Keynote Address by Commissioner Brian Quintenz before the DC Blockchain Summit

March 7, 2018

Introduction

Good afternoon and thank you for that very kind introduction. As an alumnus, I'm always happy to be back at the McDonough School of Business. It's great to be with you here at the DC Blockchain Summit. I want to congratulate Perianne and the Chamber of Digital Commerce on hosting such a fascinating event with such robust participation by the DLT and cryptocurrency community. What you have accomplished in advocacy and connectivity in such a short period is incredible.

Before I begin, let me quickly say that the views contained in this speech are my own and do not represent the views of the Commission.

I want to start with a story about my childhood. I have a fraternal twin brother. Growing up, we were pretty competitive – academically, socially, and athletically. One of the sports we both played was tennis. As some of you know, amateur tennis at the juniors, high school, and college level is kind of a unique sport in terms of its rule enforcement. The players themselves act as the referees. But if you think about the landscape of competitive tennis, as the seriousness of the sport and the consequences of winning increase, and the players become professionals, umpires ultimately are called in to officiate the game. The incentives become too skewed for a player to make the right call in a tight situation. I believe we are at that same point with regard to cryptocurrency exchanges where millions, if not billions, of dollars' worth of products are transferred on a daily basis. Some level of *independent* officiating is now required.

Before we get in to that, however, let's take a step back and talk about how we, the Commodity Futures Trading Commission (CFTC) – the traditional regulator of frozen concentrated orange juice and pork belly futures – got involved in cryptocurrencies.

Since Satoshi Nakamoto first published his groundbreaking paper on cryptography and a cryptocurrency called bitcoin almost decade ago,[1] we have witnessed exponential growth in the technology underlying bitcoin – distributed ledger technology (DLT) – and its dizzying array of potential applications. We have also seen the proliferation of thousands of new cryptocurrencies[2] – such as litecoin, ether, ripple, zcash, monero, to name a few – as well as tokens, such as utility tokens, like Filecoin, that can be used to rent cloud storage space.[3] The transaction platform landscape is advancing rapidly as well. People can now purchase bitcoin from multiple locations in and around the District of Columbia, including a falafel shop in Adams Morgan, a beer and wine market in Columbia Heights, and a laundromat in Falls Church.[4]

Although it sometimes feels like it, the markets for these cryptocurrencies and digital assets did not develop overnight. And neither did the CFTC's thinking around these products and markets.

The Beginning

Congress, through the Commodity Exchange Act (CEA), granted the CFTC exclusive jurisdiction over futures, options, and swaps on commodities.[5] In turn, the CEA defines the term "commodity" very broadly to include, among other things, all goods and articles and "all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in."[6]

In December 2014, then Chairman Timothy Massad first declared through Congressional testimony that the Commission viewed virtual currencies as commodities. The former Chairman explained that although the Commission did not have policies and procedures specific to virtual currencies like bitcoin, the Commission's "authority extends to futures and swaps contracts in any commodity" and therefore "derivative contracts based on a virtual currency represent one area" within the Commission's responsibility.[7]

Nine months later, in September 2015, this interpretation was formalized through a CFTC enforcement action. The CFTC filed and settled a complaint against a bitcoin trading platform called Derivabit, which was owned and operated by a company called Coinflip. The Derivabit trading platform offered to connect buyers and sellers of bitcoin options contracts. In the order, the Commission asserted jurisdiction over Derivabit's activities by determining that "bitcoin and other virtual currencies are encompassed in the definition and properly defined as commodities."[8] Based upon this finding, the CFTC found that Derivabit had illegally offered commodity options without being registered as an exchange or swap execution facility with the Commission.[9]

The Coinflip case was the first time the CFTC asserted jurisdiction over contracts involving bitcoin by recognizing that bitcoin was a commodity. That jurisdiction, though, is limited when it comes to the actual trading of bitcoin itself.

It is important to recognize that, in the derivatives markets, the CFTC has both oversight *and* enforcement authority, while in the spot markets, or the platforms where commodities themselves are actually bought and sold, the CFTC has *only* enforcement authority.

In terms of oversight authority over derivatives trading, the CFTC's role is broad and far reaching, including setting requirements for: registration of trading platforms or firms, trade execution, orderly trading, data reporting, and recordkeeping.

But in the spot markets for commodities, neither the CFTC nor any other federal agency has that same oversight authority. This means the agency cannot impose things like registration requirements on platforms or participants in the cash markets, surveillance and monitoring requirements on spot platforms, or otherwise require compliance with business conduct standards or other trading requirements. The CFTC only has enforcement authority to police fraud and manipulation in the actual trading of commodities. Pursuant to this enforcement jurisdiction, the CFTC can investigate potential fraud and manipulation in the underlying virtual currency spot markets.

One area where the Commission has taken enforcement action on spot exchanges involves "look-alike futures contracts" offered to retail customers. In the Dodd-Frank Act, Congress added a provision to the CEA known as

the retail commodity provision, which states that if an entity offers a commodity for sale to a retail customer on a margined, leveraged, or financed basis – in other words, with borrowed funds – then the agreement is regulated as if it were a futures transaction.[10] Regulated like futures, these contracts then become subject to CFTC requirements related to exchange trading and registration.[11] However, there is an important exception to the Commission's retail commodity jurisdiction for cases where the commodity is actually delivered to the buyer within 28 days.

Within a year of the Coinflip case, the CFTC filed and settled a case against a Hong Kong-based company called Bitfinex.[12] Bitfinex held itself out as a spot exchange where retail customers could buy and sell bitcoin and other virtual currencies. However, the exchange permitted retail customers to purchase bitcoin on a leveraged, margined or financed basis, thereby transforming what might have been vanilla spot transactions into look-alike futures contracts within the Commission's jurisdiction.

In the case of Bitfinex, the Commission found that Bitfinex failed to actually deliver the bitcoin to the buyers because Bitfinex held the bitcoin in its own private wallet and retained control of all the "private keys" that permitted access to the wallet.[13] Accordingly, the Commission found that these financed retail commodity transactions did not meet the exception for actual delivery and should have been executed on a registered exchange like any other futures contract. In addition, the Commission determined that Bitfinex should have been registered as a futures commission merchant.

While I agree with the outcome of the Bitfinex case, it is an example of the Commission making policy through enforcement. Prior to Bitfinex, the CFTC had never before addressed what "actual delivery" means in the context of virtual currencies – although the agency had issued guidance in 2011 about what actual delivery means in the context of physical commodities, like wheat or oil. Therefore, before the Bitfinex case, there may have been some confusion about what constitutes actual delivery for cryptocurrencies. As a general matter, I think the optimal approach to the regulation of incipient, but growing, markets is for the regulator to provide the market with some guidance or even a bright line test that gives some indication of the agency's interpretation of its regulations and how it might adjudicate certain situations. That is why, although I believe the Bitfinex case was settled correctly, I was pleased to see the Commission issue proposed guidance about the meaning of actual delivery in the context of virtual currency transactions.[14]

The proposed interpretation builds upon past Commission guidance and focuses on whether the customer can take possession and control of the commodity and use the commodity freely in commerce 28 days after purchase.[15] I am looking forward to reviewing public comments and believe they will greatly benefit the development of a clear standard for when financed virtual currencies are considered actually delivered to retail customers.

A New Chapter

We entered a new chapter in cryptocurrencies this past December when both CME Group and Cboe listed futures contracts on bitcoin. Let me take a minute to address some concerns I have heard regarding cryptocurrency futures generally.

For those who may be concerned by the speed at which new cryptocurrency futures contracts may be listed, it is not the case that a token or cryptocurrency can be created today and have a futures contract tomorrow. One of the core principles in the CEA to which an exchange must adhere in listing futures contracts is to ensure the financial integrity of its transactions, including the clearance and settlement of the transactions with a clearinghouse. One measure of a futures contract's financial integrity is the contract's initial margin level. In order to gain comfort that a contract's initial margin level is set commensurate with the volatility of the underlying asset, the Commission generally likes to see a historic time series of price data on that asset covering either a full economic cycle or including periods of significant stress. In terms of bitcoin futures, the Commission had five years' worth of price data, with multiple periods of stress, with which to back test initial margin sufficiency. I would expect to see similar time periods of price data for any new cryptocurrency futures contract proposals.

From a risk perspective, it is important to note that the Commission is concerned with one or two day price volatility, not weekly or monthly volatility, and certainly not percentage moves across quarters or years. This is because variation margin payments are exchanged at the end of every trading day, which resets any positive or negative economic exposure back to zero. Losses, therefore, cannot accumulate over time. Both CME and Cboe set initial margin requirements for the bitcoin futures contracts that take into account their potential one-day volatility. CME's initial margin is currently set at 47 percent of the notional value of the contract, while Cboe's initial margin requirement is 44 percent. As a point of comparison, these margin requirements are roughly ten times more than the initial margin required for CME corn futures products.

The amount that a futures contract's daily price change eats into the initial margin posted by traders is called margin erosion. Staff monitors contracts' margin erosion on a daily basis to ensure the required initial margin levels remain adequate. Over the past two months, we have seen only one example of bitcoin's price movements eroding the contract's initial margin by up to 50%. In contrast, during that same time period, on eleven separate occasions, volatility in the WTI crude oil contract eroded initial margin levels by more than 50%, sometimes upwards of 70%. Similarly, during that time period, there were five instances of price movements in CME's 10-year Treasury futures contract eroding initial margin by more than 50%. As a general matter, based on CFTC regulations, two to three initial margin breaches per year would be reasonable. Therefore, to date, the initial margin for bitcoin futures contracts has performed as required. While it is important to monitor and regularly re-evaluate the performance of the bitcoin futures contracts, I believe that the Commission and clearinghouses have the tools and expertise to make any necessary adjustments.

Looking Ahead

In the midst of this technological revolution, which promises to transform the building blocks not just of our financial markets, but of commerce in general, I am honored to sponsor the Commission's Technology Advisory Committee (TAC). The TAC will serve as an immeasurable well of knowledge from which the Commission may draw. We had our first meeting of 2018 three weeks ago, where the TAC recommended that the Commission create four subcommittees to provide actionable advice regarding cryptocurrencies, DLT, cybersecurity, and the modern trading environment. That last subcommittee will explore the real risks of the modern trading environment so that a properly calibrated replacement to Regulation Automatized Trading (Reg AT) can be considered by the Commission. We are still in the process of forming these subcommittees and I look forward to their first meetings.

During the TAC meeting, I also expressed my willingness to explore how a new, private independent organization could perform an oversight function for U.S. cryptocurrency platforms. For example, we see this model working today through the National Futures Association (NFA) and the Financial Industry Regulatory Authority (FINRA). Currently, a patchwork of state and federal regulators have jurisdiction over the cryptocurrency industry. In my opinion, the area with the greatest need for enhanced regulatory certainty and oversight is the spot market. Today, state regulators and the Treasury Department's Financial Crimes Enforcement Network (FinCEN) regulate cryptocurrency platforms as money service businesses.16 While cryptocurrency exchanges can resemble traditional money transmission services, there are enough differences to warrant different regulatory treatment. As Congress works with federal and state regulators to determine the appropriate regulatory framework for cryptocurrencies, I believe an SRO-like entity could develop industry standards that could inform, or even serve as a blueprint for, future action.

Indeed, we are already seeing a movement toward self-regulation in the cryptocurrency sector. A cryptocurrency trade association called "CryptoUK" was recently established in the United Kingdom.17 The organization has established a code of conduct for its members which includes guidelines around due diligence checks, customer protections, and pricing transparency. Similarly, the heads of two cryptocurrency trade groups in Japan, together with the country's 16 spot exchanges, have committed to establishing a new self-regulating body.18 In the United States, efforts toward standardization are also underway at the state level. Seven states have agreed to recognize each other's money service business licenses19 and a model state virtual currency law has been published.20

I think an independent, self-regulating body for spot platforms in the United States could significantly contribute to these ongoing efforts to rationalize and formalize cryptocurrency regulation. Initially, this entity could establish best practices for spot platforms, including setting minimum standards of fitness for their employees. Eventually, it could enforce rules on its own membership, supervise them for compliance, and provide a forum for customers to seek redress against member platforms, just like FINRA and NFA do for the securities and derivatives markets today. An SRO-like, independent regulatory body could create uniform standards for these trading platforms, reduce the possibility of regulatory arbitrage, and avoid duplicative regulation.21

A private cryptocurrency oversight body has several advantages. First, as a private membership organization, it could begin providing oversight over spot platforms far more quickly than any federal regulatory regime, which could only be established following the promulgation of a new law, given the current lack of oversight jurisdiction. A case in point is the regulation of the off-exchange retail foreign exchange ("retail forex") industry. The NFA began regulating this sector seven years before the CFTC.22

SRO-like entities also provide numerous efficiencies. They are funded by their members, not by the federal government. They can adopt and amend rules more quickly than a federal agency. The rules and best practices published by an SRO are informed by practical experience because the organization has input from industry participants. This is especially beneficial in the case of a rapidly evolving industry, like cryptocurrency, where products and trading conventions are constantly changing.

Additionally, past SROs have not limited their functions to enforcing fair trading practices. In the 1890s, the Butter and Cheese Exchange of New York (the predecessor to the New York Mercantile Exchange (NYMEX)) implemented groundbreaking methods of standardizing butter, cheese, and eggs. NYMEX graded and inspected butter before the U.S. Department of Agriculture.23 There is certainly a broad role for a private cryptocurrency oversight body to play in developing these markets.

I would also point out that there is a long history of SROs in the U.S. futures industry, dating back to the mid-nineteenth century, decades prior to the adoption of federal regulation.24 The Chicago Board of Trade (CBOT) began enforcing rules on its members in 1859.25 In 1897, when CBOT member Joe Leiter, the "Wheat King," attempted to corner the December wheat market, the CBOT suspended Leiter from the exchange.26 In contrast, state anti-corner statutes were ineffective during this era, and, despite the introduction of 200 futures regulation bills in Congress between 1880 and 1920, no federal legislation was passed until 1921 – over twenty years after the CBOT suspended the Wheat King from the market.27

Moreover, Congress has repeatedly called for self-regulation in conjunction with federal oversight of financial markets. When the CFTC was first created in 1974, its authorizing statute

included provisions for a "registered futures association" or RFA to be supervised by the CFTC.28 The NFA became the first RFA in 1981 and still serves this function today. FINRA traces its history to the Maloney Act of 1938, which created the National Association of Securities Dealers to promote oversight of the over-the-counter securities market. The Municipal Services Rulemaking Board has served as the SRO for firms operating in the municipal securities markets since the Securities Acts Amendments of 1975.

Any SRO-like body should have policies and procedures to address potential conflicts of interest between itself and the industry it regulates. It should strive to have a fair representation of diverse views among its members and leadership. But, such entities need not develop standards for independence and fairness from scratch. The International Organization of Securities Commissioners (IOSCO) has developed internationally recognized Principles for Self-Regulation.29 According to this benchmark, an SRO should establish standards of corporate governance to effectively manage any conflicts of interest. IOSCO calls upon SROs to observe standards of fairness and confidentiality when exercising powers and responsibilities, and to avoid rules that may create anti-competitive situations or allow any market participant to unfairly gain advantage in the market.30 The SRO should also have the ability to enforce compliance by its members with its standards and should develop rules that promote investor protection and market integrity.31 Compliance with IOSCO's robust set of protocols would lend credibility to any SRO-like body for cryptocurrency spot platforms.

Ultimately IOSCO's framework calls for the SRO to be subject to the oversight of a government regulator, who can assume responsibility should the SRO exhibit conflicts of interest or prove unable to discharge its responsibilities.32 To-date, Congress has not authorized the creation of an SRO to serve in this capacity in the cryptocurrency markets. Notwithstanding this fact, I believe that while Congress considers what, if any, further federal action in this area is appropriate, an SRO-like entity could begin to develop ideas and standards that would strengthen the integrity of the spot markets. We regularly hear from cryptocurrency market participants that they desire a more credible, regulated marketplace. I believe that a private, cryptocurrency oversight body could help bridge the gap between the status quo and future government regulation.

Conclusion

While my tennis matches with my brother never rose to the level that necessitated an official referee (although that might have led to less brotherly squabbling), I think we've come to the point with cryptocurrencies where an independent body must step up, establish, and enforce the rules of play. It is my hope that cryptocurrency platforms in the United States will consider the many benefits, including enhanced credibility, that the establishment of an SRO-like organization may provide. Moreover, in light of the global market for cryptocurrencies, and the efforts currently underway in the United Kingdom and Japan, there is no reason why a private, cryptocurrency oversight body could not achieve global significance. I look forward to working together with you and other industry participants to find ways to strengthen the integrity of these growing markets. Thank you.

1 Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System (Oct. 2008), https://bitcoin.org/bitcoin.pdf.

2 Cryptocurrency Market Capitalizations, CoinMarketCap, https://coinmarketcap.com/all/views/all/.

3 Josiah Wilmoth, *Three Types of ICO Tokens*, Strategic Coin, http://strategiccoin.com/3-types-ico-tokens/.

4 Bitcoin ATM Map, https://coinatmradar.com/bitcoin-atm-near-me/.

5 CEA Section 2(a)(1)(A).

6 CEA Section 1a(9).

7 *The Commodity Futures Trading Commission: Effective Enforcement and the Future of Derivatives Regulation Before the S. Comm. on Agric., Nutrition, and Forestry*, 111th Cong. 55 (2014) (statement of Timothy Massad, Chairman of the Commodity Futures Trading Commission).

8 *In re* Coinflip, Inc., CFTC Docket No. 15-29, at 3 (Sept. 17, 2015), http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoinfliprorder09172015.pdf.

9 *Id.* at 4. Most recently, Judge Weinstein of the U.S. District Court for the Eastern District of New York affirmed the Commission's conclusion that virtual currencies were commodities subject to the Commission's jurisdiction in a Preliminary Injunction Order.

10 CEA Section 2(c)(2)(D).

11 *Id.*

12 *In re* BFXNA Inc., CFTC Docket No. 16-19 (June 2, 2016), http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfbfxnaorder060216.pdf.

13 *Id.* at 3, 6.

14 Retail Commodity Transactions Involving Virtual Currency, 82 Fed. Reg. 60335 (Dec. 20, 2017), http://www.cftc.gov/idc/groups/public/@lrfederalregister/documents/file/2017-27421a.pdf.

15 82 Fed. Reg. at 60339.

16 *See, e.g.* FinCEN Guidance: Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies (Mar. 18, 2013), https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering; "Virtual Currency" licenses issued by the State of Washington Dept. of Financial Services and the "BitLicenses" issued by the New York State Dept. of Financial Services, https://dfi.wa.gov/bitcoin; http://www.dfs.ny.gov/legal/regulations/bitlicense_reg_framework.htm.

17 Hannah Murphy, *UK Crypto Companies Link Up for Self-Regulation*, Financial Times (Feb. 13, 2018), https://www.ft.com/content/d6db427c-10c1-11e8-940e-08320fc2a277.

18 Takahiko Wada, *Japan's Cryptocurrency Exchanges to Form New Self-Regulating Body*, Reuters (Feb. 20, 2018), https://www.reuters.com/article/us-crypto-currencies-japan/japans-cryptocurrency-exchanges-to-form-new-self-regulating-body-sources-idUSKCN1G4156.

19 *U.S. States Join Forces on Fintech Licenses*, Reuters (Feb. 6, 2018), https://www.reuters.com/article/us-fintech-regulations/u-s-states-join-forces-on-fintech-licenses-idUSKBN1FQ2CK. The seven states are Georgia, Illinois, Kansas, Massachusetts, Tennessee, Texas and Washington.

20 National Conference of Commissioners on Uniform State Laws, *Uniform Regulation of Virtual Currency Business Act* (2017), http://www.uniformlaws.org/Act.aspx?title=Regulation%20of%20Virtual-Currency%20Businesses%20Act.

21 The SEC considered these themes in a 2005 assessment of SROs. *See Concept Release Concerning Self-Regulation* (Release No. 34-50700; File No. S7-40-04) (Mar. 8, 2005), https://www.sec.gov/rules/concept/34-50700.htm.

22 *See* discussion of NFA's "Forex Dealer" membership category in Testimony of Daniel J. Roth, President and CEO, NFA, Before the Subcommittee of General Farm Commodities and Risk Management of the U.S. House of Representatives Committee on Agriculture (June 19, 2003), https://www.nfa.futures.org/news/newsTestimony.asp?ArticleID=1115.

The CFTC adopted rules for retail foreign exchange dealers in 2010. *See Regulation of Off-Exchange Retail Foreign Exchange Transactions and Intermediaries*, 75 Fed. Reg. 55410 (Sept. 10, 2010).

23 Jane Kagan Vitiello, Trading Through Time, The History of the NYMEX 1872-1997 36-46 (Milan, Italy: Amilcare Pizzi, S.p.A, 1997).

24 The first comprehensive federal regulation of the futures industry was the Futures Trading Act, enacted in 1921. The Futures Trading Act was replaced by the Grain Futures Act of 1922, which was then replaced by the Commodity Exchange Act in 1936.

25 Jerry W. Markham, The History of Commodity Futures Trading and its Regulation 4 (New York: Praeger Publishers, 1987); Jonathan Lurie, The Chicago Board of Trade, 1859-1905, The Dynamics of Self-Regulation 27-28 (Urbana, Ill.: Univ. of Illinois Press, 1979).

26 Markham, at 5-6.

27 Markham, at 6 and 10.

28 Title III of the Commodity Futures Trading Commission Act of 1974 (currently sec. 17 of the Commodity Exchange Act).

29 Objectives and Principles of Securities Regulation, International Organization of Securities Commissions 5 (May 2017), https://www.iosco.org/library/pubdocs/pdf/IOSCOPD561.pdf.

30 Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation, International Organization of Securities Commissions 55-61 (May 2017), https://www.iosco.org/library/pubdocs/pdf/IOSCOPD562.pdf.

31 *Id*.

32 *Id.*

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