

August 21, 2017

Via e-mail: [rule-comments@sec.gov](mailto:rule-comments@sec.gov)

Brent Fields, Secretary  
Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549

Re: Comments on File No. SR-NYSE Arca-2017-06

Mr. Secretary,

This Comment for Rulemaking regarding the Bitcoin Investment Trust is submitted on behalf of a group of seven professors.

According to its website, the U.S. Securities and Exchange Commission (“the Commission”) has a three-part mission<sup>1</sup> to:

- Protect investors
- Maintain fair, orderly, and efficient markets
- Facilitate capital formation

It is our firm belief that the approval of a Rule Change by the Commission allowing the Bitcoin Investment Trust to list its shares on the NYSE Arca as a bona fide Exchange-Traded Product (“ETP”) would demonstrate the Commission’s utmost commitment to achieving this mission. In the subsequent sections of this letter we will provide the logic supporting this view.

### ***Protect Investors***

At the moment, investors are forced to take substantial, and in our view unnecessary risks, in order to gain exposure to bitcoin due to (1) the willful absence of a regulatory regime and (2) the absence of a regulated investment vehicle that can provide passive exposure to bitcoin price movements as intended. These two items are interrelated.

The Commission explicitly stated in its response letter to BZX Rule 14.11(e)(4) that it disapproved the Rule Change because it did not find the proposal to be consistent with Section 5(b)(5) of the Exchange Act, which requires, among other things, that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices to protect investors and the public interest. While disapproval of a Rule Change on this basis may have protected investors in prior bitcoin ETP proposals, it ignores an important fact: the Bitcoin Investment Trust (Symbol: GBTC) is already available for trading on the OTCQX market by anyone with a brokerage account at a substantial premium to its net asset value. Since the Bitcoin Investment Trust first began trading on the OTCQX market on May 4, 2015, the top tier of three marketplaces for trading over-the-counter securities, it has traded at an average of a 40% premium to its net asset value. More recently, the market price of GBTC has traded in excess of a 130% premium. In its current form, investors that desire passive exposure to bitcoin through the Bitcoin Investment Trust, a vehicle solely invested in bitcoins, are forced to overpay for the assets that they hold.

It is our belief that investors will continue to demand and obtain bitcoin exposure for a variety of legitimate reasons. However, they will be forced to do so through inefficient product structures (such as GBTC in its

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<sup>1</sup> <https://www.investor.gov/introduction-investing/basics/role-sec>

current form) that consistently trade at a premium to net asset value, or by going directly to the bitcoin market, which can be a challenging experience. We believe allowing investors to continue to pay a steep premium for the bitcoin assets that they hold via GBTC is inconsistent with the Commission's mission to protect investors. We are requesting that the Commission hold the sponsor of the Bitcoin Investment Trust to a higher standard by approving the proposed Rule Change and granting Regulation M relief to allow the Bitcoin Investment Trust to convert to an ETP structure. As an ETP, the Bitcoin Investment Trust would allow investors to passively gain exposure to the bitcoin market price at net asset value, through a reliable and secure investment vehicle.

Moreover, in the context of portfolio construction, bitcoin provides exposure to economic growth opportunities and real-world applications that are not directly or easily captured by traditional asset classes and currencies. Because of these unique applications, bitcoin is a historically uncorrelated, diversifying asset that may play an important role in helping investors build more efficient portfolios.<sup>2</sup>

### ***Maintain Fair, Orderly, and Efficient Markets***

In addition to our view that an ETP structure is a superior way for investors to efficiently gain exposure to the price movements of bitcoins versus the mechanisms currently available to them, the sponsor of the Bitcoin Investment Trust employs further measures designed to protect investors from manipulation and ensure a fair, orderly, and efficient market.

First, the sponsor utilizes a 24-hour VWAP of the TradeBlock XBX Index as the benchmark for the Bitcoin Investment Trust. The benchmark was designed to serve as a reference rate to track a liquid bitcoin market price while also adjusting for deviations caused by anomalies and manipulation attempts at individual exchanges, and across exchanges, at a single point in time. The XBX Index incorporates a:

- Volume Weighting Factor, whereby exchanges with greater liquidity receive a higher weighting in the index, increasing the ability to execute against the index in the underlying spot markets. Liquidity weighting also mitigates the impact of volume spikes during off-peak trading hours.
- Price Variance Weighting Factor, which means that the index price reflects data points that are discretely weighted in proportion to their variance from the rest of the cohort exchanges comprising the index.
- Inactivity Adjustment Factor, which penalizes stale ticks on any given exchange. In other words, if an exchange does not have recent trading data, its weighting is gradually reduced, until it is de-weighted entirely from the index. Similarly, once activity resumes, the corresponding weighting for that constituent exchange is gradually increased until it reaches the appropriate level.<sup>3</sup>

Furthermore, TradeBlock has published empirical evidence identifying a number of cases in which the aforementioned index methodology has successfully shielded the XBX Index from anomalistic or manipulative pricing.<sup>4</sup> It is our view that this is the highest quality benchmark being used in a bitcoin ETP proposal and one that can substantially mitigate price manipulation to ensure a fair, orderly, and efficient market.

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<sup>2</sup> Don't Forget Diversification, Gary Sanger, PhD, CFA. April 11, 2014. <https://blogs.cfainstitute.org/investor/2014/04/11/diversification/>

<sup>3</sup> <https://tradeblock.com/markets/index/>

<sup>4</sup> <https://tradeblock.com/blog/analysis-of-bitfinex-anomalies-and-xbx-performance>  
<https://tradeblock.com/blog/bitfinex-flash-crash-analysis>  
<https://tradeblock.com/blog/xbx-update-adding-okcoin-removing-btc-e-and-btcchina>  
<https://tradeblock.com/blog/xbx-update-adding-coinbase-removing-kraken>  
<https://tradeblock.com/blog/xbx-index-update-removing-okcoin>

Second, the sponsor has developed thorough in-kind and cash creation and redemption procedures for their proposed ETP. These procedures minimize the likelihood that large blocks of bitcoins will need to be purchased or redeemed during predictable times throughout the trading day.<sup>5</sup> For example, cash creation orders must be placed by Authorized Participants on T-1, which gives the Trust's liquidity provider(s) roughly a full day to go out and purchase bitcoins directly to create the shares on T. This mitigates the potential for market manipulation or front-running during constrained, predetermined timeframes.

Moreover, financial derivatives, including ETPs, can generally serve to enhance the liquidity and efficiency of the markets for many asset classes and currencies, including bitcoins. Price discovery, and in turn market efficiency, is sensitive to factors such as numbers of buyers and sellers, number of recent sales or purchases, current bids and offers, availability of capital, cost of execution, and cost, availability and transparency of pricing information on trusted execution venues, amongst others. It is difficult to imagine a scenario in which approval of the Bitcoin Investment Trust as a bona fide ETP on the NYSE Arca would not increase the number of market participants, dollar-denominated liquidity, and other competitive forces that would lead to more efficient price discovery than currently exists in a semi-fragmented, global bitcoin spot market that lacks a regulated, centralized trading venue or order book. |

We urge the Commission to be part of the solution to further protect investors and maintain a fair, orderly, and efficient bitcoin market.

### ***Facilitate Capital Formation***

Finally, as an ETP on the NYSE Arca, the Bitcoin Investment Trust could serve as a liquid and regulated conduit for capital formation within the bitcoin ecosystem, enhancing the growth and development of this transformative technology as well as the applications built on top of it.

The signatories request that the Commission consider the approval of a Rule Change allowing the Bitcoin Investment Trust to list its shares on the NYSE Arca within the context of the fundamental reasons outlined in this letter, that we believe are broadly consistent with the Commission's mission. We thank the Commission for considering our request and are happy to speak further on the subject matter of this letter.

Together, we are:



Campbell R. Harvey, Professor, Fuqua School of Business, Duke University  
Patrick Murck, Fellow, Berkman Center for Internet & Society, Harvard University  
James J. Angel, Associate Professor, McDonough School of Business, Georgetown University  
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<sup>5</sup> File No. SR-NYSE Arca-2017-06