Blockchain and cryptocurrencies: a cross-border conundrum

Michael L. Spafford, Daren F. Stanaway and Sabin Chung

Michael L. Spafford (michaelspafford@paulhastings.com) is a partner, Daren F. Stanaway (darenstanaway@paulhastings.com) is a senior associate, and Sabin Chung (sabinchung@paulhastings.com) is an associate at Paul Hastings LLP in Washington, DC.

Abstract

Purpose – *To analyze the CFTC's approach to regulating cryptocurrencies and blockchain technologies in light of their cross-border nature, limitations on the CFTC's extraterritorial authority, and the CFTC's prerogative to work cooperatively with foreign regulators.*

Design/methodology/approach – *Discusses the principles set forth in CFTC Chairman Christopher Giancarlo's White Paper regarding cross-border swap regulation; analyzes the similar nature of cross-border issues arising from regulation of cryptocurrencies and blockchain technologies; examines regulations and guidance implemented by foreign authorities in the blockchain and cryptocurrency space; and assesses the limitations of the CFTC's extraterritorial authority.*

Findings – *The principles set forth in Chairman Giancarlo's White Paper regarding cross-border swap regulation apply equally to blockchain technologies and cryptocurrencies, and as such, the CFTC may wish to pursue an analogous approach to regulating cryptocurrencies and blockchain technologies.*

Practical implications – *The CFTC should exercise deference to and cooperate with foreign counterparts to regulate cryptocurrencies and blockchain technologies that traverse international borders, thereby avoiding overlapping and potentially conflicting regulation while fostering an innovative growth environment for emerging technologies.*

Originality/value – *In-depth analysis and insight from experienced professionals in the CFTC and cross-border investigations and enforcement space.*

Keywords *Commodity Futures Trading Commission (CFTC), Blockchain, Cross-border, Cryptocurrency, Extraterritorial regulation, Commodity Exchange Act (CEA)*

Paper type *Technical paper*

1. Introduction

In an October 17, 2018 speech, Commodity Futures Trading Commission ("CFTC") Chairman J. Christopher Giancarlo suggested that the CFTC transform its current "ad-hoc cross-border regime" of swaps regulation into a "holistic risk-based framework that furthers the cause of swaps market reform" (Christopher Giancarlo, 2018b). This would require the CFTC to exercise "regulatory deference" to foreign regulators, and Chairman Giancarlo thus committed to "establishing a CFTC cross-border framework that is risk-based and offers deference to comparable non-U.S. regulations" (Christopher Giancarlo, 2018b).

Like swaps, cryptocurrencies and blockchain technologies are inherently global in nature and subject to potentially divergent regulation by authorities in multiple jurisdictions. These innovations traverse a number of different sectors – from consumer protection and cybersecurity to financial services, investment services, and insurance – thereby further complicating efforts to maintain consistent, coordinated cross-border policies. Notwithstanding the new frontiers and opportunities that these technologies afford, they also bring a host of new challenges for government regulators, including in the anti-money laundering ("AML"), anti-terrorism financing, payment systems, and cross-border verification spaces. Chairman Giancarlo's call to dramatically overhaul the CFTC's

© Paul Hastings LLP.

Editor's Note: Special thanks from the authors to Paul Hastings Foreign Exchange Professional Lara Kaplan for her assistance.

approach to cross-border swaps regulation and exercise cooperation with, and deference to, foreign regulators (at least insofar as they have enacted comparable regulatory regimes) thus resonates with respect to cryptocurrencies and blockchain as well. The CFTC may wish to exercise deference to and cooperate with foreign counterparts who have enacted regimes to govern these new technologies, thereby avoiding overlapping and potentially conflicting regulation while fostering an innovative growth environment for emerging technologies.

1.1 Chairman Giancarlo's white paper

Chairman Giancarlo's October 2018 speech followed his recently published White Paper on cross-border swaps regulation (Christopher Giancarlo, 2018a), which acknowledged the CFTC's previously over-expansive assertion of jurisdiction in applying Title VII of the Dodd-Frank Act[1] outside the U.S.. As the White Paper concedes, the Commodity Exchange Act ("CEA")[2] provides that the CFTC's swap authority "shall not apply" to activities outside the U.S. unless those activities "have a direct and significant connection with activities in, or effect on, commerce of the U.S."[3]. In light of that restriction, the White Paper advocates rolling back overreaching CFTC enforcement efforts and circumscribing the CFTC's attempts to pursue extraterritorial conduct that lacks a "direct and significant" impact on the U.S. – particularly given that many jurisdictions now have robust swaps regulations in place. In 2013, the CFTC promulgated Cross-Border Guidance, which Chairman Giancarlo now deems "out of step with the world's major swaps trading regimes," given its assumption that virtually every swap entered by a U.S. person, regardless of location or manner of transaction, has the requisite direct and significant connection with U.S. activities and thus remains subject to CFTC rules[4]. Chairman Giancarlo suggests that the CFTC "should operate on the basis of comity, not uniformity, with non-U.S. regulators that oversee comparable regulatory regimes," to avoid a "completely untenable state of overlapping and conflicting rules"[5]. His White Paper advocates a new alternative cross-border framework premised upon the following principles:

- The CFTC should distinguish between swaps reforms intended to mitigate systemic risks and reforms intended to address market integrity, such as specific trading practices, and limit its cross-border oversight of the latter, because those requirements may be adapted to local market conditions.
- The CFTC should pursue multilateralism, as opposed to unilateralism, for swaps reforms designed to mitigate systemic risks.
- The CFTC should not divide the global swaps markets into separate U.S. person and non-U.S. person marketplaces. Markets in regulatory jurisdictions that have adopted comparable G20 swaps reforms[6] each should function as a unified marketplace, under one set of comparable trading rules and a single regulator.
- The CFTC must be a "rule maker," not a "rule taker," in overseeing U.S. markets.
- The CFTC should defer to non-U.S. regulators in jurisdictions that have adopted comparable G20 swaps reforms and seek stricter comparability for requirements intended to address systemic risk and more flexible comparability for requirements intended to address market and trading practices.
- The CFTC should encourage adoption of similar swaps reforms in other markets that have not yet adopted the G20 reforms[7].

In short, Chairman Giancarlo's White Paper recommends changes to a range of cross-border issues in swaps regulation, including those related to non-U.S. swaps central counterparties ("CCPs"), non-U.S. trading venues, and non-U.S. swap dealers, advocating CFTC deference to its foreign counterparts that have adopted robust swaps regulations – a

"sea-change in approach," with "deference to overseas regulation" at its core (Mackenzie Smith, 2018).

1.2 Blockchain technology and cryptocurrencies

Chairman Giancarlo's White Paper focuses primarily upon cross-border issues related to swaps, but the underlying considerations, concerns, and principles set forth therein may apply with equal force in another emerging market area: cryptocurrencies and blockchain technologies. Blockchain is a type of distributed ledger technology; it is a shared, immutable chronological record of transactions, often referenced as a digital ledger. Blockchain technology utilizes a decentralized digital ledger to eliminate the need for a trusted third-party intermediary or central authority, such as a bank or government, to verify the transaction (Martindale, 2018). Cryptocurrencies are a species of blockchain technology, and cryptocurrency markets have grown exponentially in recent years. Although the mechanics and applications of different blockchain technologies and cryptocurrencies vary, cryptocurrencies like Bitcoin may be purchased on exchanges or directly from other market participants using fiat currency (cash, credit or debit cards, or wire transfers) or other cryptocurrencies (Acheson, 2018). Today, hundreds of cryptocurrency exchanges are in operation and purchase and sell cryptocurrency on behalf of users (with varying degrees of liquidity and security) (Acheson, 2018). Cryptocurrencies also may be transacted off-exchange. As of December 2018, the global cryptocurrency market had formed a nearly $130 billion digital payment ecosystem (CoinMarketCap, 2018), and nearly $15 billion in cryptocurrency transactions are executed daily around the world, with the number increasing each day (CoinMarketCap, 2018). Initial coin offerings ("ICOs"), which raise funds by promoting sales of cryptocurrency to investors, have contributed significantly to the explosion of the cryptocurrency market as well (SEC, 2017).

Given their virtual nature, cryptocurrencies are widely transacted and cross borders easily. ICOs often are global in nature as well; they frequently involve non-domestic issuers and domestic investors or vice versa. The global nature of blockchain technologies and cryptocurrencies presents unique international regulatory challenges, including how to and who should regulate them. For this reason, a number of international bodies like the European Securities Markets Authority ("ESMA") (ESMA, 2017a, 2017b) and the International Organization of Securities Commissions ("IOSCO")[8] have endeavored to issue guidance in these areas. Individual countries also have begun to formulate their own rules and regulations, which often take into account local considerations and market conditions and thus vary by country. That said, many countries look to guidance from larger international organizations (and from one another) and engage in collaborative discussions, thereby leading to a more cooperative, unified approach to this area – particularly among G20 members[9]. Although regulation of these areas remains in its infancy – and much uncertainty remains – in many jurisdictions, cryptocurrencies and blockchain technologies present challenging cross-border issues analogous to those present in swaps markets, and it would behoove the CFTC to adopt the principles set forth in Chairman Giancarlo's White Paper in its approach to cryptocurrency and blockchain regulation as well.

2. The principles set forth in Chairman Giancarlo's white paper apply equally to blockchain technologies and cryptocurrencies, and the CFTC generally should refrain from extraterritorial regulation in those areas

Regulators in the U.S. and abroad have amplified their efforts to regulate cryptocurrencies in recent months. In January 2018, for example, the chairmen of the U.S. Securities and Exchange Commission ("SEC") and the CFTC published a joint article warning that regulators planned to take enforcement action against misconduct in the cryptocurrency

space (Clayton and Christopher Giancarlo, 2018). The SEC subsequently issued multiple subpoenas and information requests to companies and advisers involved in ICOs and launched an investigation into cryptocurrency-focused hedge funds (Eaglesham and Vigna, 2018; Michaels, 2018), and in May 2018 obtained a court order halting an alleged ongoing ICO fraud that raised as much as $21 million from investors (Knutson, 2018). The CFTC, too, pursued several cases in 2018 relating to fraud and manipulation involving cryptocurrencies (Rubin, 2018).

Given the inherent cross-border nature of cryptocurrencies and the heightened regulatory focus on them, the principles and concerns set forth in Chairman Giancarlo's White Paper – though tailored to swaps regulation – apply in the cryptocurrency context and militate against extraterritorial regulation in that area as well. *First*, in light of the cross-border nature of cryptocurrencies and blockchain technologies, the CFTC (or another U.S. regulator) could find itself in perpetual conflict (or in an ongoing jurisdictional fight) with foreign regulators, with multiple regulators endeavoring to exercise jurisdiction over the same conduct. *Second*, over-expansive extraterritorial regulation could be operationally impractical, increase transaction costs, and reduce economic growth and opportunity. *Third*, market fragmentation would be detrimental to cooperation among regulators and diminish market resilience in the event of global market shocks. *Fourth*, the CFTC may wish to afford more deference to foreign regulators that have adopted appropriate rules and regulations concerning blockchain and cryptocurrencies in light of international comity. *Finally*, individual and corporate actors may not reasonably expect to be hauled into U.S. court for their foreign activities, which further weighs against extraterritorial regulation in these areas[10].

2.1 Extraterritorial regulation may lead to conflicts with other foreign regulators

Blockchain and cryptocurrency platforms operate without borders, and the intangible nature of cryptocurrencies permits them to exist in and move fluidly between countries. Regulators in multiple jurisdictions therefore may find themselves simultaneously seeking to assert jurisdiction over the same conduct or alleged misconduct. Absent deference, U.S. regulations potentially could clash with different but effective non-U.S. regulatory frameworks, resulting in an untenable state of overlapping and conflicting rules. This, in turn, could create adverse consequences, including:

- unpredictability to investors and other market participants regarding which rules and guidance apply;
- potentially duplicative sanctions in multiple jurisdictions for the same conduct;
- fragmentation of the global cryptocurrency marketplace;
- protectionism; and
- regulatory arbitrage[11].

For these reasons, the very real potential of conflicting regulations weighs against extraterritorial application of U.S. regulations to cryptocurrencies and other blockchain technologies.

2.2 Cross-border regulation is impractical and may lead to increased transaction costs and reduced economic growth and opportunity

As Chairman Giancarlo's White Paper highlights, the CFTC's over-expansive cross-border approach to swaps regulation has driven market participants away from transacting with entities subject to the CFTC's regulations and fragmented global markets[12]. In the swaps context, an approach to jurisdiction that focuses only upon whether a transaction involves a U.S. person, without taking into account where and how the transaction is entered,

effectively disregards whether the transaction has a direct and significant connection with activities in, or effect on, U.S. commerce – the only circumstance under which the CEA's swaps provisions may apply to activities outside the U.S.[13]. By analogy, the CFTC should have little interest in pursuing cryptocurrency-related conduct that has little or no connection to the U.S. and should instead leave such conduct to its foreign counterparts to pursue[14], lest the CFTC risk driving away foreign market participants, fragmenting cryptocurrency markets, and denying domestic businesses and commercial enterprises opportunities to raise funds, hedge risks, and engage in technological innovation that could lead to business expansion, job creation, and economic development[15].

2.3 Market fragmentation may lead to diminished resilience to global cryptocurrency market shocks

Over-expansive cross-border regulation may lead to market fragmentation, which in turn may not only reduce economic growth and opportunity for domestic enterprises, but also impede resilience following sudden market tumult, resulting in greater price and transaction volatility[16]. Given their nascent, unpredictable, uncertain nature, cryptocurrency markets are especially vulnerable to market shocks and price swings. Bitcoin, for example, has experienced wild volatility and repeated crashes over the last few years, including a 71 per cent overnight price drop in 2013 (Roberts, 2017). More recently, in October 2018, the International Monetary Fund ("IMF") warned that the Bitcoin and blockchain boom facilitating the rapid growth of cryptocurrency assets could create "new vulnerabilities in the international financial system" (Bambrough, 2018). Shortly after the IMF's warning, the values of Bitcoin and other leading cryptocurrencies, including Ripple and Ethereum, plunged, wiping out billions of dollars within minutes (Stevenson, 2018). Such unpredictability and vulnerability associated with cryptocurrencies weigh in favor of regulatory cooperation and against market fragmentation.

2.4 International comity warrants deference to foreign regulators

In cases involving cross-border conduct, international comity and increased deference to foreign regulators may achieve more harmonious and cooperative operation of unified cryptocurrency markets[17]. As discussed above, international organizations and G20 countries have begun to adopt rules and regulations concerning blockchain and cryptocurrencies to achieve compatible and comparable regulatory outcomes and minimize the need for individual regulators to expand or transgress their jurisdictional limits.

At a March 2018 summit, for example, G20 members committed to apply Financial Action Task Force ("FATF")[18] standards to crypto-assets and called on international bodies, including the Financial Stability Board ("FSB")[19], the Committee on Payments and Market Infrastructures ("CPMI")[20], the FATF, and IOSCO to report back to the G20 in July 2018, continue monitoring cryptocurrencies and associated risks, and assess multilateral responses[21]. IOSCO subsequently reported at the July 2018 summit and emphasized the importance of coordination among financial regulators in different jurisdictions in the cryptocurrency space[22]. In October 2018, the FSB published an additional report for G20 highlighting potential risks associated with cryptocurrencies, including fragmented markets, insignificant liquidity, volatility, leverage, technology risks related to mining-based systems, and institutionalization, which necessitate "vigilant monitoring" in light of the "speed of market developments" (FSB, 2018b). Such vigilance may be best achieved via cooperation and collaboration among regulators, including via exercising deference to one another with respect to conduct occurring within each of their respective jurisdictions[23].

Notably, a number of foreign authorities already have begun to implement regulations and guidance in the blockchain and cryptocurrency space. The United Kingdom's Financial Conduct Authority ("FCA"), for example, has determined that firms conducting business in cryptocurrency derivatives in the UK must comply with both applicable FCA rules and relevant provisions in European Union ("EU") regulations and directives (FCA, 2018). The FCA also has deemed it likely that "dealing in, arranging transactions in, advising on or providing other services that amount to regulated activities in relation to derivatives that reference either cryptocurrencies or tokens issued through an initial coin offering (ICO)," such as cryptocurrency futures, cryptocurrency contracts for differences ("CFDs"), and cryptocurrency options, "will require authorisation by the FCA" (FCA, 2018). Violating these authorization requirements constitutes a criminal offense in the UK and may subject a violating firm to enforcement action (FCA, 2018).

In addition to these UK-specific mandates, other EU requirements also may apply, both in the UK and throughout the EU more broadly. The Markets in Financial Instruments Directive ("MiFID") II, for example, is a European Directive governing firms that provide investment services in relation to "financial instruments" (ESMA, 2017a), defined in MiFID II as transferable securities, money-market instruments, units in collective investment undertakings, and certain options, futures, forward rate agreements, and swaps, among other items[24]. Whether a coin or token involved in an ICO qualifies as a financial instrument depends on its characteristics and nature, but firms providing services in the EU in relation to ICOs or other activities involving a coin or token that so qualifies may be subject to MiFID II requirements, and several other EU Directives also may apply (ESMA, 2017a). The UK's apparent continuing focus on and interest in monitoring and regulating cryptocurrencies (and the focus of the EU more broadly in this regard) suggests that U.S. regulators may wish to cooperate with and defer to UK and other EU member state authorities in this space, to avoid overlapping and potentially conflicting regulation.

2.5 Unfairness and unpredictability concerns weigh against extraterritorial application of U.S. regulatory regimes

Extraterritorial application of U.S. regulations to cryptocurrencies and blockchain technologies could render non-U.S. actors subject to charges in the U.S. and prompt questions of fairness and unpredictability (as occurs in other circumstances). Absent a mutual commitment to cross-border regulatory deference, actors in cryptocurrency markets would have little visibility regarding which sets of rules and regulations apply to their activities and in some instances may have to confront and determine how best to comply with conflicting or contradictory mandates[25].

3. The CFTC has limited authority to regulate blockchain technologies and cryptocurrencies extraterritorially

Under the Supreme Court's holding in *Morrison v. National Australia Bank Ltd.*, an "affirmative indication [...] that [a statute] applies extraterritorially" is required as "clear evidence of congressional intent" to overcome the presumption against extraterritoriality[26]. The CEA is largely silent as to its extraterritorial reach; its provisions related to the purchase or sale of any commodity for future delivery, for example, "contain [] nothing on [their] face that suggests extraterritorial application"[27]. Given the general absence of an explicit grant of extraterritorial application in the CEA (subject to a few narrow exceptions), *Morrison*'s presumption against extraterritoriality applies, and courts thus must determine what conduct is – and is not – "domestic," and therefore subject to the CEA's prohibitions. Stated simply, "a claim is within the CEA's domestic application if it involves:

- commodities in interstate commerce; or
- futures contracts traded on domestic exchanges"[28].

The CEA does carve out a few exceptions to the presumption against extraterritoriality, however – most notably, the provisions governing swaps. Indeed, Dodd-Frank granted the CFTC the authority to regulate swap-related activities outside the U.S. that:

- "have a direct and significant connection with activities in, or effect on, commerce of the United States;" or
- contravene certain CFTC rules or regulations[29].

Accordingly, whether the CFTC has jurisdiction to regulate a particular cryptocurrency or cryptocurrency exchange may well turn upon the specific nature of the cryptocurrency in question (such as whether it involves a U.S. or foreign swap, or a futures contract traded on a domestic exchange) and, in instances involving exchanges, whether the exchange is foreign or domestic[30]. For cryptocurrencies that have minimal, if any, U.S. ties, however – such as those premised upon exchanges located abroad – the CFTC (and perhaps other U.S. regulators) may need to enlist the assistance of foreign regulators (and defer to foreign regulatory regimes) out of necessity, because its jurisdictional reach simply does not extend that far.

4. Conclusion

Notwithstanding the uncertainties and vulnerabilities of the cryptocurrency markets and blockchain applications, the principles articulated in Chairman Giancarlo's White Paper provide valuable guidance regarding how best to structure future cross-border regulation of these new technologies. The CFTC already has taken positive steps in this direction. In October 2018, for example, the CFTC and the Australian Securities and Investments Commission ("ASIC") signed an agreement to cooperate and support innovation in the financial technology ("FinTech") space[31], and other domestic and foreign regulators have taken parallel approaches. In this way, the CFTC can work more cooperatively with its foreign counterparts to ensure consistency, predictability, and a unified global market approach.

Notes

1. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).
2. 7 U.S.C. § 1, *et seq.*
3. Christopher Giancarlo, 2018a (hereinafter "White Paper") at 20 (quoting 7 U.S.C. § 2(i)).
4. White Paper at 82.
5. White Paper at 24.
6. The G20 swaps reforms stem from commitments made by G20 leaders in 2009. *See* White Paper at i.
7. *See* White Paper at ii-iii.
8. IOSCO (2017); *see also* Press Release, IOSCO (2018).
9. *Communiqué*, G20 (March 20, 2018), www.g20.utoronto.ca/2018/2018-03-30-g20_finance_communique-en.html; *see Communiqué Annex*, G20 (March 20, 2018), www.g20.utoronto.ca/2018/2018-03-30-g20_finance_annex-en.html; *see also* FSB (2018a).
10. *See generally* White Paper, §§ III, V.
11. *See* White Paper at 24.
12. *See* White Paper at ii.

13. 7 U.S.C. § 2(i).
14. Moreover, as discussed *infra*, the CEA does not authorize the CFTC to act extraterritorially (other than pursuant to the exception applicable to swaps and certain other narrow exceptions), so deference to foreign regulators may be advisable not only from a policy standpoint, but also a practical necessity, given that the CFTC may lack jurisdiction to pursue most extraterritorial conduct tied to cryptocurrencies or other blockchain technologies.
15. *See* White Paper at 27.
16. *See* White Paper at 27.
17. *See* White Paper at 30.
18. The FATF is an inter-governmental body established to set standards and "promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system." *Who We Are*, FATF, www.fatf-gafi.org/about/.
19. The FSB is an "international body that monitors and makes recommendations about the global financial system" to "promote[] financial stability" by "coordinating national financial authorities and international standard-setting bodies as they work toward developing strong regulatory, supervisory and other financial sector policies." *About the FSB*, FSB, www.fsb.org/about/.
20. CPMI, a committee of the Bank for International Settlements ("BIS"), "promotes the safety and efficiency of payment, clearing, settlement and related arrangements," "monitors and analyses developments in these arrangements, both within and across jurisdictions," and "serves as a forum for central bank cooperation in related oversight, policy and operational matters." *Committee on Payments and Market Infrastructures (CPMI) – overview* BIS (last updated May 13, 2015), www.bis.org/cpmi/.
21. *Communiqué* and *Communiqué Annex*, *supra* note 9.
22. *See* FSB (2018a).
23. *See* White Paper at 32.
24. *See* MiFID II Art. 4(1)(15) & Annex I, Section C; *see also* MiFID II Art. 4(1)(44) (defining "transferable securities"); MiFID II Art. 4(1)(17) (defining "money-market instruments").
25. *See* White Paper at 31.
26. 561 U.S. 247, 265 (2010); *Smith v. United States*, 507 U.S. 197, 204 (1993).
27. *Loginovskaya v. Batratchenko*, 936 F. Supp. 2d 357, 372 (S.D.N.Y. 2013), *aff'd*, 764 F.3d 266 (2d Cir. 2014). The references to "interstate commerce" in the CEA are insufficient to establish extraterritorial applicability.
28. *In re LIBOR-Based Fin. Instruments Anti-trust Litig.*, 935 F. Supp. 2d 666, 696 (S.D.N.Y. 2013), *vacated and remanded on other grounds by Gelboim v. Bank of Am. Corp.*, 823 F.3d 759 (2d Cir. 2016).
29. 7 U.S.C. §§ 2(i)(1)-(2).
30. Several courts have acknowledged that the CFTC has authority to regulate virtual currencies as commodities, however. For example, the CFTC recently pursued an antifraud enforcement action relating to alleged fraud and misappropriation involving Bitcoin and Litecoin. *See* Press Release, CFTC, Federal Court in New York Enters Preliminary Injunction Order against Patrick K. McDonnell and His Company CabbageTech, Corp. d/b/a Coin Drop Markets in Connection with Fraudulent Virtual Currency Scheme (March 6, 2018), www.cftc.gov/PressRoom/PressReleases/pr7702-18. The defendants contended that the CFTC lacked authority to regulate virtual currencies in the first place, but the federal district court disagreed, holding that "[v]irtual currencies can be regulated by [the] CFTC as a commodity," and that the CFTC's authority covers fraud and manipulation in virtual currency spot markets. *CFTC v. McDonnell*, 287 F. Supp. 3d 213, 228 (E.D.N.Y. 2018); *see also* Press Release, CFTC, Court Denies Defendants' Motion to Dismiss in Commodity Fraud Case Involving the Virtual Currency My Big Coin (October 3, 2018), www.cftc.gov/PressRoom/PressReleases/7820-18 (acknowledging court holding that the virtual currency at issue was a commodity under the CEA).
31. Press Release, CFTC (2018).

References

Acheson, N. (2018), "How can I buy Bitcoin", *COINDESK*, available at: www.coindesk.com/information/how-can-i-buy-bitcoins/ (last updated 26 January).

Bambrough, B. (2018), "IMF issues stark warning over bitcoin and crypto 'rapid' growth", *Forbes*, available at: www.forbes.com/sites/billybambrough/2018/10/09/imf-issues-stark-warning-over-bitcoin-and-crypto-rapid-growth/#617fc3043544 (9 October).

CFTC (2018), "CFTC, CFTC and ASIC sign FinTech cooperation arrangement", available at: www.cftc.gov/PressRoom/PressReleases/7824-18 (4 October).

Christopher Giancarlo, J. (2018a), "Cross-border swaps regulation version 2.0: a risk-based approach with deference to comparable non-U.S. Regulation", ("White Paper"), available at: www.cftc.gov/sites/default/files/2018-10/Whitepaper_CBSR100118.pdf (1 October).

Christopher Giancarlo, J. (2018b), "Remarks at FIA Expo: A Week in the Life of the CFTC", Chicago, IL, available at: www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo58 (17 October).

Clayton, J. and Christopher Giancarlo, J. (2018), "Regulators are looking at cryptocurrency", *The Wall Street Journal*, available at: www.wsj.com/articles/regulators-are-looking-at-cryptocurrency-1516836363 (24 January).

CoinMarketCap (2018), "Cryptocurrency market capitalizations", available at: https://coinmarketcap.com (accessed 19 December).

Eaglesham, J. and Vigna, P. (2018), "Cryptocurrency firms targeted in SEC probe", *The Wall Street Journal*, available at: www.wsj.com/articles/sec-launches-cryptocurrency-probe-1519856266 (28 February).

ESMA (2017a), "ESMA alerts firms involved in initial coin offerings (ICOs) to the need to meet relevant regulatory requirements", available at: www.esma.europa.eu/sites/default/files/library/esma50-157-828_ico_statement_firms.pdf (13 November).

ESMA (2017b), "ESMA alerts investors to the high risks of initial coin offerings (ICOs)", available at: www.esma.europa.eu/sites/default/files/library/esma50-157-829_ico_statement_investors.pdf (alerting investors of risks of investing in ICOs) (13 November).

FCA (2018), "Cryptocurrency derivatives", available at: www.fca.org.uk/news/statements/cryptocurrency-derivatives (last updated 6 April).

FSB (2018a), "Crypto-assets: report to the G20 on work by the FSB and standard-setting bodies", p. 6, available at: www.fsb.org/wp-content/uploads/P160718-1.pdf

FSB (2018b), "CRYPTO-Assets: potential channels for future financial stability implications", p. 1, available at: www.fsb.org/wp-content/uploads/P101018.pdf (10 October).

IOSCO (2017), "IOSCO research report on financial technologies (fintech)", pp. 47-63, available at: www.iosco.org/library/pubdocs/pdf/IOSCOPD554.pdf

IOSCO (2018), "IOSCO annual conference focuses on key challenges facing securities regulators", available at: www.iosco.org/news/pdf/IOSCONEWS497.pdf (10 May).

Knutson, T. (2018), "Court halts alleged fraudulent $21 million ICO at SEC's request", *Forbes*, available at: www.forbes.com/sites/tedknutson/2018/05/29/court-halts-alleged-fraudulent-21-million-ico-at-secs-request/#5c69aa581a97 (29 May).

Mackenzie Smith, R. (2018), "Q&A: CFTC's Giancarlo on the race to overhaul cross-border rules", RISK.NET, available at: www.risk.net/regulation/6002076/qa-cftcs-giancarlo-on-the-race-to-overhaul-cross-border-rules (4 October).

Martindale, J. (2018), "What is blockchain?", *Digital Trends*, available at: www.digitaltrends.com/computing/what-is-a-blockchain/ (3 August).

Michaels, D. (2018), "Crypto-focused hedge funds on SEC's radar", *The Wall Street Journal*, available at: www.wsj.com/articles/crypto-focused-hedge-funds-on-secs-radar-1521757104 (22 March).

Roberts, J.J. (2017), "5 Big bitcoin crashes: what we learned", *Fortune*, available at: http://fortune.com/2017/09/18/bitcoin-crash-history/ (18 September).

Rubin, G.T. (2018), "Cryptocurrencies, trading scams draw increased federal enforcement", *The Wall Street Journal*, available at: www.wsj.com/articles/cryptocurrencies-trading-scams-draw-increased-federal-enforcement-1538731800 (5 October).

SEC (2017), "Investor bulletin: initial coin offering", available at: www.sec.gov/oiea/investor-alerts-and-bulletins/ib_coinofferings (warning investors about recent increase in ICOs and potential for fraud) (25 July).

Stevenson, S. (2018), "Bitcoin price CRASH: cryptocurrency suddenly falls and wipes out $13 billion in minutes", *Express UK*, available at: www.express.co.uk/finance/city/1029870/bitcoin-price-news-cryptocurrency-BTC-volatility-blockchain-fintech-IMF (11 October).

Corresponding author

Michael L. Spafford can be contacted at: michaelspafford@paulhastings.com

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com