; Notice, 84 FR at 56227.

[198] *See* Wilshire Phoenix Submission II at 12; Notice, 84 FR at 56227. *See also* Notice, 84 FR at 56227 n.57 (stating that manipulating the Bitcoin Reference Rate must entail manipulating the price data at one or more Constituent Platforms).

[199] *See* Wilshire Phoenix Submission II at 12.

[200] *See* Wilshire Phoenix Submission II at 12.

[201] *See* Wilshire Phoenix Submission II at 12. *See also supra* notes 77–79 and accompanying text. The Sponsor also states that this is consistent with recent FATF guidance that directs certain platforms, including the Constituent Platforms, to comply with AML regulations. *See* Wilshire Phoenix Submission II at 12. *See also supra* note 78.

[202] *See* Wilshire Phoenix Submission II at 12–13. *See also supra* notes 91–94 and accompanying text.

[203] *See* Wilshire Phoenix Submission II at 13. *See also supra* notes 95–98 and accompanying text.

[204] *See* Wilshire Phoenix Submission II at 13. *See also id.* at 16–17 (stating that the CME Committee is responsible for overseeing the Bitcoin Reference Rate's methodology and calculation process and providing effective oversight of CF Benchmarks as it relates to the Bitcoin Reference Rate, and that the scope of this oversight includes CF Benchmarks' manipulation surveillance).

[205] *See id.* at 13–14.

[206] *See* Wilshire Phoenix Submission II at 14 (stating that a platform must (i) have policies in place that ensure fair and transparent market conditions at all times; (ii) have processes in place to identify and impede illegal, unfair, or manipulative trading practices; and (iii) comply with applicable laws and regulations, including regulations concerning capital markets, money transmission, client money custody, KYC, and AML). *See also id.* at 16 (stating that CF Benchmarks is independently tasked with overseeing each Constituent Platform for potential manipulation and that that this responsibility includes establishing appropriate monitoring processes and procedures to identify attempted manipulation or manipulative behavior and reporting any such incidents to the CME Committee in a timely manner).

[207] *See* Wilshire Phoenix Submission II at 14–15. *See also id.* at 18–19. The Sponsor asserts that the ability of a Constituent Platform to fully share relevant trade data, not just with CF Benchmarks, but also publicly, is an integral factor on whether to include a platform as a Constituent Platform for purposes of the Bitcoin Reference Rate. *See id.* at 15.

[208] *See* Wilshire Phoenix Submission II at 15. NYSE Arca states that the BRR Calculation Agent receives trading data from the Constituent Platforms through its API, noting that ''[CF Benchmarks] will have primary responsibility for all of the following in respect of Bitcoin Pricing Products: . . . Establishing appropriate monitoring processes and procedures designed to identify any breaches of these Practice Standards and any attempted manipulation or manipulative behavior and reporting any such incidents to the [CME Committee] in a timely manner.'' *See* Notice, 84 FR at 56227 n.58.

[209] *See* Notice, 84 FR at 56227 (stating that the Constituent Platforms must also cooperate with inquiries and investigations of regulators and CF Benchmarks and submit each of its clients to its KYC procedures); Wilshire Phoenix Submission II at 15. The Sponsor asserts that this requirement of cooperation would allow NYSE Arca to directly request from each Constituent Platform any information that may be relevant to detecting potential manipulation. *See* Wilshire Phoenix Submission II at 17.

CME receives information related to customer identification, trade data, order book data, and other relevant information and data.[210] Thus, the Sponsor and NYSE Arca assert that the CME can effectively share any information that it receives from the Constituent Platforms with NYSE Arca and this arrangement satisfies the requirement that a listing exchange have surveillance-sharing agreements in place with such markets.[211]

Moreover, the Sponsor asserts that the Commission, the CFTC, and the FCA have a long-standing history of consultation, cooperation, and information sharing in relation to the securities markets.[212] As such, the Commission, according to the Sponsor, would be able to access any information regarding an attempt at manipulating the Constituent Platforms by requesting such information from the FCA.[213]

(iii) Whether Trading in the ETP Would Be the Predominant Influence on Prices in the Relevant Market

The second component of the Commission's interpretation of the term ''market of significant size'' is that it is unlikely that trading in the ETP would be the predominant influence on prices in the market of significant size.[214] NYSE Arca and the Sponsor assert that it is unlikely that the Trust would be the predominant influence on prices in the identified markets of significant size.[215] The Sponsor asserts that the three critical factors it used to arrive at this conclusion are the events causing the Trust to buy or sell bitcoin, the frequency with which it will do so, and the composition of assets of the Trust.[216]

First, NYSE Arca and the Sponsor state that the Trust will only buy and sell bitcoin in connection with the issuance of Shares, the redemption of Shares by holders, or potentially in connection with monthly balancing of the Trust's assets.[217] NYSE Arca and the Sponsor state that the Trust will not buy or sell bitcoin as a result of trading of the Shares on NYSE Arca.[218] The Sponsor asserts that it structured the Trust in this manner to limit any effect the Trust could potentially have on the underlying market.[219]

Second, NYSE Arca and the Sponsor state that the Trust will only redeem Shares and rebalance the Trust on limited occasions and will not have a daily or continuous effect, or be the predominant influence, on CME bitcoin futures prices or prices on the Constituent Platforms.[220]

Third, NYSE Arca and the Sponsor state that the Trust's assets consist of bitcoin and T-Bills and that the presence of T-Bills reinforces that the Trust would not be the predominant influence on prices in the CME bitcoin futures market or on the Constituent Platforms.[221] According to NYSE Arca, the Sponsor notes that even if it was possible to influence the price of bitcoin or the Bitcoin Reference Rate through trading shares of the Trust, the influence of such trades would be muted by the presence of the T-Bills held by the Trust.[222] The Sponsor asserts that the Trust and Shares of the Trust are imperfect substitutes for bitcoin pricing due to the Trust's T-Bills component, and that therefore prices of the Shares would not be an appropriate or accurate proxy for the pricing of stand-alone bitcoin on the Constituent Platforms or the CME bitcoin futures market.[223] The Sponsor states that the impact of any issuance of Shares on the identified markets will be muted relative to the value of the Shares issued because only a portion of the cash received in connection with the issuance would be used to purchase bitcoin.[224] The Sponsor also states that the Trust's allocation of its bitcoin and T-Bill assets will change on a monthly basis based on the allocations determined by the Index, based on the realized volatility of the Bitcoin Reference Rate; therefore, trading in the Shares will not have a direct effect on the re-allocation of the Index and thus will not have an impact on the determination of the Trust to buy or sell bitcoin in connection with such rebalancing.[225]

(b) Analysis

The record before the Commission does not demonstrate that NYSE Arca has entered into a surveillance-sharing agreement with a regulated market of significant size related to the underlying assets. As stated in the Winklevoss Order, as well as the Bitwise Order and Commission orders considering bitcoin-related trust issued receipts, the Commission's interpretation of the term ''market of significant size'' depends on the interrelationship between the market with which the listing exchange has a surveillance-sharing agreement and the proposed ETP.[226] This interrelationship must be such that there is a reasonable likelihood that a person attempting to manipulate the proposed ETP would also have to trade on that market to successfully manipulate the ETP.[227] Thus, 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.'' NYSE Arca and the Sponsor do not challenge this standard.

The Commission first considers assertions by NYSE Arca and the Sponsor that the CME bitcoin futures market constitutes such a market and concludes that 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, nor does it demonstrate that it is unlikely that trading in the proposed ETP would be the predominant influence on prices in that market. The Commission then considers assertions regarding the Constituent Platforms. NYSE Arca has not entered into a surveillance-sharing agreement with any Constituent Platform and the record does not demonstrate that the regulation of the Constituent Platforms is sufficient to constitute a ''regulated market.'' Therefore, the Commission concludes that NYSE Arca's relationship with the Constituent

[210] *See* Wilshire Phoenix Submission II at 15.

[211] *See* Wilshire Phoenix Submission II at 16. *See also* Notice, 84 FR at 56227 (stating that CME and NYSE Arca would be able, in the case of any suspicious trades, to discover all material trade information including the identities of the customers placing the trades).

[212] *See* Wilshire Phoenix Submission II at 18 (stating that the FCA is obligated to take appropriate steps to cooperate with oversees regulators, including the Commission).

[213] *See* Wilshire Phoenix Submission II at 18.

[214] *See supra* note 18 and accompanying text.

[215] *See* Notice, 84 FR at 56228; Wilshire Phoenix Submission II at 25.

[216] *See* Wilshire Phoenix Submission II at 25.

[217] *See* Notice, 84 FR at 56228; Wilshire Phoenix Submission II at 25.

[218] *See* Notice, 84 FR at 56228 (asserting that trading the Shares will therefore not influence the price of bitcoin); Wilshire Phoenix Submission II at 25.

[219] *See* Wilshire Phoenix Submission II at 25.

[220] *See* Notice, 84 FR at 56228; Wilshire Phoenix Submission II at 25 (stating that the Trust will redeem Shares and rebalance its assets monthly, with a requirement on a holder of Shares to submit a notice of redemption at least five business days prior to the redemption date, and the Trust will only issue Shares in offerings that will occur from time to time).

[221] *See* Notice, 84 FR at 56228; Wilshire Phoenix Submission II at 25.

[222] *See* Notice, 84 FR at 56228.

[223] *See* Wilshire Phoenix Submission II at 25.

[224] *See* Wilshire Phoenix Submission II at 25.

[225] *See* Wilshire Phoenix Submission II at 26. The Sponsor states that the more volatility that bitcoin exhibits, the lower the ration of bitcoin to T-Bills in the Index, and the fewer the amount of bitcoin that the Trust would buy in connection with rebalancing. *See id.*

[226] *See* Winklevoss Order, 83 FR at 37594; Bitwise Order, 84 FR at 55410; ProShares Order, 83 FR at 43936; GraniteShares Order, 83 FR at 43925; Direxion Order, 83 FR at 43914.

[227] *See supra* note 18 and accompanying text.

Platforms likewise does not satisfy the standard through which the listing exchange for a proposed ETP may satisfy its obligations under Section 6(b)(5) of the Exchange Act.

(i) CME as a Regulated Market of Significant Size

(A) Reasonable Likelihood

Regarding the CME bitcoin futures market, while the Commission recognizes that the CFTC regulates the CME futures market, the evidence that NYSE Arca and the Sponsor present, including that concerning the relative size of the bitcoin futures market and the relationship between prices in the spot and futures markets, does not, as explained further below, establish that there is a reasonable likelihood that a person attempting to manipulate the proposed ETP would also have to trade on the CME to successfully manipulate the ETP. Therefore, the record does not establish that the CME bitcoin futures market constitutes a ''market of significant size'' in the context of the proposed ETP.

The Sponsor's assertions about the size of the bitcoin futures market, either as compared to the size of the segment of the spot market composed of the Constituent Platforms or as compared to the futures market for other commodities, do not establish that the bitcoin futures market is significant.[228] As stated above, the Commission's interpretation of the term ''market of significant size'' depends on the interrelationship between the market with which the listing exchange has a surveillance-sharing agreement and the proposed ETP.[229] The Sponsor's assertions regarding the size of the CME bitcoin futures market, either in an absolute sense or in relation to other futures markets that underlie existing ETPs, are not sufficient to establish an interrelationship between the CME bitcoin futures market and the proposed ETP.[230]

Likewise, the Sponsor's comparisons to approvals of ETPs that hold futures contracts and for which the listing exchanges entered into surveillance-sharing agreements with regulated, significant markets trading those futures contracts are inapposite and do not establish the CME bitcoin futures market's significance.[231] First, in the approval orders cited by the Sponsor the Commission noted a number of factors supporting its findings that surveillance-sharing agreements were in place with significant regulated markets. For example, the approval order for the AirShares EU Carbon Allowances Fund stated ''the Exchange has an information sharing agreement in place with ICE Futures for the purpose of providing information in connection with trading in, or related to, futures contracts traded on ICE Futures.'' [232] In the case of the iShares GSCI Commodity-Indexed Trust the Commission specifically addressed whether the futures on which the ETP was based, which were futures on an index of well-established commodity futures, were illiquid or susceptible to manipulation and concluded, as the Sponsor concedes, that the requirements of Exchange Act Section 6(b)(5) had been met because, among other things, the ETP's listing exchange had a comprehensive surveillance-sharing agreement not only with the regulated market for the index futures, but also with the regulated markets for the component futures.[233] And as concerns the Breakwave Dry Bulk Shipping ETF, the Commission specifically found, as the Sponsor also concedes, that the exchange would be able to ''share surveillance information with a significant regulated market for trading futures on dry bulk freight.'' [234] Second, unlike the ETPs that were the subject of the approvals cited by the Sponsor, the proposed ETP would hold bitcoin as assets, not futures contracts, and the comparisons made by the Sponsor do not establish that an actor attempting to manipulate the price of the proposed ETP's assets would be reasonably likely to trade in the regulated bitcoin futures market.

The evidence in the record also does not support a conclusion that price formation on the CME bitcoin futures market leads the bitcoin spot market in such a manner that the CME bitcoin futures market is a ''market of significant size.'' As the Commission has previously stated, establishing a lead-lag relationship between the bitcoin futures market and the spot market is central to understanding whether it is reasonably likely that a would-be manipulator of the ETP would need to trade on the bitcoin futures market to successfully manipulate prices on those spot platforms that feed into the proposed ETP's pricing mechanism.[235] 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.

While the Sponsor asserts that its analysis indicates ''that futures contracts contributed more to price formation than spot,'' the Sponsor has not provided sufficient details supporting this conclusion, and unquestioning reliance by the Commission on representations in the record is an insufficient basis for approving a proposed rule change in circumstances where, as here, the proponent's assertion would form such an integral role in the Commission's analysis and the assertion is subject to several challenges.[236] For example, the Sponsor has not provided sufficient information explaining its underlying analysis, including detailed information on the analytic methodology used, the specific time period analyzed, or any information that would enable the Commission to evaluate whether the findings are statistically significant or time varying.

In addition, the Sponsor has not assessed the possible influence that spot market platforms not included among

[228] *See supra* notes 171–173. The Sponsor asserts that the trading volume on the CME bitcoin futures market is greater than the EUA futures market underlying the AirShares EU Carbon Allowances Fund. *See* Wilshire Phoenix Submission III at 2. Wilshire Phoenix Submission III is improperly focused on the absolute size of the futures market and the length of existence of the futures market for purposes of establishing its significance.

[229] *See supra* note 226.

[230] *See* Bitwise Order, 84 FR at 55410.

[231] *See* Wilshire Phoenix Submission III at 2–4 (citing to Securities Exchange Act Release No. 57838 (May 20, 2008), 73 FR 30649 (May 28, 2008) (SR–NYSEArca–2008–09) (order approving listing of shares of the AirShares EU Carbon Allowances Fund); Securities Exchange Act Release No. 54013 (June 16, 2006), 71 FR 36372 (June 26, 2006) (SR–NYSE–2006–17) (order approving listing of shares of iShares GSCI Commodity-Indexed Trust); Securities Exchange Act Release No. 82390 (Dec. 22, 2017), 82 FR 61625 (Dec. 28, 2017) (SR–NYSEArca–2017–107) (order approving listing of shares of the Breakwave Dry Bulk Shipping ETF).

[232] 73 FR at 30652.

[233] *See* 71 FR at 36379. The Commission distinguished the iShares GSCI Commodity-Indexed Trust in previous orders concerning proposals to list bitcoin-based trust issued receipts. *See* GraniteShares Order, 83 FR at 43927 n.39; Direxion Order, 83 FR at 43916 n.40; ProShares Order, 83 FR at 43938 n.37. The Sponsor also asserts that it was ''highly likely'' that trading in this ETP would be a predominant influence on the price of the index futures. *See* Wilshire Phoenix Submission III at 3 n.13. However, the Sponsor offers no data or evidence to support this contention. And in any event, the Commission in that previous order rejected such a contention. *See* 71 FR at 36379.

[234] *See* 82 FR at 61633–34. The Commission distinguished the Breakwave Dry Bulk Shipping ETF in a previous order concerning a proposal to list bitcoin-based trust issued receipts. *See* GraniteShares Order, 83 FR at 43930 n.87. The Sponsor also asserts that as compared to the CME bitcoin futures market, the freight futures market is conducted through ''a largely unregulated network of brokers.'' *See* Wilshire Phoenix Submission III at 3–4. However, the Commission specifically noted in the approval order that all freight futures are listed and cleared through a number of regulated futures exchanges, including the CME. *See* 82 FR at 61629.

[235] *See* Bitwise Order, 84 FR at 55411.

[236] *See Susquehanna,* 866 F.3d at 447.

the Constituent Platforms may have on the proposed ETP's pricing mechanism. The record does not demonstrate that the Sponsor addressed whether or not there is any lead/lag relation between prices on the Constituent Platforms and prices on other bitcoin spot market platforms or where price formation occurs as between the Constituent Platforms and the rest of the spot market.[237] The Commission thus cannot agree with the Sponsor's assertion that its analysis demonstrates that it is reasonably likely that a would-be manipulator of the proposed ETP would transact on the CME bitcoin futures market absent additional information supporting such an assertion.

The academic literature on the lead-lag relationship between bitcoin spot and futures markets is unsettled.[238] Contrary to the Sponsor's assertion, the academic evidence on this topic is, in fact, mixed, and thus the Commission cannot conclude—based solely on the papers cited by the Sponsor in relatively new markets—that it is reasonably likely that a would-be manipulator of the proposed ETP would transact on the CME bitcoin futures market.

Furthermore, the findings of the papers cited by the Sponsor are responsive to choices made regarding time period, futures contracts, spot market platforms, spot market prices, and analytic methodologies that do not sufficiently establish the general proposition that the CME bitcoin futures market leads the spot market such that the CME bitcoin futures market is ''significant'' for purposes of this proposal. Indeed, the findings of the cited studies run counter to those of other studies that have analyzed the lead-lag relationship between the bitcoin spot and futures markets. For example, a study on this topic that was published in a peer reviewed journal found that the spot market price leads the CME futures price.[239] A working (that is, nonpublished and non-peer reviewed) paper cited by the Sponsor for the proposition that the futures market prices lead the spot market surmises that its findings differ from this published study because of choices regarding the particular spot prices and futures contracts used in the two analyses.[240] However, another working paper cited by the Sponsor followed a similar approach, yet arrived at a different conclusion, finding that price discovery measures vary significantly over time without one market being clearly dominant over the other.[241] Moreover, this second working paper found that the spot market was the leading market during the months at the end of the sample period, which concluded in March of 2019.[242] The documented time variation from this study also limits the reliability of the findings of another working paper cited by the Sponsor which used only two months of data to support its results.[243] This data choice limits the applicability of its results to other time periods. The Commission concludes that, in light of the mixed results found in these academic studies, the Sponsor has not demonstrated that the bitcoin futures market constitutes a market of significant size.[244]

In addition, none of the papers cited by the Sponsor assesses the possible influence that spot market platforms not included among the Constituent Platforms may have on bitcoin prices on the Constituent Platforms or the bitcoin futures prices. Specifically, the papers cited by the Sponsor do not address whether or not there is any lead/lag relation between prices on the Constituent Platforms in particular and prices on other bitcoin spot market platforms or where price formation occurs as between the Constituent Platforms and the rest of the spot market.[245] Accordingly, the Commission cannot conclude that the papers cited by the Sponsor establish that it is reasonably likely that a would-be manipulator of the proposed ETP would transact on the CME bitcoin futures market.

Similarly, neither the Sponsor, nor NYSE Arca, has provided sufficient data to support their contentions that comparative trade volumes and trade sizes between the CME bitcoin futures market and the Constituent Platforms are evidence that prices on the bitcoin futures market lead the relevant spot markets.[246] For example, the Sponsor neither provided any explanation nor otherwise demonstrated that comparatively larger average trade sizes suggest that one market's prices lead those of another. Thus, the evidence provided concerning trade volumes and trade sizes does not demonstrate that the futures market leads the relevant segment of the spot market such that it would establish a reasonable likelihood 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.

Finally, the Commission is not persuaded by the Sponsor's citations to academic studies about the interrelationship of spot and futures markets for *other* asset classes,[247] because NYSE Arca has the burden of showing that the relevant market at issue here—the bitcoin futures market—is of significant size.

(B) Predominant Influence

The record similarly does not establish that NYSE Arca has satisfied the second aspect of the assessment of significance, as NYSE Arca and the Sponsor have not sufficiently supported the Sponsor's assertions that it is unlikely that trading in the proposed ETP would become the predominant influence on prices in either the Constituent Platforms or the CME bitcoin futures market.[248] The Sponsor's assertions about the potential effect of issuances or redemptions on trading in the bitcoin spot market are speculative and the Sponsor has not provided any analysis to support its assertions concerning, for example, whether it is possible for issuances or redemptions to be of such size that it would be the

[237] *See supra* note 71 and accompanying text.

[238] *See infra* notes 239–244 and accompanying text.

[239] *See* D. Baur & T. Dimpfl, *Price discovery in Bitcoin spot or futures?,* 39 J. Futures Mkts. 803 (2019).

[240] *See* Alexander & Heck at 24.

[241] *See* Entrop et al. Figure 1 of this working paper shows that price discovery measures of the spot market fluctuate between 15% and more than 80%. Such a fluctuation could suggest that the market has not yet found its natural equilibrium.

[242] *See id.* at 2. The record does not include evidence to explain why, because this shift occurred at the end of the study period, it would not indicate a shift toward prices in the spot market leading the futures market that would be expected to persist into the future.

[243] *See* Mizrach & Aleti.

[244] The Commission notes that two other papers cited by the Sponsor utilize daily spot market prices, as opposed to intraday prices. *See* Kapar & Olmo; Hu et al. In seeking to draw conclusions regarding which market leads price discovery, studies based on daily price data may not be able to distinguish which market incorporates new information faster, because the time gap between two consecutive observations in the data samples could be longer than the typical information processing time in such markets. The Sponsor has not provided evidence to support the assertion that daily price data is sufficiently able to capture information flows in the bitcoin market. Furthermore, one study that used daily trading data found inconclusive evidence that futures prices lead bitcoin spot market prices. For example, for a period of time spanning over 20% of the study, prices in the bitcoin spot market led futures market prices. Such time inconsistency in the direction of price discovery could suggest that the market has not yet found its natural equilibrium. Moreover, this period spanned the end of the study period and the record does 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 supra* notes 187–190 and accompanying text.

[245] *See supra* note 71 and accompanying text.

[246] *See supra* notes 191–194.

[247] *See supra* note 181.

[248] *See supra* notes 215–225 and accompanying text.

predominant influence on prices in the Constituent Platforms. Moreover, in the Trust's Registration Statement, the Sponsor acknowledges that its buying activity, as a result of issuances or rebalances, as well as its selling activity, as a result of redemptions or rebalances, may cause the price of bitcoin to increase or decrease.[249] Furthermore, the Sponsor states that because there is no limit on the number of bitcoin that the Trust may acquire, growth of the Trust could have an impact on the supply and demand of bitcoin.[250] Thus, the Commission cannot conclude based on the Sponsor's statements that its trading in the ETP would not be the predominant influence on prices in the Constituent Platforms absent any evidence or analysis in support of the Sponsor's assertions.

The Commission is also not persuaded by the Sponsor's assertions that the proposed ETP would not be the predominant influence on prices in the relevant market because the Trust will only purchase or sell bitcoin at certain specified dates, as opposed to on a daily or continuous basis, and pursuant to specific Index allocations. As stated in the Winklevoss Order, this component of the interpretation of significance concerns the influence on prices from trading in the proposed ETP, which is broader than just trading by the proposed ETP. While the Trust might only transact in the bitcoin market on certain specified dates, the proposed ETP will be traded in the secondary market in the interim. The record does not establish the potential effect of the ETP's trade prices on prices for either bitcoin or bitcoin futures. For example, the Sponsor does not provide any data or analysis about the potential effect the quotations or trade prices of the proposed ETP might have on market-maker quotations in bitcoin futures contracts and whether those effects would constitute a predominant influence on the prices of those futures contracts.

Lastly, the Sponsor asserts that, because the Trust will also hold T-Bills it is an imperfect substitute for bitcoin pricing and that its impact on bitcoin markets will be muted. But this assertion is not supported by evidence or analysis regarding the value and size of the Trust's bitcoin holdings and whether that may likely be the predominant influence on prices notwithstanding that the Trust will also own T-Bills. Irrespective of the weighting of the Trust's two components, there is no cap on the notional amount of bitcoin that the Trust may hold. The record does not include any analysis regarding whether the notional amount of bitcoin held by the Trust would be of such size that it would be the predominant influence on prices in the underlying market. To that end, the Commission reiterates that the Sponsor states that, because there is no limit on the number of bitcoin the Trust may acquire, growth of the Trust could have an impact on the supply and demand of bitcoin.[251]

Thus, the Commission cannot conclude that, based on the current record, the CME bitcoin futures market is a ''market of significant size,'' such that NYSE Arca would be able to rely on surveillance-sharing with the CME to provide sufficient protection against fraudulent and manipulative acts and practices.

(ii) Constituent Platforms as a Regulated Market of Significant Size

The Commission is not persuaded by the Sponsor's contention that NYSE Arca has satisfied the requirements of Section 6(b)(5) of the Exchange Act because the Constituent Platforms constitute a regulated market of significant size and the CME, as well as other entities, can obtain information regarding trading activity on the Constituent Platforms and then share that information with NYSE Arca pursuant to NYSE Arca's surveillance-sharing agreement with the CME, or through other means. As discussed above, the Commission concludes that the record does not establish that the Constituent Platforms are subject to a level of regulation comparable to that of a national securities exchange or to futures exchanges, and as such, the Constituent Platforms do not constitute a regulated market.[252]

Furthermore, even if the Constituent Platforms were ''regulated,'' the record would not support a conclusion that NYSE Arca has demonstrated that it has satisfied Section 6(b)(5) of the Exchange Act because NYSE Arca concedes that it has not entered into bilateral surveillance-sharing agreements with the Constituent Platforms. NYSE Arca represents that it has entered into surveillance-sharing agreements with the CME, through which the Sponsor asserts would be able to obtain certain information from the Constituent Platforms by virtue of data-sharing agreements the CME has entered into with the Constituent Platforms.[253] As the Commission has previously stated, a surveillance-sharing agreement with a regulated, significant market facilitates the ETP listing exchange's ability to obtain the necessary information to detect and deter such manipulative misconduct.[254] Here, NYSE Arca has not entered into bilateral surveillance-sharing agreements with the Constituent Platforms and therefore NYSE Arca lacks a surveillance-sharing agreement that could be sufficient to satisfy the requirements of the Exchange Act as set forth in the Winklevoss Order.

The Commission is also not convinced by the Sponsor's assertion that the Constituent Platforms must make trade data and order book data publicly available in order for the platform to be included in the Bitcoin Reference Rate.[255] Trade data and order book data only represent a small subset of the information that the Commission has said represent the hallmarks of a surveillance-sharing agreement.[256] For example, the Constituent Platforms do not make information regarding clearing activity or customer identity publicly available. Accordingly, the record does not establish that NYSE Arca would have access to necessary information to detect and deter fraudulent and manipulative activity through the data that the Sponsor asserts is publicly available.

Furthermore, a surveillance-sharing agreement with the spot bitcoin platforms at issue here would not be a sufficient substitute for such an agreement with a futures market, because the spot platforms at issue here lack the ability of a self-regulatory organization to discipline its members to compel compliance with surveillance-sharing requirements.[257] Accordingly, the Commission cannot conclude that a surveillance-sharing agreement between NYSE Arca and CME satisfies the requirements of the Exchange Act if the regulated market of significant size is not, in fact, the CME, but rather is the Constituent Platforms.

The Commission also is not persuaded by the Sponsor's assertions that NYSE Arca has satisfied the requirements of the Exchange Act by virtue of the Commission's ability to obtain information from other Federal and international regulators.[258] First, the requirements of Section 6(b)(5) of

[249] *See* Registration Statement at 31.

[250] *See id.* at 32.

[251] *See id.*

[252] *See supra* Section III.B.1(a)(ii)(B) for a discussion of the Commission's conclusion that the Constituent Platforms are not regulated in a manner equivalent to that of a national securities exchange or a futures exchange.

[253] *See supra* note 211 and accompanying text.

[254] *See* Winklevoss Order, 83 FR at 37549.

[255] *See supra* note 207.

[256] *See* Winklevoss Order, 83 FR at 37592–93.

[257] *See* Bitwise Order, 84 FR at 55393, 55411 n.478.

[258] *See supra* note 213.

the Exchange Act apply to the rules of national securities exchanges. As the Commission previously explained, MOUs with foreign or domestic regulators are tools to assist the Commission in performing its regulatory functions, not a mechanism for the Commission to assume an SRO's obligations under the Exchange Act.[259] Accordingly, the relevant obligation for a surveillance-sharing agreement resides with the listing exchange, not the Commission. When a listing exchange enters into a surveillance-sharing agreement, such agreement establishes the exchange's ability to obtain relevant information to detect and deter manipulation in furtherance of the listing exchange's obligation to ensure that its rules are designed to prevent fraudulent and manipulative acts and practices. Absent evidence in the record demonstrating that the listing exchange has satisfied its obligations, the Commission cannot approve a proposed ETP for listing and trading on a national securities exchange. Second, the Commission's ability to obtain information from other regulators is not a factor that affects whether an exchange needs to enter into a surveillance-sharing agreement with a regulated market of significant size for purposes of detecting and deterring fraud or manipulation. Indeed, in prior instances where the Commission has relied on the existence of surveillance-sharing agreements in approving ETPs, the Commission's ability to obtain relevant information from other regulatory authorities was not impeded.

Thus, because (1) the Constituent Platforms are not ''regulated markets'' and (2) because NYSE Arca has not entered into a surveillance-sharing agreement with the Constituent Platforms, the Commission does not reach the question of whether the Constituent Platforms constituent a market of significant size.

The Commission recognizes that, over time, bitcoin-related markets—including bitcoin futures markets—may continue to grow and develop. Should circumstances or conditions change in a manner that affects the Exchange Act analysis, the Commission would then have an opportunity to consider whether such a bitcoin ETP would be consistent with the requirements of the Exchange Act.[260]

C. Whether NYSE Arca Has Met Its Burden To Demonstrate That the Proposal Is Consistent With the Protection of Investors and the Public Interest

NYSE Arca contends that, if approved, its ETP would protect investors and the public interest, but the Commission finds that NYSE Arca has not made such a showing on the current record. The Commission must consider any potential benefits in the broader context of whether the proposal meets each of the applicable requirements of the Exchange Act. And 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.

1. Representations Made and Comments Received

The Sponsor asserts that the Trust was formed to provide retail investors with access to bitcoin through a regulated and transparent investment vehicle.[261] The Sponsor states that investors in the Trust will receive full disclosure about the Trust; that the Trust was created to mitigate the volatility of bitcoin; that the Trust's structure provides an understandable, efficient, and cost-effective investment product; that the Trust will utilize qualified custodians and its bitcoin assets will be covered by the Bitcoin Custodian's fidelity insurance; that investors in the Trust will be able to trade the Shares on NYSE Arca and hold them through accounts with Commission-registered broker-dealers; and that any adviser or broker who recommends the Shares to a client will be required to undertake a suitability analysis.[262] The Sponsor also asserts that the Trust's monthly redemption schedule increases investor protection by reducing operational risk, counterparty risk, and other risks.[263]

A commenter states that introducing a digital-asset related ETP that would be traded on national securities exchanges will benefit the bitcoin spot market by improving price discovery, reducing volatility, and diminishing the potential for manipulation and money laundering to affect bitcoin's price.[264] The same commenter also asserts that the ability of market participants to engage in short selling with respect to digital asset ETPs would bring more information about their intrinsic value into the market—which would result in a more fair and orderly market.[265] This commenter also states that U.S.-traded digital asset ETPs would facilitate the development of U.S.-traded derivatives such as options and futures, and that these additional hedging tools would permit even more information to be incorporated in digital asset prices.[266]

2. Analysis

As it has in disapproving previous proposals for bitcoin-related ETPs, the Commission acknowledges that, as compared to trading in unregulated bitcoin spot markets, trading a bitcoin-based ETP on a national securities exchange may provide some additional protection to investors, but 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.[267] 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.[268] Thus, even if a proposed rule change would provide certain benefits to investors and the markets, the proposed rule change may still fail to meet other requirements under the Exchange Act.

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),[269] and, accordingly, the Commission must disapprove the proposal.[270]

D. Proposed Amendments to NYSE Arca Rule 8.201–E (Commodity-Based Trust Shares)

Rule 8.201–E(c)(1) currently states that Commodity-Based Trust Shares

[259] *See* Winklevoss Order, 83 FR at 37591.

[260] *See supra* at p.8; Winklevoss Order, 83 FR at 37580; Bitwise Order, 84 FR at 55411.

[261] *See* Wilshire Phoenix Submission I at 6. *See also* Notice, 84 FR at 56225.

[262] *See* Wilshire Phoenix Submission I at 6–7.

[263] *See* Wilshire Phoenix Submission II at 28–29.

[264] *See* Letter from James J. Angel (Dec. 15, 2019) (''Angel Letter'') at 2, 6–7.

[265] *See* Angel Letter at 6.

[266] *See* Angel Letter at 6.

[267] *See* Winklevoss Order, 83 FR at 37602; GraniteShares Order, 83 FR at 43931; ProShares Order, 83 FR at 43941; Direxion Order, 83 FR at 43919; Bitwise Order, 84 FR at 55413.

[268] *See* 15 U.S.C. 78s(b)(2)(C).

[269] 15 U.S.C. 78f(b)(5).

[270] In disapproving the proposed rule change, as modified by Amendment No. 1, the Commission has considered its impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f). For the reasons discussed throughout, the Commission is disapproving the proposed rule change because it does not find that the proposed rule change is consistent with the Exchange Act.

may be issued and redeemed for the underlying commodity. NYSE Arca proposes to amend this rule to also allow issuances and redemptions in cash, or in a combination of the underlying commodity and cash.[271] Rule 8.201–E(c)(2) currently states that the term ''commodity'' is defined in Section 1(a)(4) of the Commodity Exchange Act. NYSE Arca proposes to update the reference for the definition of the term ''commodity'' to Section 1(a)(9) of the Commodity Exchange Act.[272]

1. Representations Made and Comments Received

NYSE Arca states that the Commission has previously approved listing and trading on NYSE Arca of Commodity-Based Trust Shares that permit issuance and redemption of shares for cash in whole or in part.[273] NYSE Arca states that it believes that such an alternative would allow a trust issuing Commodity Based Trust Shares to structure the procedures for issuance and redemption of shares in a manner that may provide operational efficiencies and accommodate investors who may wish to deliver or receive cash rather than the underlying commodity.[274] NYSE Arca further asserts that the proposed change will facilitate the listing and trading of additional types of exchange-traded derivative securities products that will enhance competition among market participants, to the benefit of investors and the marketplace.[275]

With regard to its proposed change to Rule 8.201–E(c)(2), NYSE Arca states that the change in cross-reference to the definition of ''commodity'' in the Commodity Exchange Act is to reflect an amendment to the Commodity Exchange Act included in the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.[276]

2. Analysis

The Commission is disapproving the proposed rule change, as modified by Amendment No. 1, on the basis that NYSE Arca has not demonstrated that its proposal to list and trade the Shares is consistent with Section 6(b)(5) of the Exchange Act. As such, in this order the Commission does not reach the question of whether these proposed amendments to Rule 8.201–E are consistent with the Exchange Act.

E. Other Comments

Comment letters also addressed the general nature and uses of bitcoin; [277] the state of development of bitcoin as a digital asset; [278] the inherent value of, and risks of investing in, bitcoin; [279] the desire of investors to gain access to bitcoin through an ETP; [280] the volatility of the spot price of bitcoin and the potential volatility of the price of the ETP; [281] the legitimacy or enhanced regulatory protection that Commission approval of the proposed ETP might confer upon bitcoin as a digital asset; [282] the potential impact of Commission approval of the proposed ETP on the price of bitcoin and on bitcoin markets; [283] the level of fees proposed by the Sponsor; [284] the role of the U.S. in promoting innovation through bitcoin; [285] and the bitcoin network's effect on the environment.[286] Ultimately, however, additional discussion of these topics beyond that included above is unnecessary, as they do not further bear on the basis for the Commission's decision to disapprove the proposal.

IV. Conclusion

For the reasons set forth above, the Commission does not find, pursuant to Section 19(b)(2) of the Exchange Act, that the proposed rule change, as modified by Amendment No. 1, is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to a national securities exchange, and in particular, with Section 6(b)(5) of the Exchange Act.

It is therefore ordered, pursuant to Section 19(b)(2) of the Exchange Act, that proposed rule change SR–NYSEArca–2019–39, as modified by Amendment No. 1, is disapproved.

By the Commission.

J. Matthew DeLesDernier,

Assistant Secretary.

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[271] *See* Notice, 84 FR at 56220.

[272] *See id.* at 56221.

[273] *See id.* at 56220 & n.11.

[274] *See id.* at 56220.

[275] *See id.*

[276] *See id.* at 56221.

[277] *See* Angel Letter at 3.

[278] *See id.* at 14; Letter from Alex Heuer (Oct. 16, 2019); Letter from James Williams (Dec. 19, 2019).

[279] *See, e.g.,* Angel Letter; Thompson Letter; Letter from Alastair Holdsworth (Dec. 20, 2019).

[280] *See, e.g.,* Angel Letter; Letter from Scott Page (July 5, 2019) (''Page Letter'').

[281] *See, e.g.,* Notice, 84 FR at 56228.

[282] *See, e.g.,* Angel Letter; Page Letter.

[283] *See, e.g.,* Angel Letter.

[284] *See, e.g.,* Letter from Avinash Shenoy (May 22, 2019).

[285] *See, e.g.,* Page Letter.

[286] *See* Thompson Letter.

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88292; File No. SR–ISE–2020–06]

Self-Regulatory Organizations; Nasdaq ISE, LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend the Exchange's Pricing Schedule at Options 7

February 26, 2020.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act''),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on February 12, 2020, Nasdaq ISE, LLC (''ISE'' or ''Exchange'') filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend the Exchange's Pricing Schedule at Options 7, as described further below.

The text of the proposed rule change is available on the Exchange's website at *http://ise.cchwallstreet.com/,* at the principal office of the Exchange, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to amend the Exchange's Pricing Schedule at Options 7 with the

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

[2] 17 CFR 240.19b–4.