

Reimagining a Centralised Cryptocurrency Regulation in the US: Looking through the Lens of Crypto-Derivatives

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ABSTRACT

Cryptocurrency as a reference asset in any derivative product ('crypto-derivatives') is opaque, complex, and unreliable. The pricing and settlement of crypto-derivatives have no standardized form and limit retail investors' ability to comprehend the terms of the product. Moreover, retail investors investing in crypto-derivatives are vulnerable to monetary losses due to cryptocurrency's highly speculative nature, price volatility, and spot market manipulation. Nonetheless, the regulatory approach to crypto-derivatives appears to vary from jurisdiction to jurisdiction. For instance, while regulators in the UK and the EU have recently banned crypto-derivatives to protect retail investors from the risk and volatility of the crypto-derivatives market, the US has taken a more hands-off approach. This paper presents a comparative analysis of the US regulatory responses to crypto-derivatives with specific references to the UK's and the EU's approaches and rationale towards crypto-derivatives regulations in their respective regions. Unlike the EU and UK, where the regulators introduced restrictive measures regarding cryptocurrency, the US regulatory efforts are primarily limited to interpreting cryptocurrency in light of the existing legal and regulatory framework. Further,

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the regulatory approach in streamlining cryptocurrency and associated innovative products in the current framework inadequately encapsulates cryptocurrency's susceptibility to spot market manipulation and its potential to jeopardize investors' interests. Hence, it is paramount that the US enact comprehensive cryptocurrency regulation that recognizes the novelty of cryptocurrencies' market risks and introduces a robust regulatory infrastructure to limit market manipulation in the cryptocurrency spot market vis-à-vis the crypto-derivatives market. The paper envisions a cryptocurrency regulation that includes: (i) a centralised cryptocurrency trading platform; (ii) a mandatory registration requirement for all cryptocurrency exchanges and; (iii) a federal cryptocurrency agency. The paper suggests that with a degree of centralisation, a federal cryptocurrency agency is likely to establish the desired visibility into the cryptocurrency spot and an effective oversight mechanism that would eventually help curb market manipulation and restore investor confidence.

Keywords: crypto-derivatives, cryptocurrency, price volatility, investor protection, regulation.

I. INTRODUCTION

“What I’m concerned about at the moment is if it can be reasonably demonstrated that the underlying trading is generally not manipulated, it’s happening on reliable venues with good rules”.¹

On 6 October 2020, the UK Financial Conduct Authority (‘FCA’) prohibited the sale of cryptocurrency-related derivatives (‘crypto-derivatives’) to retail investors on the ground that cryptocurrency as a reference asset is an unreliable basis for valuation of these derivatives products.² The FCA concluded that crypto-derivatives, especially in the form of contract for difference (‘CFD’) and exchange-traded notes (‘ETNs’), are ill-suited for retail consumers because of the harm they pose.³ In Europe, the European Securities and Markets Authority (‘ESMA’) has also been looking to curb crypto-derivatives trading as these products are risky,

¹ Jay Clayton (SEC Chairman) quoted in Helen Partz, ‘SEC Chairman Highlights Investor Protection in Regard to Bitcoin ETF’ (Cointelegraph, 14 March 2019) <<https://cointelegraph.com/news/sec-chairman-highlights-investor-protection-in-regard-to-bitcoin-etf>> accessed 23 February 2021.

² Financial Conduct Authority, ‘Prohibiting the Sale to Retail Clients of Investment Products that Reference Cryptoassets’ (2020) PS20/10 <www.fca.org.uk/publication/policy/ps20-10.pdf> accessed 24 February 2021.

³ *ibid.*

speculative, and expose consumers to potentially huge losses.⁴ Both regulators seem to have three main reasons for banning the sale of crypto-derivatives to retail investors: first, cryptocurrencies' extreme volatility as a reference asset; second, the prevalence of rampant market abuse, price manipulation, and security breaches in the cryptocurrency spot market and; investors' significant lack of understanding of these complex derivatives products.⁵

While regulators have initiated a broader crackdown in the UK and the EU to protect retail investors from the crypto-derivatives market's abuse and manipulation, the US regulators chose to go the opposite direction. In 2014, the Commodity Futures Trading Commission ('CFTC') approved TeraExchange, a bitcoin-derivatives exchange, to self-certify bitcoin swaps allowing investors to trade dollar-dominated bitcoin currency swaps.⁶ In the following year, the CFTC classified bitcoin as a commodity in its order against Coinflip Incorporated, a bitcoin trading platform, and thus ensured its entrance into the traditional derivatives market just like other commodities.⁷ Since then, several crypto-derivatives have proliferated in the market. The Chicago Mercantile Exchange ('CME') and the Chicago Board Options Exchange ('CBOE') first launched cash-settled bitcoin futures in December 2017.⁸ The Intercontinental Exchange ('ICE') introduced physically-settled bitcoin futures and bitcoin options in September and October 2019, respectively.⁹ Following the CFTC's announcement that the 'Ethereum'

⁴ European Securities and Markets Authority, 'ESMA Agrees to Prohibit Binary Options and Restrict CFDs to Protect Retail Investors' (27 March 2018) <www.esma.europa.eu/press-news/esma-news/esma-agrees-prohibit-binary-options-and-restrict-cfds-protect-retail-investors> accessed 24 February 2021.

⁵ Previously, South Korea banned bitcoin futures trading following its initial ban on Initial Coin Offerings (ICOs) in 2017; see David Dinkins, 'In Unexpected Move, South Korean Regulator Suddenly Bans Bitcoin Futures Trading' (CoinTelegraph, December 2017) <<https://cointelegraph.com/news/in-unexpected-move-south-korean-regulator-suddenly-bans-bitcoin-futures-trading>> accessed 11 May 2020.

⁶ Michale Casey, 'TeraExchange Unveils First U.S. Regulated Bitcoin Swaps Exchange' (The Wall Street Journal, 12 September 2014) <www.wsj.com/articles/teraexchange-launches-bitcoin-derivatives-exchange-1410543989> accessed 11 November 2020.

⁷ CFTC v Coinflip Inc [2015] CFTC Docket No. 15-29. In this case, the CFTC held that bitcoin and other virtual currencies fall within Section 1(A)(9) of the Commodity Exchange Act, as the definition of "commodity" shall include "all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in". Therefore, any company offering bitcoin derivatives must comply with the CFTC laws, rules, and regulations.

⁸ Evelyn Cheng, 'Bitcoin Debuts on the World's Largest Futures Exchanges, and Prices Fall Slightly' (CNBC, 18 December 2019) <www.cnbc.com/2017/12/17/worlds-largest-futures-exchange-set-to-launch-bitcoin-futures-sunday-night.html> accessed 11 November 2020.

⁹ Ryan Brown, 'NYSE Owner ICE Launches Deliverable Bitcoin Futures Contracts' (CNBC, 23 September 2019) <www.cnbc.com/2019/09/23/nyse-owner-ice-launches-deliverable-bitcoin-futures-contracts.html> accessed 11 November 2020.

cryptocurrency is a commodity,¹⁰ Eris Exchange ('ErisX') launched Ethereum-based physically settled futures contracts on 11 May 2020.¹¹

The US crypto-derivatives and perpetual swap market cap stands at \$319.11 billion.¹² As the market grows, the crypto-derivatives market's concerns are also emerging, as unregulated online exchanges, and brokerage firms offering cryptocurrency trading products are susceptible to spot market,¹³ manipulation,¹⁴ and cyber-attacks.¹⁵ In support of the crypto-derivatives market, many argued that crypto-derivatives give institutional investors an efficient and confident way to hedge risk. However, this argument could be far from reality as two major global regulators — the FCA and the ESMA — view crypto-derivatives as harmful to retail investors due to its opaque and uncertain nature. From a regulatory standpoint, the CFTC's approach in regulating

¹⁰ William Foxley, 'CFTC Chairman Confirms Ether Cryptocurrency is a Commodity' (Coindesk, 10 October 2019) <www.coindesk.com/cftc-chairman-confirms-ether-cryptocurrency-is-a-commodity> accessed 11 November 2020.

¹¹ Nikhilesh De, 'ErisX Announces Launch of First US Ether Futures Contracts' (Coindesk, 11 May 2020), <www.coindesk.com/erisx-announces-launch-of-first-us-ether-futures-contracts> accessed 11 November 2020.

¹² CoinMarket Cap, 'Cryptocurrency Derivatives and Perpetual Swap Markets' <<https://coinmarketcap.com/derivatives/>> accessed 20 February 2021. It is important to mention that on 17 February 2021, the market cap was \$134.21 billion, which means the market grew more than twice in 72 hours.

¹³ Spot market refers to the trading and prices of cryptocurrency in any exchange. Unlike traditional spot markets for commodities, cryptocurrencies have its own niche spot markets. There are over 300 cryptocurrency exchanges, and some Over the Counter markets, that constitute the cryptocurrency spot markets.

¹⁴ A few notable examples of regulators' enforcement action against market manipulation in the cryptocurrency spot market are: (1) On 20 October 2020, the CFTC announced that the US District Court for the Southern District of New York ordered a person to pay \$7.4 million for committing a multi-million-dollar bitcoin fraud (CFTC Release No. 8272-20); (2) On 18 June 18 2019, the CFTC charged Control-Finance Limited, a purported bitcoin trading and investment company, and its principal, Benjamin Reynolds, for fraudulently obtaining and misappropriating \$147 million worth of bitcoins from more than 1,000 customers (CFTC Release No. 7938-19); (3) On 23 July 2018, the Federal Court order a commodity pool operator and its principal to pay more than \$1.9 million in connection with a bitcoin and binary options fraud scheme (CFTC Release No. 7760-18); and (4) In another case, a New York Federal Court ordered a trading firm and its CEO to pay more than \$2.5 million for operating a bitcoin ponzi scheme (CFTC Release No. 7831-18). See also, Neil Gandal, JT Hamrick, Tyler Moore, and Tali Oberman, 'Price Manipulation in the Bitcoin Ecosystem' [2018] 95 *Journal of Monetary Economics* 86.

¹⁵ In a study about market manipulation behaviour in the cryptocurrency exchanges, the evidence showed that the biggest cryptocurrency exchange, Mt. Gox, was engaged in bitcoin price manipulation before it was hacked in 2013, that led the exchange to file for bankruptcy in 2014. A subsequent data leak revealed that a significant number of trades took place at rates that were far higher or far lower than the reference price. The findings also demonstrated that these abnormal transactions took place between two accounts (presumably belonging to Mt. Gox itself), which artificially inflated the daily bitcoin trade volume to manipulate the price. See Weili Chen and others, 'Market Manipulation of Bitcoin: Evidence from Mining the Mt. Gox Transaction Network' <<https://arxiv.org/abs/1902.01941>> accessed 23 February 2021.

crypto-derivatives through self-certification (like traditional derivatives products) inadequately encapsulates the cryptocurrency spot market's inherent risks of opacity, price volatility, and exposure to market manipulation.¹⁶ Such inadequacy is embedded in the CFTC's two contrasting positions. In a traditional commodity derivatives market, the CFTC has the power and capacity to both oversee the commodity spot markets and, therefore, to take enforcement actions against any abusive and manipulative behaviour that is detrimental to the investors' interests.¹⁷ However, concerning crypto-derivatives, the CFTC's oversight mechanism over the cryptocurrency spot market is debatable as the CFTC has, on repeated occasions, appeared to have conflicting opinions regarding such power. Furthermore, market participants in the spot market operate with the assumption that the spot market is beyond the CFTC's regulatory perimeter. Hence, in the absence of any regulatory clarity and with the CFTC's questionable oversight mechanism, the spot market could be a means to incentivise a bad actor to jeopardise crypto-derivatives markets' integrity and thereby undermine the retail investors' confidence.

In addition, investor protection is a grey area in the US cryptocurrency regulatory regime. As an example, although an Initial Coin Offering ('ICO') may be a security,¹⁸ it is uncertain whether all investments are protected under the Security Investment Protection Act ('SIPA') given that the SEC has also determined that not all digital tokens are securities as depending on the degree of decentralization of platform the offering takes place, a coin or token may fall outside the definition of a security.¹⁹ Similarly, investor protection in the crypto-derivatives market also remains vague as the effectiveness of the CFTC's regulatory and oversight mechanisms in preventing manipulation in the cryptocurrency spot market is questionable. Most investors, especially retail investors, lack an understanding of the complexity of cryptocurrency pricing and thus tend to treat cryptocurrency

¹⁶ For a detailed discussion regarding the impact of self-certification on bitcoin futures, see Lee Reiners, 'Bitcoin Futures: Self-certification to System Risk' [2019] 23 North Carolina Bank Institute 61.

¹⁷ Enacted after the financial crisis of 2007, the Dodd-Frank Act authorises the CFTC to bring the OTC under a broader regulatory purview, and thereby establish a direct visibility into the commodity spot market.

¹⁸ Securities and Exchange Commission, 'Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO' (2017) Release No. 81207 <www.sec.gov/litigation/investreport/34-81207.pdf> accessed 11 March 2021.

¹⁹ *ibid.* The SEC is of the view that "[w]hether or not a particular transaction involves the offer and sale of a security—regardless of the terminology used—will depend on the facts and circumstance, including the economic realities of the transaction" (n 18) 17–18. See also, William Hinman, 'Digital Asset Transactions: when Howey Met Gary (Plastic)' (US Securities and Exchange Commission, 14 June 2018) <www.sec.gov/news/speech/speech-hinman-061418> accessed 23 November 2020.

trading like gambling.²⁰ Furthermore, the complex pricing combined with extreme price volatility gives main-street investors an incentive to speculate the cryptocurrency price.²¹ Finally, the cryptocurrency market size incentivises the institutional money to flow into the new cryptocurrency-based economy, and therefore, calls for regulators' vigilance.²²

Against this background, this paper puts forth a comparative analysis of the US regulatory responses to crypto-derivatives with specific references to the UK's and the EU's approaches and motives towards crypto-derivatives regulations in their respective regions. It discusses that the UK and the EU regulators primarily focus on protecting retail investors from monetary losses arising from investment in crypto-derivatives products. In contrast, the US regulatory efforts are limited to interpreting cryptocurrency in light of the existing legal and regulatory framework. In the absence of CFTC's oversight over the cryptocurrency spot market, regulating cryptocurrency-related products under the traditional laws undermines cryptocurrency's novel risks of price volatility and susceptibility to spot market manipulation. By comparing the US crypto-derivatives regulation with that of the UK's and the EU's, this paper does not necessarily suggest that the US should follow either of these jurisdictions and issue an outright ban — permanent or temporary — on crypto-derivatives. What the paper emphasises on is that the US incorporates a robust crypto-derivatives regulation that captures this novel product's complex risks and uncertainties, and tailors the regulation to protect the 'Main Street' investors' interest. It nevertheless explores the possibility of imposing an outright ban on crypto-derivatives like the UK and concludes that such a ban on the crypto-derivatives market is likely to jeopardise financial innovation growth

²⁰ In a market survey conducted in the UK, the majority's perception regarding cryptocurrency is, it is akin to betting. A study showed that cryptocurrency trading is linked with problematic gambling. See Yessi Bello Perez, 'Problem Gamblers More Likely to Obsessively Trade Cryptocurrency, Research Finds' (The Next Web.com, 11 March 2019) <<https://thenextweb.com/cryptocurrency/2019/03/11/problem-gamblers-more-likely-to-obsessively-trade-cryptocurrency-research-finds/>> accessed 11 November 2020.

²¹ The cryptocurrency hedge-funds are betting on bitcoin's price. See Vincent Mislos, 'Bitcoin Price will Hit \$20,000 This Year because of "Liquidity Pump", Says Novogratz' (International Business Times, 30 July 2020) <www.ibtimes.com/bitcoin-price-will-hit-20000-year-because-liquidity-pump-says-novogratz-3019421> accessed 23 November 2020.

²² In the age of digital communications system and cryptocurrency-based financial system, the states have to reimagine their roles in protecting financial stability and hence, redesign the financial regulatory structure. For an academic discussion on regulation in the context of an emerging *lex cryptographica financiera*, see Jason Grant Allen and Rosa María Lastra, 'Border Problems: Mapping the Third Border' [2020] 83 *Modern Law Review* 505.

in the US.²³ Furthermore, some cryptocurrency trading platforms are already complying with the existing laws and regulations, and an outright ban will set them back. Therefore, to protect market integrity and safeguard retail investors' interest, it is paramount that the cryptocurrency spot market be regulated.

The proposition this paper puts forward is that without an effective and robust crypto-regulation with a certain degree of centralization, the market manipulation in the spot markets will continue. This eventually hurts the crypto-derivatives market, and hence, requires a parallel discussion. Furthermore, amidst the COVID-19 pandemic, digital finance, including cryptocurrency, has been witnessing accelerated growth.²⁴ Big corporations, such as Tesla, BNY Mellon and Mastercard are reported to have invested in cryptocurrency.²⁵ Facebook is testing the launch of Diem (formerly known as 'Libra') — a global stablecoin²⁶ that is designed to be pegged to US dollar.²⁷ Such expansion of digital finance and the use of cryptocurrencies among big corporations compelled regulators worldwide

²³ In November 2019, the CFTC Chairman, Health P. Tarbert, expressed his intention to make the US a leading nation in the field of blockchain and digital assets. So, it is highly unlikely that the US regulators will take any decision of putting an outright ban on the crypto-derivatives. See Miranda Wood, 'CFTC Chairman Wants to Lead in Blockchain' (Ledger Insight, 21 November 2019) <<https://www.ledgerinsights.com/cftc-chairman-us-blockchain/>> accessed 11 May 2021.

²⁴ For reference, see The World Bank, 'Fintech Market Reports Rapid Growth During COVID-19 Pandemic' (The World Bank, 3 December 2020) <www.worldbank.org/en/news/press-release/2020/12/03/fintech-market-reports-rapid-growth-during-covid-19-pandemic> accessed 21 February 2021. See also Chris Versace, Lenore Elle Hawkins and Mark Abssy, 'The Rising Tide of Digital Currencies' (NASDAQ, 19 February 2021) <www.nasdaq.com/articles/the-rising-tide-of-digital-currencies-2021-02-19> accessed 21 February 2021.

²⁵ BBC, 'Elon Musk's Tesla Buys \$1.5bn of Bitcoin Causing Currency to Spike' (BBC, 8 February 2021) <www.bbc.com/news/business-55939972> accessed 21 February 2021. See also, Penny Crossman "'Digital Assets are Here to Stay": BNY Mellon Embraces Crypto' (American Banker, 23 February 2021) <www.americanbanker.com/news/digital-assets-are-here-to-stay-bny-mellon-embraces-crypto> accessed 24 February 2021; Jenna Delpoit, 'Mastercard to Support Cryptocurrency Transactions on its Network' (The CNBC, 11 February 2021) <www.itnewsafrika.com/2021/02/mastercard-to-support-cryptocurrency-transactions-on-its-network/> accessed 24 February 2021.

²⁶ Stable coins are digital currencies pegged to fiat currencies or non-volatile assets or to fixed amounts of traditional monetary instruments. Stable coins came into cryptocurrency markets to resolve the problem the problem of cryptocurrencies' market volatility. For reference, see Aleksander Berensten and Fabian Schär, 'Stablecoins: The Quest for a Low-Volatility Cryptocurrency' in Antonio Fatas (ed.), *The Economics of Fintech and Digital Currencies* (CEPR Press 2019) 65–74.

²⁷ For an academic discussion on Libra and its impact on payment and monetary system landscape, see Dirk A. Zetzsche, Ross P. Buckley and Douglas W. Arner, 'Regulating LIBRA: The Transformative Potential of Facebook's Cryptocurrency and Possible Regulatory Responses' (forthcoming) *Oxford Journal of Legal Studies* <https://papers.ssrn.com/sol3/Papers.cfm?abstract_id=3414401> accessed 21 February 2021.

to reimagine the legislative actions required in addressing issues concerning cryptocurrency and stable coins.

The UK and the EU have moved towards implementing a coherent, robust, and uniform regulatory structure for the cryptocurrency industry and market participants that provides stringent protection measures to retail investors and consumers while supporting financial innovation and stability. The paper proposes that the US Congress enact a centralised, comprehensive cryptocurrency regulation ('crypto-regulation'), recognising the novelty of the cryptocurrencies' market risks, and introducing effective regulatory treatments, to curb market manipulation in the cryptocurrency spot market *vis-à-vis* crypto-derivatives market. It is paramount that such crypto-regulation is not fragmented,²⁸ but rather centralised, conferring specific jurisdiction relating to cryptocurrency and cryptocurrency-related financial products on a single US regulatory body. To this end, this paper envisions a centralised US crypto-regulation that would include: (i) centralization of cryptocurrency trading platforms; (ii) a mandatory registration requirement for all cryptocurrency exchanges and; (iii) a single federal cryptocurrency agency having exclusive jurisdiction over cryptocurrencies and oversight authority on the cryptocurrency spot market.

II. REGULATORY FRAMEWORK OF CRYPTO-DERIVATIVES IN THE EU AND THE UK

Unlike the US, regulators worldwide are sceptical about crypto-derivatives — mainly because of their extremely volatile, speculative, and high-leverage nature.²⁹ The complexity of crypto-derivative' products and investors' lack of understanding regarding the risks associated with come with a high likelihood of losing money.³⁰ Therefore, among other major regulators, the EU and the UK have

²⁸ In the US, the major regulators concerning financial products are the SEC (for securities and security-based derivatives) and the CFTC (for commodity and financial derivatives). Under the existing legal framework, the SEC regulates the digital tokens and ICOs which they determine as securities, whereas the CFTC regulates derivatives products where cryptocurrency is used as a reference asset. The proposed crypto-regulation will obliterate this division between the SEC's and the CFTC's mandate over cryptocurrency and establish a centralised cryptocurrency regulatory body.

²⁹ For instance, in May 2019, Japan asked bitFlyer to reduce leverage for its perpetual swap product. See Emmanuel Goh, 'Crypto Derivatives: A Corner of the Market or the Market Itself?' (CoinDesk, 16 November 2019) <www.coindesk.com/crypto-derivatives-a-corner-of-the-market-or-the-market-itself> accessed 11 November 2020.

³⁰ *ibid.*

evaluated their regulations of crypto-derivatives on the ground that investment in these products hurt retail investors.

A. THE EU

In the EU, the derivatives markets are regulated by two central EU regulations, namely, the European Market Infrastructure Regulation ('EMIR')³¹ and the Markets in Financial Instruments Directive ('MiFID II'),³² alongside the Markets in Financial Instruments Regulation ('MiFIR').³³ Under these regulations, the ESMA is the independent authority for market supervisory and law enforcement of the EU derivatives markets.³⁴ The ESMA is authorised to clear all eligible derivatives contracts and is responsible for trade repositories' surveillance across the EU.³⁵ Besides derivatives market, the ESMA is also responsible for promoting

³¹ Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories [2012] OJ L201/1. In the wake of the US financial crisis 2007, the EU OTC derivatives markets also went through transformation. As a result, in 2012, the European Commission promulgated the EMIR to include and regulate broad range of OTC derivatives across various asset classes, central counterparties and trade repositories.

³² Directive 2014/65/EU on markets in financial instruments [2014] OJ L173/349 ("MiFID II"). Previously, in 2004, the European Commission adopted the Markets in Financial Instruments Directive ("MiFID") which was in force between 2007 and 2018. In 2014, the Commission revised the MiFID framework and adopted new rules composed of a directive—MiFID II and a regulation, MiFIR. Under the MiFID, the investors are categorised in three separate groups: professional clients, retail clients, and eligible counterparties. The aim of such division among investors is to reflect the necessity of different level of protection an investor may need. According to the classification, the retail investors needed the highest level of protection and comprehensive information that are required for them to understand the risks associated with a specific investment product and transaction. For reference on MiFID II's impact on investor protection, see Christos Gortosos, 'Stricto Sensu Investor Protection under MiFID II: A Systemic Overview of Articles 24–30' (1st ed., Cambridge Scholars Publishing 2018).

³³ Regulation (EU) No 600/2014 on markets in financial instruments [2014] OJ L173/84.

³⁴ Philipp Maume and Mathias Fromberger, 'Regulation of Initial Coin Offerings: Reconciling US and EU Securities Laws' [2019] 19 *Chicago Journal of International Law* 548.

³⁵ European Commission, 'Derivatives / EMIR'(European Commission) <https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-markets/post-trade-services/derivatives-emir_en> accessed 23 February 2021.

“supervisory convergence and the consistent application of market rules”³⁶ within the EU.

The ESMA first stepped into the cryptocurrency world by expressing its view on cryptocurrency token offering, by way of ICOs, in November 2017.³⁷ Although the ESMA’s statement regarding token sales was vague as it largely leaves the burden on the firms and investors for their activities,³⁸ the ESMA has quite a strong position in regulating the EU’s crypto-derivatives market. In a Call for Evidence Report³⁹ issued in January 2018,⁴⁰ the ESMA announced that crypto-derivatives, which are in the form of CFDs⁴¹ and BOs,⁴² should be subject

³⁶ *ibid.*

³⁷ European Securities and Markets Authority, ‘The ESMA alerts firms involved in Initial Coin Offerings (ICOs) to the need to meet relevant regulatory Requirements’ (13 November 2017) ESMA50-157-828 (“first statement”) <<http://perma.cc/A4BP-9QS4>> accessed 11 November 2020. This statement was published alongside with the ESMA’s statement made towards the investors warning the risks involved with the ICOs. See European Securities and Markets Authority, ‘ESMA alerts investors to the high risks of Initial Coin Offerings (ICOs)’ (13 November 2017) ESMA50-157-829 <www.esma.europa.eu/sites/default/files/library/esma50-157-829_ico_statement_investors.pdf> (“second statement”) accessed 20 February 2021.

³⁸ *Ibid.* In the first statement, the ESMA delivers a blanket statement stating, “Firms involved in ICOs must give careful consideration as to whether their activities constitute regulated activities”, without elaborating or giving precise guidelines as to what may be construed as “regulated activities”. The second statement further states that, “[d]epending on how they are structured, ICOs may fall outside of the scope of the existing rules and hence outside of the regulated space. However, where the coins or tokens qualify as financial instruments it is likely that the firms involved in ICOs conducted regulated investment activities” and hence, should be subject to the EU securities laws and regulations. Without delineating specific conditions or requirements, the ESMA appears to leave the burden of compliance on the firms offering digital tokens and ICOs.

³⁹ European Securities and Markets Authority, ‘Call for Evidence: Potential Intervention Measures on Contracts for Differences and Binary Options to Retain Clients’ (18 January 2018) ESMA35-43-904 <www.esma.europa.eu/sites/default/files/library/esma35-43-904_call_for_evidence_-_potential_product_intervention_measures_on_cfds_and_bos_to_retail_clients.pdf> accessed 11 November 2020.

⁴⁰ European Securities and Markets Authority, ‘ESMA Consults on Potential CFDs and Binary Options Measures to Protect Retail Investors’ (European Securities and Markets Authority, 18 January 2018) <www.esma.europa.eu/press-news/esma-news/esma-consults-potential-cfd-and-binary-options-measures-protect-retail> accessed 11 November 2019.

⁴¹ A CFD is defined as “a derivative other than an option, future, swap, or forward rate agreement, the purpose of which is to give the holder a long or short exposure to fluctuations in the price, level or value of an underlying, irrespective of whether it is traded on a trading venue, and that must be settled in cash at the option of one of the parties other than by reason of default or other terminational event”. See (n 40) 4.

⁴² A BO is defined as “a derivative that meets the following conditions: (a) it must be settled in cash or may be settled in cash at the option of one of the parties other than by reason of default or other terminational event; (b) it only provides for payment at its close-out or expiry; and (c) its payment is limited to: (i) a predetermined fixed amount if the underlying of the derivative meets one or more predetermined conditions; and (ii) zero or another predetermined fixed amount if the underlying of the derivative does not meet one of more predetermined conditions”. See European Securities and Markets Authority (n 40) 4.

to strict legal scrutiny alleging that these derivatives products are speculative and volatile, exposing investors to potentially significant monetary loss.⁴³ The ESMA further called for responses from market participants regarding possible measures to regulate crypto-derivatives.⁴⁴ After considering all responses and concerns, the ESMA, according to Art. 40 of MiFIR,⁴⁵ adopted restrictive product intervention measures in relation to CFDs and BOs.⁴⁶ The intervention measures include: (1) a prohibition on the marketing, distribution, or sale of BOs and (2) a restriction on the marketing, distribution, or sale of CFDs to retail investors.⁴⁷ In adopting these restrictive measures, the ESMA noted that:

“[...] CFDs are complex products. The pricing, trading terms, and settlement of such products is not standardized, impairing retail investors’ ability to understand the terms of product. In addition, CFD providers often require investors to acknowledge that the reference prices used to determine the value of a CFD may differ from the price available in the respective market where the underlying is traded, making it difficult for retail investors to check the accuracy of the prices received from the CFD provider”.⁴⁸

It also noted that cryptocurrency is an immature asset class that poses “separate and significant concerns”.⁴⁹ Therefore, retail investors hardly understand the risk of speculation on crypto-derivatives products. The ESMA from time to

⁴³ European Securities and Markets Authority, ‘Additional Information on the Agreed Product Intervention Measure Relating to Contract for Differences and Binary Options’ (European Securities and Markets Authority, 27 March 2018) <www.esma.europa.eu/sites/default/files/library/esma35-43-1000_additional_information_on_the_agreed_product_intervention_measures_relying_to_contracts_for_differences_and_binary_options.pdf> accessed 11 November 2020.

⁴⁴ *ibid.*

⁴⁵ Article 40 of MiFIR (n 33). It permits the ESMA to temporarily prohibit, restrict marketing, distribution, or sale of certain financial instruments on grounds of investor protection and market integrity.

⁴⁶ European Securities and Markets Authority (n 4).

⁴⁷ *ibid.* The restrictions on BOs came in effect from 1 July 2018, whereas the restrictions on CFDs came in effect from 1 August 2018 (the restrictions on CFDs are renewable).

⁴⁸ (n 44).

⁴⁹ *ibid.* 5. The ESMA also states: “[...] CFDs with cryptocurrencies as an underlying raise separate and significant concerns as CFDs on other underlyings. Cryptocurrencies are a relatively immature asset class that pose major risks for investors. ESMA and NCAs have significant concerns about the integrity of the price formation process in underlying cryptocurrency markets, which makes it inherently difficult for retail clients to value these products...”.

time extended its restriction on CFDs and BOs.⁵⁰ In renewal notices, the ESMA reiterated its concern over investor protection related to the sale of CFDs and BOs to retail clients.⁵¹

B. THE UK

The FCA, that regulates the UK financial services industry, has imposed strict regulatory measures in the UK crypto-derivatives market.⁵² Before finalizing the outright ban on crypto-derivatives,⁵³ the FCA first proposed a temporary ban on crypto-derivatives and ETNs in 2019, on the ground that crypto-derivatives products were ill-suited to retail customers who are unable to assess the value and risks of derivatives or ETNs reliably.⁵⁴

To assess the trend of investors' increasing interest and its correlation with cryptocurrencies' price instability, the FCA evaluated the price of bitcoin and Ethereum, and Google trends data between 2018 and 2019. By doing so, it was demonstrated that retail investors' interests are strongly "correlated to the increasing price and trading volumes of bitcoin"⁵⁵ as well as ethereum. The FCA

⁵⁰ See European Securities and Markets Authority, 'ESMA to Renew Restriction on CFD for a Further Three Months' (European Securities and Markets Authority, 28 September 2018) <www.esma.europa.eu/sites/default/files/library/esma71-99-1041_-_esma_to_renew_restriction_on_cfds_for_a_further_three_months.pdf> accessed 11 November 2020. European Securities and Markets Authority, 'ESMA to Renew Restrictions on CFDs for a Further Three Months from 1 May 2019' (European Securities and Markets Authority, 27 March 2019) <<https://www.esma.europa.eu/press-news/esma-news/esma-renew-restrictions-cfds-further-three-months-1-may-2019>> accessed 11 May 2021. See also European Securities and Market Authority, 'ESMA Renews Binary Options Prohibition for a Further Three Months from 2 January 2019' (European Securities and Markets Authority, 09 November 2018) <https://www.esma.europa.eu/sites/default/files/library/esma71-99-1057_-_esma_renews_binary_options_prohibition_for_a_further_three_months_from_2_january_2019.pdf> accessed 11 May 2021. See also European Securities and Markets Authority, 'ESMA Renews Binary Options Prohibition for a Further Three Months from 2 April 2019' (European Securities and Markets Authority, 18 February 2019) <<https://www.esma.europa.eu/press-news/esma-news/esma-renews-binary-options-prohibition-further-three-months-2-april-2019>> accessed 11 May 2021.

⁵¹ *ibid.*

⁵² In April 2018, the FCA released additional guidance regarding derivative contracts on cryptocurrencies, making it clear that derivatives on crypto tokens are transferable securities and that providing financial services in this regard require formal authorization. See Financial Conduct Authority, 'FCA proposes ban on sale of crypto-derivatives to retail consumers' (Financial Conduct Authority, 3 July 2019) <www.fca.org.uk/news/press-releases/fca-proposes-ban-sale-crypto-derivatives-retail-consumers> accessed 11 November 2020.

⁵³ Financial Conduct Authority (n 2).

⁵⁴ Financial Conduct Authority, 'Prohibiting the Sale to Retail Client of Investment Products that Reference Cryptoassets' (July 2019) CP19/22 <www.fca.org.uk/publication/consultation/cp19-22.pdf> accessed 24 February 2021.

⁵⁵ Financial Conduct Authority (n 2) 9, 11.

is of the view that the data further demonstrated investors' speculative behaviour over a price-boom in cryptocurrency, rather than their ability to reliably and consistently assess the intrinsic value of cryptocurrency, or the derivatives that use cryptocurrency as a reference asset.⁵⁶

Therefore, in framing the grounds for banning crypto-derivatives, the FCA's central focus was protecting retail investors from monetary losses.⁵⁷ The regulators were concerned that retail investors could be hurt because of: (i) the opacity and complexity of cryptocurrency as reference assets;⁵⁸ (ii) retail investors' lack of understanding and consequent inability to make an informed investment decision on crypto-derivatives⁵⁹ and; (iii) the cryptocurrency as a reference asset is highly speculative,⁶⁰ volatile,⁶¹ and susceptible to sudden price drops and abrupt price dislocation.⁶² Allowing crypto-derivatives to grow in the retail market might create a perception among retail investors that these products are suitable and appropriate investment products. In considering the proportionality of a ban on crypto-derivatives, the FCA invoked Art. 42 of MiFIR⁶³ and Art. 21(2) of the Delegated Regulation of MiFIR,⁶⁴ and determined that a permanent ban on crypto-derivatives is an appropriate measure to secure the interest of retail investors. During the interim phase, the FCA considered other less interventionist

⁵⁶ *ibid* 8.

⁵⁷ Financial Conduct Authority (n 54).

⁵⁸ *ibid* 14.

⁵⁹ *ibid*.

⁶⁰ Shay-Keen Tan, Jennifer So-Kuen Chan and Kok-Haur Ng, 'On the Speculative Nature of Cryptocurrencies: A Study of Garman and Klass Volatility Measure' [2020] 32 *Finance Research Letters*.

⁶¹ Bitcoin is 26 times as volatile than S&P 500. See C. Baek and M. Elbeck, 'Bitcoin as an investment or speculative: A first look' 22 [2015] 1 *Applied Economics Letter* 34.

⁶² Financial Conduct Authority (n 2) 9, citing CP19/22 (n 57).

⁶³ Article 42 of the MiFIR (n 33) provides a competent authority with the power to prohibit or restrict: "(a) the marketing, distribution or sale of certain financial instruments or structured deposits or financial instruments or structured deposits with certain specified features; or (b) a type of financial activity or practice."

⁶⁴ Commission Delegated Regulation (EU) 2017/567 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to definitions, transparency, portfolio compression and supervisory measures on product intervention and positions [2016] OJ L87/90. Article 21(2) lays down the factors and criteria to be assessed by a competent authority to "determine the existence of a significant investor protection concern or a threat to the orderly functioning and integrity of financial markets or commodity markets [...]".

approaches such as “do nothing”⁶⁵ or “provide further consumer warnings”.⁶⁶ Nevertheless, it concluded that “any remedy other than a ban on the sale to retail clients would fall short of adequately reducing the harms to consumers and risks identified”.⁶⁷

The FCA’s efforts to regulate crypto-derivatives were not unopposed.⁶⁸ The FCA’s position was challenged on the ground that “an outright ban would affect its members who are already in compliance with a slew of regulatory standards”.⁶⁹ However, the FCA continues to maintain its position on the matter to protect retail investors, stating, “a ban on crypto-derivatives could lead to a \$96 million haircut in harm done to retail traders per year”.⁷⁰

III. REGULATORY FRAMEWORK OF CRYPTO-DERIVATIVES IN THE US

In the US, the Commodity Exchange Act (‘CEA’) and the Commodity Futures Trading Commission Rules (‘CFTC Rules’) regulates the trading of derivatives contracts (including futures, options, and swaps), and the CFTC supervises the commodity and derivatives markets. The CEA, that is the primary statute governing the laws and regulations of the US derivatives market, defines “commodity” to include agricultural products, “all other goods and articles”, and “all services, rights, and interests”, in which “contracts for future delivery are presently or in the future dealt in”.⁷¹ In 2015, the CFTC assumed that certain virtual currencies, such as bitcoin and litecoin, are commodities, and should be regulated

⁶⁵ Financial Conduct Authority (n 54) 24. The FCA is of the opinion that a “do nothing” approach does not address the fundamental product flaws or address the significant harm to consumers posed by these products. Existing disclosure obligations and appropriateness tests are unlikely to be effective in conveying the risks to retail clients. Continuing to allow the offer of these products by firms with FCA authorization may also give retail investors a false sense of security by contrast to the underregulated nature of the underlying.

⁶⁶ Financial Conduct Authority, ‘Consumer Warning About the Risks of Investing in Cryptocurrency CFDs’ (Financial Conduct Authority, 3 July 2019) <www.fca.org.uk/news/news-stories/consumer-warning-about-risks-investing-cryptocurrency-cfds> accessed 11 November 2020.

⁶⁷ Financial Conduct Authority (n 54) 24.

⁶⁸ Steve Kaaru, ‘CoinShares Wants Users to Take Action against UK Crypto Assets Ban’ (Coingeek, 29 September 2019) <<https://coingeek.com/coinshares-wants-users-to-take-action-against-uk-crypto-assets-ban/>> accessed 11 November 2020.

⁶⁹ Osato Avan Nomayo, ‘Crypto Derivatives Ban: The UK Govt Won’t Interfere with FCA’ (Blockonomi, 29 October 2019), <<https://blockonomi.com/crypto-derivatives-ban-uk-govt-wont-interfere-with-fca/>> accessed 11 November 2020.

⁷⁰ *ibid.*

⁷¹ Section 1a (9), Commodity Exchange Act.

by the CFTC.⁷² Besides, multiple federal courts also held that virtual currencies are commodities as per the CEA.⁷³ Hence, crypto-derivatives — such as bitcoin-futures, swaps, and options — fall within the CFTC’s regulatory perimeter.⁷⁴

In December 2017, the CFTC permitted futures exchanges to apply the self-certification process for bitcoin-futures and binary options under §7(a)(2) of the CEA.⁷⁵ However, despite the CFTC’s attempt to normalise crypto-derivatives in the existing legal and regulatory framework, these derivatives products pose numerous risks to retail consumers. Its lack of direct oversight on the cryptocurrency spot market poses a significant challenge to regulate market manipulation, that has adverse impacts on crypto-derivatives investors. In July 2018, Daniel Grofine, then Director of the CFTC’s fintech initiative (‘LabCFTC’), shared similar concerns on the issue of cryptocurrencies and digital assets during his testimony before the US House Committee on Agriculture.⁷⁶ He warned that while many things could be commodities, the CFTC’s direct oversight on the commodity spot market is essential to bring those commodity-built futures, swaps, and options within its regulatory perimeter.⁷⁷ The current regulatory approach should focus on bringing clarity and certainty to the market, and any “hasty regulatory pronouncements are likely to [...] have unintended consequences, or fail to capture important nuance regarding the structure of new products and models”.⁷⁸

Currently, there are several crypto-derivatives products available to US retail customers.⁷⁹ The ICE launched its first bitcoin-settled futures, the Bakkt futures,

⁷² CFTC v Coinflip Inc (n 7). See also, Matt Clinch, ‘Bitcoin Officially Becomes a Commodity’ (CNBC, 15 September 2018) <www.cnbc.com/2015/09/18/bitcoin-now-classed-as-a-commodity-in-the-us.html> accessed 11 November 2020.

⁷³ CFTC v McDonnell [2018] 287 F Supp 3d 213 (EDNY 2018). See also CFTC v. My Big Coin Pay, Inc. [2018] 334 F Supp 3d 492 (D Mass 2018).

⁷⁴ See Houman B. Shadab, ‘Regulating Bitcoin and Blockchain Derivative’ (2020) NYLS Legal Studies Research Paper <www.cftc.gov/sites/default/files/idc/groups/public/@aboutcftc/documents/file/gmac_100914_bitcoin.pdf> accessed 11 November 2020 (discussing whether bitcoins fall within the definition of “commodity” under the Commodity Exchange Act (CEA), and therefore, derivatives contracts like futures, swaps, options that reference bitcoins are subject to regulation by the CFTC).

⁷⁵ Commodity Futures Trading Commission, ‘A CFTC Primer on Virtual Currencies’ (Commodity Futures Trading Commission, 17 October 2017) <www.cftc.gov/sites/default/files/idc/groups/public/documents/file/labfcftc_primercryptocurrencies100417.pdf> accessed 12 November 2020.

⁷⁶ Commodity Futures Trading Commission, ‘Written Testimony of Daniel S. Grofine before the US House Committee on Agriculture (Commodity Futures Trading Commission, 18 July 2018) <www.cftc.gov/PressRoom/SpeechesTestimony/opagorfine1> accessed 24 February 2021.

⁷⁷ *ibid.*

⁷⁸ *ibid.*

⁷⁹ For reference, see CoinMarketCap <<https://cryptoderivatives.market/>> accessed 24 February 2021.

in September 2019.⁸⁰ Three months later, the ICE introduced its monthly settled bitcoin options.⁸¹ In January 2020, the CME started trading options on bitcoin futures.⁸² ErisX launched ether-based physically settled futures contracts in May 2020.⁸³ In addition to bitcoin and ether derivatives products, the cryptocurrency industry will soon attempt to issue other cryptocurrency-based derivatives products. However, there are at least three regulatory issues with the CFTC's approach to approving these new crypto-derivatives.⁸⁴ First, the CFTC's traditional approach to regulating crypto-derivatives, primarily through the 'self-certification' process, is risky as the existing legal framework of 'self-certification' is not adequate to prevent price manipulation in the cryptocurrency spot market. Second, the CFTC's view on market manipulation in the cryptocurrency spot market contradicts the SEC's view on the same issue. Third, the CFTC is surprisingly numb to the suggestion that crypto-derivatives could jeopardise retail investors' interest, and such an approach deviates from the two major global regulators, that is the ESMA and the FCA.

A. THE CFTC'S SELF-CERTIFICATION PROCESS AND THE HEIGHTENED REVIEW FOR CRYPTO-DERIVATIVES UNDERMINE CRYPTOCURRENCIES' MARKET RISKS

The 'self-certification' process for derivatives contracts was introduced in 2000 by enacting the Commodity Futures Modernization Act.⁸⁵ Under this law, the CFTC permits the listing of a new futures contract if: (1) the exchange submits a written self-certification to the CFTC certifying that the contract complies with the CEA and CFTC regulations or (2) the exchange has voluntarily submitted the contract for CFTC approval.⁸⁶ Therefore, in the self-certification process, the exchanges themselves can verify that a new contract complies with the CEA's or the CFTC's requirements.⁸⁷ The designated contract markets ('DCMs') may

⁸⁰ Brown (n 9).

⁸¹ Adam White, 'Expanding the Bakkt Bitcoin Product Complex: Bitcoin Options and Cash Settled Futures Now Available' (Bakkt Blog, 9 December 2019) <<https://medium.com/bakkt-blog/expanding-the-bakkt-bitcoin-product-complex-68000faea6b3>> accessed 11 November 2020.

⁸² CME Group <www.cmegroup.com/trading/bitcoin-futures.html> accessed 11 November 2020.

⁸³ Brown (n 9).

⁸⁴ This paper will not discuss systemic risk aspect of crypto-derivatives. This paper, however, admits that the crypto-derivatives connect regulated sectors, i.e., firms and financial institutions, with the unregulated underlying cryptocurrency markets. Therefore, any contagion created in the unregulated asset class may have a spill over impact on the regulated sector; that can give rise to systemic risk. For a discussion of crypto-derivatives' systemic risks, see Reiners (n 16).

⁸⁵ Section 7(a)(2), Commodity Exchange Act.

⁸⁶ Commodity Futures Trading Commission Regulation 40.2 (17 Code of Federal Regulations 40.2).

⁸⁷ Reiners (n 16) 71.

also voluntarily submit new contracts for approval to the Commission and list the futures contract within twenty-four hours upon the CFTC's approval of the contract.⁸⁸ The CFTC's self-certification process has, however, been questionable since its introduction.⁸⁹ Between 2000 and 2017, data⁹⁰ suggests that the self-certification process facilitated the approval and listing of many complex exchange-traded commodity derivatives.⁹¹ Such approval process often included an absence of a proper understanding of the traded products giving rise to opacity and unpredictability in the market. This potentially increased inefficiency and system failure⁹² across the financial system.

Despite criticisms of the self-certification process and its controversial role in the 2007 financial crisis, the CFTC allowed the processing of crypto-derivatives in 2014, as TeraExchange self-certified its bitcoin non-deliverable forwards.⁹³ Several US futures exchanges such as CME, CBOE, ICE, and ErisX self-certifies both cash-settled and physically-settled cryptocurrency-based (bitcoin and ether) futures contracts and binary options.⁹⁴ Although the CFTC stated that the Commission "held rigorous discussions"⁹⁵ with the exchanges for weeks before allowing them to self-certify these crypto-derivatives products, such a process spurred agitation

⁸⁸ *ibid.*

⁸⁹ For an academic discussion on the CFTC's role in approving complex financial products, see Saule T Omarova, 'Licence to Deal: Mandatory Approval of Complex Financial Products' [2010] 90 Washington University Law Review 63.

⁹⁰ Reiners (n 16) 72. The author compiled the data from a publicly available database on the CFTC's website, that clearly indicated a significant increase of the number of new exchange-traded products approved through self-certification process. It also suggested that this might have potentially contributed to the financial crisis of 2007.

⁹¹ Although the economic purpose of the CFTC's self-certification rule was to "reduce the potential threat of market manipulation or congestion", during the financial crisis of 2008, the market could not necessarily extricate themselves from the underlying cash markets and the policy goal of preventing potential harm to such markets from excessive financial speculation.

⁹² Steven L. Schwartz, 'Regulating Complexity in Financial Markets' [2010] 87 Washington University Law Review 211.

⁹³ Casey (n 6).

⁹⁴ David Felsenthal and others, 'Clifford Chance Discusses the Role of the CFTC in the Regulation of Bitcoin' (The CLS Blue Sky Blog, 16 February 2018) <<http://clsbluesky.law.columbia.edu/2018/02/16/clifford-chance-discusses-the-role-of-the-cftc-in-the-regulation-of-bitcoin/>> accessed 13 November 2020.

⁹⁵ Commodity Futures Trading Commission, 'CFTC Statement on Self-Certification of Bitcoin Products by CME, CFE, and Cantor Exchange' (Commodity Futures Trading Commission, 1 December 2017) <www.cftc.gov/PressRoom/PressReleases/pr7654-17> accessed 13 November 2020.

within the futures industry.⁹⁶ In 2017, Walk Lukken, the CEO of the Futures Industry Association (FIA), expressed the FIA's concerns:

“We remain apprehensive with the lack of transparency and regulation of the underlying reference products on which these products are based and whether exchanges have the proper oversight to ensure the reference products are not susceptible to manipulation, fraud, and operational risk”.⁹⁷

Besides, the CFTC does not oversee the cryptocurrency spot market, making it more susceptible to fraud and price manipulation.⁹⁸ To respond to the FIA's concern and provide more clarity, the CFTC came up with a stricter review for self-certified crypto-derivatives products, that is “heightened review”⁹⁹ for all bitcoin futures and crypto-derivatives products that will apply through self-certification.¹⁰⁰ However, such a review is also questionable because the “heightened review” does not provide the CFTC with an effective oversight mechanism for the cryptocurrency spot market, and therefore, cannot minimise the risks of crypto-derivatives (analysis set out below).

B. ‘HEIGHTENED REVIEW’ DOES NOT PROVIDE THE CFTC WITH THE DESIRED VISIBILITY INTO THE CRYPTOCURRENCY SPOT MARKETS

Cryptocurrency spot markets operate in an unregulated space, or with little regulatory clarity. For instance, ErisX, that offers Ethereum-based futures contract, insists that the ErisX spot market is beyond the CFTC's regulatory purview. It says that,

“[t]he CFTC does not have regulatory oversight over virtual currency products including spot market trading of virtual currencies. ErisX spot market is not licensed, approved, or

⁹⁶ Walt Lukken, ‘Open Letter to CFTC Chairman Giancarlo Regarding the Listing of Cryptocurrency Derivatives’ (The Futures Industry Association, 7 December 2017) <<https://fia.org/articles/open-letter-cftc-chairman-giancarlo-regarding-listing-cryptocurrency-derivatives>> accessed 24 November 2021.

⁹⁷ *ibid.*

⁹⁸ *ibid.*

⁹⁹ Reiners (n 16) 74. “Heightened review is a new process, without statutory basis, that the CFTC is using to review new virtual currency derivative products”.

¹⁰⁰ Commodity Futures Trading Commission, ‘CFTC Backgrounder on Oversight of and Approach to Virtual Currency Futures’ (Commodity Futures Trading Commission, 4 January 2018) <https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/backgrounder_virtualcurrency01.pdf> accessed 24 February 2021.

registered with the CFTC and transaction on the *ErisX Spot Market* are not subject to CFTC rules, regulations or regulatory oversight (emphasis added).¹⁰¹

Under the CEA, the CFTC is mandated to prevent market manipulation in the derivatives market, which gives the CFTC an authority to act against the price manipulation of any underlying commodity.¹⁰² To achieve this goal, the CFTC intends to ensure that the self-certified crypto-derivatives contracts are not “readily susceptible to manipulation”.¹⁰³ The ‘heightened review’ also allows the CFTC to implement risk-mitigation and oversight mechanisms through heightened margin requirements and information-sharing agreements between cryptocurrency exchanges.¹⁰⁴ The CFTC views that the information-sharing agreements between cryptocurrency exchanges will ensure the CFTC’s access to data, that could “facilitate the detection and pursuit of bad actors in the underlying spot market”.¹⁰⁵ However, unlike other traditional commodity spot markets, there is no existing US law providing “direct, comprehensive federal oversight of underlying bitcoin or virtual currency spot markets”.¹⁰⁶ Many of the platforms are located offshore and are not registered with the CFTC or the SEC. Therefore, the CFTC’s satisfaction that the information-sharing agreements would ensure their visibility into the cryptocurrency spot market, is debatable.¹⁰⁷

Also, in cash-settled cryptocurrency futures, the ability to manipulate depends on “how easily the reference rate that is used to price the contract can

¹⁰¹ ErisX <www.erisx.com/about/investors/> accessed 24 February 2021.

¹⁰² Sections 6(c)(1), 6(c) (3), and 9(1) Commodity Exchange Act; Commodity Futures Trading Commission, ‘Prohibition on the Employment, or Attempted Employment, of Manipulative and Deceptive Devices and Prohibition on Price Manipulation’ (Commodity Futures Trading Commission, 14 July 2011) (Final Rule 180.1) <www.federalregister.gov/documents/2011/07/14/2011-17549/prohibition-on-the-employment-or-attempted-employment-of-manipulative-and-deceptive-devices-and> accessed 13 November 2020.

¹⁰³ Section 38.200, Title 17, Code of Federal Regulations.

¹⁰⁴ Heightened review includes, among others, DCMs to enter into “direct or indirect information sharing agreements with spot market platforms to allow access to trade and trader data”. See Commodity Futures Trading Commission (n 100) 3.

¹⁰⁵ Jay Clayton and Cristopher Giancarlo, ‘Regulators are Looking at Cryptocurrency’ (The Wall Street Journal, 24 January 2018) <<https://www.wsj.com/articles/regulators-are-looking-at-cryptocurrency-1516836363>> accessed 11 May 2021.

¹⁰⁶ Felsenthal and others (n 94). See also, Jerry Brito, Houman B Shadab, and Andrea Castillo, ‘Bitcoin Financial Regulations: Securities, Derivatives, Prediction Markets, and Gambling’ [2014] 51 Columbia Science and Technology Law Review 144, 196, arguing “physically-settled transactions are generally not subject to the full scope of CFTC regulation precisely because they do not implicate the markets that the CFTC is concerned about, namely, futures and swaps markets”.

¹⁰⁷ Reiners (n 16) 75.

also be manipulated”.¹⁰⁸ Although there is no evidence of price manipulation of the CME or ICE futures until April 2021, such manipulation on cryptocurrency exchanges is rampant.¹⁰⁹ In the absence of federal oversight, crypto-exchanges are widely involved in price tampering by creating fake trade volumes (commonly known as “pump-and-dump”).¹¹⁰ In many instances, traders use social media to perform pump-and-dump schemes to inflate the virtual currencies’ prices artificially.¹¹¹ A recent study has revealed Telegram and Discord’s large-scale pump-and-dump scheme.¹¹² Such pumping-and-dumping activity can hurt investors in the crypto-derivatives markets in the long run because crypto-derivatives enable institutional investors (and also potential manipulators) to bet on the future bitcoin’s price. It is not unlikely that a group of traders would place a massive trade on a bitcoin spot market on the contract’s settlement date, thereby pushing up the price of bitcoin and earning a profit on the futures position, and in the same way, if the speculation is on a decreased price, instantly dump the trade.

Despite the apprehension, there is a regulatory vacuum in enforcing cryptocurrency pump-and-dump.¹¹³ Usually, the SEC enforces against pump-and-

¹⁰⁸ *ibid.*

¹⁰⁹ *ibid.*

¹¹⁰ Paul Vigna, ‘Most Bitcoin Trading Faked by Unregulated Exchanges: Study Finds’ (The Wall Street Journal, 22 March 2019) <www.wsj.com/articles/most-bitcoin-trading-faked-by-unregulated-exchanges-study-finds-11553259600?mod=hp_lead_pos7> accessed 13 November 2020. See also, Kate Rooney, ‘Majority of Bitcoin Trading is a Hoax’ (CNBC, 23 March 2019) <www.cnbc.com/2019/03/22/majority-of-bitcoin-trading-is-a-hoax-new-study-finds.html> accessed 13 November 2020.

¹¹¹ JT Hamerick and others, ‘An Examination of the Cryptocurrency Pump and Dump Ecosystem’ [2021] 58(4) Information Processing and Management 102506 <<https://doi.org/10.1016/j.ipm.2021.102506>> accessed 11 May 2021.

¹¹² Michael Mckee, ‘Trader Using “Pump and Dump” Schemes to Manipulate Cryptocurrency Prices’, (Finbrief, 22 August 2018) <<https://blogs.dlapiper.com/globalfinance/2018/08/22/traders-using-pump-and-dump-schemes-to-manipulate-cryptocurrency-prices/>> accessed 13 November 2020 (“[s]uch pump and dump scheme are accomplished through private chatrooms which are accessible only by invitation, and generally overseen by an anonymous moderator. The strategy is to announce a date, time, and exchange for a pump of typically illiquid cryptocurrency. As the buying frenzy pushes the prices up, the members of the pump group begin dumping, i.e., selling at the signal. Successful traders gloat about their profits”).

¹¹³ A report published by the New York Office of the Attorney General admitted that the regulators lack control to evade pump and dump activity. See New York State Office of the Attorney General, ‘Virtual Markets Integrity Initiative Report’ (New York State Office of the Attorney General, September 2018) <https://ag.ny.gov/sites/default/files/vmii_report.pdf> accessed 23 November 2020.

dump schemes since it is a type of securities fraud.¹¹⁴ Nevertheless, in the existing federal securities law, the SEC is not likely to intervene as it has determined that bitcoin is not a security.¹¹⁵ Hence, the question remains, will the CFTC oversee such illegal activities in the crypto-derivatives commodity spot market under its mandate of preventing fraud and market manipulation? In 2018, the CFTC first issued an advisory note to warn the consumers to beware and avoid pump-and-dump schemes that occurred in cryptocurrency trading.¹¹⁶ Nonetheless, the CFTC's overall approach does not adequately address the fraud and manipulation concerns in the cryptocurrency spot market.¹¹⁷ On the other hand, in the absence of any oversight mechanisms, cryptocurrency spot markets operate in an unregulated space, that is likely to incentivise manipulative behaviour in the crypto-derivatives market.

C. CRYPTO-DERIVATIVES SERVE ONLY THE INTEREST OF CRYPTOCURRENCY EXCHANGES

Many scholars argued that crypto-derivatives would serve only the interest of the cryptocurrency exchanges because crypto-derivatives allow these exchanges to hedge their risk exposures that arise from the volatility in the cryptocurrency spot market.¹¹⁸ To illustrate, if someone purchases a piece of furniture on Overstock and pays in bitcoin via Coinbase, the payment is denominated in Dollars and transferred from Coinbase to Overstock's bank account. This means "it is Coinbase that is accepting the exchange volatility risk".¹¹⁹ Even though Coinbase charges Overstock a certain percentage as a payment processing fee, such a fee is not sufficient to "cover the exchange rate risk that Coinbase could

¹¹⁴ Section 10(b) read with Section 17(a) (2) and Rule 10b-5, Securities Exchange Act 1934. For a brief analysis, see Wendy Gerwick Couture, 'Prosecuting Securities Fraud under Section 17 (a) (2)' (The CLS Blue Sky Blog, 20 March 2019) <<https://clsbluesky.law.columbia.edu/2019/03/20/prosecuting-securities-fraud-under-section-17a2/>> accessed 11 May 2021.

¹¹⁵ Eugene Kim, 'The SEC Warns Investors About Potential ICO Scams and 'Pump and Dump' Schemes' (CNBC, 28 August 2017) <www.cnbc.com/2017/08/28/sec-warns-on-ico-scams-pump-and-dump-schemes.html> accessed 13 November 2020.

¹¹⁶ Commodity Futures Trading Commission, 'CFTC Warns Customers to Avoid Pump-and-Dump Schemes' (Commodity Futures Trading Commission, 15 February 2018) <www.cftc.gov/Press-Room/PressReleases/pr7697-18> accessed 22 November 2020.

¹¹⁷ In the past, the CFTC publicly announced that it is not the CFTC's duty to oversee a spot market on a daily basis. See Reiner (n 16) 85.

¹¹⁸ Brito, Shadab, and Castillo (n 107).

¹¹⁹ Cade Metz, 'The Grand Experiment Goes Live: Overstock.com is Now Accepting Bitcoin' (The Wired, 4 January 2014) <www.wired.com/2014/01/overstock-bitcoin-live/> (discussing the volatility risks associated with Bitcoin and Overstock's collaboration with Coinbase).

face in the future”.¹²⁰ It will only make sense if Coinbase can hedge its exchange rate risk by “simply engaging in swap or futures contract”.¹²¹ Arguably, this is one of the reasons why cryptocurrency exchanges were insisting on crypto-derivatives for so long.¹²² Also, fraud,¹²³ scams,¹²⁴ hacks,¹²⁵ and insider trading,¹²⁶ are rampant in the cryptocurrency market. Moreover, it is quite uncertain what impacts on the market price of cryptocurrencies. Any regulatory move appears to impact bitcoin price; bitcoin price dropped by 30% when China banned cryptocurrency or South Korea initiated a crackdown on cryptocurrency.¹²⁷ In March 2020, when the US market was turbulent due to the COVID-19 crisis combined with a plummet in oil prices and sell-off in stocks,¹²⁸ the cryptocurrency market lost almost \$26.43 billion in a day (see Figure III.1).¹²⁹ Since November 2020, bitcoin’s price has been soaring and hit as high as \$63,729.50.¹³⁰ In addition to spot markets, the abrupt price dips

¹²⁰ Brito, Shadab, and Castillo (n 107) 157.

¹²¹ *ibid* 157–58.

¹²² *ibid*.

¹²³ Collen Shalby, ‘Camarillo Man and Two Others Arrested in Alleged \$722-million Cryptocurrency Fraud Scheme’ (The Los Angeles Times, 10 December 2019) <www.latimes.com/california/story/2019-12-10/camarillo-man-and-two-others-arrested-in-alleged-722-million-cryptocurrency-fraud-scheme> accessed 13 November 2020.

¹²⁴ Shaurya Malwa, ‘Twitter Bitcoin Scams Take New Leap After Verified Twitter Accounts Impersonate Elon Musk’ (CryptoSlate, 18 November 2019) <<https://cryptoslate.com/twitter-bitcoin-scams-take-new-leap-after-verified-twitter-accounts-impersonate-elon-musk/>> accessed 13 November 2020.

¹²⁵ Eric Lam, ‘Hackers Steal \$40 Million Worth of Bitcoin from Binance Exchange’ (The Bloomberg, 08 May 2019) <www.bloomberg.com/news/articles/2019-05-08/crypto-exchange-giant-binance-reports-a-hack-of-7-000-bitcoin> accessed 21 November 2020; Andrew Norry, ‘The History of the Mt. Gox Hack: Bitcoin’s Biggest Hit’ (Blockonomi, 7 June 2019) <<https://blockonomi.com/mt-gox-hack/>> accessed 13 November 2020.

¹²⁶ Daniel Oberhaus, ‘Coinbase is Being Sued for Insider Trading’ (Vice, 5 March 2018) <www.vice.com/en_us/article/pam4xn/coinbase-insider-trading-lawsuit-gdax-bitcoin-cash> accessed 13 November 2020.

¹²⁷ Stefan Stankovic, ‘US Cryptocurrency Regulation: Policies, Regimes & More’ (Unblock, 18 February 2019) <<https://unblock.net/us-cryptocurrency-regulation/#h3>> accessed 21 November 2020.

¹²⁸ Luke Kawa, ‘Stock Market Volatility Tops Financial Crisis with VIX at Record’ (Bloomberg, 16 March 2020) <<https://www.bloomberg.com/news/articles/2020-03-16/stock-market-volatility-tops-financial-crisis-with-vix-at-record>> accessed 11 May 2021.

¹²⁹ Arjun Kharppal, ‘Over \$26 Billion Wiped Off Cryptocurrency Market in 24 Hours After Massive Oil Price Plunge’ (CNBC, 8 March 2020) <www.cnbc.com/2020/03/09/bitcoin-btc-and-other-cryptocurrency-prices-plunge-after-oil-drop.html?__source=sharebar|linkedin&par=sharebar> accessed 21 November 2020.

¹³⁰ Ryan Browne, ‘Bitcoin Hits New All-Time High above \$63,000 ahead of Coinbase Debut’ (CNBC, 13 April 2021) <<https://www.cnbc.com/2021/04/13/bitcoin-hits-new-all-time-high-above-62000-ahead-of-coinbase-debut.html>> accessed 11 May 2021.

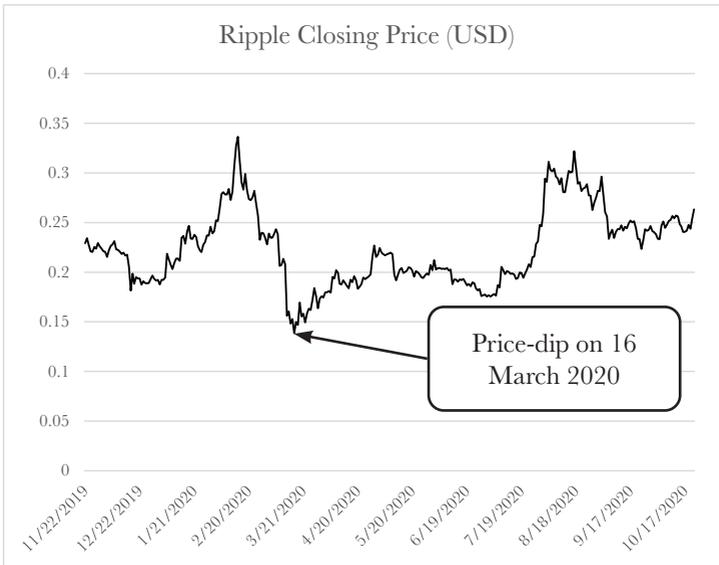
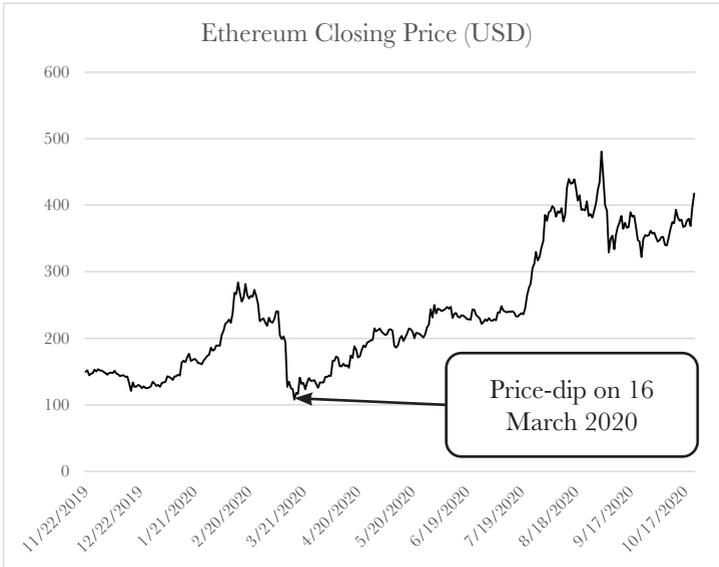
regularly wipe out billions of dollars from other cryptocurrency-based markets, such as the decentralised finance market.¹³¹

FIGURE III.1

*Daily Closing Prices of Bitcoin, Ethereum, and
Ripple (22 November 2019–21 November 2020)*



¹³¹ Jose Antonio Lanz, 'Ethereum Price Dip Wipes \$1.5 Billion from DeFi Markets' (Decrypt, 31 October 2020) <<https://decrypt.co/46796/ethereum-price-1-5-billion-defi-markets>> accessed 21 November 2020.

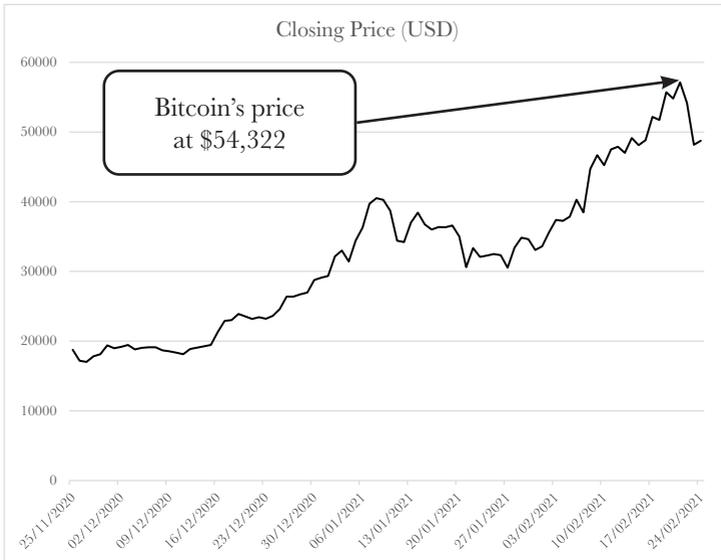


Source: Coindesk

Figure III.1 shows that all three cryptocurrencies suffered a major price dip on 16 March 2020 as a response to the COVID-19 crisis coupled with the turmoil in the US financial markets and international oil prices.

FIGURE III.2

Bitcoin’s Soaring Price between (25 November 2020–24 February 2021)



Source: Coindesk

In light of cryptocurrency’s price volatility and regulatory opacity, the addition of federally regulated crypto-derivatives to the market will give these investors complacency that their investments are protected under federal laws. However, it appears that until now the regulators’ approach is largely based on warnings where customers are advised to do their research before investing in cryptocurrency-related products. issued from time to time.¹³² Therefore, in the

¹³² Commodity Futures Trading Commission, ‘Investor Alert, Watch Out for Fraudulent Digital Asset and “Crypto” Trading Websites’ (26 April 2019) <<https://www.cftc.gov/sites/default/files/2019-04/OIEA%20and%20CFTC%20Investor%20Alert%20Fraudulent%20Digital%20Assets%20Websites.pdf>> accessed 11 May 2021.

context of an unregulated spot market and the CFTC's lack of oversight on it, investor protection in the crypto-derivatives market is very much questionable.

D. THE SEC CONTRADICTS THE CFTC'S VIEW AS THE SEC REJECTS ETFs ON THE GROUND OF FRAUD AND ABUSIVE PRACTICES IN THE CRYPTOCURRENCY SPOT MARKET

Unlike the CFTC, the SEC appears to be reluctant to approve any new cryptocurrency products that would require oversight in the spot market.¹³³ On several occasions, SEC has raised concerns about the current cryptocurrency markets featuring less investor protection and more susceptibility to fraud and manipulation.¹³⁴ The SEC's view became evident when it first rejected a bitcoin exchange-traded product ('ETP')¹³⁵ in 2018.¹³⁶ To date, the SEC has disapproved of more than nine bitcoin ETP proposals, including bitcoin ETP proposals from

¹³³ See Marion A. Brown, 'Cryptocurrency and Financial Regulation: The SEC's Rejection of Bitcoin-Based ETPs' [2012] 23 N.C. Banking Institute 139. See also, Tom Lydon, 'SEC Rejects 9 Applications for Bitcoin ETFs' (The NASDAQ, 23 August 2018) <www.nasdaq.com/articles/sec-rejects-9-applications-bitcoin-etfs-2018-08-23> accessed 13 November 2020.

¹³⁴ See Jay Clayton, 'Statement on Cryptocurrencies and Initial Coin Offerings' (US Securities and Exchange Commission, 11 December 2017) <www.sec.gov/news/public-statement/statement-clayton-2017-12-11> accessed 14 November 2020 (warning that cryptocurrency markets span national borders as the investment funds may travel across boundaries rapidly. As a result, "risks can be amplified, including the risk that market regulators, such as the SEC, may not be able to effectively pursue bad actors or recover funds"). See also, Jay Clayton and Christopher Giancarlo, 'Statement by SEC Chairman Jay Clayton and CFTC Chairman J. Christopher Giancarlo: Regulators are Looking at Cryptocurrency' (US Securities and Exchange Commission, 25 January 2018) <www.sec.gov/news/public-statement/statement-clayton-giancarlo-012518> accessed 13 November 2020.

¹³⁵ ETPs are securities that are traded on exchanges similar to stocks. Cryptocurrency ETPs could be in two basic forms: (1) ETFs holding crypto-derivatives; and (2) ETPs physically holding cryptocurrency. See also, James Chan, 'Exchange Traded Products (ETPs)' (Investopedia, 25 August 2019) <www.investopedia.com/terms/e/exchange-traded-products-etp.asp> accessed 13 November 2020.

¹³⁶ Kate Rooney and Bob Pisani, 'Winklevoss Twins Bitcoin ETF Rejected by SEC' (CNBC, 26 July 2018) <www.cnn.com/2018/07/26/winklevoss-twins-bitcoin-etf-rejected-by-sec.html> accessed 13 November 2020.

ProShares,¹³⁷ Direxion,¹³⁸ and GraniteShares,¹³⁹ and the latest being the ETP application by Wilshire Phoenix.¹⁴⁰ In rejecting the bitcoin ETPs applications, the SEC held that none of the applicants had proved that the cryptocurrency market is uniquely resistant to market manipulation to secure investor protection and public interest, as required under §6(b)(f) of the Exchange Act 1934. These ETP products are not designed to “prevent fraudulent and manipulative acts and practices”,¹⁴¹ as the current bitcoin futures market (such as CMR and CBOE) is not of a significant size. This technically prevents the DCMs from detecting and deterring misconduct and tracing price manipulation despite the use of an information-sharing agreement.¹⁴² With regard to investor protection, although the SEC viewed that “trading a bitcoin-based ETP on a national securities exchange might provide some additional protection to investors”,¹⁴³ this protection is not sufficient to fulfil the requirements of §6(b)(f) of the Exchange Act, that requires the “rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices”.¹⁴⁴

Regarding these new cryptocurrency products, the SEC also raises the issue of custody risk.¹⁴⁵ As bitcoin is largely traded on unregulated international exchanges, these custodians carry a significant risk of being hacked or going out

¹³⁷ Securities and Exchange Commission, ‘SEC Release No. 82350’ (19 December 2017); Securities and Exchange Commission, ‘SEC Release No. 82 FR 61100’, 26 December 2017).

¹³⁸ Securities and Exchange Commission, ‘SEC Release Nos. 82532’ (18 January 2018); and Securities and Exchange Commission, 83 FR 3380 (SR-NYSEArca-2018-02, 24 January 2018).

¹³⁹ Securities and Exchange Commission, ‘SEC Release No. 34-83913’ (22 August 2018) <www.sec.gov/rules/sro/cboebzx/2018/34-83913.pdf> accessed 13 November 2020. For commentary see Nikhilesh De, ‘The Securities and Exchange Commission (SEC) has Issued Rejections to Bitcoin Exchange-Traded Fund (ETFs) Proposals from ProShares, Direxion and GraniteShares’ (CoinDesk, 27 November 2019) <www.coindesk.com/sec-rejects-7-bitcoin-etf-proposals> accessed 13 November 2020.

¹⁴⁰ Nikhilesh De, ‘SEC Rejects Latest Bitcoin ETF Bid’ (CoinDesk, 27 February 2020) <www.coindesk.com/sec-rejects-latest-bitcoin-etf-bid> accessed 14 November 2020.

¹⁴¹ See Katie Rooney and Bob Pisani, ‘Winklevoss Twins Bitcoin ETF Rejected by SEC’ (CNBC, 26 July 2018) <www.cnbc.com/2018/07/26/winklevoss-twins-bitcoin-etf-rejected-by-sec.html> accessed 30 November 2019).

¹⁴² Securities and Exchange Commission (n 139) 24. The rationale here is that to successfully manipulate the ETP, one would also have to trade on the spot market. In traditional commodity a surveillance-sharing agreement assists the ETP listing markets in spotting manipulative behaviour in the spot market.

¹⁴³ *ibid* 29.

¹⁴⁴ *ibid*.

¹⁴⁵ *ibid*.

of business.¹⁴⁶ Custody risk is also present in the crypto-derivatives markets, which is rarely addressed by the CFTC. Particularly, for physically-settled bitcoin futures contracts, the exchanges are required to hold physical bitcoins.¹⁴⁷ Given that there is no federal-level investor protection for these trusts, bitcoin held by the trust is not subject to Federal Deposit Insurance Corporation or SIPA. Therefore, if cryptocurrencies are lost or stolen, or a crypto holder dies, it is likely that those coins will be lost forever.¹⁴⁸ The existing law hardly “adjudicate the matter of recovering the coins owned by the crypto holder who has passed away”.¹⁴⁹

E. THE CFTC’S APPROACH DEVIATES FROM THE MAJOR GLOBAL REGULATORS

The CFTC’s approach in approving crypto-derivatives deviates from the other two major global regulators, the ESMA and the FCA. Both the EU and the UK regulators took measures restricting the trading of crypto-derivatives, determining that retail investors are not protected from the price volatility, speculation, and other forms of market and operational risks associated with cryptocurrencies.¹⁵⁰ Also, the complexity of these products and a lack of transparency limit retail investors’ ability to understand the risks underlying these products.¹⁵¹ Leveraged crypto-derivatives are risky and extremely volatile, increasing the scale and speed

¹⁴⁶ Daniel Shane, ‘Bitcoin Exchange Goes Bust After Hack’ (CNN, 20 December 2017) <<https://money.cnn.com/2017/12/20/technology/south-korea-bitcoin-exchange-closes/index.html>> accessed 23 November 2020.

¹⁴⁷ A company’s CEO has gone missing with Cold Wallet’s access. See Matthew Beedham, ‘Cryptocurrency Exchange IDAX’s CEO Reportedly Missing with Company’s Wallet’ (The Next Web, 29 November 2019) <<https://thenextweb.com/hardfork/2019/11/29/cryptocurrency-exchange-ceo-missing-idax-bitcoin-cold-wallet/>> accessed 14 November 2020. On another occasion, a CEO died and was the only person who knew the password of the company’s cold wallet. See Antonia Noor Farzan, ‘Millions Vanished with a Cryptocurrency Entrepreneur’s Sudden Death. Now Investors Want His Body Exhumed’ (The Washington Post, 16 December 2019) <www.washingtonpost.com/nation/2019/12/16/gerald-cotten-quadrigacx-cryptocurrency-death-body-exhumed/> accessed 14 November 2020. In both cases, the investors lost all the cryptocurrencies and the money.

¹⁴⁸ Lefan Gong and Luping Yu, ‘China’ in Josias Dewey (ed), *Blockchain & Cryptocurrency Regulation* (Global Legal Group 2019) 261, 266 <www.acc.com/sites/default/files/resources/vl/membersonly/Article/1489775_1.pdf> accessed 24 February 2021.

¹⁴⁹ *ibid.*

¹⁵⁰ See analyses in Section II.A and II.B regarding the EU and UK’s ban on crypto-derivatives on the ground of potential harm to retail investors.

¹⁵¹ Financial Conduct Authority, ‘Prohibiting the Sale to Retail Clients of Investment Products that Reference Cryptoassets’ (n 2); Financial Conduct Authority, ‘Prohibiting the Sale to Retail Client of Investment Products that Reference Cryptoassets’ (n 54).

of investors' losses from a crypto-derivative.¹⁵² Furthermore, the regulators should be cautious about the risk of the cryptocurrency speculative bubble. Although many crypto-enthusiasts believe that crypto-derivatives could increase liquidity in the cryptocurrency market, thereby stabilizing price volatility,¹⁵³ in the absence of a comprehensive regulation addressing the core regulatory concerns, crypto-derivatives would still hurt retail investors.

IV. FUTURE OF CRYPTO-DERIVATIVES IN THE US: POSSIBLE REGULATORY FRAMEWORKS

To achieve a robust and effective crypto-derivatives regulatory framework in the US, it is essential that: (1) the US crypto-derivatives market is free from manipulative and abusive practices; (2) regulators have adequate visibility into the cryptocurrency spot market; (3) regulators are well-equipped to detect abusive and manipulative practices in the crypto-derivatives market and; (4) enforcement mechanisms are in place to safeguard investors' interest. This paper explores two possible regulatory frameworks for crypto-derivatives. First, like the UK (and possibly the EU in the future), there could be a complete ban on crypto-derivatives enacted by a federal statute, as crypto-derivatives are just a means of speculation, and the lack of oversight in the spot market will continue harming retail investors. Second, if an outright ban is not feasible, Congress must develop comprehensive legislation that recognises the novel market and operational risks posed by cryptocurrency, and introduce effective regulatory intervention in the crypto-derivatives markets.

A. THE POSSIBILITY OF A COMPLETE BAN ON CRYPTO-DERIVATIVES

Following the UK and the EU, the US regulators may consider banning the sale and purchase of crypto-derivatives in the derivatives exchanges, keeping investor protection as their central focus. Crypto-derivatives pose a unique threat to investors due to their high leverage and extreme price volatility.¹⁵⁴ Moreover, the failure of the CFTC to have any oversight mechanism on the cryptocurrency

¹⁵² *ibid.*

¹⁵³ Many were of the view that having another competitor in the market or other altcoin derivatives could give a major boost to its liquidity and trading volumes. This may also create awareness of broader cryptocurrency market among investors that may result in infusing more money into the market. This could help create less volatility in altcoin prices.

¹⁵⁴ Ryan Clements, 'Cryptocurrency Self-Regulatory Organization (CSRO)' (The FinReg Blog, 21 June 2019) <<https://sites.duke.edu/thefinregblog/2018/06/21/can-a-cryptocurrency-self-regulatory-organization-work-assessing-its-promise-and-likely-challenges/>> accessed 23 November 2020.

spot market is contrary to the CFTC's mandate to protect investors from fraud and abusive market practices. Unless the CFTC has established a mechanism to oversee the cryptocurrency spot market meaningfully and adequately, a ban on crypto-derivatives will act as a warning to investors not to put their money in such risky products. Further, the complexity of the crypto-derivatives and the lack of transparency in the cryptocurrency spot market require a more rigorous enforcement approach from the CFTC. However, many argue that an outright ban is likely to hurt the existing cryptocurrency platforms that comply with the laws and regulations.¹⁵⁵ There is another set of arguments:

“where regulator erred on the side of banning or bashing cryptocurrencies, they have faced classical problems of regulatory competition and regulatory arbitrage, i.e., the migration of the industry from their jurisdiction to more welcoming ones or migration of activities to underground or black-markets”.¹⁵⁶

Given the drawbacks of an outright ban on crypto-derivatives, this paper proposes an alternative regulatory framework — enacting comprehensive federal-level crypto-regulation in response to the emerging issues of manipulation and lack of investor protection in the cryptocurrency spot market and vis-à-vis crypto-derivatives markets.

B. THE NEED FOR A COMPREHENSIVE FEDERAL CRYPTO-REGULATION

The need for a comprehensive crypto-regulation is premised on four grounds. First, the sporadic regulatory efforts among different US regulatory agencies concerning cryptocurrency are counterproductive. A systemic regulatory approach can minimise the risks of cryptocurrency spot markets and avert market failure.¹⁵⁷

Second, the novelty involved in cryptocurrency requires a uniform regulatory approach. Otherwise, it may bring about an unwanted disruption in the capital and financial market. In the US, the regulatory approach to cryptocurrency is fragmented. For instance, while the SEC has declared ICO as a security, it did not establish its jurisdiction exclusively on all digital tokens. Meanwhile, the US Internal Revenue Service (IRS) considers convertible cryptocurrency as property

¹⁵⁵ Osato Avan-Nomayo ‘Cryptoderivatives Ban is Not a Good Idea, Says WFE’ (Blockonomi, 08 October 2019), <<https://blockonomi.com/crypto-derivatives-ban-not-good-idea-says-wfe/>> accessed 23 November 2020.

¹⁵⁶ Hossein Nabilou, ‘How to Regulate Bitcoin? Decentralized Regulation for a Decentralized Cryptocurrency’ [2019] 27 *International Journal on Law and Information Technology* 266, 270.

¹⁵⁷ *ibid.*

for tax purposes.¹⁵⁸ In addition, the federal courts in several cases (such as *United States v. Ulbricht*)¹⁵⁹ have treated cryptocurrency as money for specific purposes. However, there are still divided opinions as to the status of cryptocurrency as “money” because: (1) cryptocurrency is not widely accepted as a means of payment and (2) its store value is unreliable due to market volatility.¹⁶⁰ It is argued that a comprehensive federal crypto-regulation can cure the problem of this fragmented, sporadic, and ambiguous regulatory approach by adopting a unanimous definition of cryptocurrency (or by defining it as a separate ‘digital asset class’) and thus bringing the intermediaries and cryptocurrency-based assets under the same regulatory framework.¹⁶¹

Third, if fraud and market manipulation continue, it will eventually drive potential investors away from the market. Furthermore, opacity and lack of regulatory clarity can result in the loss of investors’ confidence.¹⁶²

Finally, if cryptocurrencies become an effective monetary instrument in the future, its impact on the country’s monetary policy would be profound as the Federal Reserve Board might lose its ability to control the money supply.¹⁶³ Therefore, there is a demand from both policymakers and market participants that

¹⁵⁸ Internal Revenue Service, ‘Virtual Currencies’ (The Internal Revenue Service) <www.irs.gov/businesses/small-businesses-self-employed/virtual-currencies> accessed 21 November 2020.

¹⁵⁹ *United States of America v. Ulbricht*, No. 15-1815 (2d Cir 2017). Retrieved from <<https://cases.justia.com/federal/appellate-courts/ca2/15-1815/15-1815-2017-05-31.pdf?ts=1496241010>> accessed 11 May 2021.

¹⁶⁰ Mohamed Damak, ‘The Future of Banking: Cryptocurrencies Will Need Some Rules to Change the Game’ (S&P Global, 19 February 2018) <www.spglobal.com/en/research-insights/articles/the-future-of-banking-cryptocurrencies-will-need-some-rules-to-change-the-game> accessed 4 December 2019. As it goes “[...] cryptocurrencies do not meet the basic two requisites of a currency: An effective mean of exchange and an effective store of value. First, cryptocurrencies are still not widely accepted as payment instruments, although the list of companies accepting them have increased over the past few years. Second, the volatility that we have observed over the past 12 months in the valuation of some cryptocurrencies and their market cap is the most meaningful evidence that they fail the test of value storage. We also don’t view cryptocurrencies as an asset class. For starters, the total outstanding aren’t big enough yet. At Feb. 10, 2018, there were 1,523 outstanding cryptocurrencies with a market cap of around \$394 billion. By way of comparison, at the same date, this is well below the market capitalization of Apple Inc., around \$794 billion”.

¹⁶¹ Averie Brooks, ‘U.S. Regulation of Blockchain Currencies: A Policy Overview’ [2018] 9 *Amherst Intellectual Property Brief* 75.

¹⁶² *ibid.*

¹⁶³ Damak (n 160).

Congress develop comprehensive federal legislation to regulate cryptocurrencies¹⁶⁴ and bring it under a uniform legislative scope.¹⁶⁵

In the UK and the EU, regulators are taking measures to establish a uniform and robust regulatory framework to achieve transparency into the cryptocurrency spot market. The UK government is in the consultative process with various stakeholders and industry participants to ensure that “its regulatory framework is equipped to harness the benefits of new technologies, supporting innovation and competition, while mitigating risks to consumers and stability”.¹⁶⁶ The UK’s efforts on regulatory measures predominantly aim to enhance consumer protection and address risks and challenges associated with cryptocurrency and stable coins.¹⁶⁷ With a similar approach, the European Commission has adopted a comprehensive digital finance package that included “Legislative Proposals on Cryptoassets”,¹⁶⁸ to provide the cryptocurrency markets with coherent legal rules as well as to support financial innovation, reinforce investor protection while ensuring financial stability.¹⁶⁹ The proposal further aims to reduce the market fragmentation by

¹⁶⁴ Financial Stability Oversight Council, ‘Annual Report’ (2019) <<https://home.treasury.gov/system/files/261/FSOC2019AnnualReport.pdf>> accessed 20 November 2020 (calling for stricter state and federal regulations of stablecoins and digital assets).

¹⁶⁵ Peter Van Valkenburgh, ‘A National Alternative to Onerous State-by-State Regulation of Cryptocurrency Intermediaries’ (Coin Center, 30 August 2019) <<https://coincenter.org/entry/a-national-alternative-to-onerous-state-by-state-regulation-of-cryptocurrency-intermediaries>> accessed 20 November 2020.

¹⁶⁶ See HM Treasury, ‘UK Regulatory Approach to Cryptoassets and Stablecoins: Consultation and Call for Evidence’ (January 2021) 3 <www.gov.uk/government/consultations/uk-regulatory-approach-to-cryptoassets-and-stablecoins-consultation-and-call-for-evidence> accessed 21 February 2021.

¹⁶⁷ *ibid.* The UK’s Call for Evidence report is the reflection of the final report submitted by the Cryptoassets Taskforce in 2018 which advised the government to take actions in five main grounds to: (1) “maintain the UK’s international reputation as a safe and transparent place to do business in financial services; (2) ensure high regulatory standards in financial markets; (3) protect consumers; (4) guard against threats to financial stability that could emerge in the future; and (5) allow those investors in the financial sector that play by the rules to thrive”. See also, HM Treasury, Financial Conduct Authority, and Bank of England, ‘Cryptoassets Taskforce: Final Report’ (October 2018) 6 <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf> accessed 21 February 2021.

¹⁶⁸ The proposed legislative proposal on cryptoassets will be accompanied by the MiFID and MiFIR.

¹⁶⁹ European Commission, ‘Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937’ [2020] COM/2020/593 final <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-:52020PC0593>> accessed 21 February 2021.

developing “uniform conditions of operations for firms with the EU”,¹⁷⁰ that can be utilised to overcome regulatory differences across the member states.

In contrast, the US regulatory approach towards cryptocurrency is still sporadic, fragmented, and ambiguous, along with powers being divided across multiple regulatory agencies between SEC, CFTC, the Office of the Comptroller of the Currency (‘OCC’), the Financial Crimes Enforcement Network (‘FinCEN’) and Internal Service Revenue (‘IRS’).¹⁷¹ In addition to the SEC and the CFTC’s authority over cryptocurrency, the OCC from time to time, provides interpretative letters and guidance for the banks and financial institutions to delineate the permissible activities concerning cryptocurrency.¹⁷² Since 2013, the FinCEN has also been issuing instructions for banks, Money Services Businesses (MSBs), and

¹⁷⁰ *ibid* 5.

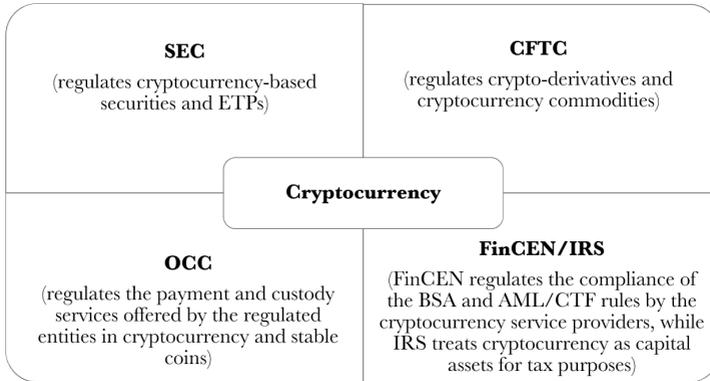
¹⁷¹ For an analysis on the gap in the regulation of cryptoassets, see Timothy G. Massad, ‘It’s Time to Strengthen the Regulation of Crypto-Assets’ (Brookings, 18 March 2019) <<https://www.brookings.edu/wp-content/uploads/2019/03/Timothy-Massad-Its-Time-to-Strengthen-the-Regulation-of-Crypto-Assets-2.pdf>> accessed 11 May 2021.

¹⁷² In an interpretive letter dated 04 January 2021, the OCC has now permitted the banks to use cryptocurrency and stable coins to facilitate payment transactions for customers. The banks can also validate, store and record payment transactions made in cryptocurrency and stablecoins, and serve as a node of a blockchain (INVN). See Office of the Comptroller of the Currency, ‘OCC Chief Counsel’s Interpretation on National Bank and Federal Savings Association Authority to Use Independent Node Verification Networks and Stablecoins for Payment Activities’ (04 January 2021) <www.occ.treas.gov/news-issuances/news-releases/2021/nr-occ-2021-2a.pdf> accessed 24 February 2021. In a previous interpretive letter dated 22 July 2020, the OCC permitted the US national banks to provide cryptocurrency custody services for customers. See, Office of the Comptroller of the Currency, ‘Authority of a National Bank to Provide Cryptocurrency Custody Services for Customers’ (22 July 2020) <www.occ.treas.gov/topics/charters-and-licensing/interpretations-and-actions/2020/int1170.pdf> accessed 24 February 2021.

cryptocurrency exchanges to require them to comply with the Bank Secrecy Act¹⁷³ and AML/CTF rules.¹⁷⁴

FIGURE IV.1

The Major US Regulators with Jurisdictions over Cryptocurrency



However, legislative efforts are going on to bring about some regulatory clarities for cryptocurrency service providers and market participants. In particular, the shift towards contactless digital payment because of the COVID-19 pandemic, and Facebook's efforts to initiate their own digital currency, compelled the US legislatures to consider the need for a cryptocurrency regulation. In March 2020, the US House of Representatives proposed a new Cryptocurrency Act 2020,¹⁷⁵ categorizing cryptocurrency or digital tokens into three main groups based on its decentralised nature and the use of cryptographic ledger, that is: (1) cryptocurrencies

¹⁷³ 31 United States Code 5311 et seq.

¹⁷⁴ See Financial Crime Enforcement Network, 'FinCEN Issues Guidance on Virtual Currencies and Regulatory Responsibilities' (Financial Crime Enforcement Network, 18 March 2013) <www.fincen.gov/news/news-releases/fincen-issues-guidance-virtual-currencies-and-regulatory-responsibilities> accessed 24 February 2021; Financial Crime Enforcement Network, 'Application of FinCEN's Regulations to Certain Business Models Involving Convertible Virtual Currencies' (Financial Crime Enforcement Network, 9 May 2019 <www.fincen.gov/sites/default/files/2019-05/FinCEN%20Guidance%20CVC%20FINAL%20508.pdf> accessed 24 February 2021; US Department of the Treasury, 'The Financial Crimes Enforcement Network Proposes Rule Aimed at Closing Anti-Money Laundering Regulatory Gaps for Certain Convertible Virtual Currency and Digital Asset Transactions' (18 December 2020) <<https://home.treasury.gov/news/press-releases/sm1216>> accessed 24 February 2021.

¹⁷⁵ United States House of Representatives, 'H.R.6154': Crypto-Currency Act of 2020.

including the US currency representation; (2) crypto-commodities residing on a blockchain or decentralised cryptographic ledger and; (3) crypto-securities that meet the Howey test.¹⁷⁶ The Act further proposed that depending on the categories, the CFTC, the SEC, and the FinCEN would have regulatory authorities over this asset class. In another draft bill, the Digital Commodity Exchange Act 2020,¹⁷⁷ The US House of Representatives proposed an amendment to the CEA by incorporating definitions of ‘digital commodity,’ ‘digital commodity custodian’¹⁷⁸ and ‘digital commodity exchange’.¹⁷⁹ Although it recommended the CFTC as a single regulatory body with exclusive jurisdiction over cryptocurrency-related transactions,¹⁸⁰ the proposition is based on the assumption that cryptocurrencies are only ‘virtual commodities’, and thus excluded other cryptocurrency-based financial products, such as ICOs and various forms of digital tokens and utility tokens. It also does not provide any specific regulatory guidance where cryptocurrency is used as a payment method.

Nonetheless, both propositions do not adequately answer the regulatory quandaries regarding cryptocurrency, in as much as they do not complement the existing fragmented regulatory approach towards cryptocurrency. To provide a degree of regulatory clarity, this paper proposes a federal level crypto-regulation with a separate regulatory agency having exclusive jurisdiction over cryptocurrencies in the US, including the spot market and any financial instruments where the underlying asset is a cryptocurrency (such as crypto-derivatives). The legislation should also incorporate mandatory registration requirement for cryptocurrency exchanges.¹⁸¹ The agency will also coordinate with other regulatory agencies, as the new agency will work parallelly with the others (such as the SEC, CFTC, IRS, and FinCEN), but will only be limited to regulating cryptocurrency and other digital assets. A uniform federal-level cryptocurrency agency is likely to establish

¹⁷⁶ Securities and Exchange Commission (n 18).

¹⁷⁷ United States House of Representatives, ‘H.R. 8373’: Digital Commodity Exchange Act of 2020.

¹⁷⁸ *ibid* 2. “The term ‘digital commodity custodian’ means an entity that holds, maintains, or safeguards digital commodities and other assets on behalf of digital commodity market participants”.

¹⁷⁹ *ibid* 2. “The term ‘digital commodity exchange’ means a trading facility that lists for one digital commodity”.

¹⁸⁰ *ibid*.

¹⁸¹ The proposed new legislation should also exempt the SEC and the CFTC from exercising its jurisdiction over cryptocurrency-based financial instruments.

effective oversight and supervisory authority over the cryptocurrency spot markets, that would help curb market manipulation and restore investor confidence.¹⁸²

C. THE PROPOSED FRAMEWORK OF THE CRYPTO-REGULATION

The proposed crypto-regulation should be based on information, equal access, and investors' confidence. In particular, it should have the mandate of protecting investors against fraud and offer a degree of centralization. Therefore, the regulation should have: (1) a new federal cryptocurrency agency established by an Act of Congress; (2) the mandatory registration requirement for all cryptocurrency exchanges, including the cryptocurrency spot markets and; (3) a national cryptocurrency exchange.

(i) *A New Federal Cryptocurrency Agency: A de novo Crypto-Regulatory Regime Established by an Act of Congress*

A federal cryptocurrency agency having exclusive jurisdiction over cryptocurrencies can prevent price manipulation, fraud, and abusive market practices, by exercising direct oversight over the cryptocurrency intermediaries, including exchanges and spot markets. Although the new cryptocurrency agency structure is subject to rigorous academic, technical, and regulatory discussions, it is not uncommon in the US to constitute a new federal agency to protect consumers and fill in the regulatory vacuum. After the financial crisis of 2008, the Dodd-Frank Wall Street Reform and Consumer Protection Act established the Consumer Financial Protection Bureau — a single, independent consumer-focused regulatory regime — consolidating the scattered financial authorities throughout the federal government and bringing them under one roof.¹⁸³ Similarly, the de novo crypto-regulator should combine existing regulators' mandates, jurisdictions, responsibilities, and enforcement authorities over cryptocurrencies, and overcome the current regulatory overlap and ambiguity. The de novo regime's mandate should be based on investor protection through promoting market transparency.

With respect to jurisdictions, this paper proposes that the crypto-regulator should deal with cryptocurrency-based securities (for example, ICOs, digital tokens, and utilities), derivatives (for example, swaps, futures, and options), ETFs,

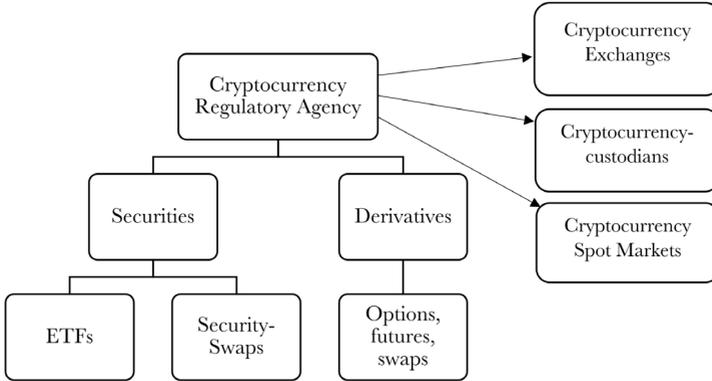
¹⁸² This paper does not propose a direct regulation of the cryptocurrency technology (i.e., blockchain technology) itself. Rather, the regulation should be indirect, meaning it should address the regulation of the cryptocurrency intermediaries, including cryptocurrency exchanges and custodians.

¹⁸³ 12 United States Code Sections 5491–5497 (2010).

crypto-securities based swaps, cryptocurrency custodians, and cryptocurrency spot markets (Figure IV.2).

FIGURE IV.2

The Proposed US Crypto-Regulation



With respect to jurisdictions, this paper proposes that the crypto-regulator should deal with cryptocurrency-based securities (for example, ICOs, digital tokens, and utilities), derivatives (for example, swaps, futures, and options), ETFs, crypto-securities based swaps, cryptocurrency custodians, and cryptocurrency spot markets (Figure IV.2).

(ii) Federal Licensing Requirement: Overseeing the Cryptocurrency Spot Market

The new regulator should be responsible for authorising licenses to eligible and trusted cryptocurrency intermediaries, i.e., cryptocurrency exchanges, cryptocurrency custodians, payment processors, and cryptocurrency spot markets, that will operate businesses in cryptocurrencies. The licensing regime is significant for cryptocurrency companies because it will help the regulator bring the licensed entities under a single supervisory authority. For instance, after the infamous Mt. Gox hacking incident,¹⁸⁴ Japan enacted an amendment to the Payment Services Act

¹⁸⁴ In 2014, Bitcoin hacking bankrupted a leading exchange in Japan called Mt. Gox, with approximately half-a-billion dollars in bitcoin (\$850,000 bitcoin) stolen. While \$200,000 bitcoin were recovered within six months, its dollar value sunk by the revelation of weak security, and the incident showed that hacks impact bitcoin’s trading price. Exchange customers had no remedy. See Robert McMillan, “The Inside Story of Mt. Gox, Bitcoin’s \$460 Million Disaster” (Wired, 3 March 2014) <www.wired.com/2014/03/bitcoin-exchange/#:~:text=Tokyo%2Dbased%20bitcoin%20exchange%20Mt,the%20much%2Dhyped%20digital%20currency> accessed 11 May 2021.

(‘PSA’) in 2017, and created a licensing regime for its cryptocurrency exchanges.¹⁸⁵ According to the new amendment, all cryptocurrency exchanges engaged in purchasing, selling, and exchanging cryptocurrencies and intermediaries thereof, must register with the Japan Financial Services Authority (‘FSA’).¹⁸⁶ The exchanges must also comply with capital and positive net assets requirements and have an internal auditing system to ensure compliance with the relevant PSA rules.¹⁸⁷ To date, the FSA has granted licenses to 16 cryptocurrency exchanges subjecting them to regulatory oversight.¹⁸⁸

Like Japan, the licensing regime will help the US regulator supervise the cryptocurrency intermediaries. The regime will establish a market oversight mechanism by ensuring that these intermediaries comply with the relevant US laws, including AML/CFT, anti-manipulation, anti-fraud, consumer disclosure, and prudential (licensing and minimum-capitalisation) requirements.

(iii) A Central Cryptocurrency Trading Platform with Registration Requirement

Under the new cryptocurrency regulation, there should be a central cryptocurrency trading platform with mandatory registration requirements for all cryptocurrency exchanges and spot markets willing to trade cryptocurrencies and issue cryptocurrency-based offerings. A centrally regulated cryptocurrency trading platform with a mandatory registration requirement will infuse the liquidity in the spot market and stabilise the cryptocurrency’s price volatility.¹⁸⁹ This will further facilitate the regulators to exercise direct oversight over the cryptocurrency spot markets. A central platform predicated on disclosure requirements and information-sharing will provide investors with transparency and equal access to information, and will safeguard the market from the cryptocurrency world, which is highly asymmetrical, unverified, and sometimes blatantly false.¹⁹⁰

As to the platform’s structure, the new agency could create and maintain a central database where all cryptocurrency-based offerings will be listed and

¹⁸⁵ Masahiko Ishida, Edward Mears, and Ryutaro Takeda, ‘Japan Regulatory Update on Virtual Currency Business’ (DLA Piper, 29 December 2017) <www.dlapiper.com/en/japan/insights/publications/2017/12/japan-regulatory-update-on-virtual-currency-business/> accessed 23 November 2020.

¹⁸⁶ *ibid.*

¹⁸⁷ *ibid.*

¹⁸⁸ These cryptocurrency exchanges are represented by the Japan Virtual Exchange Association—a self-regulatory organization for the Japanese cryptocurrency industry.

¹⁸⁹ Brial Novell, ‘Regulation Crypto—A Proposed Framework for United States Cryptocurrency Regulation’ (PR Newswire, 20 August 2018) <www.prnewswire.com/news-releases/regulation-crypto--a-proposed-framework-for-united-states-cryptocurrency-regulation-300699235.html> accessed 23 November 2020.

¹⁹⁰ *ibid.*

conducted, providing the regulator “with direct oversight, capabilities, and transparency for all transactions and parties involved”.¹⁹¹ Further, to prevent false claims on ICOs, crypto-derivatives, and other cryptocurrency-based offerings, here should be a requirement that all advertisements and solicitations be source-verified.¹⁹² The registration and offering process should be based on disclosure requirements, representations, and warranties, as well as the regulator’s involvement at the outset. In addition to supporting, facilitating, and listing ICOs and crypto-derivatives, a central cryptocurrency exchange could employ world-class security measures, which would consequently enhance the trading platform’s safety and investors’ confidence.¹⁹³

V. CONCLUSION

There are many questions yet to be answered in this rapidly changing cryptocurrency industry. However, hype, volatility, and speculation — these three words best describe the current cryptocurrency space, which is likely to adversely impact the crypto-derivatives investors in the absence of a robust regulatory framework, investor protection, and oversight mechanisms of the spot market.

The UK’s and the EU’s regulators have recently moved to protect retail investors from the risk and volatility of the crypto-derivatives market, and have extended their efforts to establish a uniform legislative framework for all kinds of cryptocurrency-related assets. Nevertheless, the US offers a somewhat hands-off approach. The present study takes a comparative approach to analyse the regulators’ contrasting stance with respect to crypto-derivatives in the UK, EU, and US. The research revolves around an essential question — whether the existing regulatory approach towards crypto-derivatives is adequate to protect the retail investors? It concludes that unlike the UK and the EU, the US measures fail considerably to consider the ‘Main Street’ investors’ vulnerability to this allegedly over-leveraged crypto-derivatives market. It further concludes that the propensity of market manipulation in the cryptocurrency spot market combined with regulatory opacity and fragmentation creates significant hurdles to regulate crypto-derivatives under the existing US legal framework.

These opaque and fragmented regulatory responses to crypto-derivatives demonstrate the dire need for centralised and comprehensive cryptocurrency regulation in the US. The lack of regulation perpetuates the fraudulent and manipulative behaviour in the spot market, that will eventually drive potential investors away from the market. Many crypto-enthusiasts resist the idea of

¹⁹¹ *ibid.*

¹⁹² *ibid.*

¹⁹³ *ibid.*

regulating the industry on the ground that it may impede innovation. However, regulatory clarities and a proper oversight mechanism over the cryptocurrency exchanges and spot markets are necessary frictions, as this will help protect the market integrity, punish abusive and manipulative practices, and restore investor confidence.

To reimagine the crypto-derivatives regulation in the US, the paper envisions a centralised disclosure-based cryptocurrency regulatory regime in establishing an effective oversight mechanism for the US cryptocurrency spot market. This would not increase regulatory certainties and competencies and is also likely to attract a wide range of market participants.

At the 5th Annual Conference on FinTech and Regulation held in February 2021, Robert Ophèle, as Chairman of Autorité des Marchés Financiers, proposed a centralised crypto-regulation on the ground that a single regulator is cheaper and more competent to exercise the centralised expertise in this emerging cryptocurrency market.¹⁹⁴ In the US, Hester Peirce, as an SEC Commissioner, called for regulatory clarities as major corporations like Tesla, BNY Mellon, and Mastercard, started participating in the cryptocurrency market.¹⁹⁵

Therefore, like the UK and the EU, the US Congress should develop comprehensive federal cryptocurrency legislation to capture the cryptocurrency's novelty and underpinning technology. A comprehensive regulation will serve the public interest, providing a systemic regulatory approach that minimises the risks of cryptocurrency spot markets and averts market failure. Furthermore, the legislation will encapsulate the technology-specific regulation to cryptocurrency, strengthening the US capital and financial market. A uniform federal-level cryptocurrency agency is likely to establish effective oversight and supervisory authority over the cryptocurrency spot markets, that would help curb market manipulation and protect retail investors, and thereby uphold market integrity.

¹⁹⁴ In Robert Ophèle's opinion, a single body could provide a level playing field among all cryptocurrency service providers and is likely to have all the expertise that would provide simplicities and certainties in regulating cryptocurrency. In his view, the ESMA, in the EU, could be a competent authority to oversee cryptocurrency spot markets and any financial instruments where the reference asset is a cryptocurrency. See Helen Partz, 'French Official Wants to Change How Europe Regulates Crypto and Blockchain' (The CoinTelegraph, 09 February 2021) <<https://cointelegraph.com/news/french-official-wants-to-change-how-europe-regulates-crypto-and-blockchain>> accessed 20 February 2021.

¹⁹⁵ Chris Prentice and Katanga Johnson, 'Clear Crypto Rules Urgently Needed as Major Companies Embrace Asset: SEC Official' (The Reuters, 13 February 2021) <www.reuters.com/article/idUSKBN2AD0ML> accessed 24 February 2021.