



Comment Letter regarding Rule Change under BZX Rule 14.11 (e)(4) and the subsequent intended listing of the WisdomTree Bitcoin Trust

April 2021

This comment letter is provided by CF Benchmarks, the UK Financial Conduct Authority regulated Administrator of both the CF Bitcoin US Settlement Price, the "Reference Rate" cited as the means for calculating the NAV of the WisdomTree Bitcoin Trust, and the CME CF Bitcoin Reference Rate (BRR) that is used to settle the Bitcoin-USD futures contract listed for trading by CME Group.

Introduction

The proposed rule change would allow for the listing of the WisdomTree Bitcoin Trust, making it the first exchange traded product holding Bitcoin (BTC) to be listed for trading on a National Securities Exchange. In a number of previous orders, the Commission has articulated very clearly what standards that previous filers have failed to reach and in the course of this letter, CF Benchmarks welcomes the opportunity to provide information it believes demonstrates how the standards have been met.

The standard

Securities and Exchange Act 1934 Section 6(b)(5), 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.”

How the WisdomTree Bitcoin Trust meets the standard

CF Benchmarks believes that the WisdomTree Bitcoin Trust meets the standard due to:

- the Trust’s use of the Reference Rate to calculate its NAV,
- that the Reference Rate is calculated using transactional data from the “**CF Constituent Exchanges**”¹ – the same bitcoin trading platforms that are used to compute the **CME CF BRR** that is the settlement mechanism for the CME BTC-USD futures contract,
- CF Benchmarks as the Administrator of the CF Bitcoin US Settlement Price has in place information sharing agreements with the “**CF Constituent Exchanges**” in order to fulfil its regulatory obligations under UK Benchmarks Regulation (as further described below) in regard to reporting any actual or attempted benchmark manipulation that is overseen by the UK Financial Conduct Authority (FCA), the regulator of financial markets in the UK, and
- CME Group, in the course of operating and overseeing the market in BTC-USD futures contracts under the regulatory oversight of the CFTC, has in place information sharing agreements with the exact same bitcoin trading platforms for the purposes of impeding and detecting any attempted manipulation of the futures contract, as they are the bitcoin trading platforms from which trade data is gathered to compute the CME CF BRR – the settlement index for the futures contract.

Background to CF Benchmarks and Benchmark Regulation

The UK Benchmarks Regulation (BMR) was originally enacted by the European Commission in 2016 and came into force in the European Union on January 1st, 2018. Since the UK departure from the EU the BMR has been adopted into UK legislation and its enforcement is undertaken by the UK FCA. There are numerous requirements of Benchmark Administrators that pertain to transparency, conflicts of interest, operational resilience, accountability and most pertinently an obligation to conduct surveillance benchmarks for attempted and actual manipulation (Article 14 which is reproduced below)– which are offences under the Market Abuse Regulations (MAR).

Article 14

Reporting of infringements

1. An administrator shall establish adequate systems and effective controls to ensure the integrity of input data in order to be able to identify and report to the competent authority any

¹ CF Constituent Exchanges (www.cfbenchmarks.com/docs/CF+Constituent+Exchanges.pdf)

conduct that may involve manipulation or attempted manipulation of a benchmark, under Regulation (EU) No 596/2014.

2. An administrator shall monitor input data and contributors in order to be able to notify the competent authority and provide all relevant information where the administrator suspects that, in relation to a benchmark, any conduct has taken place that may involve manipulation or attempted manipulation of the benchmark, under Regulation (EU) No 596/2014, including collusion to do so.

The competent authority of the administrator shall, where applicable, transmit such information to the relevant authority under Regulation (EU) No 596/2014.

3. Administrators shall have procedures in place for their managers, employees and any other natural persons whose services are placed at their disposal or under their control to report internally infringements of this Regulation.

In order to satisfy its regulatory obligations CF Benchmarks applies the following processes:

Ensuring data that is the result of manipulation is not used in determinations of the Reference Rate

CF Benchmarks only includes bitcoin trading platforms that conform to the CF Constituent Exchange Criteria and are approved by the CF Cryptocurrency Oversight Function. Information from a particular venue will be utilized only once approved to serve as a price source.. These criteria are published on the CF Benchmarks website, which apply to the Reference Rate:

"A trading venue is eligible as a Constituent Platform in any of the CF Cryptocurrency Index Family if it facilitates spot trading of the relevant cryptocurrency against the corresponding fiat currency (the "Relevant Pair") and makes trade data and order data available through an Automatic Programming Interface (API) with sufficient reliability, detail and timeliness. Furthermore, it must, in the opinion of the Oversight Function, fulfil the below criteria:

The pricing source's Relevant Pair spot trading volume for an Index must meet the minimum thresholds as detailed below for it to be admitted as a constituent exchange:

- 1. The average daily volume the venue would have contributed during the observation window for the Index of the Relevant Pair exceeds 3% for 90 days.*
- 2. The pricing source has policies to ensure fair and transparent market conditions at all times and has processes in place to identify and impede illegal, unfair or manipulative trading practices.*
- 3. The pricing source does not impose undue barriers to entry or restrictions on market participants, and utilizing the venue does not expose market participants to undue credit risk, operational risk, legal risk or other risks.*
- 4. The pricing source complies with applicable law and regulation, including, but not limited to capital markets regulations, money transmission regulations, client money custody regulations, know-your-client (KYC) regulations and anti-money laundering (AML) regulations.*

5. *The pricing source cooperates with inquiries and investigations of regulators and the Administrator upon request and must execute data sharing agreements with CF Benchmarks*

Once admitted, a Constituent Exchange must demonstrate that it continues to fulfil the above criteria 2 to 5 inclusive. Should the average daily contribution of a Constituent Exchange fall below 3% for the Index, then the continued inclusion of the pricing source as a Constituent Exchange to the Relevant Pair shall be assessed by the CF Cryptocurrency Oversight Function.

To confirm that bitcoin trading platforms meet these criteria, CF Benchmarks conducts due diligence reviews of all trading platforms before they are admitted and then on an annual basis thereafter (the last review was conducted in October/November of 2020).

Surveillance of benchmarks for signs of manipulation or attempted manipulation

To be able to utilise its information sharing arrangements effectively, CF Benchmarks operates a Benchmark Surveillance Programme whereby it monitors its benchmarks for signs of manipulation through a series of alerts. When an alert is triggered, CF Benchmarks will conduct an investigation, including seeking further information from Constituent Exchanges, and in cases of actual or attempted manipulation the necessary confidential information, including trader identities, that can be shared with its regulator, the UK FCA. Each investigation is then written up as a report and shared with the CF Cryptocurrency Oversight Function. The UK FCA has regulatory oversight of this process and its operation has been audited by Deloitte, see p.47 of SOC 1 Report:

https://docs-cfbenchmarks.s3.amazonaws.com/Deloitte_CF+Benchmarks+SOC1+Audit+Report.pdf

Significant Market

As discussed above, susceptibility of the shares or the underlying asset to fraud or manipulation can be addressed without the Commission's previously described requirement of a formal agreement with a regulated exchange and we respectfully submit that such agreement is not necessary to achieve the Commission's stated objective. Notwithstanding, a **significant** regulated market does currently exist and a surveillance-sharing arrangement meeting such requirement would be in place should the shares of the Trust be listed. The definition:

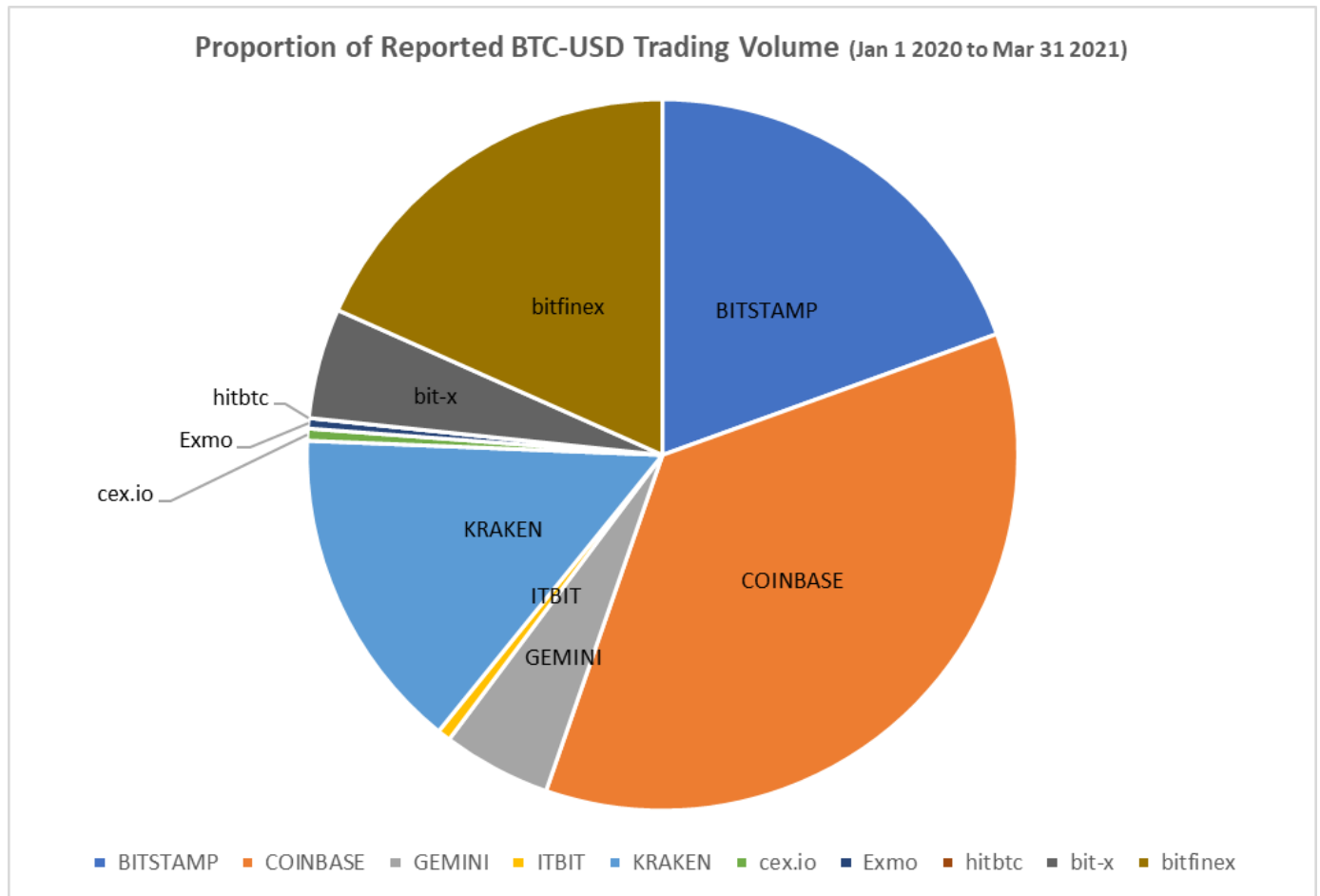
*In the context of this standard, the terms "significant market" and "market of significant size" include a market (or group of markets) as to which (a) there is a reasonable likelihood that a person attempting to manipulate the ETP would also have to trade on that market to successfully manipulate the ETP, so that a surveillance-sharing agreement would assist in detecting and deterring misconduct, and (b) it is unlikely that trading in the ETP would be the predominant influence on prices in that market. 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." p. 4 **Wilshire Order, SEC, Feb 26 2020***

The Spot Bitcoin-USD Market and the Proportion Accounted for by the CF Constituent Exchanges

Although difficult to fully verify due to the distributed nature of cryptocurrency trading and the difficulty in identifying bona fide trading volumes, the BTC-USD markets of CF Constituent Exchanges constitute

roughly 76% of all Bitcoin-USD trading from cryptocurrency trading platforms whose volumes are publicly available, during the period January 1, 2020 to March 31, 2021 – see figure 1 below

Figure 1 - ⁱSource- *Bitcoinity.org*



It is estimated that BTC-USD trading constitutes approximately 20% of all trading in BTCⁱⁱ according to cryptocurrency market data provider CryptoCompare, the balance being BTC traded against JPY, EUR, KRW and other cryptocurrencies (including stablecoins such as Tether or USDC), meaning that the five CF Constituent Exchanges account for 15% of all Bitcoin. Much of the trading volume of BTC to other cryptocurrencies as reported by CryptoCompare is conducted on cryptocurrency trading platforms domiciled in jurisdictions with little or no legal and regulatory oversight. The five CF Constituent Exchanges are domiciled in the USA and Europe, where the operation of a cryptocurrency trading platform - though not regulated in the manner in which capital markets venues are – nonetheless require AML/KYC compliance and prohibitions against wash trading and fraudulent claims of trading volume. Given this fact, the five CF Constituent Exchanges likely constitute significantly more than 15% - very likely 25% plus - of all *bona fide* Bitcoin trading conducted on cryptocurrency trading platforms.

Bitcoin Futures Markets

The CME Group has offered trading in CFTC regulated BTC-USD futures since November 2017. Open interest in the contracts currently stands at approximately \$2.3 billion, with trading volume and open interest having grown substantially in the previous 12 months as demonstrated in the proposed rule

change filing². According to Bitcoinfuturesinfo.com the CME accounts for approximately 15% of all Bitcoin futures open interest. The CME Group, Bakkt and Crypto Facilities are the only venues that offer Bitcoin futures trading under relevant capital markets regulations. A number of other venues with little or no regulatory oversight or external scrutiny also purport to offer bitcoin derivatives. Given this fact it is difficult to ascertain what proportion of the total Bitcoin derivatives market is represented by CME Group, but it is likely that it constitutes significantly more than the 15% - very likely 30% plus – of all **bona fide** Bitcoin futures trading.

CME Bitcoin Futures Leading the Spot Market

As well as considering the relative size of the CME BTC-USD futures market, it is also necessary to be assured that any potential manipulator of the Trust would also have to transact on the CME market in order to satisfy that it meets the Commission’s definition of “Significant Market”. There is a body of research that has amply demonstrated that price discovery for bitcoin is largely achieved through the CME BTC-USD futures market as opposed to the spot markets by both academic³ and commercial⁴ sources. These previous analyses have been conducted to evaluate the Hasbrouck’s information share and Gonzalo and Granger’s common factor component properties of the CME BTC-USD futures markets and the bitcoin spot markets of the major BTC-USD cryptocurrency trading platforms. Their conclusions have not been widely challenged in the academic literature. Since the publication of this research the CME BTC-USD futures markets have been growing significantly in liquidity and institutional participation – as evidenced by the analysis provided by in the proposed rule change filing.

Information Sharing between CME Group and the Five CF Constituent Exchanges

As detailed in the CME CF Constituent Exchange Criteria⁵- all Constituent Exchanges under criterion 5 have information sharing agreements in place with the CME Group to facilitate the CME Group’s surveillance of the market for BTC-USD futures. As previously discussed in this letter, CF Benchmarks also has separate information sharing agreements in place with the same exchanges to fulfil its regulatory requirements under UK BMR, the current flow of information sharing is summarised in figure 2.

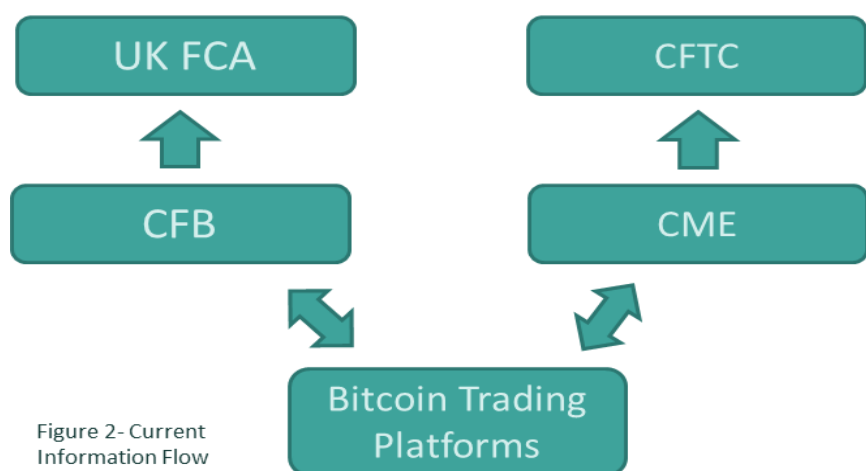


Figure 2- Current Information Flow

² Notice of filing of a Proposed Rule Change to List and Trade Shares of the WisdomTree Bitcoin Trust under BZX Rule 14.11€(4) Commodity Based Trist Stares p.19

³ **Price Discovery in Bitcoin Futures, Research in International Business & Finance Vol 52-** Passas, Papdamou & Koulis

⁴ **Efficient Price Discovery in the Bitcoin Markets** – Chang, Hermann & Cai

⁵ www.cfbenchmarks.com/docs/CME+CF+Constituent+Exchange+Criteria.pdf

Should the proposed rule change be approved, and the shares of the Trust begin trading on the BZX exchange, then by virtue of both BZX and CME's membership of the Intermarket Surveillance Group, then the flow of information would include BZX, the listing exchange for the proposed Trust. The Commission has previously noted that, when two or more exchanges belong to the ISG, their membership qualifies as a surveillance-sharing agreement with each other. *p. 53 Winklevoss Order, SEC, Mar 10 2017*

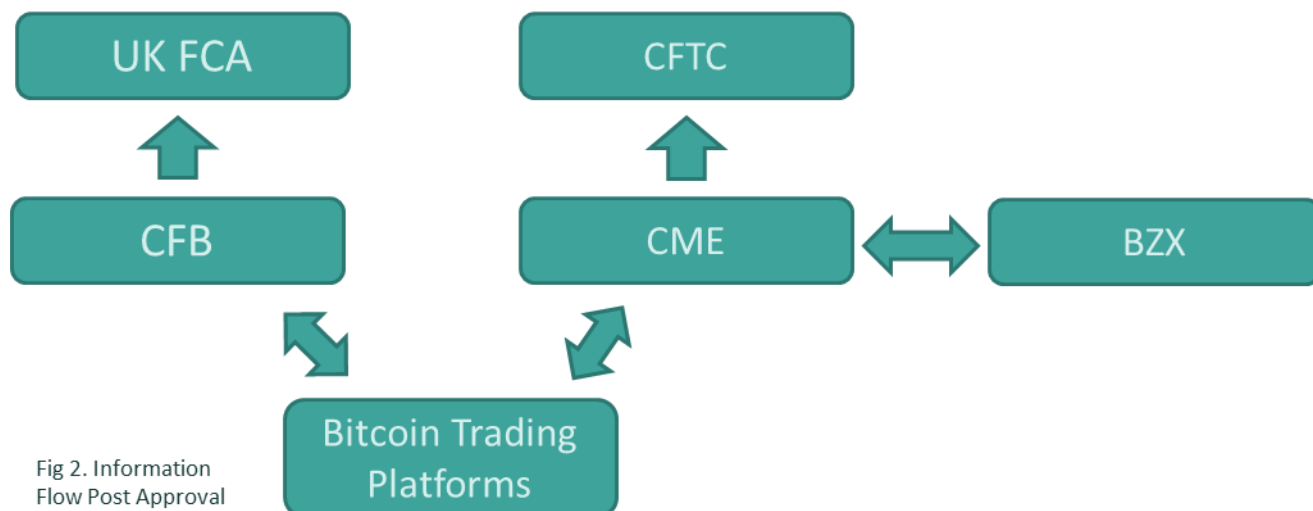


Fig 2. Information Flow Post Approval

The CME as a “Significant Market”

Given that the proposed Trust will:

- Strike its NAV to the CF Bitcoin US Settlement Price that is calculated using transaction data from the five CF Constituent Exchanges and provide an IIV based on the CME CF Bitcoin Real Time Index that is calculated using order data from the same five Constituent Exchanges
- Have its shares traded by APs who will use the below as liquidity rails for pricing and arbitrage:
 - CME BTC-USD futures markets
 - Underlying spot markets (including the CF Constituent Exchanges)

And that:

- The CF Constituent Exchanges account for a significant proportion of the spot Bitcoin markets
- The CME BTC-USD futures contract leads the spot market in terms of price formation
- The CME BTC-USD futures market constitutes a significant proportion of the Bitcoin futures market

Accordingly, we submit that any attempted manipulator of the Trust will have to undertake trading on both the CME and at least one, likely more than one, of the five CF Constituent Exchanges to engage in potentially manipulative acts in seeking to undermine the protection of investors and public interest with respect to the price of shares in the Trust. This demonstrates that the CME BTC-USD Futures market can indeed be considered a Significant Market as previously defined by the Commission.

Information Sharing between the Filer and the CME – Meeting the Standard

Given the information sharing arrangements in place between the CME and CF Constituent Exchanges, this would allow for such activity be detected and deterred by CME. In turn, the CME and BZX are members of the ISG, which would mean that BZX Exchange would also have access to this information to allow for detection and deterrence of manipulation should it occur. The conclusion is that the proposed rule change

should indeed meet the standard that the Commission has previously set for National Securities Exchanges seeking to list a Trust that is comprised of holdings of Bitcoin.
