THE VIRTUAL CURRENCY REGULATION REVIEW

Third Edition

Editors
Michael S Sackheim and Nathan A Howell

THE LAWREVIEWS

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PREFACE

We are pleased to introduce the third edition of *The Virtual Currency Regulation Review* (the *Review*). The increased acceptance and use of virtual currencies by businesses and the exponential growth of investment opportunities for speculators marked late 2019 and early 2020. In 2019, it was reported that several of the largest global banks were developing a digital cash equivalent of central bank-backed currencies that would be operated via blockchain technology, and that Facebook was developing its own virtual currency pegged to the US dollar – Libra – to be used to make payments by people without bank accounts and for currency conversions. In 2019, the US House of Representatives' Committee on Financial Services held a hearing on the potential impact of Libra in which one witness testified that Libra posed a fundamental threat to the ability of sovereign nations to maintain distinct monetary policies and respond to currency crises.

The *Review* is a country-by-country analysis of developing regulatory initiatives aimed at fostering innovation, while at the same time protecting the public and mitigating systemic risk concerning trading and transacting in virtual currencies. In February 2020, the International Organizations of Securities Commissions (IOSCO) published a final report titled 'Issues, Risks and Regulatory Considerations Relating to Crypto-Asset Trading Platforms'. The final report describes issues and risks identified to date that are associated with the trading of cryptoassets on cryptoasset trading platforms (CTPs). In relation to the issues and risks identified, the report describes key considerations and provides related toolkits that are useful for each consideration. The key considerations relate to: (1) access to CTPs; (2) safeguarding participant assets; (3) conflicts of interest; (4) operations of CTPs; (5) market integrity; (6) price discovery; and (7) technology. IOSCO advised that these seven key considerations (and the related toolkits described in the report) represent specific areas that IOSCO believes jurisdictions could consider in the context of the regulation of CTPs.

Fortunes have been made and lost in the trading of virtual currencies since Satoshi Nakamoto published a white paper in 2008 describing what he referred to as a system for peer-to-peer payments, using a public decentralised ledger known as a blockchain and cryptography as a source of trust to verify transactions. That paper, released in the dark days of a growing global financial market crisis, laid the foundations for Bitcoin, which would become operational in early 2009. Satoshi has never been identified, but his white paper represented a watershed moment in the evolution of virtual currency. Bitcoin was an obscure asset in 2009, but it is far from obscure today, and there are now many other virtual currencies and related assets. In 2013, a new type of blockchain that came to be known as Ethereum was proposed. Ethereum's native virtual currency, Ether, went live in 2015 and opened up a new phase in the evolution of virtual currency. Ethereum provided a broader platform, or protocol, for the development of all sorts of other virtual currencies and related assets.

In 2020, the global outbreak of the novel coronavirus (or covid-19) impacted virtually every person on the planet and had severe and sudden effects on every major economy. At the time of writing, the pandemic is ongoing and, while some locations are pushing past their respective 'peaks' of infection, cities that are central to the global financial markets, such as New York City, remain under strict lockdown orders, with many workers in the financial services sector working remotely. It is unclear when these cities will return to a version of 'normal'. In the midst of all this chaos, there is a natural experiment under way in the cryptocurrency markets. We are perhaps learning what happens when our governments are strained and their competence is questioned. Since mid-March 2020, when the pandemic hit the United States in earnest (it had already been raging in China, Italy, Iran, etc.), the price of Bitcoin has gone up in essentially a straight line – from approximately US$5,000 to almost US$10,000 as at mid-May. Now, to be fair, this follows a significant price decline preceding March, but it is at least interesting to observe that the most widely held cryptocurrency is weathering a significant economic storm with apparent ease.

When we first launched the *Review* three years ago, we were optimistic but sceptical about whether virtual currencies would be widely and consistently in commercial use. However, the virtual currency revolution has come a long way and has endured a sufficient number of events that could or should have been fatal for the asset class. Our confidence in the long-term viability of virtual currency has only increased over the previous year. Virtual currencies and the blockchain and other distributed ledger technology on which they are based are groundbreaking, and are being deployed right now in many markets and for many purposes. As lawyers, we must now endeavour to understand what that means for our clients.

Virtual currencies are borderless: they exist on global and interconnected computer systems. They are generally decentralised, meaning that the records relating to a virtual currency and transactions therein may be maintained in a number of separate jurisdictions simultaneously. The borderless nature of this technology was the core inspiration for the *Review*. As practitioners, we cannot afford to focus solely on our own jurisdictional silos. For example, a US banking lawyer advising clients on matters related to virtual currency must not only have a working understanding of US securities and derivatives regulation; he or she must also have a broad view of the regulatory treatment of virtual currency in other major commercial jurisdictions.

Global regulators have taken a range of approaches to responding to virtual currencies. Some regulators have attempted to stamp out the use of virtual currencies out of a fear that virtual currencies such as Bitcoin allow capital to flow freely and without the usual checks that are designed to prevent money laundering and the illicit use of funds. Others have attempted to write specific laws and regulations tailored to virtual currencies. Still others – the United States included – have attempted to apply legacy regulatory structures to virtual currencies. Those regulatory structures attempt what is essentially 'regulation by analogy'. In some countries, a virtual currency, which is not a fiat currency, may be regulated in the same manner as money; in other countries, virtual currency may be regulated similarly to securities or commodities. We make one general observation at the outset: there is no consistency across jurisdictions in their approach to regulating virtual currencies. Perhaps the efforts of IOSCO will help to change that going forward, but there is currently no widely accepted global regulatory standard. That is what makes a publication such as the *Review* both so interesting and so challenging.

The lack of global standards has led to a great deal of regulatory arbitrage, as virtual currency innovators shop for jurisdictions with optimally calibrated regulatory structures that provide an acceptable amount of legal certainty and virtual currency scofflaws shop for jurisdictions with regulatory structures that provide no meaningful regulation. While some market participants are interested in finding the jurisdiction with the lightest touch (or no touch), most legitimate actors are not attempting to flee from regulation entirely. They appreciate that regulation is necessary to allow virtual currencies to achieve their potential, but they do need regulatory systems with an appropriate balance and a high degree of clarity. The technology underlying virtual currencies is complex enough without adding layers of regulatory complexity into the mix.

It is perhaps ironic that the principal source of strength of virtual currencies – decentralisation – is the same characteristic that the regulators themselves seem to be displaying. There is no central authority over virtual currencies, either within or across jurisdictions, and each regulator takes an approach that seems appropriate to that regulator based on its own narrow view of the markets and legacy regulations. Again, we are hopeful that IOSCO's efforts will help to encourage the emergence of optimal regulatory structures over time. Ultimately, the borderless nature of these markets allows market participants to 'vote with their feet', and they will gravitate towards jurisdictions that achieve the right regulatory balance of encouraging innovation and protecting the public and the financial system. It is much easier to do this in a primarily electronic and computerised business than it would be in a brick-and-mortar business. Computer servers are relatively easy to relocate; factories and workers are less so.

The third edition of the *Review* provides a practical analysis of recent legal and regulatory changes and developments, and of their effects, and looks forward to expected trends in the area of virtual currencies on a country-by-country basis. It is not intended to be an exhaustive guide to the regulation of virtual currencies globally or in any of the included jurisdictions. Instead, for each jurisdiction, the authors have endeavoured to provide a sufficient overview for the reader to understand the current legal and regulatory environment at a high level.

Virtual currency is the broad term that is used in the *Review* to refer to Bitcoin, Ether, Tethers and other stablecoins, cryptocurrencies, altcoins, ERC20 tokens, digital, virtual and crypto assets, and other digital and virtual tokens and coins, including coins issued in initial coin offerings. We recognise that in many instances the term 'virtual currency' will not be appropriate, and other related terms are used throughout as needed. In the law, the words we use matter a great deal, so, where necessary, the authors of each chapter provide clarity around the terminology used in their jurisdiction and the legal meaning given to that terminology.

Based on feedback on the first and second editions of the *Review* from members of the legal community throughout the world, we are confident that attorneys will find the updated third edition to be an excellent resource in their own practices. We are still in the early days of the virtual currency revolution, but it does not appear to be a passing fad. The many lawyers involved in this treatise have endeavoured to provide as much useful information as practicable concerning the global regulation of virtual currencies.

The editors would like to extend special thanks to Ivet Bell (New York) and Dan Applebaum (Chicago), both Sidley Austin LLP associates, for their invaluable assistance in organising and editing the third edition of the *Review*, and particularly the United States chapter. The assembly of this third edition is made all the more remarkable by the fact that

many of the authors and contributors are working from home, with dogs barking in the background and children at their feet. Special thanks go out to all those dogs and children for being as tolerant as possible as we try to conduct the work of busy lawyers and also produce this *Review*.

Michael S Sackheim and Nathan A Howell
Sidley Austin LLP
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Chapter 27

UNITED STATES

Sidley Austin LLP[1]

I INTRODUCTION TO THE LEGAL AND REGULATORY FRAMEWORK

In the United States, multiple regulators may assert overlapping jurisdiction for market participants transacting in virtual currencies or other digital assets. Market participants must consider legal and regulatory regimes overseen at the federal level by the US Securities and Exchange Commission (SEC), the US Commodity Futures Trading Commission (CFTC), the Financial Crimes Enforcement Network (FinCEN), the Office of Foreign Asset Control (OFAC) of the US Treasury Department and federal banking regulators. In addition, US states have legal and regulatory regimes that should be considered when undertaking virtual currency activities. These include state money transmitter requirements, state virtual currency licensing regimes and state 'blue sky' laws applicable to digital asset securities transactions. Market participants should also consider commercial, tax and bankruptcy laws before engaging in virtual currency transactions.

The SEC regulates digital asset transactions if they are offered or traded as securities or if they are offered through a collective investment fund. The SEC has published reports and guidance related to the offering of, secondary trading in and investing in digital asset securities. The Securities Act of 1933 (the Securities Act) makes it unlawful for any person to make use of the means or instrumentalities of interstate commerce to offer or sell a security unless such offering is registered with the SEC or there is an applicable exemption from the registration requirements. A threshold consideration in trading or investing in digital assets is whether the particular digital asset is a security and therefore subject to the federal securities laws. The inquiry into whether a particular digital asset is a security and thus subject to the federal securities laws is based on the facts and circumstances surrounding the offer and sale of each digital asset. Further, registration requirements under the Securities Exchange Act of 1934 (the Exchange Act) extend to market participants involved in the offer or secondary trading of digital asset securities. The SEC's digital asset guidance, settlement orders and enforcement actions help to shed light on how the legal and regulatory framework applies to different digital asset business models.

The CFTC, the primary federal derivatives regulator in the United States, regulates certain transactions in virtual currencies as commodities. To the extent that a virtual currency is deemed to be a 'commodity', the CFTC has regulatory jurisdiction over derivatives

1 Michael S Sackheim is senior counsel; Nathan A Howell, James B Biery, James Munsell, Lilya Tessler, Michael A Levy, Pamela J Martinson, David E Teitelbaum, Dominique Gallego, Andrew P Blake, Teresa Wilton Harmon and Alex R Rovira are partners; Daniel J Applebaum, Ivet A Bell, Daniel Engoren, David A Miller, Verity A Van Tassel Richards and Sean A Smith are associates; and Kenny Terrero is counsel at Sidley Austin LLP.

transactions with respect to the virtual currency and has anti-fraud and manipulation authority with respect to transactions in the virtual currency itself. The CFTC has brought civil enforcement cases against virtual currency derivatives trading facilities alleging failures to comply with the CFTC's requirements for regulated derivatives exchanges. The CFTC also has broad authority to bring civil enforcement actions where there is fraud or manipulation with respect to any commodity transaction in interstate commerce, even if the transaction is not a derivatives transaction (i.e., even if it is not a futures contract, swap or option). Because certain virtual currencies are commodities as the term is defined in the Commodity Exchange Act (CEA), the CFTC maintains that it can police any fraudulent, deceptive or manipulative activity involving virtual currency spot, cash and forward transactions, making the CFTC a key player in the US regulatory regime for virtual currencies.

FinCEN regulates money services transmitters and has issued interpretative guidance for virtual currency exchanges. Some states also require licensing of money transmitters, including those that facilitate the transmission of virtual currencies. The federal banking agencies have closely monitored banking activities involving virtual currencies. In mid-2018, the former Chair of the CFTC testified before Congress that there may be a gap in the oversight of virtual currencies that are not securities, stating that regulatory oversight through state money transmission regulations is not satisfactory and that the US Congress might consider giving the CFTC or another federal agency the authority to write new rules for spot digital asset markets, including new registration requirements. Each of the 50 states in the United States has its own securities and financial services regulator, many of which are involved in monitoring activities regarding virtual currencies and in some cases have brought enforcement actions where they found fraud or money laundering.

This chapter reviews the web of concurrent and overlapping regulatory jurisdiction and developments in the United States regarding virtual currency and digital assets, including regulatory requirements applicable to intermediaries and trading platforms.

II SECURITIES AND INVESTMENT LAWS

In this section, we discuss securities and commodities laws and regulations that apply to digital assets. See Section V (Regulation of Miners), Section VI (Regulation of Issuers and Sponsors) and Section VII (Criminal Fraud and Enforcement) for discussions that also implicate securities and commodities laws as they relate to digital assets.

i Digital asset securities

A threshold consideration in trading or investing in digital assets is whether the particular digital asset is a security and therefore subject to the federal securities laws. Section 5 of the Securities Act makes it unlawful for any person to make use of the means or instrumentalities of interstate commerce to offer or sell a security unless such security is registered with the SEC or there is an applicable exemption from the registration requirements.[2] In July 2017, the SEC issued a Report of Investigation (the DAO Report) analysing whether the offer and sale of a digital asset was subject to the federal securities laws.[3] The digital asset in question

2 Securities Act § 5 (codified at 15 U.S.C. § 77e (2018)).

3 Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, Exchange Act Release No. 81207 (July 25, 2017) (DAO Report), https://www.sec.gov/litigation/investreport/34-81207.pdf.

was a token issued by an entity known as the Decentralized Autonomous Organisation (DAO), an unincorporated organisation. The DAO was created by a German corporation named Slock.it UG, and by the time the DAO Report was issued, the DAO had offered and sold approximately 1.15 billion DAO tokens in exchange for a total of approximately 12 million Ether, a virtual currency used on the Ethereum blockchain, which had a value, at the time the offering closed, of approximately US$150 million.

The SEC analysed whether the DAO token was an investment contract, and therefore a security, as defined by the Supreme Court of the United States (the Court) in the seminal case, *SEC v. WJ Howey Co*,[4] which involved the offer and sale of interests in an orange grove. The Court defined an investment contract as an investment of money in a collective enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others. In the DAO Report, the SEC approvingly quoted from the Court's observation that this definition embodies a 'flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits'.[5]

The DAO token represented an ownership interest in a collective vehicle whereby monies raised by the token sales would be used to fund various blockchain projects that could provide holders with a return on their investment. DAO token holders could vote on which projects to fund; however, before a project could be voted on, it first had to be reviewed and approved by one of the DAO's curators, which was a group of individuals selected by Slock. These curators performed crucial security functions and maintained ultimate control over which proposals could be submitted to, voted on and funded by the DAO.

Presented with this fact pattern, the SEC concluded that the DAO token was an investment contract. There was (1) an investment of money (in this case, Ether) in (2) a common enterprise (the DAO platform), with the (3) expectation of profits (promotional materials informed investors that the DAO was a for-profit entity whose objective was to fund projects in exchange for a return on investment) (4) derived from the efforts of others (Slock.it and the curators). Although the DAO token holders did have voting rights, the SEC concluded that the voting rights were limited, and that the holders were substantially reliant on the managerial efforts of Slock.it and the curators. As an investment contract, the DAO Report noted that the offer and sale of the DAO token was required to be registered under the Securities Act (unless a valid exemption from registration applied), and that platforms trading DAO tokens that met the definition of an exchange would need to register as such under the Exchange Act.

Following the issuance of the DAO Report, blockchain market participants focused on the two elements of the investment contract test that could potentially lead to a different conclusion than the one reached by the SEC with respect to the DAO token. Under the *Howey* test, the first two elements would likely always be met: an investment of money in a common enterprise. However, the question arises of whether token projects could avoid triggering the second two elements of the *Howey* test – the expectation of profits and being derived from the efforts of others. For example, what if the value of the token was not primarily to provide a return on investment, but rather to enable the holder to do something that he or she could not do without a token, such as purchase a good or service available through the network on

4 328 U.S. 293 (1946).

5 id., at 299.

which the token was created? Or, what if the holder's expectation of profits did not rely on the efforts of others, but rather the holder had the power to create his or her own return on investment? What if there was no potential for profit or capital appreciation at all?

In December 2017, the SEC provided further clarity for blockchain participants in a cease-and-desist order issued to Munchee Inc, a California corporation (Munchee).[6] Munchee commenced business operations when it launched an iPhone app in 2015 (Munchee App), which allowed users to review meals and upload pictures. In early 2017, Munchee sought to raise capital through the development and issuance of a digital token (MUN token). The issuance of the MUN token purported to address the issues raised by the SEC in the DAO Report. For example, Munchee characterised the MUN tokens as utility tokens, because there was a real use case for the MUN token in connection with the already existing Munchee App. The SEC's order quickly addressed the first two elements of the *Howey* analysis and focused on the manner of sale of the MUN token. The order stated that 'investors' expectations were primed by Munchee's marketing of the MUN token offering', and listed several examples of how the marketing of the MUN tokens offered investors hope and expectations that their investments would increase in value. Munchee's marketing materials also stated that Munchee would 'ensure that MUN token is available on a number of exchanges in varying jurisdictions', thereby ensuring MUN token holders could buy and sell MUN on secondary markets to realise the purported increases in value. Additionally, the SEC noted that Munchee and its agents marketed the MUN token to people interested in investing in digital assets instead of marketing to restaurant owners and food critics. Directly addressing the utility token argument that developed after the DAO Report, the SEC stated that 'even if MUN tokens had practical use at the time of the offering, it would not preclude the token from being a security. Determining whether a transaction involves a security does not turn on labelling [. . .] but instead requires an assessment of the economic realities underlying the transaction'.

In June 2018, the SEC's Director of the Division of Corporation Finance, William Hinman, made an important speech in which he provided further guidance refining the SEC's approach to analysing when a digital asset is offered as an investment contract and therefore is a security.[7] He framed the question differently by focusing not on the digital asset itself, but rather on the circumstances surrounding the digital asset and the manner in which it is sold. He conceded that the token, or 'whatever the digital information packet is called', is not a security all by itself, just as the interests in the orange grove in *Howey* were not. The token is 'simply code'. Instead, 'the way it is sold – as part of an investment; to non-users; by promoters to develop the enterprise – can be, and, in that context, most often is, a security – because it evidences an investment contract. And regulating these transactions as securities transactions makes sense'. When there is information asymmetry between promoters or founders and investors, then the protections of the Securities Act – namely, disclosure and liability for material misstatements and omissions – are necessary and appropriate.

On the other hand, Hinman noted that '[i]f the network on which the token or coin is to function is sufficiently decentralised – where purchasers would no longer reasonably

6 *In the Matter of Munchee Inc*, Securities Act Release No. 10445, Admin. File No. 3-18304 (Dec. 11, 2017), https://www.sec.gov/litigation/admin/2017/33-10445.pdf.

7 William Hinman, Director, US Sec. and Exch. Comm'n Div. of Corp. Fin., 'Digital Asset Transactions: When Howey Met Gary (Plastic), Remarks at the Yahoo Finance All Markets Summit: Crypto' (June 14, 2018), https://www.sec.gov/news/speech/speech-hinman-061418.

expect a person or group to carry out essential managerial or entrepreneurial efforts – the assets may not represent an investment contract. Moreover, when the efforts of the third party are no longer a key factor for determining the enterprise's success, material information asymmetries recede'. Hinman put both Bitcoin and Ether into this latter category – as digital assets where there is no central third party whose efforts are a key determining factor in the common enterprise, and where it would seem that the disclosure regime of the federal securities laws would provide little value to the holders of Bitcoin and Ether.

In other words, as has always been the case, an investment contract can be made out of virtually any asset, including digital assets, so long as the investor is reasonably expecting profits from the promoter's efforts. As Hinman reiterated, 'the economic substance of [a] transaction determines the analysis, not the label'. Similarly, an investment contract can also be unwound or undone. The management contract for the orange grove can be terminated. With regard to digital assets, it is a novel idea that this transition or change would or could occur as a result of changes to the facts and circumstances associated with the token, without necessarily any action taken or to be taken by the holder. In response to Hinman's speech, many market participants sought clarity as to the precise mix of facts that would distinguish the sale of digital assets from a securities transaction.

In April 2019, the SEC's Strategic Hub for Innovation and Financial Technology (FinHub)[8] released a framework (the Framework) for applying the investment contract analysis set forth in *Howey* and its progeny to digital assets to 'help market participants assess whether the federal securities laws apply to the offer, sale, or release of a particular digital asset'.[9] While the Framework does not create new law, it provides the SEC staff's view as to whether specific facts commonly present in the digital asset context make it more or less likely that specific elements of the *Howey* test are met. In addition, the Framework provides additional factors to consider that may be indicative of whether a digital asset is offered with 'consumptive' intent (as opposed to investment intent) and highlights particular facts that may change over time to be considered in determining whether and when a subsequent offering and sale of a digital asset previously sold as a security may no longer be considered an offering and sale of a security. Specifically with respect to 'virtual currency', the Framework notes that the ability to use the virtual currency immediately to make payments for goods and services without having to convert it to another digital asset or real currency may make it less likely the *Howey* test is met.

On the same day that the Framework was released, the SEC Division of Corporation Finance issued its first no-action letter relating to the offer and sale of a digital asset.[10] In providing relief that the relevant tokens would not be required to register under the Securities Act or the Exchange Act, the Division of Corporation Finance particularly noted that: (1) the issuer would not use funds from the token sale to develop the related application and that the application would be fully developed and operational at the time tokens are sold; (2) the tokens would be immediately usable for their intended functionality (purchasing air

8 The SEC launched FinHub in October 2018 as a 'resource for public engagement on the SEC's FinTech-related issues and initiatives', including digital assets. FinHub is staffed by personnel from across the SEC's divisions and offices.

9 'Framework for 'Investment Contract' Analysis of Digital Assets', US Sec. and Exch. Comm'n (Apr. 3, 2019), https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets.

10 *TurnKey Jet, Inc.*, SEC No-Action Letter (Apr. 3, 2019), https://www.sec.gov/divisions/corpfin/cf-noaction/2019/turnkey-jet-040219-2a1.htm.

charter services) at the time they are sold; (3) the tokens could not be transferred external to the application; and (4) the tokens would always be sold at a fixed price and redeemable for services valued at that price.

In July 2019, the SEC Division of Corporation Finance issued its second no-action letter to a company seeking to distribute digital assets. In providing relief that the particular tokens would not be required to register under the Securities Act or the Exchange Act, the SEC noted that: (1) the issuer would not use any funds from the token sale to build the related application, which was fully developed and would be fully functional and operational immediately upon its launch and before any of the tokens were sold; (2) the tokens would be immediately usable for their intended functionality (gaming) at the time they were sold; (3) the issuer would implement technological and contractual provisions governing the tokens and the related application restricting the transfer of the tokens to the issuer or to wallets on the related application; (4) gamers would only be able to transfer the tokens from their on-platform wallets for gameplay to addresses of developers with approved accounts or to the issuer in connection with participation in e-sports tournaments; (5) only developers and influencers with approved accounts would be capable of exchanging tokens for Ethereum at predetermined exchange rates by transferring their tokens to the token smart contract; (6) to create an approved account, developers and influencers would be subject to know your customer and anti-money laundering (AML) checks at account initiation as well as on an ongoing basis; (7) tokens would be made continuously available to the most common type of user (gamers) in unlimited quantities at a fixed price; (8) there would be a correlation between the purchase price of the tokens and the market price of accessing and interacting with participating games; and (9) the issuer would market and sell the tokens to gamers solely for consumptive use as a means of accessing and interacting with participating games.

In October 2019, the SEC sued Telegram Group Inc and its wholly owned subsidiary TON Issuer Inc (together, Telegram), alleging that Telegram failed to register the offers and sales of digital assets called 'Grams', which were made in the United States and overseas and raised more than US$1.7 billion of investor funds. The SEC obtained a temporary restraining order preventing the delivery of Grams to purchasers. Opposing the SEC's motion for a preliminary injunction further preventing the delivery of Grams, Telegram argued that the prior sales to investors and transaction in Grams after the Telegram blockchain was launched should be considered separately. According to Telegram, the sale of Grams to investors was an offering of securities, which Telegram conducted relying on an exemption from registration under the Securities Act (Rule 506(c) under Regulation D) – however, transactions in Grams once the blockchain was launched would constitute spot transactions in commodities, not securities transactions. In an important decision, in March 2020 the US District Court for Southern District of New York (SDNY) ruled in favour of the SEC, finding that the sales to investors and any subsequent transactions after the blockchain had launched comprised a single scheme (but notably, not the Grams themselves) constituting an investment contract by application of the *Howey* test.[11]

In February 2020, SEC Commissioner Hester Peirce gave a speech explaining the need for clarity on the application of federal securities law to the offer and sale of digital assets, describing a proposal for a safe harbour from the registration requirements of the

11 *SEC v. Telegram Group Inc. et al*, 19-cv-09439-PKC (S.D.N.Y. Oct 11, 2019). See also Castel, J., Opinion & Order, *SEC v. Telegram Grp. Inc. & Ton Issuer Inc.*, No. 1:19-cv-09439-PKC (S.D.N.Y. Mar. 24, 2020).

Securities Act.[12] The safe harbour, if adopted, is intended to provide development teams with a three-year period within which they can facilitate participation in a functional or decentralised network, exempt from the registration provisions of the federal securities laws.[13] To rely on the safe harbour, a development team would need to disclose certain information on a freely accessible public website, and the token must be offered and sold for the purpose of facilitating access to, participation on or the development of the network. The company must undertake good faith and reasonable efforts to create liquidity through listing the token on trading platforms, exempt from the definition of 'exchange', 'broker' or 'dealer' under the Exchange Act. Furthermore, the issuer would have to file a notice of reliance with the SEC. The safe harbour is currently a draft proposal; an actual safe harbour proposal will require formal rule-making by the entire Commission and will be subject to an open comment period. Further, the proposed safe harbour is not expected to change the SEC's approach in pending enforcement actions.

ii Certain market participants

In planning to negotiate, effect, clear or settle transactions in virtual currencies that are securities,[14] market participants should evaluate whether their activities may trigger registration and related requirements under the framework of the Exchange Act, which is administered by the SEC. In particular, market participants should be aware of the definitions of broker,[15] dealer,[16] exchange,[17] alternative trading system (ATS),[18] clearing agency[19] and transfer agent.[20] The SEC has increasingly made clear that it intends to regulate virtual currencies to the extent of its existing authority in these areas.

For example, the SEC's Division of Trading and Markets and Division of Enforcement published a joint statement in which they noted that trading venues on which individuals buy tokens that are securities as part of an ICO (or in secondary transactions) may be required to register with the SEC as a national securities exchange or otherwise avail themselves of an exemption from registration, such as by filing as an ATS.[21] The SEC addressed this same point in its July 2017 issuance of the DAO Report.[22] There, it found that certain platforms that facilitated trading of certain DAO tokens that constituted securities appeared to violate Section 5 of the Exchange Act by engaging in activities that met the definition of an exchange

12 Hester M. Peirce, SEC Comm'r, Remarks at the 4th International Blockchain Congress, Running on Empty: A Proposal to Fill the Gap Between Regulation and Decentralization (Feb. 6, 2020), https://www.sec.gov/news/speech/peirce-remarks-blockress-2020-02-06.

13 id.

14 As described herein, many, but not all, virtual currencies are viewed by US regulators as being securities.

15 15 U.S.C. § 78c(a)(4) (2018).

16 id., § 78c(a)(5).

17 id., § 78c(a)(1).

18 17 C.F.R. § 242.300(a) (2018).

19 15 U.S.C. § 78c(a)(23) (2018).

20 id., § 78c(a)(25).

21 Divs. of Enf't and Trading and Mkts., US Sec. and Exch. Comm'n, 'Statement on Potentially Unlawful Online Platforms for Trading Digital Assets' (Mar. 7, 2018), https://www.sec.gov/news/public-statement/enforcement-tm-statement-potentially-unlawful-online-platforms-trading.

22 DAO Report, footnote 3.

(i.e., matching the orders of multiple buyers and sellers for execution using non-discretionary methods) without being registered as such or relying on an available exemption from registration.

Below is a general overview of some of the most common registration types and related requirements under the Exchange Act that may be triggered by transacting in or otherwise facilitating transactions in virtual currencies that are securities.

Broker-dealers

Registration with the SEC is generally required for any entity that meets the statutory definition of a broker or dealer, including with respect to their activities in virtual currencies that are securities. A securities broker includes any person who is engaged in the business of effecting transactions in securities for the accounts of others.[23] Exceptions from the broker definition are also available to a bank,[24] as defined under the Exchange Act, that only engages in certain securities activities (e.g., third-party brokerage arrangements, trust activities, stock purchase plans and sweep accounts).[25] A securities dealer includes any person engaged in the business of buying and selling securities for such person's own account, regardless of whether through a broker or otherwise. However, the definition also includes an exception for persons who are not in the business of dealing in securities. Specifically, the dealer-trader exception states that a person is generally not acting as a dealer where that person trades for his or her own account but not as part of a regular business. The SEC Division of Trading and Markets has also published a significant volume of guidance in the form of no-action letters that further address when a person may be engaged in broker or dealer activities, but SEC staff would not recommend enforcement action by the agency if the person engages in the specified activities without becoming registered. Consideration of that guidance is therefore also relevant to a market participant's own evaluation of whether it is acting as broker or dealer and must register.

Section 15(a)(1) of the Exchange Act generally requires registration of any person who acts as a broker or dealer, as described above, and who uses instrumentalities of interstate commerce[26] 'to effect any transaction in, or to induce or attempt to induce the purchase or sale of, any security (other than an exempted security or commercial paper, bankers acceptances or commercial bills)'.[27] Registration with the SEC requires the submission of Form BD (Uniform Application for Broker-Dealer Registration) through the Central Registration Depository, which is currently the central licensing and registration system operated by the Financial Industry Regulatory Authority, Inc (FINRA). Unless a broker-dealer is a member of a US national securities exchange and generally limits its securities activities to trading on that exchange, it must also become a member of FINRA, which is the national securities association in the United States for broker-dealers that, among other things, has surveillance

23 15 U.S.C. § 78c(b)(4) (2018).

24 id., § 78c(a)(6).

25 id., § 78c(a)(4)(B).

26 id., § 78c(a)(17).

27 id., § 78o(a)(1). A broker-dealer and its personnel must also, separately and independently, comply with the securities (or 'blue sky') laws, and in particular the broker-dealer and agent and salesperson registration requirement, of each US state and territory (including the District of Columbia) in which the broker-dealer and its personnel conduct securities activities, even if the broker-dealer does not maintain a place of business in such state.

and enforcement authority over its members. To apply to become a member of FINRA, broker-dealers must complete a detailed new membership application that requires an applicant to provide FINRA with, among other things, detailed written supervisory and compliance procedures. On 18 July 2019, FINRA issued Regulatory Notice 19-24, updating a notice from the previous year and requesting member firms to notify FINRA if 'it, or its associated persons or affiliates, currently engages, or intends to engage, in any activities related to digital assets, such as cryptocurrencies and other virtual coins and tokens'.[28] The notice also reminds FINRA members of the requirement to submit a Continuing Membership Application pursuant to NASD Rule 1017 and receive approval from FINRA before engaging in a material change in business operations, but does not state that activities related to digital assets would per se be a material change.

Among other considerations regarding acting as a broker-dealer in respect of virtual currencies that are securities, market participants should consider the compatibility of their planned activities with the existing requirements of the SEC's financial responsibility rules.[29] For example, broker-dealers are generally required by SEC Rule 15c3-3(b)(1) to promptly obtain and thereafter maintain control of all fully paid and excess margin securities that are carried for the account of a customer.[30] The terms fully paid securities[31] and excess margin securities[32] are separately defined in Rule 15c3-3, and broker-dealers frequently satisfy this obligation today through custody of the securities at a clearing agency (e.g., the Depository Trust Company (DTC) or a custodian bank) because those locations are recognised in Rule 15c3-3(c) as being under the control of the broker-dealer. In terms of virtual currencies that are securities, however, the same recognised good control locations may not be practicable depending on the characteristics of the financial instruments and how they are issued and maintained. Accordingly, a broker-dealer should evaluate its planned activities against the SEC's control requirement, including whether it may need to apply to the SEC for the recognition of a new control location pursuant to Rule 15c3-3(c)(7). On 8 July 2019, the SEC's Division of Trading and Markets and FINRA's Office of General Counsel issued a joint statement on broker-dealer custody of digital asset securities that contained regulatory considerations applicable to various market participants, including those related to noncustodial broker-dealer models, the application of SEC Rule 15c3-3 to broker-dealer custody and books and records and financial reporting rules.[33]

28 Fin. Indus. Regulatory Auth. Inc., Regulatory Notice 19-24, 'FINRA Encourages Firms to Notify FINRA if they Engage in Activities related to Digital Assets' (July 18, 2019); Fin. Indus. Regulatory Auth. Inc., Regulatory Notice 18-20, 'FINRA Encourages Firms to Notify FINRA if they Engage in Activities related to Digital Assets' (July 6, 2018).

29 See Lilya Tessler, David M Katz, Steffen Hemmerich & Daniel Engoren, 'Custody of Digital Asset Securities: A Proposal to Address Open Questions for Broker-Dealers Under the SEC's Customer Protection Rule', Blockchain 2019: A Sidley Austin LLP Educational Series (Mar. 18, 2019), https://www.sidley.com/en/insights/publications/2019/03/custody-of-digital-assets-securities.

30 17 C.F.R. § 240.15c3-3(b)(1) (2018).

31 id., § 240.15c3-3(a)(3).

32 id., § 240.15c3-3(a)(5).

33 Div. of Trading and Mkts., US Sec. and Exch. Comm'n, Office of Gen. Counsel, Fin. Indus. Regulatory Auth. Inc., 'Joint Staff Statement on Broker-Dealer Custody of Digital Asset Securities' (July 8, 2019), https://www.sec.gov/news/public-statement/joint-staff-statement-broker-dealer-custody-digital-asset-securities.

Exchanges and ATSs

In general under the Exchange Act, an exchange is defined to mean a system that brings together the orders for securities of multiple buyers and sellers, and uses established, non-discretionary methods (whether by providing a trading facility or by setting rules) under which such orders interact with each other.[34] As noted above, the SEC and its staff have emphasised recently that market participants who facilitate transactions in virtual currencies that are securities may come within the definition of an exchange, and that any such entity or group of persons that performs the functions typically provided by a securities exchange must either register as a national securities exchange, pursue an exemption from the definition of an exchange[35] or become an ATS that is operated by a broker-dealer. Under the regulatory framework administered by the SEC, an ATS is a national securities exchange; however, it is exempt from such registration provided that it complies with the requirements of the SEC's Regulation ATS.[36]

The regulatory burdens associated with registering and operating as a national securities exchange are significantly greater than those associated with an ATS. For example, the registration process for an exchange involves completing and submitting Form 1 to the SEC, which is published for public notice and comment. By contrast, the submission of Form ATS to the SEC is not subject to the same public notice and comment process. Additionally, under Section 6(b)(2) of the Exchange Act,[37] a national securities exchange is generally required to permit any broker-dealer or natural person associated with a broker-dealer to become a member of the exchange. An ATS is not subject to this obligation, and therefore it has more discretion over who it allows to participate. The rules of an exchange also generally cannot be amended without the advance submission of rule changes to the SEC pursuant to Section 19(b)(1) of the Exchange Act, which are published for public notice and comment and may take up to 240 calendar days for the SEC to approve or disapprove.[38] No such rule filing requirement currently applies to an ATS that wishes to change its operating procedures. Changes to the operating procedures of an ATS are made pursuant to an amendment to Form ATS or Form ATS-N, are not approved by the SEC, and need only be submitted to the SEC 30 days (at most) in advance of implementation of the change.[39] Exchanges are also subject to the requirements of the SEC's Regulation Systems Compliance and Integrity (Regulation SCI),[40] which require detailed policies, procedures and monitoring to ensure the integrity and resiliency of most exchange systems. ATSs are generally not subject to these same requirements, unless they exceed certain volume thresholds in a given security.[41]

34 15 U.S.C. § 78c(a)(1) (2018); 17 C.F.R. § 240.3b-16(a) (2018).

35 The SEC has authority to exempt an entity from the exchange definition. 15 U.S.C. § 78e (2018); 17 C.F.R. § 240.3b-16(e) (2018).

36 17 C.F.R. § 240.3a1-1(a)(2) (2018).

37 15 U.S.C. § 78f(b)(2) (2018).

38 id., § 78s(b)(1).

39 17 C.F.R. § 242.304(a)(2)(i)(A) (2018).

40 id., § 242.1000 et seq.

41 id., § 242.1000 (defining SCI alternative trading system).

Clearing agencies

Market participants who plan to engage in post-trade activities related to transactions in virtual currencies that are securities should closely examine whether their activities may rise to the level of performing clearing agency functions. The term clearing agency under Section 3(a)(23)(A)[42] of the Exchange Act is defined broadly to generally include any person who:

a acts as an intermediary in making payments or deliveries, or both, in connection with transactions in securities;

b provides facilities for the comparison of data regarding the terms of settlement of securities transactions, to reduce the number of settlements of securities transactions or for the allocation of securities settlement responsibilities;

c acts as a custodian of securities in connection with a system for the central handling of securities whereby all securities of a particular class or series of any issuer deposited within the system are treated as fungible and may be transferred, loaned or pledged by bookkeeping entry, without physical delivery of securities certificates; or

d otherwise permits or facilitates the settlement of securities transactions or the hypothecation or lending of securities without physical delivery of certificates.

In practice, this reaches firms that operate as a central counterparty to novate, net and guarantee securities settlement obligations or that operate as a central securities depository (e.g., DTC) to transfer ownership by book entry. However, the SEC has also recognised in guidance that it may capture firms performing other common types of functions in the securities markets. These include, but are not limited to collateral management activities – involving calculating collateral requirements and facilitating the transfer of collateral between counterparties and trade matching services – whereby an intermediary compares trade data to reduce the number of settlements or to allocate settlement responsibilities.[43]

Like the registration and operation of a national securities exchange, the registration and operation of a registered clearing agency involves significant regulatory requirements that include, but are not limited to, the submission of proposed rule changes to the SEC and compliance with Regulation SCI. Accordingly, market participants who believe that their activities may come within the clearing agency definition may wish to consider whether they nonetheless qualify for certain exclusions from the clearing agency definition in Section 3(a)(23)(B) of the Exchange Act,[44] or whether it would be appropriate to pursue an exemption from registration. The SEC has authority to provide conditional or unconditional exemptions from registration pursuant to Section 17A(b)(1) of the Exchange Act.[45]

In October 2019, the SEC issued a no-action letter to Paxos Trust Company, LLC (Paxos) providing relief from clearing agency registration under Section 17A(b)(1) of the Exchange Act.[46] The no-action letter was issued on the basis that Paxos would operate, for no more than 24 months, a private permissioned distributed ledger system in order to conduct

42 15 U.S.C. § 78c(a)(23)(A) (2018).

43 'Clearing Agency Standards for Operation and Governance', 76 Fed. Reg. 14495 (Mar. 16, 2011), https://www.gpo.gov/fdsys/pkg/FR-2011-03-16/pdf/2011-5182.pdf.

44 15 U.S.C. § 78c(a)(23)(B) (2018).

45 id., § 78q-1(b)(1).

46 Paxos Trust Co., LLC No-Action Letter (Oct. 28, 2019), https://www. sec.gov/divisions/marketreg/mr-noaction/2019/paxos-trust-company- 102819-17a.pdf.

a feasibility study of the system.[47] The system records changes in ownership of securities and cash resulting from the settlement of securities transactions between participants in the service.[48] The system is designed to conduct simultaneous delivery versus payment settlement of securities and cash for trades submitted to the system for clearance and settlement.[49]

Transfer agents

Where a market participant provides services to the issuer of a virtual currency that is a security, it should consider the implications of the transfer agent definition. The definition of a transfer agent in Section 3(a)(25) of the Exchange Act[50] includes any person who engages on behalf of a securities issuer in:

a countersigning such securities upon issuance;
b monitoring the issuance of such securities with a view to preventing unauthorised issuance;
c registering the transfer of the issuer's securities of the issuer;
d exchanging or converting the securities; or
e transferring record ownership of the securities by bookkeeping entry without physical issuance of securities certificates.

In turn, Section 17A(c)(1) of the Exchange Act requires that, except as otherwise provided in the Exchange Act, it is unlawful for any transfer agent, unless registered, to use US instrumentalities of interstate commerce 'to perform the function of a transfer agent with respect to any security registered under Section 12 [of the Exchange Act] or which would be required to be registered except for the exemption from registration provided by subsections (g)(2)(B) or (g)(2)(G) of that section'.[51] Therefore, transfer agent registration is not required unless a person acts as a transfer agent in respect of such securities. The SEC also has authority pursuant to Section 17A(c)(1) of the Exchange Act[52] to provide conditional or unconditional exemptions from transfer agent registration.

iii Commodities laws

The CFTC is the US federal regulatory agency that administers and enforces the CEA, having jurisdiction over derivatives, that is, futures contracts, options and swaps involving commodities.[53] CEA Section 1a(9) defines a commodity as '[enumerated agricultural products], and 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'.[54]

Virtual currencies are not fiat currencies; they are not legal tender issued by a sovereign government. In March 2020, the CFTC interpreted virtual currency to be 'a digital asset that encompasses any digital representation of value or unit of account that is or can be used as

47 id.
48 id.
49 id.
50 id., § 78c(a)(25).
51 id., § 78q-1(c)(1).
52 id.
53 7 U.S.C. § 1 et seq. (2018). The CFTC's regulations are at 17 C.F.R. § 1 et seq. (2018).
54 7 U.S.C. § 1a(9) (2018).

form of currency (i.e., transferred from one party to another as a medium of exchange)'.[55] In December 2017, the CFTC permitted the trading of Bitcoin futures contracts and Bitcoin binary options on two CFTC-regulated futures exchanges, referred to as designated contract markets (DCMs).[56] Therefore, as of December 2017, Bitcoin satisfied the condition in the 'commodity' definition of being the underlying asset for a futures contract. Receptiveness to trading of Bitcoin futures on US DCMs has been mixed. For example, in the first quarter of 2019, CBOE Global Markets Inc announced that it would discontinue the trading of Bitcoin futures,[57] while in June 2019, the CFTC approved LedgerX's application to be a DCM for the trading of physically settled Bitcoin futures by retail investors.[58] In June 2020, a market survey indicated that 22 per cent of US survey respondents invested in digital assets had exposure via futures, up from 9 per cent the prior year.[59]

In 2014, the then-current CFTC Chair advised Congress that derivatives contracts based on virtual currencies fall within the CFTC's jurisdiction.[60] Beginning in 2015, the CFTC commenced several administrative enforcement actions involving virtual currencies. In settling an enforcement case with Coinflip, Inc, an unregistered trading facility on which Bitcoin options were traded, the CFTC determined that Bitcoin and all virtual currencies are commodities within the definition of CEA Section 1a(9), that Bitcoin is not a fiat currency, that Bitcoin options are commodity options and therefore are CFTC-regulated swaps, and that the trading facility was therefore required to be registered with the CFTC as either a swap execution facility (SEF) or DCM.[61] The CFTC determined that all virtual currencies fell within the CEA definition of commodity, notwithstanding that no regulated futures contract based on any virtual currency was traded at that time.

In 2016, in another administrative enforcement proceeding, the CFTC entered into a settlement with Bitfinex, which operated an online platform for retail customers exchanging and trading various virtual currencies, including Bitcoin, on a margined, leveraged or financed basis, without actually delivering the Bitcoin to the retail customers, but instead

55 Commodity Futures Trading Comm'n, 'CFTC Issues Final Interpretive Guidance on Actual Delivery for Digital Assets', CFTC Release No. 8139-20 (Mar. 24, 2020), https://www.cftc.gov/PressRoom/PressReleases/8139-20 (Retail Transactions Final). This interpretation of virtual currency reaffirmed the CFTC's earlier interpretation of virtual currency from proposed guidance published in December 2017. 'Retail Commodity Transactions Involving Virtual Currency', 82 Fed. Reg. 60,335, 60,338 (Dec. 20, 2017) (Retail Transactions Proposed).

56 Commodity Futures Trading Comm'n, 'CFTC Statement on Self-Certification of Bitcoin Products by CME, CFE and Cantor Exchange', CFTC Release No. 7654-17 (Dec. 1, 2017), https://www.cftc.gov/PressRoom/PressReleases/pr7654-17; see also 'Bitcoin Futures Are Here: The Story So Far', Nasdaq (Dec. 11, 2017), https://www.nasdaq.com/article/bitcoin-futures-are-here-the-story-so-far-cm889984.

57 See Alexander Osipovich, 'Cboe Abandons Bitcoin Futures', *Wall Street Journal* (Mar. 18, 2019), https://www.wsj.com/articles/cboe-abandons-bitcoin-futures-11552914001.

58 Commodity Futures Trading Comm'n, 'CFTC Approves LedgerX LLC as a Designated Contract Market, CFTC Release No. 7945-19 (June 25, 2019), https://www.cftc.gov/PressRoom/PressReleases/7945-19.

59 Fidelity Digital Assets, 'Growing Number Of Institutional Investors Believe That Digital Assets Should Be A Part Of Their Investment Portfolios, According To New Research From Fidelity Digital Assets' (June 9, 2020), https://www.fidelitydigitalassets.com/bin-public/060_www_fidelity_com/documents/FDAS/institutional-investor-study.pdf.

60 Timothy Massad, 'Testimony of Chairman Timothy Massad before the U.S. Senate Committee on Agriculture, Nutrition and Forestry' (Dec. 10, 2014), https://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-6.

61 See *In the Matter of: Coinflip, Inc, d/b/a Derivabit, et al.*, CFTC No. 15-29 (Sept. 17, 2015).

holding the Bitcoin in wallets that it owned and controlled, in violation of the CEA's retail commodity transactions provision that is intended to protect individual retail customers from abuse involving unregulated speculative commodities investments.[62] The CFTC again determined that virtual currencies are commodities, and that the transactions were illegal, off-exchange commodity futures contracts because they were transacted with retail investors and did not result in actual delivery. Retail investors are individuals who are not eligible contract participants (e.g., sophisticated investors, specified regulated entities and large entities). Retail commodity transactions are treated under the CEA as futures contracts and must be traded on regulated DCMs. The CFTC required Bitfinex to register with the CFTC as a futures commission merchant because it engaged in soliciting or accepting orders for retail commodity transactions and received funds from retail customers in connection with the transactions.

In March 2020, the CFTC issued final interpretive guidance on the meaning of the term 'actual delivery' in the context of retail transactions in virtual currencies, in order to determine whether off-exchange transactions involving virtual currencies that are margined, leveraged or financed fall within the CEA's retail commodity transactions prohibition.[63] The CFTC advised that while the test for whether actual delivery has occurred would be determined by facts and circumstances, it will look to whether, no later than 28 days after the transaction, the retail customer is able to take possession and control of the entire quantity of the virtual currency purchased (including the margined, leveraged or financed portion) and use it freely in commerce at all times thereafter without the seller, the trading platform or the financing provider (or any of their affiliates or agents) retaining any interest in, legal right or control over the virtual currency. The CFTC indicated that it would generally consider customer possession and control to have been demonstrated when (1) there is a transfer of the virtual currency away from the seller or trading platform and receipt by a separate blockchain address over which the retail customer maintains sole possession and control or a separate, independent and appropriately licensed depository chosen by the retail customer, (2) the retail customer has the ability to use the virtual currency freely in commerce as soon as technologically practicable and (3) none of the seller, the trading platform or the financing provider (or any of their affiliates or agents) retain any interest in, legal right or control over the transferred virtual currency. The CFTC recognised that actual delivery could be achieved even if a trading platform has relationships or affiliations with its customers' depositories so long as the depository is completely separated from the trading platform and the depository has certain other safeguards in place to ensure the customer receives actual possession and control over the virtual currency.[64] The CFTC also advised that a book-out, cash settlement, netting or offset mechanism, or where the virtual currency is retained in an omnibus wallet where the trading platform operator retains the private keys, will not constitute actual delivery.

62 *In the Matter of: BFXNA Inc d/b/a Bitfinex*, CFTC No. 16-19 (June 2, 2016).

63 Retail Transactions Final, footnote 55. The CFTC's issuance of final interpretive guidance on the meaning of the term actual delivery followed the CFTC's publication of a proposed interpretation of actual delivery in December 2017 and a period for market participants to comment on such proposed interpretation. See Retail Transactions Proposed, footnote 55.

64 Retail Transactions Final, footnote 55. The CFTC advised that, to avoid running afoul of the actual delivery requirement, an affiliated depository should be: (1) a 'financial institution' as defined by CEA Section 1a(21); (2) a separate line of business from the trading platform not subject to the trading platform's control (although it may be under common control with the trading platform); (3) a separate legal entity from the trading platform; (4) predominantly operated for the purpose of providing custodial

In March 2018, in the enforcement case *CFTC v. McDonnell*, a federal district court judge confirmed the CFTC's view that all virtual currencies are commodities under the CEA definition, and that spot transactions in virtual currencies are subject to the CFTC's anti-fraud and anti-manipulation enforcement authority.[65] Notwithstanding that only Bitcoin futures contracts were traded on CFTC-regulated DCMs at the time, the court found that all virtual currencies are goods that fall within the CEA's definition of commodity, as excerpted above.[66] The court also held that the CEA grants the CFTC enforcement authority over fraud or manipulation not only in derivatives markets, but also over the underlying virtual currencies spot markets pursuant to CFTC Rule 180.1, which prohibits employing a manipulative or fraudulent scheme not only in connection with derivatives transactions but 'in connection with [. . .] a contract of sale of any commodity in interstate commerce'. The court also concluded that the CFTC's jurisdiction over virtual currencies is concurrent with the jurisdiction of other federal and state regulators and criminal prosecutors. In August 2018, following a non-jury trial, the case was decided in favour of the CFTC and the court issued a permanent injunction and assessed civil monetary penalties against the defendants.[67]

With respect to virtual currency swap transactions, the CFTC's jurisdictional authority is not based on the underlying asset being a commodity. Therefore, even if a virtual currency is not a commodity, if the transaction is determined to be a swap, the CFTC would have regulatory authority over the swap transaction, which means that the CFTC's swap dealer, reporting, record-keeping and other swaps compliance rules would apply.

The CFTC has also advised that virtual tokens and virtual coin offerings may be commodities or derivatives contracts depending on the particular facts and circumstances.[68] All CFTC registrants must become members of the National Futures Association (NFA), which requires that its members who trade, broker or advise about virtual currency derivatives notify the NFA of this activity and make appropriate risk disclosures to their customers.[69]

In 2018, the CFTC signed separate arrangements with each of the United Kingdom's Financial Conduct Authority, the Monetary Authority of Singapore and the Australian Securities and Investments Commission to collaborate and support innovative firms through their respective fintech initiatives.[70]

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services, including for virtual currency and other digital assets; (5) appropriately licensed to conduct such custodial activity in the jurisdiction of the customer; (6) offering the ability for the customer to utilise and engage in cold storage of the virtual currency; and (7) contractually authorised by the customer to act as its agent (with such authorisation being freely revocable by the customer at any time). id.

65 *CFTC v. McDonnell*, 287 F. Supp. 3d 213, 217 (E.D.N.Y. 2018); see also *CFTC v. My Big Coin Pay, Inc.*, 334 F. Supp. 3d 492, 495–98 (D. Mass. 2018) .

66 Ether futures contracts are now also traded on CFTC-regulated DCMs.

67 *CFTC v. McDonnell*, No. 1:18-cv-00361-JBW-RLM (E.D.N.Y. Aug. 23, 2018), https://www.cftc.gov/sites/default/files/2018-08/enfdropmarketsorder082318.pdf.

68 LabCFTC, 'A CFTC Primer on Virtual Currencies', 14 (Oct. 17, 2017), https://www.cftc.gov/sites/default/files/idc/groups/public/documents/file/labcftc_primercurrencies100417.pdf. In May 2019, the CFTC published its enforcement manual, which is applicable to trading and dealing in all commodities (including virtual currencies) and which provides insight into the agency's approach to investigations and enforcement proceedings.

69 See Notice I-18-13, Nat'l Futures Assoc. (Aug. 9, 2018) (NFA Notice), https://www.nfa.futures.org/news/newsNotice.asp?ArticleID=5036.

70 'Cooperation Arrangement', CFTC- FCA (Feb. 19, 2018), https://www.cftc.gov/sites/default/files/idc/groups/public/@internationalaffairs/documents/file/cftc-fca-cooparrgt021918.pdf; 'Cooperation

III BANKING AND MONEY TRANSMISSION

Below is an overview of the regulation of virtual currency activities by US federal prudential banking regulators (the Board of Governors of the Federal Reserve System (Fed), the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC)) and the Consumer Financial Protection Bureau (CFPB), as well as the regulation of virtual currency activities by the US states, specifically as money transmission or a related money services business activity.[71] The US federal prudential banking regulators and the CFPB have not sought to actively regulate the virtual currencies and virtual currency activities of their supervised entities to date.[72] The US states, on the other hand, have adopted a broad spectrum of approaches concerning the application of money transmission and related laws and regulations to virtual currency activities, including requiring in certain circumstances a specialised virtual currency licence or a more general money transmission licence (MTL).

i Federal banking regulators

While the CFTC, the SEC[73] and FinCEN[74] have issued guidance or made public pronouncements that begin to define the scope of their jurisdiction concerning virtual currencies, the Fed, OCC, FDIC and CFPB have largely adopted a more limited 'wait and see' approach.

Fed

In a press conference in late 2017, the former Chair of the Fed, Janet Yellen, responded to a question regarding the Fed's policy regarding Bitcoin as follows:

> *It is a highly speculative asset, and the Fed doesn't really play any role – any regulatory role with respect to Bitcoin other than assuring that banking organisations that we do supervise are attentive, that they're appropriately managing any interactions they have with participants in that market and appropriately monitoring anti-money laundering Bank Secrecy Act, you know, responsibilities that they have.*[75]

In short, Chair Yellen confirmed that the Fed does not have any direct role in regulating Bitcoin or, by implication, the class of other virtual currencies with similar features.

Nonetheless, the Fed continues to monitor the use and development of virtual currencies and the role of Fed-regulated financial institutions in virtual currency activities through the Digital Assets Working Group of the Financial Stability Oversight Council

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Arrangement', CFTC-MAS (Sept. 13, 2018), https://www.cftc.gov/sites/default/files/2018-09/cftc-mas-cooparrgt091318_16.pdf; 'Cooperation Arrangement', CFTC-ASIC (Oct. 4, 2018), https://www.cftc.gov/sites/default/files/2018-10/cftc-asic-cooparrgt100418.pdf.

71 This section does not address securities or commodities laws and regulations, tax laws or commercial law questions, such as the mechanism for taking a security interest in virtual currencies. The money services business registration requirements of FinCEN are discussed in Section IV.

72 The information in this section was accurate as at 20 May 2020. Regulation of virtual currencies on both the federal and state levels is rapidly evolving and subject to change.

73 See Section II.

74 See Section IV.

75 Janet Yellen, 'Transcript of Chair Yellen's Press Conference of December 13, 2017', 12 (Dec. 13, 2017), https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20171213.pdf.

(FSOC), which includes the CFTC, the SEC and FinCEN.[76] In its 2018 Annual Report, FSOC stated '[d]igital assets do not presently appear to pose a threat to the stability of the financial system . . . the estimated market capitalization of digital assets is still relatively small . . . for context, [it] is less than 1 percent of the market capitalization of U.S. stocks' and '[d]igital assets have limited use in the real economy of financial transactions'.[77] The report went on to note, however, that the value and use of virtual currencies could grow rapidly and federal agencies will continue to monitor risk to the banking system.[78] Public comments by current Fed governors, including Chairman Powell, have been generally consistent with these positions.[79] As at May 2020, the Fed has not publicly taken a position on the permissibility of bank holding companies and financial holding companies to engage in various activities (either as principal or agent) related to virtual currencies. However, one example of the Fed's ongoing monitoring is Chairman Powell's testimony before Congress in July 2019, in which the Chairman expressed the Fed's concerns that Libra could present systematic risk to the US financial system requiring strict supervision and oversight and also that Libra poses money laundering, consumer protection and privacy risks. [80] Chairman Powell further acknowledged that the Fed does not have direct jurisdiction over Libra, but also recognised that FSOC will be focusing on the possibility of classifying the consortium issuing Libra as a non-bank systematically important financial institution, which would subject the consortium, for purposes of its virtual currency activities, to the jurisdiction of the Fed under the Dodd–Frank Act.[81]

Separate to Fed's oversight potential, remarks by Chairman Powell and other representatives of the Fed made in February 2020 have indicated that the Fed is actively considering the possibility of issuing a US virtual currency or otherwise utilising distributed ledger technologies to enhance the US financial system.[82] Depending on the design and use of any such currency, additional Congressional authorisation may be required.[83]

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76 'Examining the Growing World of Virtual Currencies and the Oversight Conducted by the U.S. Securities and Exchange Commission and the U.S. Commodity Futures Trading Commission: Hearing Before the S. Comm. on Banking, Hous., and Urban Affairs', 115th Cong. 11 (2018) (Testimony of CFTC Chairman J Christopher Giancarlo); Financial Stability Oversight Council Ann. Rep. 89 (2018) (FSOC Annual Report).

77 FSOC Annual Report, footnote 76.

78 id.

79 'Monetary Policy and the State of the Economy: Hearing Before the H. Comm. on Fin. Servs.', 115th Cong. (Testimony of Jerome Powell); Randal Quarles, Vice Chair, Board of Governors of the Fed. Res. Sys., 'Thoughts on Prudent Innovation in the Payment System, Remarks Before the 2017 Financial Stability and FinTech Conference' (Nov. 30, 2017), https://www.federalreserve.gov/newsevents/speech/quarles20171130a.htm; Lael Brainard, Governor, Board of Governors of the Fed. Res. Sys., 'Cryptocurrencies, Digital Currencies, and Distributed Ledger Technologies: What Are We Learning, Remarks Before the Decoding Digital Currency Conference' (May 15, 2018), https://www.federalreserve.gov/newsevents/speech/brainard20180515a.htm.

80 See Testimony of Fed Chairman Powell Before the Senate Banking Housing and Urban Affairs Committee (Jul. 11, 2019), https://www.govinfo.gov/content/pkg/CHRG-116shrg37911/pdf/CHRG-116shrg37911.pdf.

81 id.

82 See, e.g., Testimony of Federal Reserve Board Chairman Powell Before the Senate Banking Housing and Urban Affairs Committee (Feb. 12, 2020), https://www.banking.senate.gov/hearings/02/03/2020/the-semiannual-monetary-policy-report-to-the-congress; Fed Governor Lael Brainard, The Digitalization of Payments and Currency: Some Issues for Consideration (Feb. 5, 2020), https://www.federalreserve.gov/newsevents/speech/brainard20200205a.htm.

83 id.

OCC

Like the Fed, the OCC has published little guidance regarding the role of national banks in virtual currency ecosystems.[84] However, in 2018, the OCC announced it will make available a special-purpose national bank charter, generally known as a fintech charter, that may be owned by certain types of non-bank financial services companies.[85] A fintech charter permits a company to operate on a national basis under the OCC's supervision and thereby bypass multi-state licensing and supervision, and certain types of state regulation.[86] These features have led to industry speculation whether the charter will be available to enable a more streamlined alternative for certain virtual currency activities than the multistate licensing approach described below.[87] The OCC has stated that applicants and licensees will be held to the same standards as national banks, suggesting that even if the fintech charter is an avenue for certain virtual currency activities, only certain industry participants may be in a position to meet the applicable regulatory requirements.[88]

The fintech charter proposal proved controversial shortly after it was initially proposed, and state regulators continue to oppose the charter, including through a pending legal challenge to the charter.[89] The initial industry reaction to the fintech charter has been tepid.[90] In addition, in October 2019, the US District Court for SDNY ruled in favour of New York's legal challenge to the fintech charter by denying the OCC's motion to dismiss and finding that the OCC only has authority to issue bank charters to depository institutions.[91] In December 2019, the OCC appealed the ruling to the US Court of Appeals for the Second Circuit. As at May 2020, no company has received a fintech charter.

In January 2020, the OCC issued its first consent order concerning a supervised entity's virtual currency activities.[92] The OCC alleged that MY Safra Bank, a federal savings association, failed to maintain an adequate Bank Secrecy Act/Anti-Money Laundering programme to monitor its digital-asset customers. Beginning in 2016, MY Safra Bank

84 See, e.g., Michelle Price, 'U.S. Regulator Plays Down Bitcoin Fear, Backs FinTech Charter', Reuters (Dec. 20, 2017), https://www.reuters.com/article/us-usa-occ-bitcoin/u-s-regulator-plays-down-bitcoin-fears-backs-fintech-charter-idUSKBN1EE25C.

85 Office of the Comptroller of the Currency, 'Policy Statement on Financial Technology Companies' Eligibility to Apply For National Bank Charters' (2018); Office of the Comptroller of the Currency, 'Comptroller's Licensing Manual Supplement: Considering Charter Applications From Financial Technology Companies' (2018).

86 id.

87 The OCC has not explicitly commented on what types of virtual currency activities, if any, may be conducted under the authority of a fintech charter. The OCC has stated that the charter is available to entities that facilitate payments electronically, and suggested that certain new or innovative activities may qualify as banking activities permitted by the charter; however, the OCC has expressly stated that entities will not qualify if they intend to accept deposits or engage primarily in fiduciary services.

88 Office of the Comptroller of the Currency, footnote 85. The standards applicable to national banks that apply to fintech charter licensees include those concerning capital and liquidity, profitability, corporate governance and management, risk management, community financial inclusion, financial-stress contingency planning, competition, treating customers fairly and regulatory compliance.

89 *Lacewell v. Office of the Comptroller of the Currency*, 2019 U.S. Dist. Lexis 182934, 18 Civ. 8377 (VM) (S.D.N.Y. Oct. 21, 2019).

90 Rachel Witkowski, 'Fintech Charter Delayed Following Court Ruling: Otting', *American Banker* (May 15, 2019), https://www.americanbanker.com/news/fintech-charter-delayed-following-court-ruling-occs-otting.

91 *Lacewell*, footnote 89.

92 *In the Matter of M.Y. Safra Bank*, FSB (OCC 2020).

opened accounts for a broad range of money services businesses that engage in virtual currency activities, including digital currency exchangers, digital currency ATM operators, crypto arbitrage trading accounts, blockchain developers and incubators, and fiat currency money services businesses, and the bank's focus on services to digital-asset customers led to a significant increase in transactional volume. The OCC issued a cease-and-desist order, but did not assess a fine against MY Safra Bank.[93]

In June 2020, the OCC issued an Advance Notice of Proposed Rulemaking seeking input on how best to accommodate new technology and innovation in the business of banking in connection with the OCC's comprehensive review of its regulations at 12 CFR Part 7, subpart E (national banks), and Part 155 (federal savings associations) (the OCC Rules). The OCC requested public input on the issue of whether the OCC Rules 'effectively take into account the ongoing evolution of the financial services industry, promote economic growth and opportunity and ensure that banks operate in a safe and sound manner, provide fair access to financial services, treat customers fairly, and comply with applicable laws and regulations'.[94]

FDIC

Like the other prudential banking regulators, the FDIC is presently merely monitoring the development of virtual currencies and is likely to continue this approach. The FDIC has publicly stated that it is actively studying the potential effects of virtual currencies on the banking system and banks under its jurisdiction through FSOC's Digital Assets Working Group.[95]

CFPB

In light of its consumer protection mandate, the CFPB's focus with respect to virtual currencies has been on ensuring that consumers are adequately informed of the risks of virtual currencies. In this regard, in 2014, the CFPB issued a public warning regarding the risks of transacting and investing in virtual currencies and began accepting consumer complaints regarding virtual currency matters, a potential first step towards regulation or enforcement.[96] However, in 2016, after taking public comments, the CFPB declined to bring virtual currencies within its regulation on prepaid products or to take a position concerning whether virtual currencies are otherwise subject to Regulation E.[97] To date there have been no public CFPB enforcement actions regarding virtual currency activities. Moreover, although the CFPB receives consumer complaints about virtual currencies, the number of complaints declined significantly in 2019 as compared to 2018, and overall consumer complaints regarding virtual currency activities represent a small fraction of the consumer complaints received by the CFPB.[98]

93 id.

94 'National Bank and Federal Savings Association Digital Activities', 85 Fed. Reg. 40827 (July 7, 2020).

95 Fed. Deposit Ins. Corp. Ann. Rep. 29-30 (2019).

96 Press release, Consumer Fin. Protection Bureau, 'CFPB Warns Consumers About Bitcoin' (Aug. 11, 2014), https://www.consumerfinance.gov/about-us/newsroom/cfpb-warns-consumers-about-bitcoin/.

97 'Prepaid Accounts under the Electronic Fund Transfer Act (Regulation E) and the Truth in Lending Act (Regulation Z)', 79 Fed. Reg. 77101 (Dec. 23, 2014), 81 Fed. Reg. 83978 (Nov. 22, 2016).

98 See Bureau of Consumer Financial Protection, Consumer Response Annual Report January 1 – December 31, 2019 (Mar. 2020), https://files.consumerfinance.gov/f/documents/cfpb_consumer-response-annual-report_2019.pdf.

ii State money transmission regulators

The states have adopted a broad spectrum of approaches concerning the application of money transmission laws and regulations to virtual currencies. These approaches include: promulgating an entirely separate regulatory regime for the oversight of entities engaged in virtual currency activities (e.g., New York's BitLicense); incorporating or exempting virtual currency activities from state MTL regimes by statutory amendment or regulatory fiat; and declining to adopt a position (e.g., the approach of the California Department of Business Oversight (CDBO)).[99] In addition to their general regulatory regime, some states also offer a regulatory sandbox that permits companies to engage in limited virtual currency activities without having to obtain a licence and potentially with less rigorous supervisory oversight.[100] As these approaches continue to evolve, there is also a potential alternative approach on the horizon, the Uniform Law Commission's proposed Uniform Regulation of Virtual Currency Business Act (the Uniform Act),[101] which, like the New York BitLicense, is a licensing regime specifically designed for entities involved in virtual currency activities. Although the Uniform Act has only been introduced in the legislatures of a handful of states and has only been adopted in Rhode Island as at June 2020, it may serve as the basis for future legislative activity concerning virtual currency regulation. Similarly, the Conference of State Bank Supervisors (CSBS) has published a model regulatory framework for states to consider.[102] The following summarises a handful of representative approaches to regulation of virtual currency activities at the state level. However, there are numerous variations on the themes below, as well as significant pending legislative and regulatory activity that promise to make this a dynamic area for the foreseeable future.

99 The states also have generally expressed concern regarding consumer protection in virtual currency transactions, publishing bulletins warning consumers of the risks inherent in such transactions. See, e.g., Lorraine Mirabella, 'State Regulators Warn Consumers About Virtual Currency', *The Baltimore Sun* (Apr. 29, 2014), http://www.baltimoresun.com/bal-consuming-state-regulators-warn-consumers-virtual-currency-20140429-story.html; N.C. Office of the Comm'r of Banks, 'Consumer Alert: Virtual Currencies', https://www.nccob.gov/Public/docs/Financial%20Institutions/Money%20Transmitters/OCOB_Virtual_Currency_Alert.pdf.

100 See, e.g., Ariz. Rev. Stat. §§ 41-5601 – 41-5612; Utah Code. Ann. §§ 13-55-101 – 13-55-108; Wyo. Stat. Ann. §§ 40-25-101 – 40-28-109. See also, e.g., State of Hawaii, 'Hawaii Launches First Sandbox For Digital Currency' (Mar. 17, 2020), http://cca.hawaii.gov/blog/release-hawaii-launches-first-sandbox-for-digital-currency/.

101 Unif. Reg. of Virtual-Currency Bus. Act (Unif. Law Comm'n 2017) (Uniform Act), https://www.uniformlaws.org/committees/community-home?CommunityKey=e104aaa8-c10f-45a7-a34a-0423c2106778.

102 See Conference of State Bank Supervisors, 'State Regulatory Requirements For Virtual Currency Activities CSBS Model Regulatory Framework' (Sept. 15, 2015), https://www.csbs.org/sites/default/files/2017-11/CSBS-Model-Regulatory-Framework%28September%2015%202015%29.pdf. Several states also have published consumer advisories regarding the risks of transacting or investing in virtual currencies, generally using a model form promulgated jointly by the CSBS and the North American Securities Administrators Association. See, e.g., Md. Office of the Comm'r of Fin. Reg., Advisory Notice 14-01, 'Virtual Currencies: Risks for Buying, Selling, Transacting, and Investing' (Apr. 24, 2014), http://www.dllr.state.md.us/finance/advisories/advisoryvirtual.shtml.

New York BitLicense

New York, through rule-making by the New York Department of Financial Services (NYDFS), has been the most aggressive of the states in regulating virtual currencies. Under New York law, a licence referred to as a BitLicense is broadly required to engage in any virtual currency business activity.[103] Given that New York is the epicentre of US financial markets and services, this requirement has led the NYDFS to be a leader in regulating, or seeking to regulate, a wide spectrum of virtual currency businesses operating in the United States. New York regulations define virtual currencies as 'any type of digital unit that is used as a medium of exchange or a form of digitally stored value' and includes both centralised and decentralised currencies.[104] Excluded from the definition of virtual currencies are: prepaid cards that are issued or redeemable in legal tender; digital units that are part of a customer affinity or rewards programme that cannot be converted into legal tender or a virtual currency; and digital units used within gaming platforms that have no real-world value or market outside the gaming platform, and cannot be converted into real-world value or a virtual currency.[105] Virtual currency business activity, the activity that gives rise to the licensing requirement, broadly entails any of the following:

a receiving a virtual currency for transmission or transmitting a virtual currency;
b storing, holding or maintaining custody or control of a virtual currency on behalf of others;
c buying and selling a virtual currency as a customer business;
d performing exchange services; and
e controlling, administering or issuing a virtual currency.[106]

Virtual currency business activities do not include use of a virtual currency by merchants or consumers to purchase goods or services, investment by merchants and consumers or the development and issuance of software.[107]

In addition to the requirement to obtain a licence, licensees under the BitLicense regime are also required to meet certain substantive compliance requirements. Generally, licensees are required to:

a maintain a sufficient amount of capital as determined by the NYDFS;[108]
b maintain sufficient AML, customer identification, cybersecurity, consumer complaint and anti-fraud programmes;[109]
c provide certain disclosures and receipts in connection with transactions;[110]
d file certain money laundering reports with the NYDFS if not otherwise filed with FinCEN;[111]
e have a compliance officer and a chief information security officer;[112]

103 N.Y. Comp. Codes R. & Regs. tit. 23, § 200.3 (2019).
104 id., § 200.2(p).
105 id., §§ 200.2(p), (j).
106 id., § 200.2(q).
107 id., §§ 200.2(q), 200.3(c).
108 id., § 200.8.
109 id., §§ 200.15, 200.16, 200.20.
110 id., § 200.19.
111 id., § 200.15.
112 id., §§ 200.7(b), 200.16(c).

f maintain certain written policies and procedures;[113]
g maintain a sufficient surety bond;[114] and
h meet certain record retention requirements.[115]

Licensees that hold virtual currencies on behalf of others are also required to: hold such funds in trust with a qualified custodian that is approved by the NYDFS; hold virtual currencies of the same type and amount as what is owed to the beneficiaries; and not sell, lend or assign virtual currencies held on behalf of others except at the direction of the beneficiary.[116] Licensees are also subject to supervision of the NYDFS, which includes periodic examinations and the submission of financial and transactional information to the NYDFS.[117]

Notwithstanding this extensive regulation, it should be noted that, depending on the nature of a licensee's activities, the NYDFS may require an entity that has received a BitLicense to also obtain a New York MTL. Moreover, as an alternative to the BitLicense, the NYDFS also has licensed a handful of trust companies to engage in certain virtual currency trading and custody activities. Although applicants for a trust company licence must meet a particularly high standard, there is an advantage to the trust company licence in that many (but not all) states do not require licences for trust companies that are chartered and supervised in another state.

In December 2019, the NYDFS announced that it was beginning to review its BitLicense regulations for potential updates and revisions.[118] The NYDFS also announced proposed guidance to reduce its direct oversight when a current licensee wishes to expand its products or services to a new type of virtual currency.[119] Under the current BitLicense regulations, NYDFS approval is required prior to a licensee introducing any materially new product, service or activity or making a material change to an existing product, service or activity.[120]

Under the proposed guidance, the NYDFS will maintain a public list of approved virtual currencies, and current licensees may engage in new activities concerning these approved currencies without seeking prior approval from the NYDFS as a material change. Further, the proposed guidance also includes a process that allows licensees to avoid prior regulatory approval for new activities in connection with virtual currencies not on the NYDFS prior approval list. The proposed guidance will include a model coin-listing or adoption policy framework that addresses minimum requirements for board governance, engaging in independent risk assessments prior to expanding products and services, and engaging in ongoing monitoring of new products and services. If a licensee has previously had their

113 id., §§ 200.7, 200.15–200.17.
114 id., § 200.9(a).
115 id., § 200.12.
116 id., §§ 200.7, 200.2(n).
117 id., §§ 200.13, 200.14.
118 NYDFS, Financial Services Superintendent Linda A. Lacewell Announces New Proposed Regime For Listing Of Virtual Currencies (Dec. 11, 2019), https://www.dfs.ny.gov/reports_and_publications/press_releases/pr1912101.
119 NYDFS, Proposed Guidance Regarding Adoption or Listing of Virtual Currencies (Dec. 11, 2019), https://www.dfs.ny.gov/apps_and_licensing/virtual_currency_businesses/pr_guidance_regarding_listing_of_vc.
120 N.Y. Comp. Codes R. & Regs. til. 23, § 200.3.

coin-listing or adoption policy approved by the NYDFS and the licensee self-certifies it has complied with that policy, prior approval by the NYDFS would not be required to support a new virtual currency.

Wyoming SPDI

On the opposite end of the spectrum from New York is Wyoming, which has been aggressive in adopting legislation to make the state hospitable to virtual currency activities.[121] As discussed below, Wyoming has broadly exempted virtual currency activities from its money transmission laws; however, companies may seek to opt into supervision by the Wyoming Department of Banking by obtaining a Special Purpose Depository Institution (SPDI) charter. An SPDI is a limited-purpose banking charter that is specifically targeted to companies that engage or seek to engage in virtual currency activities. Wyoming virtual currency advocates have stated that their goal is make Wyoming the jurisdiction of choice for virtual currency companies similar to how Delaware and South Dakota attracted credit card companies in the 1980s.[122] SPDI applicants are exempted under state law from obtaining FDIC deposit insurance removing a key obstacle for most state de novo charter applications.

Among other powers, an SPDI may act as a custodian or fiduciary, and may accept deposits if they are in connection with its virtual currency activities. SPDIs are prohibited from lending. SPDIs must have liquid assets equal to 100 per cent of their custodial and deposit liability. They must also have sufficient capital, which is generally determined by the Wyoming Department of Banking on a case-by-case basis. The Wyoming Division of Banking has stated it expects approved applicants will have a minimum of US$10 million in capital and potentially more depending on the amount of anticipated assets under management or custody.[123] SPDIs must also have a resolution plan (i.e., living will) that is updated annually.[124] As at May 2020, no entity has received an SPDI charter. It remains to be seen how federal regulators, other states and the industry respond to the SPDI charter.

Inclusive legislation

As an alternative to a new and separate regulatory regime, a number of other states have amended their MTL statutes broadly to include the receipt of virtual currencies for transmission or the issuance or the sale of virtual currencies as stored value.[125] Such amendments typically revise the statutory definitions of money or money transmission to include the concept of virtual currencies, and add virtual currency as an additional defined term to the statute.[126] It is important to note that several, but not all, state MTL statutes

121 Wyo. Stat. Ann. §§ 1312101 – 1312126 and 13-02-103.

122 Kellie Mejdrich, 'Wyoming – Yes, Wyoming – Races to Fill Crypto-Banking Void', Politico (Nov. 21, 2019), https://www.politico.com/news/2019/11/21/wyoming-cryptocurrency-banking-072727.

123 Wyo. Dep't. of Banking, Special Purpose Depository Institutions: Capital Requirement Guidance (October 11, 2019), https://docs.google.com/viewer?a=v&pid=sites&srcid=d3lvLmdvdnxiYW5ra W5nfGd4OjU0N2ZmZGRjZmY1MmUwNGU.

124 21-20 Code of Wyo. R. § 4.

125 These states include, without limitation, Alabama, Connecticut, Georgia, North Carolina, Oregon, Vermont and Washington. A 50-state survey was not conducted in the development of this section, and other states may also fall under this category or other categories presented in this section.

126 See, e.g., N.C. Gen. Stat. §§ 53-208.42(12)–(13), (20) (2018); Wash. Rev. Code §§ 19.230.010(18), (30) (2018); GA. Code Ann. § 7-1-680(26) (2020).

exempt licensed broker-dealers to some degree,[127] and some states also recognise exceptions for agents of the payee[128] or payment processors.[129] Some virtual currency businesses therefore may be able to take advantage of these and other exceptions on state-by-state or activity-by-activity bases, or both.

In regard to the various types of potential virtual currency activities and whether they are subject to regulation in these states, states generally do not cover end users of a virtual currency (e.g., merchants that accept a virtual currency in payment for goods or services, individuals who use a virtual currency to make such payments and investors who purchase a virtual currency for their own portfolios), but transmitting or maintaining control of virtual currencies for others typically is a covered activity under such regimes,[130] which may be interpreted as covering both purchases and sales of virtual currencies on behalf of others.[131]

Licensees under these state MTL regimes are also subject to certain compliance requirements. Based on the plain text of money transmitter statutes and regulations, these requirements are generally not quite as extensive as those required for a New York BitLicense, but state regulators typically have discretion to require additional controls as a condition of licensing. Common examples of the relevant statutory or regulatory requirements include the following: holding permissible investments in an amount equivalent to funds received from senders; maintaining a sufficient net worth, which is often at a statutorily specified amount rather than an amount that is specific to the licensee; maintaining a sufficient surety bond; and meeting certain record retention requirements. In certain states, money transmitters are also required to maintain certain policies and procedures, provide a receipt with each transaction and provide certain disclosures. State money transmitter licensees are also subject to periodic examinations, and must submit financial and transactional information to the supervising agencies.

For licensees that engage in virtual currency activities, compliance with these requirements can pose challenges in states that have not made accommodations for the unique attributes of virtual currencies that decades-old MTL statutes were not designed to address. For example, if a licensee holds a virtual currency for a customer and the state regulator views that holding as an outstanding obligation of the licensee to the customer, state regulations will typically require, as indicated above, that the licensee hold certain eligible investments in an amount equal to the outstanding obligation. For traditional licensees, that typically means holding customer funds in insured bank accounts, US Treasury securities or the like. While most states have concluded that it is permissible to hold a 'like-kind' investment of a virtual

127 See, e.g., Wash. Rev. Code § 19.230.020(10) (2018) (exempting securities broker-dealers 'to the extent of its operation as such').

128 See, e.g., Jorge L Perez, Banking Comm'r, Conn. Dep't. of Banking, 'No Action Position on Money Transmission licensure Requirement for Persons Acting as an Agent of a Payee' (Oct. 24, 2017), https://portal.ct.gov/-/media/DOB/consumer_credit_nonhtml/102417MemoAgentofPayeepdf.pdf?la=en.

129 See, e.g., Wash. Rev. Code § 19.230.020(9) (2018).

130 See, e.g., N.C. Gen. Stat. § 53-208.42(13) (2018).

131 See, e.g., Deborah Bortner, Dir., Div. of Consumer Servs., Wash. Dep't of Fin. Insts., 'Uniform Money Services Act Interim Regulatory Guidance' (Dec. 8, 2014), https://dfi.wa.gov/documents/money-transmitters/virtual-currency-interim-guidance.pdf.

currency when the licensee has an obligation to deliver a virtual currency to a customer,[132] that is not uniformly the case, leading to significant duplicate collateralisation requirements in Hawaii, for example.[133]

Inclusive regulatory guidance

At least one state has issued regulatory guidance broadly classifying virtual currencies as money and subject to the state's money transmission laws.[134] Other states have taken a more nuanced position, covering some activities related to virtual currencies, but not others. For example, a line of guidance initially promulgated by Texas and adopted by several other states[135] distinguishes between decentralised and centralised virtual currencies. The guidance concludes that decentralised virtual currencies do not qualify as money under the respective state MTL statutes because they are not a currency as defined by the state law: that is, the coin or paper money of the United States or any other country.[136] As decentralised virtual currencies are not money, their transmission therefore is not money transmission.[137]

However, the guidance further notes that transactions involving decentralised virtual currencies that also involve the exchange of legal tender could constitute money transmission if the transactions involved more than two parties.[138] Under this line of guidance, the direct purchase and sale of virtual currencies as principal, the acceptance of virtual currencies for goods or services, the mere custody of virtual currencies and the exchange of one virtual currency for another virtual currency are not money transmission activities.[139] However, the sale of virtual currencies through an exchange for legal tender would be considered money transmission.[140]

As for centralised virtual currencies issued by a private party, the guidance generally declines to adopt a broad position given the numerous potential variations in structure.[141] Instead, it generally defers making a judgement until the regulator is presented with the

132 See, e.g., Wash. Rev. Code § 19.230.200(1)(b) (2018).

133 See, e.g., Neeraj Agrawal, 'Hawaii's Issue With Bitcoin Businesses Has an Obvious and Easy Solution', Coincenter (Mar. 1, 2017), https://coincenter.org/link/hawaii-s-issue-with-bitcoin-businesses-has-an-obvious-and-easy-solution.

134 Such guidance was issued by the Hawaii Department of Commerce and Consumer Affairs. The guidance is relatively short, does not explain the reasoning of the Department and is very broad – it implies that even mining activities require a licence. Press release, Haw. Dep't. of Commerce and Consumer Affairs, 'State Warns Consumers on Potential Bitcoin Issues' (Feb. 26, 2014) (Hawaii Release). Legislation has been introduced in Hawaii to adopt a form of the Uniform Act.

135 See Charles G Cooper, Banking Comm'r, Tex. Dep't of Banking, Supervisory Memorandum – 1037, 'Regulatory Treatment of Virtual Currencies Under the Texas Money Services Act', 3 (Apr. 3, 2014); Kan. Office of the State Bank Comm'r, Guidance Document MT 2014-01, 'Regulatory Treatment of Virtual Currencies Under the Kansas Money Transmitter Act' (June 6, 2014, revised Apr. 1, 2019); Colo. Dep't of Regulatory Agencies, Div. of Banking, 'Interim Regulatory Guidance Cryptocurrency and the Colorado Money Transmitters Act' (Sept. 20, 2018); Ill. Dep't of Fin. and Prof'l Reg., 'Digital Currency Regulation Guidance' (June 13, 2017); Greg Gonzales, Comm'r, Tenn. Dep't of Fin. Insts., 'Regulatory Treatment of Virtual Currencies under the Tennessee Money Transmitter Act' (Dec.16, 2015).

136 See Cooper, footnote 135.

137 id., at 4.

138 id.

139 id., at 3–4.

140 id.

141 id., at 3.

specific facts and circumstances at issue.[142] Texas' recently updated guidance has clarified that one particular type of centralised virtual currency, stablecoin, does qualify as money and is regulated if its value is tied to fiat currency and it is redeemable for such currency.[143] Other state regulators have informally indicated they would likely adopt a similar position.

Exemptive legislation

As noted above, Wyoming has broadly exempted from its money transmission laws the buying, selling, issuing or taking custody of virtual currency[144] and has adopted other legislation to facilitate the use of virtual currencies.[145] New Hampshire and Utah also exclude virtual currency from their money transmission laws,[146] but New Hampshire's relevant state regulator has interpreted the exemption narrowly.[147]

Exemptive regulatory guidance

A handful of other states have taken a broadly exemptive approach as a regulatory matter. For example, Pennsylvania has held through regulatory guidance that virtual currency exchanges do not need a money transmitter licence for facilitating transactions between buyers and sellers of virtual currencies based on the position that maintaining a clearing account for fiat currency at a depository institution does not require licensing because the exchange never directly handles fiat currency.[148]

No position

At present, not every state has taken a position, either through legislation or the actions of a regulator, regarding the application of MTL statutes to virtual currencies. Most notably, the CDBO has indicated that it is reserving judgement regarding the potential application of the California MTL statute to many virtual currency activities and the necessity of obtaining a licence.[149] In response, some virtual currency companies are moving forward with virtual currency activities in California pending a determination by the CDBO that the California MTL statute applies to such activities and that a licence is required.

142 id.

143 id., at 2, 5.

144 Wyo. Stat. Ann. §§ 40-22-103(xxii), 40-22-104(vi) (2019).

145 Wyoming law for purposes of the Uniform Commercial Code recognises digital assets generally as intangible personal property and virtual currency specifically. id., § 34-29-102.

146 N.H. Rev. Stat. Ann. § 399-G:3(VI-a) (2019); Utah Code Ann. § 7-25-102(9)(b) (2020).

147 The New Hampshire Department of Banking has interpreted the exemption to not be available to parties that engage in the transfer of both fiat currency and virtual currency. N.H. Dep't. of Banking, "Cryptocurrency' Transmitters No Longer Supervised' (Aug. 1, 2017).

148 Penn. Dep't of Banking, 'Money Transmitter Act Guidance for Virtual Currency Businesses' (Jan. 23, 2019).

149 Cal. Dep't of Business Oversight, Cryptocurrency Exchange Platform (Feb. 25, 2020), https://dbo.ca.gov/2020/02/27/cryptocurrency-exchange-platform-5/; Cal. Dep't of Business Oversight, Virtual Currency-10/04/19 –1 (Oct. 4, 2019), https://dbo.ca.gov/2019/10/12/virtual-currency-10-04-19/; Cal. Dep't of Business Oversight, Virtual Currency –10/04/19-2 (Oct. 4, 2019), https://dbo.ca.gov/2019/10/14/virtual-currency-2-10-4-2019/; Cal. Dep't of Business Oversight, Virtual Currency-10/04/19-3 (Oct. 4, 2019), https://dbo.ca.gov/2019/10/14/virtual-currency-10-04-19-3/; see also Cal. Dep't of Business Oversight, Cryptocurrency Exchange Platform – 10/28/19 (Oct. 28, 2019) (holding that the sale or purchase of virtual currency to a third-party for fiat money is not money transmission as it is a two-person transaction), https://dbo.ca.gov/2019/12/02/cryptocurrency-exchange-platform-10-28-19/.

Uniform Regulation of Virtual-Currency Business Act

As reflected above, states have adopted a broad range of regulatory approaches. As virtual currencies mature and gain wider acceptance, more states may move to adopt a separate regulatory regime for virtual currencies or otherwise update their already enacted regulatory regimes. During such a process, states may look to the Uniform Act referenced above for guidance.[150] Indeed, the Uniform Act has been adopted in Rhode Island[151] and legislation to adopt the Uniform Act has been introduced in a number of states.[152]

The substance of the Uniform Act is heavily influenced by New York's BitLicense licensing regime, state money transmitter licensing regimes and the CSBS Model Regulatory Framework. Under the Uniform Act, a licence is required to 'engage in virtual-currency business activity'.[153] The Uniform Act incorporates the concept of licensing reciprocity between states, so a separate licence may not be required for every state if the proposal is adopted as drafted.[154] The Uniform Act generally defines a virtual currency as a digital unit used as a medium of exchange or stored value, and includes both centralised and decentralised currencies.[155] Similar to the BitLicense regulation, the definition also excludes a customer affinity or rewards programme that cannot be converted into legal tender or a virtual currency, and digital units used within gaming platforms that have no real-world value and cannot be converted into real-world value or a virtual currency.[156] Unlike the BitLicense regulation, but similar to other states that have amended their money transmission statutes, the Uniform Act does not explicitly exclude prepaid cards that are issued or redeemable in legal tender.

The definition of virtual currency business activity – the activity that gives rise to the licensing requirement – includes 'exchanging, transferring, or storing virtual currency or engaging in virtual currency administration'.[157] The definition also explicitly includes issuing, or holding on behalf of others, electronic certificates representing an interest in precious metals .[158] As with the BitLicense regulation and several amended MTL statutes, the Uniform Act also excludes from the definition of virtual currency business activity direct purchases of goods and services using a virtual currency, the direct purchase of a virtual currency as an investment and persons whose activities are limited to the development or issuance of software.[159] The Uniform Act also provides a number of additional exceptions. Among the exceptions, several worth highlighting are those for:

150 The Uniform Law Commission has also promulgated the Uniform Supplemental Commercial Law for the Uniform Regulation of Virtual-Currency Business Act to provide commercial law rules under the Uniform Commercial Code for owing, transacting and holding virtual currencies. Unif. Supplemental Com. Law for the Unif. Reg. of Virtual-Currency Bus. Act (Unif. Law Comm'n 2018) (Supplemental Act), https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=de52d1fe-1f70-a568-9552-d354ade157ca&forceDialog=0.

151 19 R.I. Gen. Laws §§ 19-14-1 – 19-14.3-3.8.

152 Uniform Act, footnote 101.

153 id.

154 id., §§ 201, 203.

155 id., § 102(23).

156 id.

157 id., § 102(24).

158 id.

159 id., § 103.

a registered broker-dealers or other securities and commodities intermediaries under the Uniform Commercial Code that do not engage in the ordinary course of business in virtual currency business activity in addition to maintaining securities accounts or commodities accounts;
b a licensed money transmitter;
c a payment processor that facilitates clearing and settlement between exempt entities;
d entities whose activity in the jurisdiction is associated with annual transactions that have a value of US$5,000 or less;
e a virtual currency control-services vendor; and
f an entity that does not receive compensation for providing virtual currency products or services.[160]

As with state licences generally, the Uniform Act also imposes certain substantive compliance requirements, including:

a maintaining a sufficient net worth and reserves as is determined necessary by the relevant regulator;[161]
b maintaining sufficient AML, customer identification, cybersecurity, complaint programmes and anti-fraud programmes;[162]
c providing certain disclosures and receipts in connection with transactions;[163]
d maintaining certain written policies and procedures;[164]
e maintaining a sufficient surety bond;[165] and
f meeting certain record retention requirements.[166]

Licensees that hold virtual currencies on behalf of others are also required to hold virtual currencies of the same type and amount as what is owed to the beneficiary.[167]

IV ANTI-MONEY LAUNDERING

The Bank Secrecy Act (BSA)[168] is the primary federal statute that imposes AML obligations on institutions in the financial sector. FinCEN, a bureau of the US Department of the Treasury, issues and enforces AML regulations promulgated under BSA authority, generally in conjunction with other federal agencies with direct supervisory authority over impacted institutions, such as banks and broker-dealers. The BSA and its implementing regulations (BSA Regulations)[169] require that certain enumerated financial institutions that are not otherwise federally regulated must register with FinCEN, maintain a risk-based AML programme and collect, retain and share information with FinCEN.

160 id.
161 id., § 204.
162 id., §§ 601, 602.
163 id., § 501.
164 id., § 601.
165 id., § 204.
166 id., § 302.
167 id., § 502.
168 31 U.S.C. §§ 5311–5332 (2018). Money laundering itself is also defined in the US Criminal Code. See, e.g., 18 U.S.C. §§ 1956, 1957 (2018).
169 31 C.F.R. Ch. X (2018).

i FinCEN guidance: a functional approach

The BSA Regulations impose AML obligations on various financial institutions, including traditional financial entities such as banks, mutual funds, brokers and dealers in securities, futures commission merchants, introducing brokers in commodities as well as certain non-traditional financial entities, including money services businesses (MSBs).[170] Under the BSA Regulations, persons or entities 'wherever located doing business, whether or not on a regular basis or as an organised or licensed business concern, wholly or in substantial part within the [United States]' conducting certain activities are considered MSBs.[171] MSBs include, among other things, dealers in foreign exchange, providers and sellers of prepaid access and money transmitters.[172] A money transmitter is any person or entity that provides money transmission services or is engaged in the transfer of funds.[173] The terms money transmitter and money transmission services have formed the basis for FinCEN's regulation of entities engaged in certain virtual currency activities.

In 2011, FinCEN finalised a rule[174] that expanded the definition of money transmission services to encompass 'the acceptance of currency, funds, or other value that substitutes for currency from one person and the transmission of currency, funds, or other value that substitutes for currency to another location or person by any means'.[175] By covering other value that substitutes for currency, FinCEN thus laid the foundation for assessing whether a particular virtual currency business constitutes acting as a money transmitter.

FinCEN then issued guidance that established key definitions and analytical principles that FinCEN uses to assess virtual currency activities under the BSA (2013 Guidance).[176] The 2013 Guidance defines virtual currency as 'a medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency', distinguishing real currency from virtual currency on the basis that the latter does not have legal tender status in any jurisdiction.[177] The 2013 Guidance is limited to activities involving convertible virtual currencies (CVCs), defined as a virtual currency that 'has either an equivalent value in real currency, or acts as a substitute for real currency'.[178] The 2013 Guidance does not include any reference to whether CVCs must be convertible to real currency or some other form of value; nor does it address whether convertibility must be authorised by the virtual currency system itself, or whether a mere market for trade or exchange is sufficient.

170 id., § 1010.100(t).

171 id., § 1010.100(ff).

172 id., §§ 1010.100(ff)(1), (4)–(5).

173 id., § 1010.100(ff)(5).

174 'Bank Secrecy Act Regulations; Definitions and Other Regulations Relating to Money Services Businesses', 76 Fed. Reg. 43585 (July 21, 2011).

175 31 C.F.R. § 1010.100(ff)(5)(i)(A) (2018).

176 Fin. Crimes Enf't Network, US Dep't of the Treasury, FIN-2013-G001, 'Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies' (Mar. 18, 2013).

177 id., The BSA Regulations define real currency as coin and paper money of any country that is also designated as legal tender, circulates and is customarily used and accepted as a medium of exchange in the country of issuance. 31 C.F.R. § 1010.100(m) (2018).

178 FinCEN defines prepaid access as 'access to funds or the value of funds that have been paid in advance and can be retrieved or transferred at some point in the future through an electronic device or vehicle, such as a card, code, electronic serial number, mobile identification number, or personal identification number'. 31 C.F.R. § 1010.100(ww) (2018). The 2013 Guidance distinguishes CVCs from prepaid access on the basis that prepaid access is limited to value denominated in real currency.

The 2013 Guidance defines three participants in generic virtual currency arrangements: a user is a person that obtains virtual currency to purchase goods or services; an exchanger is a person engaged as a business in the exchange of virtual currency for real currency, funds or other virtual currency; and an administrator is a person engaged as a business in issuing (putting into circulation) virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency.[179] An exchanger or administrator that accepts and transmits a CVC, or buys or sells a CVC for any reason, is a money transmitter subject to any applicable limitations or exceptions.[180] However, merely acting as a user does not fit within the definition of money transmission, and therefore users are not MSBs subject to AML obligations. The 2013 Guidance addresses both centralised CVCs and decentralised[181] CVCs such as Bitcoin.

FinCEN subsequently issued several interpretations addressing the application of the 2013 Guidance under specific fact patterns, but issued a comprehensive release in May 2019, similarly limited to CVCs,[182] that consolidated and expanded upon those interpretations (the 2019 Guidance).[183] Although FinCEN asserts that the 2019 Guidance does not create any new regulatory requirements or expectations, its discussion of business models previously unaddressed by FinCEN may, in effect, establish new ground rules for certain CVC participants.

Defining the scope of user, exchanger and administrator

CVC creators: mining and investment

The 2019 Guidance provides that, if a person mines CVC and uses it solely for purchasing goods and services on its own behalf, then that person is not an MSB under the BSA Regulations unless and until the person mines CVC for use in money transmission, reaffirming prior guidance.[184] Moreover, even where persons combine computer processing

179 A person or entity may act in more than one capacity in a particular arrangement or transaction.

180 The BSA Regulations identify six circumstances under which a person is not a money transmitter despite accepting and transmitting currency, funds or value that substitutes for currency. 31 C.F.R. §§ 1010.100(ff)(5)(ii)(A)–(F) (2018). These carve-outs include: a person who merely provides the delivery, communication or network instruments used for transmission; a payment processor who facilitates payment for goods or services by agreement with the creditor or seller; and accepting or transmitting funds integral to the sale of goods or services by the person accepting or transmitting the funds. See id., §§ 1010.100(ff)(5)(ii)(A)–(B), (F).

181 These are CVCs that have no central repository and no single administrator, and may be obtained by a person's own computing or manufacturing effort.

182 The 2019 Guidance also does not address the contours of what is convertible for these purposes, but does state the definition covers value originally created for another purpose – including assets other regulatory frameworks classify as commodities, securities or futures contracts – that is repurposed as a currency substitute.

183 Fin. Crimes Enf't Network, US Dep't of the Treasury, FIN-2019-G001, 'Application of FinCEN's Regulations to Certain Business Models Involving Convertible Virtual Currencies' (May 9, 2019). On the same day FinCEN also released an advisory to aid financial institutions in identifying and reporting suspicious activity by bad actors exploiting CVCs for illicit purposes, which provided examples of unregistered CVC entities used to further such activities, red flags of illicit conduct using CVCs and recommendations on information to include when filing required reports involving CVCs. See Fin. Crimes Enf't Network, US Dep't of the Treasury, FIN-2019-A003, 'Advisory on Illicit Activity Involving Convertible Virtual Currency' (May 9, 2019).

184 See Jamal El-Hindi, Assoc. Dir., Policy Div., Fin. Crimes Enf't Network, US Dep't of the Treasury, FIN-2014-R001, 'Application of FinCEN's Regulations to Virtual Currency Mining Operations' (Jan. 30, 2014).

resources into 'mining pools' and the leader of such a group receives the earned CVC and transfers it to other group members, this alone is not money transmission under the BSA Regulations because such transfers are integral to the provision of services. FinCEN has similarly found that investors in virtual currencies for their own benefit, and not for the benefit or at the behest of others, are users of a virtual currency and therefore are not money transmitters.[185] Thus, FinCEN does not look to the label applied to a particular process of creating or obtaining a virtual currency, but rather to the function for which the person uses the CVC, and for whose benefit.

CVC trading platforms, decentralised exchanges and centralised repositories

CVC trading platforms enable CVC buyers and sellers to find one another and sometimes also function as an intermediary to facilitate trades. According to the 2019 Guidance, CVC trading platforms that merely provide a forum to post bids and offers are not money transmitters under the BSA Regulations if the parties themselves settle any matched transactions via an outside venue or service.[186] However, if a trading platform purchases the CVC from the seller and sells it to the buyer, the trading platform becomes an exchanger and is thereby subject to the BSA Regulation requirements as a money transmitter. This is the case even if an entity only effects transmissions contingent upon the occurrence of predetermined conditions or the buying and selling customers are never identified to one another.[187] Furthermore, an exchanger will be subject to the same AML obligations under the BSA Regulations regardless of whether it acts as a broker attempting to match two (mostly) simultaneous and offsetting transactions involving the acceptance of one type of currency and the transmission of another, or as a dealer transacting from its own reserve in either CVC or real currency.[188]

More broadly, in connection with CVCs for which there is a centralised repository, the 2013 Guidance concludes that the administrator of a centralised repository of CVCs is a money transmitter to the extent it allows transfers of value between persons or from one location to another, regardless of whether the transferred value is a real currency or CVC; and an exchanger that uses its access to virtual currency services provided by the administrator to accept and transmit CVCs on behalf of others also is a money transmitter.

185 See Jamal El-Hindi, Assoc. Dir., Policy Div., Fin. Crimes Enf't Network, US Dep't of the Treasury, FIN-2014-R002, 'Application of FinCEN's Regulations to Virtual Currency Software Development and Certain Investment Activity' (Jan. 30, 2014). The same ruling indicated that mere development and distribution of software is not money transmission for this purpose.

186 Such platforms fit the BSA Regulation exemption from money transmitter status for merely providing the delivery, communication or network instruments used for transmission. 31 C.F.R. § 1010.100(ff)(5)(ii)(A) (2018).

187 See Jamal El-Hindi, Assoc. Dir., Policy Div., Fin. Crimes Enf't Network, US Dep't of the Treasury, FIN-2014-R011, 'Request for Administrative Ruling on the Application of FinCEN's Regulations to a Virtual Currency Trading Platform' (Oct. 27, 2014).

188 See Jamal El-Hindi, Assoc. Dir., Policy Div., Fin. Crimes Enf't Network, US Dep't of the Treasury, FIN-2014-R012, 'Request for Administrative Ruling on the Application of FinCEN's Regulations to a Virtual Currency Payment System' (Oct. 27, 2014).

Additional business models

P2P exchangers, CVC kiosks and decentralised applications

Peer-to-peer (P2P) exchangers that are engaged in the business of buying and selling CVCs by facilitating transfers of CVC for currency, other CVCs or other types of value must comply with BSA Regulations as money transmitters, except for a natural person engaging in such activity who does so on an infrequent basis and not for profit or gain.[189] Similarly, the owner-operator of a CVC kiosk (i.e., electronic terminal) that enables the exchange of CVC for currency, other CVCs or other types of value would be treated as a money transmitter subject to the BSA Regulations.

The 2019 Guidance addresses for the first time publicly FinCEN's position regarding decentralised applications (DApps), which are software programmes operating on a P2P network of computers running blockchain platforms and designed so that they are not controlled by a central administrator. The 2019 Guidance states that when DApps perform money transmission, the definition of money transmitter may apply to the DApp itself or its owners-operators, or both. The 2019 Guidance does not address who may be considered an owner or operator of a DApp or the implications of a piece of software running on a decentralised network being a money transmitter for purposes of the BSA Regulations.

Payment processing services involving CVC transmission

Financial intermediaries that enable traditional merchants to accept CVC from customers in exchange for goods and services are also money transmitters under the 2019 Guidance. CVC payment processors generally are unable to meet the conditions for the payment processor exemption in the BSA Regulations because they do not operate through clearance and settlement systems that admit only BSA-regulated financial institutions.[190]

Internet casinos

The 2019 Guidance provides that any entity engaged in the business of gambling not otherwise covered by the BSA Regulation definition of casino, gambling casino or card club[191] – which includes any virtual platform created for betting on the possible outcome of events such as predictive markets, information markets, decision markets, idea futures or event derivatives – that accepts and transmits value denominated in CVC may still be regulated as a money transmitter under the BSA.

CVC wallets

Interfaces for intermediaries in the business of storing and transferring CVCs vary based on the technology involved, including mobile wallets, software wallets and hardware wallets. FinCEN considers wallets with user funds controlled by third parties to be 'hosted wallets' and wallets with user-controlled funds to be 'unhosted wallets'. However, FinCEN's regulatory treatment of these intermediaries under the 2019 Guidance is not technology-specific, but depends on four criteria: (1) who owns the value; (2) where the value is stored; (3) whether

189 31 C.F.R. § 1010.100(ff)(8) (2018).

190 See id., § 1010.100(ff)(5)(ii)(B); El-Hindi, footnote 188.

191 31 C.F.R. §§ 1010.100(t)(5)-(6) (2018). Casinos have their own AML obligations under the BSA Regulations. When a person falls under FinCEN's definitions for both casino and MSB, the regulatory obligations of a casino generally satisfy the obligations of an MSB, with the exception of registration.

the owner interacts directly with the payment system where the CVC runs; and (4) whether the person acting as intermediary has total independent control over the value. FinCEN does not explain how these factors would be balanced in all situations, but does describe certain providers of hosted wallets that would be treated as MSBs and specifies that a person purchasing goods or services on their own behalf via an unhosted wallet is not a money transmitter.

Fundraising for development of other projects – ICOs[192]

The 2019 Guidance specifically addresses two business models involving ICOs. The first involves ICOs whereby a preferential sale of CVC is made to a distinct set of preferred buyers (i.e., investors). The seller of the CVC is a money transmitter under the BSA Regulations because at the time of the initial offering the seller is the only person authorised to issue and redeem the new units of CVC and therefore would be considered an administrator of the CVC.[193] The second business model involves ICOs whereby funds are raised through the issuance of a digital token as proof of an equity or debt investment, where investors may subsequently: (1) receive new CVC in exchange for the token; (2) exchange the token for a DApp coin, which is a digital token that unlocks the use of DApps that provide various services; (3) use the original token itself as a new CVC or DApp coin; or (4) receive some other type of return on the original equity or debt investment. In this model, depending on the circumstances, participants may be exempt from MSB status under an exemption available for other types of regulated entities (but not from BSA Regulations otherwise applicable to the regulated entity) or for the acceptance and transmission of value that is integral to the sale of goods or services different from money transmission.[194] In any event, the resale of the initial token generally would not create any BSA Regulations obligations for the initial investor.

Anonymity-enhanced CVC transactions

Finally, the 2019 Guidance addresses transactions that are denominated in either (1) regular types of CVC but are structured to conceal information otherwise generally available through the CVC's native distributed public ledger or (2) types of CVC specifically engineered to prevent their tracing through distributed public ledgers (also called private coins). Operating in anonymity-enhanced CVCs is subject to the same regulatory treatment as operating in other CVCs, and may complicate compliance obligations related to communication of

192 The Department of the Treasury previously confirmed in a letter to Senator Ron Wyden, then the ranking member on the Senate Finance Committee, that the 2013 Guidance was intended to sweep broadly to have CVCs include ICO coins and tokens. Therefore, 'a developer that sells . . . ICO coins or tokens, in exchange for another type of value that substitutes for currency is a money transmitter and must comply with' applicable AML obligations while 'an exchange that sells ICO coins or tokens, or exchanges them for other virtual currency, fiat currency, or other value that substitutes for currency, would typically also be a money transmitter'. Letter from Drew Maloney, Assistant Sec'y for Legislative Affairs, Dep't of the Treasury to Senator Ron Wyden (Feb. 13, 2018), https://coincenter.org/files/2018-03/fincen-ico-letter-march-2018-coin-center.pdf.

193 Similarly, the 2019 Guidance specifies that any 'transaction where a person accepts currency, funds, or value that substitutes for currency in exchange for a new CVC at a preferential rate for a group of initial purchasers, before making the CVC available to the rest of the public, is simply engaging in money transmission, regardless of any specific label (such as 'early investors') applied to the initial purchasers'.

194 See 31 C.F.R. §§ 1010.100(ff)(8), (5)(ii)(F) (2018).

information in connection with certain fund transfers. Moreover, an anonymising services provider that accepts CVCs and retransmits them in a manner designed to prevent others from tracing the transmission back to its source would itself be considered a regulated money transmitter under the BSA Regulations. However, a person that merely provides anonymising software without more is not a money transmitter under the BSA Regulations.

ii FinCEN enforcement activity

FinCEN has also actively pursued criminal and civil enforcement matters against virtual currency businesses and individuals. Virtual currency exchanger Ripple Labs Inc and its wholly owned subsidiary XRP II, LLC (Ripple) concurrently entered into a consent agreement with FinCEN and a settlement with the US Attorney's Office in the Northern District of California for the failure to register as an MSB and violating numerous AML-related BSA Regulation requirements.[195] Ripple agreed to pay US$700,000 and to take remedial actions, including to only conduct such exchanger activities through a registered MSB and to implement an effective, compliant AML programme. FinCEN also assessed a US$110,003,314 civil penalty against Canton Business Corporation (BTC-e) along with a 21-count criminal indictment under 18 USC Sections 1956, 1957 and 1960 for wilful violations of the BSA AML requirements, including failure to register as an MSB and maintain an effective AML compliance programme as well as criminal money laundering charges. This was the first such action against a foreign-located, internet-based virtual currency business.[196] The Ripple and BTC-e examples are representative of numerous additional civil and criminal enforcement actions stemming from failures to comply with the BSA Regulations AML requirements.

Additionally, in April 2019 FinCEN brought its first enforcement action against an individual P2P CVC exchanger, assessing a civil monetary penalty of US$35,350 for Eric Powers' wilful failure to comply with any of the BSA Regulations applicable to money transmitters including developing, implementing and maintaining an AML programme, registering as an MSB and filing required transaction reports.[197] Powers was also immediately and permanently prohibited from ever providing money transmission services, engaging in any activity that would make him an MSB under the BSA Regulations and participating in any BSA-defined 'financial institution' that does any business in the United States.

FinCEN has indicated that it has become increasingly concerned with the risks associated with anonymity-enhanced cryptocurrencies (AECs), which 'remain unmitigated

195 News release, Fin. Crimes Enf't Network, 'FinCEN Fines Ripple Labs Inc. in First Civil Enforcement Action Against a Virtual Currency Exchanger' (May 5, 2015), https://www.fincen.gov/sites/default/files/2016-08/20150505.pdf.

196 See news release, Fin. Crimes Enf't Network, 'FinCEN Fines BTC-e Virtual Currency Exchange $110 Million for Facilitating Ransomware, Dark Net Drug Sales' (July 26, 2017), https://www.fincen.gov/sites/default/files/2017-07/BTC-e%20July%2026%20Press%20Release%20FINAL1.pdf; *United States v. BTC-e a/k/a Canton Business Corporation and Alexander Vinnik*, CR 16-00227 SI (N.D. Cal. Jan. 17, 2017). One of BTC-e's founders was also arrested, indicted and assessed a US$12 million personal penalty.

197 News release, Fin. Crimes Enf't Network, 'FinCEN Penalizes Peer-to-Peer Virtual Currency Exchanger for Violations of Anti-Money Laundering Laws' (Apr. 18, 2019), https://www.fincen.gov/news/news-releases/fincen-penalizes-peer-peer-virtual-currency-exchanger-violations-anti-money.

across many virtual currency financial institutions'.[198] Therefore, the specific AML/CFT controls FinCEN will deem satisfactory under the required risk-based approach will depend to some extent on the specific types of virtual currency regulated entities offer.[199]

FinCEN has also indicated that it takes a 'technology neutral' approach to regulation and enforcement as typified in the 2019 Guidance.[200] In practice, this means that whether an MSB offers Bitcoin, AECs or other CVCs the obligations under the BSA do not change, but that the 'expectation is [MSBs] understand the differences that exist in these different products and services' and regulated entities must be able to explain when examined how specifically they 'mitigate risks associated with AECs, including how you identify potentially suspicious activity and comply with reporting and recordkeeping requirements'.[201]

iii AML compliance programme requirements

When a virtual currency business acts as an MSB, it must register with FinCEN and implement and maintain an effective written, risk-based AML programme that is reasonably designed to prevent the MSB from being used to facilitate money laundering and the financing of terrorist activities.[202] At a minimum such a programme must:

a establish policies, procedures and internal controls to verify customer identification, file reports, create and retain records and respond to law enforcement requests;
b integrate AML compliance procedures with automated data processing systems to the extent applicable;
c maintain a list of agents;
d designate an AML programme compliance officer;
e provide appropriate AML education and training for relevant personnel; and
f provide for independent periodic review and monitoring to ensure programme adequacy.

MSBs also have a variety of record-keeping and reporting obligations in connection with their AML activities, including the obligation to file certain reports of suspicious activity.[203]

Consistent with the 2019 Guidance, in October 2019 FinCEN, along with the CFTC and SEC, issued a joint statement highlighting the application of AML obligations under the BSA Regulations to persons engaged in activities involving 'digital assets'[204] (the Joint

198 'Prepared Remarks of FinCEN Director Kenneth A. Blanco, delivered at the Concensus Blockchain Conference' (May 13, 2020), https://www.fincen.gov/news/speeches/prepared-remarks-fincen-director-kenneth-blanco-delivered-consensus-blockchain.

199 id.

200 'Prepared Remarks of FinCEN Director Kenneth A. Blanco at Chainalysis Blockchain Symposium' (Nov. 15, 2019), https://www.fincen.gov/news/speeches/prepared-remarks-fincen-director-kenneth-blanco-chainalysis-blockchain-symposium.

201 id.

202 See 31 U.S.C. §§ 5318(a)(2), (h) (2018); 31 C.F.R. § 1022.210 (2018).

203 Other regulated financial institutions also have similar, but somewhat more extensive, AML obligations, including, for example, a more specific obligation to develop a customer identification programme. See, e.g., 31 C.F.R. § 1020.220 (2018).

204 For purposes of the Joint Statement 'digital assets' are defined to include instruments that may be securities, commodities or security- or commodity-based instruments such as futures or swaps under applicable law and notes that such assets may be variously referred to as 'virtual assets', 'crypto-assets', 'digital tokens', 'digital coins', 'digital currencies', 'cryptocurrencies', and 'convertible virtual currencies'.

Statement).[205] The Joint Statement reiterates that, irrespective of how digital assets are characterised, the AML obligations of financial institutions subject to the BSA Regulations extend to such digital asset activities as set forth in the 2019 Guidance and entities not otherwise subject to the BSA Regulations engaged in certain digital asset activities would then meet the definition of a financial institution subjected to AML requirements under the BSA Regulations. For example, an entity that does not transmit fiat currency but provides exchange services for CVCs may be a money transmitter subject to the BSA and required to register with FinCEN as an MSB.

Critically, the Joint Statement clarifies that entities functionally regulated or examined by the SEC or CFTC such as introducing brokers, futures commission merchants, broker-dealers or mutual funds that engage in digital asset activities – including any activities FinCEN would otherwise consider 'money transmission' – remain subject to the at times more robust AML obligations applicable to such entities rather than the requirements applicable solely to MSBs regardless of whether the underlying digital asset is a security or commodity.[206]

iv Incorporation of the BSA AML requirements into state law

In addition to federal requirements under the BSA, all US jurisdictions (with the exception of Montana) also regulate money transmitters in some capacity through licensure and other requirements. As explained in Section III, each jurisdiction's money transmitter laws differ in terms of which activities require a licence and what is required to obtain a licence. Accordingly, whether FinCEN requires a virtual currency business to be registered federally as an MSB does not necessarily mean a state will agree with the classification under its laws, which generally have consumer protection goals as well as AML goals.

Many jurisdictions expressly incorporate compliance with the AML requirements of the BSA and BSA Regulations into their own money transmission statutes and regulations, including, for example, New York and Delaware.[207] Moreover, some jurisdictions impose AML obligations in addition to the federal requirements.[208] Consequently, virtual currency businesses may be subject to enforcement of federal AML compliance from state regulators, and may also have to comply with additional AML requirements depending on whether their activities necessitate a licence.

v Office of Foreign Assets Control

OFAC implements certain statutes, regulations and executive orders related to trade and economic sanctions that have been imposed on targeted foreign countries and regimes, terrorists, international narcotics traffickers, those engaged in activities related to the proliferation of weapons of mass destruction and other threats to the national security, foreign policy or economy of the United States. Those sanctions may prohibit certain types of transactions, or may require the blocking and freezing of assets associated with the targets of the sanctions regime, and are enforced with significant federal criminal sanctions. Any entity

205 Public Statement, Leaders of the CFTC, FinCEN, and SEC Issue Joint Statement on Activities Involving Digital Assets (Oct. 11, 2019), https://www.sec.gov/news/public-statement/cftc-fincen-secjointstatementdigitalassets.

206 id. See also 31 CFR § 1010.100(ff)(8)(ii).

207 See, e.g., 3 NYCCR § 417.2; 5 Del. Admin. Code § 2301-1.1 (2018).

208 See, e.g., Arizona Rev. Stat. Ann. § 6-1241 (2018).

engaged in virtual currency activities in the United States must comply with the applicable OFAC regimes, and therefore must take care to assess whether its customers or counterparties are subject to relevant sanctions.

OFAC has pursued virtual currency-specific sanctions actions, including against two Iran-based individuals that helped exchange Bitcoin ransom payments into Iranian Rial as P2P exchangers on behalf of Iranian malicious cyber actors.[209] This marked the first instance of OFAC specifically identifying CVC addresses associated with sanctioned individuals. Additionally, OFAC has issued FAQs stating that all US persons are prohibited from engaging in transactions related to, providing financing for and otherwise dealing in any 'digital currency, digital coin, or digital token' that was issued by, for or on behalf of the government of Venezuela on or after 9 January 2018.[210]

OFAC continues to actively enforce the US sanctions regime in the virtual currency space. For example, in March 2020 OFAC sanctioned two Chinese nationals involved in laundering approximately US$100.5 million in stolen cryptocurrency from a pair of 2018 cyber intrusions against two cryptocurrency exchanges.[211] The cyber intrusion was linked to Lazarus Group, a North Korean state-sponsored malicious cyber group designated for sanctions by OFAC.

V REGULATION OF MINERS

Mining of virtual currencies is generally lawful under US federal and state law. However, concerns about energy consumption and environmental impact have caused at least one local government to issue temporary bans on virtual currency mining.[212] There is no US regulatory regime that is specific to virtual currency mining; that is, virtual currency miners are not at this time regulated in the US as virtual currency miners. FinCEN has indicated that to the extent a user mines Bitcoin and uses the Bitcoin for its own purposes (i.e., not for the benefit of a third party), that user is not an MSB because the mining activity involves neither acceptance nor transmission of Bitcoin.[213] To the extent that the virtual currency being mined is a security or a commodity, the mining of the virtual currency may implicate other aspects of US federal law, including broker-dealer, investment adviser, commodity pool operator (CPO) or commodity trading adviser (CTA) registration.

US federal taxation of virtual currency mining may also prove complex and unclear. For example, miners may be required to include the fair market value of a mined currency in their gross income, and to the extent that an individual miner engages in virtual currency mining as part of a trade or business, the individual taxpayer may be required to pay self-employment tax on his or her net earnings from mining.

209 News release, US Dep't of the Treasury, 'Treasury Designates Iran-Based Financial Facilitators of Malicious Cyber Activity and for the First Time Identifies Associated Digital Currency Addresses' (Nov. 28, 2018), https://home.treasury.gov/news/press-releases/sm556.

210 See US Dep't of the Treasury, 'OFAC FAQs', No. 566 (Mar. 19, 2018), https://www.treasury.gov/resource-center/faqs/Sanctions/Pages/faq_other.aspx#venezuela; The White House, Exec. Order No. 13827, 'Taking Additional Steps to Address the Situation in Venezuela', 83 Fed. Reg. 12469–70 (Mar. 19, 2018).

211 News release, US Dep't of the Treasury, 'Treasury Sanctions Individuals Laundering Cryptocurrency for Lazarus Group' (Mar. 2, 2020), https://home.treasury.gov/news/press-releases/sm924.

212 Plattsburgh, NY, City Code Ch. 270, Art. V, § 270-28-J (2018).

213 El-Hindi, footnote 184.

The treatment of virtual currency mining at the state and local levels varies. For example, Hawaii has issued guidance classifying virtual currencies as money, which subjects virtual currencies to the state's laws on money transmission.[214] The guidance is relatively short, however, and does not explain the reasoning for this treatment. It is also quite broad, and appears to imply that mining activity requires a licence.[215] Montana is the only state to not have enacted any form of money transmission statute. While Montana has no state-wide laws or regulations specific to blockchain or virtual currencies, one Montana county has enacted temporary zoning regulations aimed at ensuring that Bitcoin mining operations in the county refrain from producing excessive noise, handle their electronic waste properly and utilise renewable energy.[216] On the other side of the coin, Montana is the first state to take a financial stake in a Bitcoin mining operation.[217]

VI REGULATION OF ISSUERS AND SPONSORS

Issuers and sponsors of virtual currency-related investment funds (both public and private) and regulators continue to be challenged with applying an existing body of law and regulation to new technology and a new and evolving class of assets. Public interest in virtual currencies and digital tokens has prompted the formation of hundreds of virtual currency-related private investment funds,[218] and several public fund sponsors have filed registration statements with the SEC with a view to the public offering of shares of virtual currency-related investment funds.[219]

i Legal and regulatory environment overview

All offers and sales of securities in the United States, including by investment funds, must either be registered with the SEC under the Securities Act or be exempt from such registration.[220] The Securities Act imposes rigorous disclosure requirements in connection with the offer and sale of registered securities. Additionally, investment funds that invest substantially in securities[221] and wish to issue their shares to the public in the United States generally are subject to registration and regulation as investment companies under the Investment Company Act of

214 Hawaii Release, footnote 134.

215 id.

216 See 'Cryptocurrency Mining', Missoula County Montana, https://www.missoulacounty.us/government/community-development/community-planning-services/planning-projects/cryptocurrency (last visited June 19, 2020).

217 Press release, Office of Governor Steven Bullock, 'Governor Bullock Announces $1.1 Million to Help Main Street Businesses Create Jobs, Train Employees and Plan for Growth', http://governor.mt.gov/Newsroom/governor-bullock-announces-11-million-to-help-main-street-businesses-create-jobs-train-employees-and-plan-for-growth (last visited June 19, 2020).

218 See 'Cryptocurrency Investment Fund Industry Graphs and Charts', Crypto Fund Research, https://cryptofundresearch.com/cryptocurrency-funds-overview-infographic/ (last visited June 19, 2020).

219 See, e.g., ProShares Tr. II, Registration Statement (Form S-1) (Sept. 27, 2017); Etherindex Ether Tr., Registration Statement (Form S-1) (Sept. 5, 2017); VanEck SolidX Bitcoin Tr., Registration Statement (Form S-1) (June 5, 2018); US Bitcoin & Treasury Inv. Tr., Registration Statement (Form S-1) (Jan. 1, 2019); Bitwise Bitcoin ETF Tr., Registration Statement (Form S-1) (Jan. 10, 2019); Rex Bitcoin Strategy Fund, Registration Statement (Form N-1A) (Nov. 3, 2017).

220 See Securities Act §§ 4, 5 (codified at 15 U.S.C. §§ 77d, 77e (2018)).

221 The status of virtual currencies and digital tokens as securities is addressed in Section II.

1940 (the Company Act). The Company Act substantively regulates virtually every aspect of the business and operations of a registered investment company. Investment advisers to investment funds that invest substantially in securities generally are subject to registration and regulation as investment advisers under the Investment Advisers Act of 1940 (the Advisers Act) unless an exemption is available. The Advisers Act substantively regulates the business of investment advisers and their relationships with their clients, including investment funds. The Director of the Division of Investment Management of the SEC, which administers the Company Act and the Advisers Act, as well as the Securities Act as applied to investment companies registered under the Company Act, has expressed particular concerns regarding investment funds that invest in virtual currencies and related assets.[222] The operators of investment funds that invest or may invest to any extent in derivatives, including virtual currency-based or digital assets-based derivatives, are also subject to regulation by the CFTC under the CEA, including disclosure, reporting and record-keeping requirements under the Part 4 Rules of the CFTC.[223] Registered CPOs and CTAs also are required to be members of the NFA, which imposes additional substantive regulation on their business activities.[224] The Exchange Act may subject an investment fund to public reporting requirements that include, among other things, quarterly and annual reports filed with the SEC that must comply with SEC rules regarding their content.[225] Generally, these reporting obligations arise when an investment fund's shares are listed on a national securities exchange, or when its equity securities are held by either 2,000 persons or 500 persons who are not accredited investors, and the issuer has total assets exceeding US$10 million.[226]

Private fund managers typically avoid the registration and disclosure obligations of the Securities Act by offering securities in the United States pursuant to Section 4(a)(2) of the Securities Act, which exempts from registration transactions 'by an issuer not involving any public offering'.[227] Regulation D under the Securities Act (Regulation D) establishes a safe harbour that assures exemption under Section 4(a)(2). Historically, a material requirement of Regulation D was a prohibition on general solicitation or general advertising.[228] However, pursuant to the Jumpstart our Business Startups Act, enacted in 2012, the SEC amended

222 Letter from Dalia Blass, Dir., Div. of Inv. Mgmt., US Sec. and Exch. Comm'n, to Paul Schott Stevens, President & Chief Exec. Officer, Inv. Co. Inst., and Timothy W Cameron, Head of Asset Mgmt. Group, Sec. Indus. and Fin. Mkts. Assoc., 'Engaging on Fund Innovation and Cryptocurrency-related Holdings' (Jan. 18, 2018), https://www.sec.gov/divisions/investment/noaction/2018/cryptocurrency-011818.htm.

223 The CFTC and the CEA do not regulate investment funds directly. Rather, they regulate CPOs and CTAs in respect of their operation of, and provision of commodity derivative trading advice to, investment funds that use commodity derivatives, which the CEA and the CFTC refer to as commodity pools.

224 The NFA has implemented rules specifically addressing transactions in and offerings of virtual currencies and related assets. In December 2017, the NFA issued reporting requirements that required CPOs to notify the NFA immediately once they have executed a transaction involving any virtual currency transaction or virtual currency derivative (including futures, options or swaps) on behalf of a commodity pool. On 9 August 2018, the NFA adopted disclosure requirements for NFA members offering commodity pools that trade virtual currencies or virtual currency derivatives. The NFA's disclosure guidelines highlighted concerns with virtual currencies such as price volatility, valuation and liquidity, and virtual currency exchanges, intermediaries and custodians, cybersecurity and the opaque spot market. See NFA Notice, footnote 69.

225 Exchange Act § 13 (codified at 15 U.S.C. § 78m (2018)).

226 Exchange Act § 12(g) (codified at 15 U.S.C. § 78l (2018)).

227 15 U.S.C. § 77d (2018).

228 See Rule 502(c) of Regulation D (codified at 17 C.F.R. § 230.502(c) (2018)).

Rule 506 of Regulation D to provide that the prohibition against general solicitation will not apply where, along with the other requirements of Regulation D being met, all purchasers of the securities in the offering are accredited investors and reasonable efforts, as described in the amended rule, are undertaken to verify their status as such.[229]

Private investment funds generally avoid registration and regulation under the Company Act by relying on one of two available exclusions from the definition of the term investment company.[230] Section 3(c)(1) of the Company Act provides an exclusion for investment funds that have fewer than 100 beneficial owners, and Section 3(c)(7) provides an exclusion for investment funds that are sold exclusively to qualified purchasers (without imposing any limit on the number of beneficial owners). Both Section 3(c)(1) and Section 3(c)(7) require that the investment fund not make or propose to make a public offering of its securities (which is satisfied by complying with Regulation D). A number of investment funds that propose to invest solely in virtual currencies or their derivatives, and have sought to sell their securities to the public and list them for trading on a national securities exchange, have relied on Section 3(b)(1) of the Company Act for exclusion from registration and regulation thereunder. Section 3(b)(1) excludes any issuer primarily engaged in a business or businesses other than that of investing, reinvesting, owning, holding or trading in securities. Reliance on this exclusion requires that the digital currencies or tokens in which an investment fund will invest are not securities (in the case of an investment fund that will hold virtual currencies, such as Bitcoin or Ether) or that the investment fund is a commodity pool (in the case of an investment fund that may invest in Bitcoin derivatives).[231]

Investment advisers to private funds have sought to avoid registration and regulation under the Advisers Act by not advising registered investment companies, and either keeping their assets under management below the threshold that would require registration under Section 203A of the Advisers Act (which may subject them to regulation at the state level) or operating as exempt reporting advisers under the private fund adviser exemption.[232] However, once a private fund adviser's assets under management exceed US$150 million, or if the adviser acts as investment adviser to a registered investment company or a separately managed account, registration and regulation under the Advisers Act are unavoidable. Compliance with the Advisers Act has proved challenging in the digital asset context. Compliance with Advisers Act Rule 206(4)-2, the custody rule, has been particularly challenging for investment advisers due to the general lack of qualified custodians to hold digital assets for the benefit of an investment fund and the lack of guidance from the SEC on how to comply with the custody rule with respect to digital assets.[233] The staff of the SEC's Division of Investment Management recently published a letter seeking public input on the applicability of the custody rule to digital assets.[234] Noting that amendments to the custody rule are on the

229 See Rule 506(c) of Regulation D (codified at 17 C.F.R. § 230.506(c) (2018)).

230 See Company Act § 3(a)(1)(A), (C) (codified at 15 U.S.C. §§ 80a-3(a)(1)(A), (C) (2018)).

231 In a line of no-action letters, the SEC has provided guidance as to how to distinguish a commodity pool from an investment company required to be registered and regulated under the Company Act. See *Peavey Commodity Funds I, II and III*, 1983 SEC No-Act. LEXIS 2576 (June 2, 1983); *EF Hutton and Company Inc* (June 22, 1983); *Ft Tryon Futures Fund Limited Partnership*, 1990 SEC No-Act. LEXIS 1192 (Aug. 16, 1990); *Managed Futures Association*, 1996 SEC No-Act. LEXIS 623 (July 15, 1996).

232 See Advisers Act Rule 203(m)-1 (codified at 17 C.F.R. § 275.203(m)-1 (2018)).

233 See Advisers Act Rule 206(4)-2 (codified at 17 C.F.R. § 275.206(4)-2 (2018)).

234 Letter from Paul G Cellupica, Deputy Dir. and Chief Counsel, Div. of Inv. Mgmt., US Sec. and Exch. Comm'n, to Karen Barr, President & Chief Exec. Officer, Inv. Adviser Assoc., 'Engaging on Non-DVP

SEC's long-term unified agenda, the staff stated that it expects to utilise what it learns from this information-gathering initiative to inform any future recommendations to the SEC with respect to any regulatory action that may be necessary or appropriate.[235]

Exemptions from registration and regulation as a CPO or CTA may be available. A CPO may be exempt from registration under the *de minimis* rule if commodity derivatives are not a material component of the investment fund's portfolio, and if the fund's securities are sold in transactions exempt from registration under the Securities Act and are offered and sold without marketing to the public in the United States (which is satisfied by complying with Regulation D).[236] If the *de minimis* exemption is not available, registration with the CFTC as a CPO and membership in NFA is required. However, once a CPO is registered, an exemption from most of the otherwise applicable CFTC disclosure, reporting and record-keeping rules is available if the investment fund is sold exclusively to qualified eligible persons in an offering exempt from registration under the Securities Act (which is satisfied by complying with Regulation D).[237] Because qualified purchasers are, by definition, qualified eligible persons, an investment fund that relies on Section 3(c)(7) for exclusion from the Company Act generally will be eligible for this relief. Exemption from registration as a CTA (and membership in NFA) is available for CTAs that have 15 or fewer advisory clients in the past 12 months and who do not hold themselves out generally to the public as CTAs.[238] Other exemptions from CTA registration may be available as well.

ii Attempts at public offerings

Several fund sponsors have filed registration statements with the SEC for virtual currency-related investment funds with a view to offering them to the public and, in some instances, listing their shares on a national securities exchange.[239] These investment funds include investment companies registered under the Company Act, commodity pools exempt from the Company Act pursuant to Section 3(b)(1) but fully compliant with the Part 4 Rules of the CFTC and investment funds that are exempt from the Company Act pursuant to Section 3(b)(1) (because they do not invest in securities) and not regulated under the CEA or the Part 4 rules of the CFTC (because they do not invest in commodity derivatives).[240] To date, the SEC has not declared effective any registration statement for any such issuer, and SEC staff have compelled the withdrawal of a number of registration statements for registered investment companies that would invest in virtual currencies, digital tokens or derivatives referencing such assets under threat of enforcement action.[241] In June 2018,

Custodial Practices and Digital Assets' (Mar. 12, 2019), https://www.sec.gov/investment/non-dvp-and-custody-digital-assets-031219-206.

235 id.

236 See CFTC Rule 4.13(a)(3) (codified at 17 C.F.R. § 4.13(a)(3) (2018)).

237 See CFTC Rule 4.7 (codified at 17 C.F.R. § 4.7 (2018)).

238 See CEA § 4m(1) (codified at 7 U.S.C. § 6m(1) (2018)); CFTC Rule 4.14(a)(10) (codified at 17 C.F.R. § 4.14(a)(10) (2018)).

239 e.g., Winklevoss Bitcoin Tr., Registration Statement (Form S-1) (Dec. 7, 2016). See footnote 219 for additional examples.

240 e.g., VanEck Registration Statement, footnote 219.

241 See Letter from J Garrett Stevens, President, Exch. Listed Funds Tr., to US Sec. and Exch. Comm'n, 'Exchange Listed Funds Trust (File Nos. 333-180871 and 811-22700) Request for Withdrawal of Post-Effective Amendment No. 47' (Oct. 5, 2017), https://www.sec.gov/Archives/edgar/data/1547950/000139834417012782/fp0028414_aw.htm.

the SEC disapproved the listing and trading of the Winklevoss Bitcoin Trust, finding that because Bitcoin markets are not 'uniquely resistant to manipulation', the listing of a Bitcoin fund by a securities exchange was not consistent with the requirements of the exchange to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest. In August 2018, the SEC rejected nine separate applications to list Bitcoin exchange-traded funds.

Additionally, the SEC has disapproved applications by securities exchanges to list the securities of funds that would invest in digital assets. The SEC must authorise the listing of every security traded on a national securities exchange in the United States. Although generic listing rules are available for most types of securities commonly listed on national securities exchanges, if the security or issuer exhibits new or novel features, the exchange must submit an application to the SEC's Division of Trading and Markets to promulgate a new listing rule designed specifically for that issuer and security.[242] The SEC has disapproved applications to list securities of an exchange-traded investment product that would invest solely in Bitcoin, finding that the investment funds in question were inconsistent with Section 6(b)(5) of the Exchange Act, which requires that rules of national securities exchanges be designed to prevent fraudulent and manipulative acts and practices, and protect investors and the public interest.[243] Other applications for exchange-traded investment products that would invest in digital assets have also been submitted, and the SEC has continued to reject such applications (most recently in February 2020), citing, among other things, failure by the exchanges to demonstrate the ability to sufficiently protect investors and prevent fraud in the underlying digital asset markets. To date, no such application has been approved by the SEC.

iii The Dalia Blass Letter

On 18 January 2018, the Division of Investment Management of the SEC issued a letter to the Investment Company Institute and the Securities Industry and Financial Markets Association (Blass Letter). This letter outlined the SEC's concerns regarding virtual currency-related funds in relation to valuation, liquidity, custody, arbitrage (in respect of exchange traded funds) and potential manipulation and other risks associated with virtual currency-related funds.[244] While the Blass Letter was issued in response to an attempt to register investment products under the Company Act, the SEC noted that these concerns apply also to private virtual currency-related funds.[245] The SEC also noted that 'until the questions raised [in the Blass Letter] can be addressed satisfactorily, [they] do not believe that it is appropriate for fund sponsors to initiate registration of funds that intend to invest substantially in virtual currency and related products'.[246] The Blass Letter noted that 'cryptocurrency markets are developing swiftly. Additional questions may arise from these developments'.[247] At the same time, the

242 See 17 C.F.R. § 240.19b-4 (2018).

243 See US Sec. and Exch. Comm'n, 'Self-Regulatory Organizations; Order Disapproving a Proposed Rule Change, as Modified by Amendments No. 1 and 2, to BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, to List and Trade Shares Issued by the Winklevoss Bitcoin Trust', Exchange Act Release 34-80206 (Mar. 10, 2017), https://www.sec.gov/rules/sro/batsbzx/2017/34-80206.pdf.

244 Blass, footnote 222.

245 id.

246 id.

247 id.

SEC has clearly signalled its willingness to work with the industry by indicating that, 'over the years, dialogue between fund sponsors and the [SEC] has facilitated the development of many new types of investment products'.[248]

VII CRIMINAL AND CIVIL FRAUD AND ENFORCEMENT

i Civil enforcement

Both the CFTC and SEC have declared expressly their intention to police conduct in the cryptocurrency markets. On 19 January 2018, the Directors of Enforcement for the CFTC and the SEC released a highly unusual joint statement, stating:

> *When market participants engage in fraud under the guise of offering digital instruments – whether characterised as virtual currencies, coins, tokens, or the like – the SEC and the CFTC will look beyond form, examine the substance of the activity and prosecute violations of the federal securities and commodities laws. The Divisions of Enforcement for the SEC and CFTC will continue to address violations and bring actions to stop and prevent fraud in the offer and sale of digital instruments.*[249]

That same day, the CFTC Chair, J Christopher Giancarlo, delivered a speech on virtual currencies in which he stated that '[t]he CFTC believes that the responsible regulatory response to virtual currencies involves asserting CFTC legal authority over virtual currency derivatives in support of anti-fraud and manipulation enforcement, including in underlying spot markets'.[250] In another truly extraordinary event, the Chairs of the SEC and CFTC, Jay Clayton and Giancarlo, penned a joint op-ed for the *Wall Street Journal* addressing the oversight of virtual currencies. They stated their agencies 'along with other federal and state regulators and criminal authorities, will continue to work together [. . .] to deter and prosecute fraud and abuse'.[251]

SEC

The SEC's enforcement jurisdiction is somewhat more limited than the CFTC's because the SEC can only bring actions involving instruments falling within the definition of security. However, once properly regarded as a transaction in a security, the SEC's enforcement powers sweep very broadly, with possible statutory and rule violations involving registration, business conduct, trading and many other types of statutory and regulatory requirements, as well as fraud and manipulation.[252] In 2017, the SEC's Division of Enforcement formed a Cyber Unit, which it stated would focus on the following:

248 id.

249 James McDonald et al., 'Joint statement from CFTC and SEC Enforcement Directors Regarding Virtual Currency Enforcement Actions' (Jan. 19, 2018), http://www.cftc.gov/PressRoom/SpeechesTestimony/mcdonaldstatement011918.

250 J Christopher Giancarlo, 'Remarks of Chair J Christopher Giancarlo to the ABA Derivatives and Futures Section Conference, Naples, Florida' (Jan. 19, 2018), http://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo34.

251 Jay Clayton & J Christopher Giancarlo, 'Regulators Are Looking at Cryptocurrency', *Wall Street Journal* (Jan. 24, 2018), https://www.wsj.com/articles/regulators-are-looking-at-cryptocurrency-1516836363.

252 See, e.g., US Sec. and Exch. Comm'n Div. of Enf't Ann. Rep. (2017), https://www.sec.gov/files/enforcement-annual-report-2017.pdf; 'Cyber Enforcement Actions', US Sec. and Exch. Comm'n,

a market manipulation schemes involving false information spread through electronic and social media;
b hacking to obtain material non-public information and trading on that information;
c violations involving distributed ledger technology and ICOs;
d misconduct perpetrated using the dark web;
e intrusions into retail brokerage accounts; and
f cyber-related threats to trading platforms and other critical market infrastructure.[253]

As described in more detail in Section II, the SEC issued the DAO Report in July 2017, finding that the tokens offered and sold by the DAO were securities, and thus subject to the requirements of the federal securities laws.

In the wake of the DAO Report, the SEC has brought various actions for illegal ICOs, sometimes, but not always, including charges of fraud. For example, in September 2017, it brought charges against an individual and his two companies for fraud in two ICOs purported to be backed by investments in real estate and diamonds. In the former, the alleged misstatements included that the company had a 'team of lawyers, professionals, brokers, and accountants' that would invest the ICO proceeds into real estate when in fact none had been hired or even consulted. The individual and his company allegedly misrepresented they had raised between US$2 million and US$4 million from investors when the actual amount was approximately US$300,000. In the case of the second company, the allegations were that they claimed to have purchased diamonds and engaged in other business operations when they had actually done nothing in that regard.[254] The SEC obtained an emergency asset freeze against the defendants.

As another example, in December 2017, the SEC charged a Canadian and his company with fraudulently marketing tokens to US investors (and thus also violating the registration provisions of the US securities law), and obtained an emergency asset freeze.[255] In a further example, in May 2018, the SEC filed a complaint and obtained an emergency asset freeze, and then a consented-to preliminary injunction and appointment of a receiver, in connection with an alleged ongoing fraudulent ICO that had raised US$21 million by a self-described 'blockchain evangelist' who had misrepresented his business relationship with the Fed and many well-known companies.[256]

As previously noted, the SEC has demonstrated its willingness to move against unregistered ICOs that it views as securities offerings even in the absence of fraud. As described in Section II, in December 2017, the SEC filed a settled administrative proceeding against Munchee for making an illegal, unregistered securities offering. After being contacted

https://www.sec.gov/spotlight/cybersecurity-enforcement-actions (last visited June 19, 2020) (containing a comprehensive list of SEC enforcement actions and trading suspensions related to digital assets and ICOs).

253 id., at 4.

254 *SEC v. REcoin Group Foundation, LLC, et al.*, No. 17-cv-05725 (E.D.N.Y. Sept. 29, 2017).

255 *SEC v. PlexCorps, et al.*, No. 1:17-cv-07007-DLI-RML (E.D.N.Y. Dec. 1 2017). In October 2019, a final judgment was entered ordering the defendants to pay nearly US$7 million in disgorgement of profits, interest and penalties. *SEC v. PlexCorps, et al.*, No. 1:17-cv-07007-CBA-RML (E.D.N.Y. Oct. 2 2019).

256 *SEC v. Titanium Blockchain Infrastructure Services, Inc, et al.*, CV18-4315-DSF (JPRx) (C.D. Cal. May 22, 2018); see also *SEC v. Arisebank, et al.*, No. 18-cv-00186 (N.D. Tex. Jan. 25, 2018) (allegedly fraudulent ICO in connection with a claim of creating the world's first decentralised bank); *SEC v. Sharma, et al.*, No. 18-cv-02909-DLC (S.D.N.Y. Apr. 2, 2018) (allegedly fraudulent US$32 million ICO).

by the SEC, Munchee agreed voluntarily to halt the offering, to return to investors the proceeds raised to that point and to the entry of the order finding a violation of the securities registration provisions of the Securities Act.[257]

In February 2018, the SEC brought an action against a former platform and its operator for operating an unregistered securities exchange and also for defrauding users of the exchange. The exchange offered what the SEC alleged were securities in 'virtual currency-related enterprises in exchange for [B]itcoins'. The operator of the exchange was also charged with fraud in connection with an illegally unregistered token offering.[258]

In September 2018, the SEC took action against an ICO website for operating as an unregistered broker-dealer in violation of the federal securities laws.[259] As previously signalled in the DAO Report and public statements by SEC staff, this action reiterated that those who directly or indirectly offer trading or other services related to digital assets that are securities must comply with the federal securities laws.

An October 2018 complaint filed by the SEC alleging securities fraud illustrates the fact specific nature of applying the Howey test to determine whether a security is at issue.[260] The district court judge initially denied the SEC's request to freeze the defendant's assets, finding the SEC had failed to reasonably demonstrate the tokens were securities, in part based on serious differences in the facts alleged by the SEC and the defendant. However, the SEC filed a motion for reconsideration and the court ultimately granted the injunction.

In November 2018, the SEC announced settlements against two separate ICO issuers for conducting unregistered public offerings.[261] For the first time in an SEC action settlement, each issuer in these cases agreed, under the terms of its respective settlement, to register its tokens as securities by filing a Form 10 with the SEC and to thereafter make all required filings under the Exchange Act. Such registration and periodic reporting is intended to provide the token purchasers the benefit of receiving disclosures as required by the Exchange Act. In February 2019, the SEC settled against another ICO issuer with generally similar facts.[262] In this instance, however, the SEC did not impose a penalty against the issuer because the issuer self-reported its unregistered ICO to the SEC, cooperated with the SEC's investigation and voluntarily agreed to take remedial steps.

While most SEC enforcement efforts for unregistered sales of digital assets have taken the form of settled administrative actions, the issue of whether digital assets are securities subject to the registration provisions of the Securities Act has now been contested in federal litigation as well.[263] As previously noted, in March 2020 the SDNY granted the SEC an injunction preventing the delivery of digital assets, finding that the sales to investors and subsequent transactions in the digital assets after the relevant blockchain had launched comprised a single investment contract required to be registered under the Securities Act.

257 *Munchee*, footnote 6.

258 *SEC v. Montroll, et al.*, 1:18-cv-01582 (S.D.N.Y. Feb. 21, 2018).

259 TokenLot, LLC, et al., Securities Act Release No. 10543, Exchange Act Release No. 84075, Company Act Release No. 33221, Admin. File No. 3-18739 (Sept. 11, 2018).

260 *SEC v. Blockvest*, No. 3:18-cv-02287 (S.D. Cal. Oct. 3, 2018).

261 *In re CarrierEQ, Inc. d/b/a Airfox*, Securities Act Release No. 10575, Admin. File No. 3-18898 (Nov. 16, 2018); *In re Matter of Paragon Coin, Inc.*, Securities Act Release No. 10574, Admin. File No. 3-18897 (Nov. 16, 2018).

262 *Gladius Network LLC*, Securities Act Release No. 10608, Admin. File No. 3-19004 (Feb. 20, 2019).

263 *Telegram*, footnote 11; *SEC v. Kik Interactive Inc.*, 1:19-cv-05244 (S.D.N.Y. June 4, 2019).

Additionally, in November 2018, the SEC announced its enforcement settlement against the founder of a decentralised digital asset trading platform, EtherDelta, arising out of EtherDelta's alleged operation of an unregistered national securities exchange.[264] As discussed in Section II, the Exchange Act mandates that an exchange be registered with the SEC as a national securities exchange or be exempt from registration. The EtherDelta website provided users access to an order book for tokens, displayed firm bids and offers for tokens, allowed users to buy or sell tokens and employed a smart contract to execute orders. More specifically, as a decentralised exchange, EtherDelta utilised a smart contract to self-execute trades by validating orders, confirming order terms and conditions, executing pair orders and updating the Ethereum blockchain to reflect the trade.

The SEC recently announced settlements of two proceedings involving alleged violations of Section 17(b) (or the anti-touting provision) of the Securities Act, which makes it illegal for any person to promote or publicise a security for compensation without fully disclosing the receipt and amount of such compensation. The first was against an online self-proclaimed ICO research and rating agency that had accepted undisclosed payments from issuers with respect to certain of the ICOs it had rated.[265] The second was against the actor Steven Seagal, who had become the 'brand ambassador' for an ICO without disclosing payments received for such promotional activities from the issuer.[266] In each case, the respondents were ordered to pay disgorgement, interest and penalties and were ordered to cease and desist from further violations of Section 17(b).

The SEC has also acted when illegal sales of securities occur linked to sudden price increases in what were previously shell companies in the wake of announcements that they had entered into cryptocurrency-related businesses.[267]

Finally, while not constituting enforcement actions, the SEC has halted trading in the shares of a number of companies involved or purportedly involved in cryptocurrency-related businesses because of unusual and unexplained market activity, concerns about the accuracy and adequacy of publicly released information about the company, or both.[268]

CFTC

The principal mechanisms that the CFTC uses to bring enforcement actions involving cryptocurrencies are the broad statutory and regulatory provisions prohibiting fraud and manipulation in connection with 'a contract of sale of any commodity in interstate commerce'.[269] The CEA, in turn, defines a commodity to include, with very limited exceptions, 'all [. . .] goods and articles [. . .] and all services, rights and interests [. . .] in which contracts

264 *In re Coburn*, Exchange Act Release No. 84553, Admin. File No. 3-18888 (Nov. 8, 2018).

265 *In the Matter of ICO Rating*, Securities Act Release No. 10673, Admin. File No. 3-19366 (Aug. 20, 2019).

266 *In the Matter of Steven Seagal*, Securities Act Release No. 10760, Admin. File No. 3-19712 (Feb. 27, 2020).

267 See, e.g., *SEC v. Jesky, et al.*, No. 1:18-cv-05980-JFK (S.D.N.Y. July 2, 2018) (sale of shares in excess of price required by registration statement); *SEC v. Longfin Corp, et al.*, No. 1:18-cv-02977-DLC (S.D.N.Y. Apr. 4, 2018) (unregistered distribution of shares and sale of restricted shares by CEO and three other affiliated individuals).

268 See, e.g., US Sec. and Exch. Comm'n, Exchange Act Release No. 83518 (June 25, 2018) (temporary suspension of trading in the securities of Evolution Blockchain Group Inc.); US Sec. and Exch. Comm'n, Exchange Act Release No. 83084 (Apr. 20, 2018) (temporary suspension in the trading of IBITX Software Inc.); US Sec. and Exch. Comm'n, Exchange Act Release No. 82452 (Jan. 5, 2018) (temporary suspension in the trading of UBI Blockchain Internet, Ltd.).

269 7 U.S.C. § 9(1) (2018); see also 17 C.F.R. § 180.1 (2018).

for future delivery [i.e., futures] are presently or in the future dealt in'.[270] Enforcement actions can also be brought for violations of registration and other regulatory requirements if the transactions take the form of swaps, futures or even commodity cryptocurrency transactions with retail customers (as discussed further below).

In September 2015, the CFTC brought two actions in quick succession. It first entered into a settlement agreement with a trading platform named Coinflip, Inc, which was hosting trading in Bitcoin options. The CFTC declared Bitcoin and other virtual currencies to be commodities within the meaning of the CEA, and thus the platform, which was unregistered, to be illegally hosting trading in options on commodities.[271] A week later, the CFTC brought another case against a trading platform that was registered as a SEF for failing to prevent wash trading. The CFTC asserted that the platform had arranged a transaction to 'test the pipes' by doing a round-trip trade, but then publicised the transactions without noting they were pre-arranged to test the systems, 'creating the impression of actual trading interest in the Bitcoin swap'.[272]

In June 2016, the CFTC entered a settlement order with another trading platform, Bitfinex, involving spot transactions in the virtual currency itself.[273] Bitfinex allowed trading on a 30 per cent margin, and thus potentially fell under the retail commodity transaction provisions of the CEA.[274] The CFTC concluded that there was not actual delivery of the virtual currency, and thus Bitfinex was operating illegally by not complying with the requirement to register as a DCM. In concluding that actual delivery had not taken place, the CFTC was principally concerned that 'Bitfinex retained control over the private keys' to the wallets in which the customers' coins were held.[275]

In September 2017, the CFTC charged an individual and his company with fraud, misappropriation and issuing false account statements in connection with solicited investments in Bitcoin. The defendants were accused of operating a Ponzi scheme, whereby investors were encouraged to place their funds in a pool that would be managed by using 'a high-frequency, algorithmic trading strategy'.[276] In October 2018, the defendants were ordered to pay over US$2.5 million in civil monetary penalties and restitution.[277]

On 18 January 2018, the CFTC filed two lawsuits in federal court alleging fraud in connection with the trading of virtual currencies. One involved allegations that the

270 7 U.S.C. § 1a(9) (2018).

271 *Coinflip*, footnote 61.

272 *In re TeraExchange LLC*, CFTC No. 15-33 (Sept. 24, 2015).

273 *BFXNA*, footnote 62.

274 The CEA's various regulatory requirements apply to all transactions with retail customers in any commodity involving margin, leverage or financing provided by the seller or someone acting in concert with the seller without regard to whether the contract could be characterised as a derivative or a futures transaction, as long as it is not a true spot transaction, meaning there is actual delivery of the commodity to the customer within no more than 28 days, or covered by certain other limited exceptions. See 7 U.S.C. § 2(c)(2)(D) (2018).

275 *BFXNA*, footnote 62. As the CFTC put it: 'In the context of cryptocurrencies, a 'private key' is a secret number (usually a 256-bit number) associated with a deposit wallet that allows [B]itcoins in that wallet to be spent'. id., at *3 n.4. This focus on the private key as the basis for analysing delivery raised concerns and has led the CFTC to issue interpretive guidance to address the issue of actual delivery in the context of virtual currencies. See Retail Transactions Final, footnote 55; see also Geoffrey F Aronow, 'Projections Of The Imagination: When is a Token Actually Delivered?', 38 Futures & Derivatives L. Rep. 11 (Jan. 2011).

276 *CFTC v. Gelfman Blueprint, Inc et al.*, No. 1:17-cv-07181-PKC (S.D.N.Y. Sept. 21, 2017).

277 *CFTC v. Gelfman Blueprint, Inc et al.*, No. 1:17-cv-07181-PKC (S.D.N.Y. Oct. 16, 2018); *CFTC v. Gelfman Blueprint, Inc et al.*, No. 1:17-cv-07181-PKC (S.D.N.Y. Oct. 2, 2018).

perpetrators were promoting a pooled investment vehicle in which the investors would contribute Bitcoin, which would be converted into fiat currency and then used to trade various commodity interests.[278] The other case involved an allegation of trading advice relating to trading of virtual currencies themselves.[279] Both involved simple allegations that the defendants misappropriated the funds.

On 24 January 2018, the CFTC announced that it had filed an action under seal on 16 January 2018, alleging misappropriation of over US$6 million in funds from customers.[280] In this instance, the allegations focused on misrepresentations about how the virtual currency being promoted, My Big Coin (MBC), could be used with merchants and others to process transactions with MBC. On 6 March 2018, the CFTC won affirmation from a federal district court of its antifraud authority over virtual currencies.[281] In the context of ruling on the CFTC's motion for a preliminary injunction (which the court granted), the court held that CEA Section 6(c)(1), as amended by the Dodd–Frank Wall Street Reform and Consumer Protection Act and as implemented by CFTC Rule 180.1, does grant the CFTC jurisdiction to bring cases for fraud in cash markets in general and virtual currencies in particular.[282] The alleged fraud involved purported consulting services and trading advice relating to Bitcoin and another virtual currency, Litecoin.[283] On 23 August 2018, following a non-jury trial, the case was decided in favour of the CFTC, and the defendants were ordered to pay US$1.1 million in civil monetary penalties and restitution.[284]

On 17 June 2019, the CFTC filed a civil enforcement action in federal court against an individual and his company alleging fraud and misappropriation of at least US$147 million in Bitcoin from over 1,000 customers.[285] The defendants were accused of operating a fraudulent scheme through a purported Bitcoin trading and investment company whereby the defendants solicited customer deposits by representing that the deposited Bitcoin would be managed by expert virtual currency traders and guaranteeing trading profits. The CFTC alleged that no trades or profits were ever made on behalf of the customers, that customers were provided with fabricated account and performance information, that customer redemptions were funded with other customers' deposits and that the defendants misappropriated customer Bitcoin deposits through series of confusing blockchain transactions.

The CFTC (including its Division of Enforcement's Virtual Currency Task Force) has been vigilant, and has indicated that it will continue to be vigilant, in policing the markets for virtual currencies and other digital assets falling within its jurisdiction.[286]

278 *CFTC v. Dean, et al.*, No. 2:18-cv-00345 (E.D.N.Y. Jan. 18, 2018).

279 *McDonnell*, footnote 65.

280 Commodity Futures Trading Comm'n, 'CFTC Charges Randall Crater, Mark Gillespie, and My Big Coin Pay, Inc. with Fraud and Misappropriation in Ongoing Virtual Currency Scam' (Jan. 24, 2018), https://www.cftc.gov/PressRoom/PressReleases/pr7678-18.

281 *McDonnell*, footnote 65; see also *My Big Coin Pay*, footnote 65.

282 *McDonnell*, footnote 65.

283 id., at 3.

284 See *McDonnell*, footnote 67.

285 *CFTC v. Control-Finance Limited et al.*, No. 1:19-cv-05631 (S.D.N.Y. June 17, 2019).

286 See, e.g., *CFTC v. Jon Barry Thompson*, No. 1:19-cv-09052 (S.D.N.Y. Sept. 30, 2019) (charging defendant with fraud in connection with a purported sale of over US$7 million in Bitcoin that was never delivered to the purchaser and over which the defendant seller did not have possession or control); *CFTC v. Blake Harrison Kantor et al.*, No. 2:18-cv-02247-SJF-ARL (E.D.N.Y. Oct. 23, 2019) (ordering defendants to pay more than US$4.25 million for fraud and misappropriation in connection with a binary options

ii Criminal enforcement

The US Department of Justice (DOJ) and other law enforcement authorities are rapidly recognising that cryptocurrencies present a variety of opportunities for engaging in fraud, money laundering and other criminal activity. As a result, the last several years have seen a noticeable uptick from prior years in criminal investigations and charges involving cryptocurrencies across a broad spectrum of crimes. Indeed, at a digital asset industry conference in June 2018, the Federal Bureau of Investigation (FBI) revealed that it had 130 cases under investigation that had been 'threat tagged' as involving cryptocurrencies, covering crimes including 'human trafficking, illicit drug sales, kidnapping and ransomware attacks', and, during a hearing before the US Senate Committee on Homeland Security and Governmental Affairs in November 2019, FBI Director Christopher Wray testified that cryptocurrency had become a significant issue for the FBI and was expected 'to become a bigger and bigger one'.[287] More recently, in the midst of the global outbreak of the novel coronavirus (or covid-19), the FBI issued a press release in April 2020 warning that the covid-19 crisis would likely give rise to an increase in cryptocurrency fraud schemes, including blackmail attempts, work-from-home scams, investment scams and scams involving payment for non-existent products.[288]

Investment fraud

A cryptocurrency is not just a medium of exchange, but also an investment. For that reason, in several widely reported instances, the DOJ has recognised the opportunities that now exist for the perpetration of fraud against cryptocurrency investors.

In May 2018, the US Attorney for the SDNY brought what is believed to be the first criminal fraud charges against the issuers of an ICO. Specifically, the SDNY charged three co-founders of a startup company, Centra Tech, with 'conspiring to commit, and the commission of, securities and wire fraud in connection with a scheme to induce victims to invest millions of dollars' worth of digital funds for the purchase of unregistered securities, in the form of digital currency tokens issued by Centra Tech, through material

scam involving the ATM Coin, a virtual currency); *CFTC v. Michael Ackerman et al.*, No. 1:20-cv-01183 (S.D.N.Y. Feb. 11, 2020) (charging defendant with fraudulently soliciting over US$33 million to purportedly trade digital assets and misappropriating a significant portion of that amount); *CFTC v. Daniel Fingerhut et al.*, No. 1:20-cv-21887-DPG (S.D. Fla. May 5, 2020) (charging defendants with fraudulently soliciting over 59,000 customers to open and fund off-exchange binary options and digital asset trading accounts, which generated over US$20 million in commissions for the defendants). Several of the civil enforcement actions referenced in this section were accompanied by parallel criminal proceedings. See also Commodity Futures Trading Comm'n, Div. of Enf't, Ann. Rep. (2019), https://www.cftc.gov/media/3081/ENFAnnualReport112519/download ('the [Division of Enforcement] aggressively prosecute[d] misconduct involving digital assets that fit within the [CEA's] definition of commodities').

287 Lily Katz & Annie Massa, 'FBI Has 130 Cryptocurrency-Related Investigations, Agent Says', Bloomberg (June 27, 2018), https://www.bloomberg.com/news/articles/2018-06-27/fbi-has-130-cryptocurrency-related-investigations-agent-says; 'Threats to the Homeland: Hearing Before the S. Comm. on Homeland Sec. and Gov't Affairs', 116th Cong. (2019) (Testimony of FBI Director Christopher Wray), https://www.hsgac.senate.gov/threats-to-the-homeland.

288 Press release, Fed. Bureau of Investigation, 'FBI Expects a Rise in Scams Involving Cryptocurrency Related to the COVID-19 Pandemic', (Apr. 13, 2020), https://www.fbi.gov/news/pressrel/press-releases/fbi-expects-a-rise-in-scams-involving-cryptocurrency-related-to-the-covid-19-pandemic.

misrepresentations and omissions'.[289] In particular, the indictment alleged that the defendants' offering materials for the ICO misrepresented details about their supposed executive team, their supposed partnerships with established financial institutions and their supposed state licensing. In connection with the charges, the FBI seized 91,000 Ether units that represented US$60 million in investor funds.

More recently, in 2019, the DOJ brought three additional significant cases against alleged large-scale cryptocurrency fraudsters. First, in February 2019, it charged Randall Crater, the founder of Las Vegas-based My Big Coin Pay, with wire fraud and engaging in illegal monetary transactions in connection with creating and marketing the fraudulent virtual currency MBC while misappropriating more than US$6 million in investor funds.[290] Shortly thereafter, in March 2019, it charged Konstantin Ignatov and Ruja Ignatova with a far larger, multibillion-dollar scheme in which the defendants allegedly bilked investors in the fraudulent cryptocurrency OneCoin, which authorities asserted had 'no real value'.[291] Later in the year, in December 2019, the DOJ charged four individuals with defrauding investors of US$722 million in connection with investments in a purported Bitcoin mining pool operation, which allegedly 'amount[ed] to little more than a modern, high-tech Ponzi scheme'.[292]

Focusing on a different type of fraud – market manipulation – the DOJ was reported in May 2018 to have opened a parallel investigation with the CFTC into manipulation of the market for Bitcoin and other digital currencies.[293] The DOJ's market-manipulation probe was reported to focus on a variety of illegal practices that might influence prices, including spoofing. Although reported as a seemingly broad-based investigation when it was opened,

289 US Attorney's Office, S.D.N.Y., US Dep't of Justice, press release No. 18-157, 'Founders Of Cryptocurrency Company Indicted In Manhattan Federal Court With Scheme To Defraud Investors' (May 14, 2018), https://www.justice.gov/usao-sdny/pr/founders-cryptocurrency-company-indicted-manhattan-federal-court-scheme-defraud.

290 Office of Pub. Affairs, US Dep't of Justice, press release No. 19-169, 'New York Man Charged with Cryptocurrency Scheme' (Feb. 27, 2019), https://www.justice.gov/opa/pr/new-york-man-charged-cryptocurrency-scheme.

291 US Attorney's Office, S.D.N.Y., US Dep't of Justice, press release No. 19-071, 'Manhattan U.S. Attorney Announces Charges Against Leaders Of 'OneCoin,' A Multibillion-Dollar Pyramid Scheme Involving The Sale Of A Fraudulent Cryptocurrency' (Mar. 8, 2019), https://www.justice.gov/usao-sdny/pr/manhattan-us-attorney-announces-charges-against-leaders-onecoin-multibillion-dollar. Konstantin Ignatov reportedly reached a plea deal with the US government in October 2019 and could face up to 90 years in prison, while Ruja Ignatova remains a fugitive. See 'Cryptoqueen Brother Admits Role in OneCoin Fraud', BBC News (Nov. 14, 2019), https://www.bbc.com/news/technology-50417908.

292 US Attorney's Office, D. N.J., US Dep't of Justice, press release No. 19-394, 'Three Men Arrested in $722 Million Cryptocurrency Fraud Scheme' (Dec. 10, 2019), https://www.justice.gov/usao-nj/pr/three-men-arrested-722-million-cryptocurrency-fraud-scheme. In the first half of 2020, the DOJ has continued to actively prosecute investment frauds involving cryptocurrencies. See, e.g., US Attorney's Office, D. N.J., US Dep't of Justice, press release No. 20-029, 'Two People Indicted For $30 Million Dollar Fraud Scheme Involving Blockchain Technology Company' (Jan. 17, 2020), https://www.justice.gov/usao-nj/pr/two-people-indicted-30-million-dollar-fraud-scheme-involving-blockchain-technology; US Attorney's Office, S.D.N.Y., US Dep't of Justice, press release No. 20-048, 'Leader Of Fake Cryptocurrency Investment Scheme Charged With Fraud And Money Laundering' (Feb. 11, 2020), https://www.justice.gov/usao-sdny/pr/leader-fake-cryptocurrency-investment-scheme-charged-fraud-and-money-laundering.

293 Matt Robinson & Tom Schoenberg, 'U.S. Launches Criminal Probe into Bitcoin Price Manipulation', Bloomberg (May 24, 2018), https://www.bloomberg.com/news/articles/2018-05-24/bitcoin-manipulation-is-said-to-be-focus-of-u-s-criminal-probe.

this federal criminal investigation likely soon found at least one area of particular focus in June 2018 when researchers at the University of Texas released a paper in which they purported to have identified a specific instance of fraudulent manipulation of the market for Bitcoin in 2017 involving activity at a specific cryptocurrency exchange.[294] It was reported in November 2018 that the DOJ is focusing on the possibility that Tether – a different cryptocurrency with a value that is supposedly tied to the US dollar – was illegally used to prop up the value of Bitcoin.[295]

Overall, the opportunities to defraud investors in cryptocurrencies are many and varied. No doubt for this reason, the DOJ's July 2018 announcement that it had created a new task force on market integrity and consumer fraud noted prominently that one of the task force's main areas of focus would be digital currency fraud.[296]

Money laundering

The use of cryptocurrencies in money laundering – a crime that can involve either laundering the proceeds of criminal activity or transmitting funds for the purpose of carrying on criminal activity[297] – is one of the most significant focuses of attention by the DOJ. Former Deputy Attorney General Rod Rosenstein observed at a Financial Services Roundtable conference in February 2018 that '[a] lot of [. . .] schemes involve [B]itcoin and other cryptocurrencies which do not flow through the traditional financial system', and that the DOJ is 'working [. . .] with our cybercrime task force [. . .] on a comprehensive strategy to deal with that'.[298]

Not surprisingly, a number of high-profile federal indictments have involved money laundering charges or allegations relating to the defendants' use of cryptocurrencies to carry out or hide the proceeds of their offences. For example, in July 2017, the then-current US Attorney of the Northern District of California, Brian Stretch,[299] announced the indictment of Russian national Alexander Vinnik and BTC-e – alleged to be one of the world's largest and most widely used digital currency exchanges – for deliberately allowing BTC-e to be used as a platform 'to facilitate transactions for cybercriminals worldwide and [to] receive[] the criminal proceeds of numerous computer intrusions and hacking incidents, ransomware scams, identity theft schemes, corrupt public officials, and narcotics distribution rings'.[300]

294 John M Griffin & Amin Shams, 'Is Bitcoin Really Un-Tethered?' (June 13, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3195066; Nathaniel Popper, 'Bitcoin's Price Was Artificially Inflated, Fueling Skyrocketing Value, Researchers Say', New York Times (June 13, 2018), https://www.nytimes.com/2018/06/13/technology/bitcoin-price-manipulation.html.

295 Matt Robinson & Tom Schoenberg, 'Bitcoin-Rigging Criminal Probe Focused on Tie to Tether', Bloomberg (Nov. 20, 2018), https://www.bloomberg.com/news/articles/2018-11-20/bitcoin-rigging-criminal-probe-is-said-to-focus-on-tie-to-tether.

296 Office of Pub. Affairs, US Dep't of Justice, press release No. 18-911, 'Department of Justice, Bureau of Consumer Financial Protection, U.S. Securities and Exchange Commission, Federal Trade Commission Announce Task Force on Market Integrity and Consumer Fraud' (July 11, 2018), https://www.justice.gov/opa/pr/department-justice-bureau-consumer-financial-protection-us-securities-and-exchange-commission.

297 18 U.S.C. § 1956 (2018).

298 Sead Fadilpašić, 'US Government Working on Crypto Strategy', Cryptonews (Feb. 28, 2018), https://cryptonews.com/news/us-government-working-on-crypto-strategy-1301.htm.

299 Now a partner at Sidley Austin LLP.

300 US Attorney's Office, N.D. Cal., US Dep't of Justice, 'Russian National And Bitcoin Exchange Charged In 21-Count Indictment For Operating Alleged International Money Laundering Scheme And Allegedly Laundering Funds From Hack Of Mt. Gox' (July 26, 2017), https://www.justice.gov/usao-ndca/pr/russian-national-and-bitcoin-exchange-charged-21-count-indictment-operating-alleged. The DOJ also

In another big criminal takedown in March 2018, the DOJ charged seven individuals with facilitating prostitution and money laundering through their operation of the notorious prostitution advertising website, backpage.com, accusing them, among other things, of furthering their 'money laundering efforts [by] [. . .] us[ing] [B]itcoin processing companies [. . .] such as CoinBase, GoCoin, Paxful, Kraken, and Crypto Capital to receive payments from customers and/or route money through the accounts of related companies'.[301]

Perhaps the most high-profile money laundering charges involving cryptocurrencies were those brought in July 2018 against 12 Russian intelligence officers charged with hacking the 2016 presidential election, who were alleged to have 'transfer[red] cryptocurrencies through a web of transactions in order to purchase computer servers, register domains, and make other payments in furtherance of their hacking activities, while trying to conceal their identities and their links to the Russian government'.[302] Similarly reflecting US national security risks posed by virtual currency, in November 2019, the DOJ charged a US citizen with violating the US International Emergency Economic Powers Act by travelling to North Korea to deliver a presentation on how to use cryptocurrency and blockchain technology to evade sanctions and launder money.[303] In addition, in March 2020, the DOJ charged two Chinese nationals with laundering more than US$100 million worth of cryptocurrency from a North Korean hack of a cryptocurrency exchange in 2018.[304]

In February 2020, the DOJ charged a US citizen with operating Helix, a Bitcoin 'mixer' or 'tumbler', whereby users could pay a fee to transfer Bitcoin to designated recipients in a manner designed to hide the source of the Bitcoin and conceal the identity of the transferor from law enforcement.[305] The DOJ alleged that Helix was responsible for the laundering of over US$300 million in illicit drug and other criminal proceeds worldwide between 2014 and 2017.

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filed a US$100 million civil complaint against Alexander Vinnik and BTC-e in July 2019. US Attorney's Office, N.D. Cal., US Dep't of Justice, 'United States Files $100 Million Civil Complaint Against Digital Currency Exchange BTC-e And Chief Owner-Operator Alexander Vinnik' (July 26, 2019), https://www.justice.gov/usao-ndca/pr/united-states-files-100-million-civil-complaint-against-digital-currency-exchange-btc-e.

301 *United States v. Michael Lacey et al.*, No. CR-18-00422-PHX-SPL (BSB) (D. Ariz. Mar. 28, 2018).

302 US Dep't of Justice, 'Deputy Attorney General Rod J Rosenstein Delivers Remarks Announcing the Indictment of Twelve Russian Intelligence Officers for Conspiring to Interfere in the 2016 Presidential Election Through Computer Hacking and Related Offenses' (July 13, 2018), https://www.justice.gov/opa/speech/deputy-attorney-general-rod-j-rosenstein-delivers-remarks-announcing-indictment-twelve.

303 US Attorney's Office, S.D.N.Y., US Dep't of Justice, press release No. 19-409, 'Manhattan U.S. Attorney Announces Arrest Of United States Citizen For Assisting North Korea In Evading Sanctions' (Nov. 29, 2019), https://www.justice.gov/usao-sdny/pr/manhattan-us-attorney-announces-arrest-united-states-citizen-assisting-north-korea.

304 Office of Pub. Affairs, US Dep't of Justice, press release No. 20-255, 'Two Chinese Nationals Charged with Laundering Over $100 Million in Cryptocurrency From Exchange Hack' (Mar. 2, 2020), https://www.justice.gov/opa/pr/two-chinese-nationals-charged-laundering-over-100-million-cryptocurrency-exchange-hack.

305 Office of Pub. Affairs, US Dep't of Justice, press release No. 20-185, 'Ohio Resident Charged with Operating Darknet-Based Bitcoin 'Mixer,' which Laundered Over $300 Million' (Feb. 13, 2020), https://www.justice.gov/opa/pr/ohio-resident-charged-operating-darknet-based-bitcoin-mixer-which-laundered-over-300-million.

Miscellaneous crimes

Finally, beyond money laundering and investment fraud, cryptocurrencies can be either a vehicle for, or an object of, criminal activity in all of the same ways that traditional currency and investments can be. Thus, for example, in March 2018, the Internal Revenue Service (IRS) issued a notice to taxpayers reminding them to 'report the income tax consequences of virtual currency transactions' and warning that, in 'extreme situations, taxpayers could be subject to criminal prosecution for failing to properly report the income tax consequences of virtual currency transactions'.[306] More recently, as cryptocurrency has become more widely used and accepted globally, the IRS's criminal investigation division has signalled to the market that tax crimes related to cryptocurrency have become a priority area for the division and that an uptick in criminal tax cases related to cryptocurrency should be expected.[307]

In a somewhat unexpected instance of cryptocurrency crime mirroring traditional currency crime, the Manhattan District Attorney's Office reported in December 2017 that it had indicted an individual named Louis Meza for perpetrating a gunpoint armed robbery of US$1.8 million worth of Ether tokens.[308]

VIII TAX

Guidance on the US federal income tax treatment of virtual currencies such as Bitcoin is limited and primarily determined by a notice (Notice 2014-21) issued by the IRS,[309] which treats such virtual currency as property.

On 9 October 2019, the IRS provided additional guidance in Revenue Ruling 2019-14 (the Revenue Ruling)[310] and the accompanying 'Frequently Asked Questions' (FAQ).[311] The FAQ provides examples on how to determine the fair market value and tax basis of virtual currencies and further expands on the guidance in Notice 2014-21 to apply its principles to additional situations, including: (1) payments for services using virtual currency; (2) exchanges of virtual currency for property (including other virtual currency); (3) gifts and charitable donations of virtual currency; and (4) sales of multiple units of one kind of virtual currency acquired at different times. In addition, the Revenue Ruling and FAQ address the tax treatment of a 'hard fork' (when a cryptocurrency undergoes a change that may result in the creation of a new cryptocurrency in addition to the legacy cryptocurrency) and an 'airdrop' (when a taxpayer receives new units of cryptocurrency following a hard fork), and make clear that a taxpayer is taxed only if the taxpayer receives a new virtual currency, which

306 Internal Revenue Serv., IR-2018-71, 'IRS Reminds Taxpayers to Report Virtual Currency Transactions' (Mar. 23, 2018), https://www.irs.gov/newsroom/irs-reminds-taxpayers-to-report-virtual-currency-transactions.

307 See, e.g., Laura Davison, 'IRS Says 'Dozens' of New Crypto, Cybercriminals Are Identified', Bloomberg (Nov. 8, 2019), https://www.bloomberg.com/news/articles/2019-11-08/irs-says-dozens-of-new-crypto-cybercriminals-are-identified; Internal Revenue Serv., Criminal Investigation, Ann. Rep. (2019), https://www.irs.gov/pub/irs-utl/2019_irs_criminal_investigation_annual_report.pdf.

308 Press release, New York Cty. Dist. Attorney, 'DA Vance: Man Indicted for Stealing $1.8 Million in Cryptocurrency' (Dec. 12, 2017), https://www.manhattanda.org/da-vance-man-indicted-stealing-18-million-cryptocurrency/.

309 I.R.S. Notice 2014-21, 2014-16 I.R.B. 938.

310 Rev. Rul. 2019-24.

311 Frequently Asked Questions on Virtual Currency Matters (Dec. 2019), https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions.

requires that the taxpayer be able to exercise complete dominion and control over the new virtual currency. Thus, the Revenue Ruling and FAQ reaffirm that the tax treatment of virtual currencies is consistent with the tax treatment of other properties. However, many practical questions remain, including how information reporting is supposed to be handled by various platforms involved in the virtual currency business.

From an investor's perspective, merely calling a virtual currency property leaves many questions unanswered. How does a US taxpayer treat gains on buying and selling a virtual currency? Would a US tax-exempt entity such as a private foundation be able to make an unlevered investment in a virtual currency without incurring unrelated business taxable income (UBTI)? Would a non-US investor be able to invest in a virtual currency through a US-based investment manager (whose operations, personnel and equipment are located in the United States) without being treated as engaged in a US trade or business or having effectively connected income (ECI) in respect of such virtual currency investments? Would one need to distinguish, from a US federal income tax perspective, between direct investments in virtual currencies and derivatives on assets like the Bitcoin futures on the Chicago Mercantile Exchange (CME)?

If a US taxable person recognises a gain or loss on the sale or exchange of a virtual currency, the character of such gain or loss generally depends on whether such currency is a capital asset in that person's hands.[312] Assuming the US taxable person holds the virtual currency as a capital asset for more than one year, gains are generally treated as long-term capital gain.[313] For US tax-exempt persons, gains or losses from the sale or other disposition of property are generally not taxed as UBTI.[314] This UBTI exclusion does not apply, however, to inventory or property otherwise held primarily for sale to customers in the ordinary course of business.[315]

Does investing in virtual currencies constitute investing in securities or commodities for purposes of the Section 864 safe harbour (safe harbour) under the Internal Revenue Code of 1986 (the Code)? As described in greater detail in Section II, the CFTC considers virtual currencies as commodities subject to its regulation.[316] Similarly, the SEC has asserted jurisdiction when a virtual token offering has hallmarks of a security offering under the broadly interpreted *Howey* test for investment contracts.[317]

Can these authorities be applied, by analogy, to conclude that a non-US investor can claim the protection of the safe harbour? The activities of a US-based investment manager are generally attributed to a non-US investor who invests through this manager.[318] If this manager only engages in safe harbour activities (i.e., investing or trading in securities and commodities), such activities do not create a US trade or business for the non-US investor, and gains from such safe harbour activities generally do not constitute ECI.[319] If the non-US investor is not protected by the safe harbour, the activities of the US-based investment

312 I.R.S. Notice Q-6/7/A-6/7.

313 26 U.S.C. § 1222(3) (2018). A taxpayer's holding period could be suspended under certain rules, including the straddle rules under Section 1092 of the Code, if the taxpayer enters into hedging positions.

314 id., § 512(b)(5)(B).

315 Treas. Reg. § 1.512(b)–1(d).

316 See, e.g., CFTC Primer, footnote 68.

317 See, e.g., DAO Report, footnote 3.

318 This could be altered by income tax treaties.

319 This treatment could be modified by rules under 26 U.S.C. §§ 897, 1445, 1446 and the Treasury Regulations thereunder.

manager could create a US trade or business generating ECI for such non-US investor, subjecting such investor to US federal net income tax (up to 37 per cent for individuals, or 21 per cent plus 30 per cent branch profits tax for corporations).

While it may be reasonable for a non-US investor to claim the protection of the safe harbour by applying CFTC and SEC authorities by analogy, there is no assurance that the IRS or the courts would agree with such claim. As a result, the tax risk of being incorrect is material. Thus, any offering document for an investment fund that invests in a virtual currency targeted at non-US investors is expected to include robust tax disclosure specifically identifying the risks associated with an investment in a virtual currency. In addition, due to the material tax risks and depending on the precise investment strategy, a fund sponsor will have to make an important gating decision on how narrowly to tailor an offering's target market.

Many fund sponsors cast their nets wide for investors while utilising the most tax-neutral vehicle to raise money from such investors (i.e., no or *de minimis* entity level tax to the extent permitted under the law). Partnerships (or local law entities that can be treated as partnerships for US federal income tax purposes) are typical vehicles used for pooled investments in commodities and derivatives thereon. Partnerships are generally not taxed at the entity level, so there is very little expected US federal income entity tax cost. However, when interests of a partnership are publicly traded for US federal income tax purposes, the publicly traded partnership (PTP) is treated as a corporation subject to a corporate level income tax of 21 per cent unless certain exceptions apply. One exception is for small offerings (e.g., an offering for a private investment fund exempt from registration as an investment company under Section 3(c)(1) of the Company Act where the number of investors cannot exceed 100 and certain other requirements are met).[320] Another is where the partnership meets the qualifying income test, such that at least 90 per cent of the partnership's annual gross income consists of certain passive-type income.[321] Notably, gains from direct virtual currency investments are not explicitly included in the definition of qualifying income.[322]

For non-US investor virtual currency funds, the listing of Bitcoin futures on the CME is a positive development.[323] The safe harbour for trading or investing in commodities covers a non-US investor only if the commodities are of a kind customarily dealt in on an organised commodity exchange and if the transaction is of a kind customarily consummated at such place.[324] Thus, a non-US investor investing solely in these particular futures (directly or through a partnership for US federal income tax purposes) has tenable support for claiming safe harbour benefits.

Similarly, the CME Bitcoin futures support partnership tax treatment in the case of a PTP where the PTP invests solely in such futures, making possible a retail offering of such PTP interests. In the case of PTPs whose principal activity is the buying and selling of commodities (that are not inventory) or options, futures or forwards with respect to commodities, income and gains from futures on commodities constitute qualifying income.[325]

320 Treas. Reg. § 1.7704-1(h).

321 26 U.S.C. § 7704(c) (2018).

322 id., § 7704(d).

323 'Now Available: Bitcoin Futures', CME Group, https://www.cmegroup.com/trading/bitcoin-futures.html (last visited June 19, 2020).

324 26 U.S.C. § 864(b)(2)(B) (2018).

325 id., § 7704(d)(1)(G).

In addition, because the CME Bitcoin futures meet the definition of a Section 1256 Contract under the Code,[326] a US taxable investor generally recognises annual mark-to-market gain (60 per cent long-term capital gain and 40 per cent short-term capital gain) in respect of such investments (directly or through a partnership for US federal income tax purposes).[327]

Finally, while there are many uncertain areas relating to the taxation of virtual currencies and activities related thereto, it is worth noting that mining virtual currencies, when conducted in the United States, could be treated as the business of performing services such that any virtual currency from such mining is treated as ordinary income from services, and any taxable income (i.e., receipt of virtual currencies) from mining constitutes UBTI and ECI.[328] Once a virtual currency is earned and taxed, such currency is merely property and, depending on what the taxpayer does with such currency and where such activities are undertaken, will have varying and potentially complex results for any particular taxpayer.

IX OTHER LEGAL CONSIDERATIONS

i State uniform regulation of virtual currencies

To provide a uniform framework among the various states for the regulation of virtual currency business activities, the Uniform Law Commission developed the Uniform Act.[329] As described in greater detail in Section III, the Uniform Act includes licensure, prudential regulations and customer protection requirements relating to certain businesses engaged in activities involving exchanging, transferring or storing virtual currencies. The Uniform Act is intended to provide a clear regulatory regime tailored to address issues specifically relating to virtual currency businesses, rather than the existing patchwork of money service and money transmitter licensure laws, and other, sometimes ambiguous or duplicative, existing regulatory regimes that could be applied to such activities among the various states. The motivation for developing the Uniform Act centred on a desire to provide legal certainty, which in turn would foster continued innovation and access to capital for businesses in the virtual currency space. The drafting process involved significant input from various industry, state and federal government participants, as well as practising lawyers and academics. Rhode Island was the first (and is currently the only) state to enact legislation based on the Uniform Act, which went into effect on 1 January 2020, and, to date, bills modelled on the Uniform Act have also been introduced for consideration by legislatures in California, Oklahoma and Hawaii.[330] Notably, Wyoming enacted a bill (known as SF0125), which went into effect on 1 July 2019, that governs activities relating to digital assets and was not modelled on the Uniform Act.[331]

326 A Section 1256 contract includes regulated futures contracts. A regulated futures contract is a contract with respect to which the amount to be deposited and the amount that may be withdrawn depends on a system of marking to market, and which is traded on or subject to the rules of a qualified board or exchange. The term qualified board or exchange includes a domestic board of trade designated as a contract market by the CFTC. id., §§ 1256(b)(1)(A), (g)(1), (g)(7)(B).

327 id., §§ 1256(b)(1), (g)(1), (g)(7), (a)(1), (a)(3).

328 See I.R.S. Notice Q-9/A-9 (income from mining that is conducted as a trade or business is subject to self-employment taxes for non-employees engaged in mining).

329 Uniform Act, footnote 101.

330 See id. The Nevada legislature considered but ultimately declined to adopt a bill modelled on the Uniform Act. id.

331 Wyo. Stat. Ann. §§ 34-29-101 et seq. (2019).

ii Uniform Commercial Code

The Uniform Commercial Code (UCC) provides the often-unnoticed plumbing for a broad range of commercial transactions and property rights. Where the UCC applies, parties benefit from clarity of law and special protections. Where the UCC does not apply, parties may unexpectedly find themselves without the benefit of legal rules they took for granted. Three key questions arise under the UCC with respect to virtual currencies: are virtual currencies subject to the regimes of UCC Article 3 (negotiable instruments), Article 4 (bank deposits and collections) or Article 4A (funds transfers); can virtual currencies serve as collateral under UCC Article 9; and can virtual currencies be credited as a security or financial asset to a securities account under UCC Article 8? Although we are not aware of any cases on point, we consider each question in turn below.[332]

Applicability of UCC Articles 3, 4 and 4A

Virtual currencies as commonly structured today would not be subject to UCC Articles 3, 4 or 4A. Virtual currencies do not constitute a negotiable instrument, because they are not a paper asset.[333] In addition, most virtual currencies would fail to meet the requirements for a negotiable instrument, because there is no promise or order to pay a fixed amount of money, as this presupposes a counterparty who is either the promisor or who would be subject to the order. When a party holds a virtual currency, there is no counterparty against which it has a claim (at least until it decides to transfer the virtual currency in return for value). Most virtual currencies also are not tied to a fixed amount of money (although there are purported exceptions in which the value of a virtual currency is supposedly fixed to an actual value of money in a fashion seemingly analogous to an exchange rate peg). Virtual currencies do not fit within Articles 4 or 4A owing to the absence of a bank from the scene. Initially, this left a significant gap in the commercial law plumbing applicable to virtual currencies, as the protections available under UCC Articles 3, 4 and 4A are not available in the context of virtual currency transactions. In 2017, the Uniform Law Commission considered – but did not fill – that gap when it created the Uniform Act. However, in 2018, the Uniform Law Commission issued the Uniform Supplemental Commercial Law for the Uniform Regulation of Virtual-Currency Business Act (the Supplemental Act), which helped fill that gap by making protections under UCC Article 8 explicitly available in the context of virtual currency transactions, as described below.[334]

332 To date, Rhode Island is the only state that has adopted the Uniform Act. Note that this section addresses the model version of the UCC. Some states, most notably Wyoming, have attempted to amend their versions of the UCC to accommodate virtual currencies.

333 Neil Cohen, 'The Calamitous Law of Notes', 68 *Ohio St. L. J.* 161, 182 (2007).

334 Supplemental Act, footnote 150. Rhode Island was the first (and is currently the only) state to enact legislation based on the Supplemental Act, which went into effect on 1 January 2020, and, to date, bills modelled on the Supplemental Act have also been introduced for consideration by legislatures in California, Oklahoma and Hawaii. id. The Nevada legislature considered but ultimately declined to adopt a bill modelled on the Supplemental Act. id.

Use of virtual currencies as collateral

Like most types of personal property, virtual currencies can serve as collateral under UCC Article 9.[335] Most virtual currencies will constitute a general or payment intangible under the UCC, and may also constitute proceeds of another form of collateral.[336] As a general or payment intangible, a security interest in a virtual currency can be perfected solely by the filing of a financing statement.[337] Unfortunately for an interested secured party, however, the classification of a virtual currency as a general intangible or payment intangible means that the priority of security interests in such virtual currency is determined in order of the first to file or perfect; thus, any prior liens on the virtual currency – which may be difficult to identify or trace – could take priority over such secured party's perfected security interest.[338] The parts of the UCC plumbing that strip prior liens when transfers are made involving money or bank accounts would not apply to virtual currencies as structured today.[339]

Use of securities accounts

Because of the flexibility contained in UCC Article 8, virtual currencies can be credited to a securities account (as a financial asset) at a willing securities intermediary.[340] In fact, the Supplemental Act requires that virtual currencies regulated by the Act be held in securities accounts at a securities intermediary. Whether this model will be readily adopted by those who hold virtual currencies on behalf of others remains to be seen, as the benefits of certainty resulting from securities account treatment come with an accompanying increase in responsibility and liability for the entity acting as securities intermediary. Of course, state law UCC characterisation as a security does not mean that a virtual currency would be characterised as a security for federal regulatory purposes, including under the federal securities laws.

335 See, e.g., Jeanne L Schroeder, 'Bitcoin and the Uniform Commercial Code', 24 *U. Miami Bus. L. Rev.* 1 (2016).

336 Current virtual currencies are likely not money under the UCC, although that could change. UCC Section 9-102(b)(24) defines money as a 'medium of exchange currently authorized or adopted by a domestic or foreign government. The term includes a monetary unit of account established by an intergovernmental organisation or by agreement between two or more countries'. To our knowledge, no governments or intergovernmental organisations have yet authorised or adopted a virtual currency as a medium of exchange or unit of account, so such definition is inapplicable to virtual currencies in their current vestige, though such classification could be called into question if a government or intergovernmental agency were to so authorise or adopt a virtual currency. It should be noted, however, some have argued that even if a virtual currency was adopted as a medium of exchange or unit of account, it still would not fit within the UCC definition of money. See, e.g., Schroeder, footnote 335, at 20.

337 U.C.C. § 9-310, 9-312(b) (Unif. Law Comm'n 2018).

338 id., § 9-322.

339 See id. § 9-332.

340 See id. § 8-102(a)(9)(iii), which includes 'any property that is held by a securities intermediary for another person in a securities account if the securities intermediary has expressly agreed with the other person that the property is to be treated as a financial asset under this Article'.

X BANKRUPTCY

Below we provide an overview of certain bankruptcy-related issues that may arise relating to virtual currencies in a bankruptcy proceeding under the applicable United States law. As noted earlier, there is continuing legislation and regulation from federal agencies and states such that there is a complex web of concurrent and overlapping regulatory and legislative developments that must be considered, as such could be relevant and persuasive in the context of a bankruptcy proceeding. There have been less than a handful of bankruptcy cases that have only tenuously considered or involved issues relating to virtual currencies. As such, the development of bankruptcy law involving virtual currency issues is in its very nascent stages.

i Applicable bankruptcy regime

The first question that needs to be addressed is which bankruptcy regime would apply. This would depend on the type of entity that becomes insolvent. If the entity is a broker-dealer or an SEC-registered broker-dealer that owns or is in the business of dealing with virtual currencies, then Subchapter III of Chapter 7 of Title 11 of the United States Code (Bankruptcy Code), or perhaps even the Securities Investor Protection Act of 1970, may apply; however, neither of these currently seem likely, as we are not aware of any SEC-registered broker-dealers in the brokerage business involving virtual currencies that maintain custody of virtual currency. More likely, an entity will be eligible to commence bankruptcy proceedings either under Chapter 7 (the liquidation chapter) or Chapter 11 (the reorganisation chapter) of the Bankruptcy Code.[341]

ii Virtual currencies as property of the estate

Upon the commencement of a bankruptcy case, an estate is created under Section 541 of the Bankruptcy Code, and an automatic stay arises enjoining all creditors and entities from, among other things, taking any enforcement actions against the debtor or against property of the estate, any actions to obtain possession of property of the estate or any actions to create, perfect or enforce any lien against property of the estate. Virtual currencies owned by a debtor should be treated as part of the property of that debtor's estate. Section 541 of the Bankruptcy Code provides that the property of a debtor's estate includes 'all legal or equitable interests of the debtor in property as of the commencement of the case', and courts have held that the scope of property interests included in a debtor's estate is intended to be quite broad. Although federal law governs the extent to which a debtor's interest in property is part of that debtor's estate, state law governs the nature and existence of the debtor's right to such property. Accordingly, bankruptcy courts would look to the applicable non-bankruptcy law to determine the property interests of the debtor in any virtual currency owned by a debtor, which would form part of the debtor's estate and be afforded the protection of the automatic stay subject to certain exceptions that may apply, as discussed further below.

While Section 541 of the Bankruptcy Code should include any virtual currency owned by the debtor, given the anonymous nature of the ownership of virtual currencies (through private keys known only to the owner of the virtual currency) it may be difficult to obtain complete transparency regarding the whereabouts, amounts and transactions relating to the debtor's virtual currency without the full cooperation of the debtor. However, a debtor is required to provide a full and accurate accounting of its property and other assets as part of

341 See 11 U.S.C. § 109 (2018).

filling out and filing with the bankruptcy court, under penalty of perjury, its schedules and statements of financial affairs.[342] A debtor should be incentivised to provide accurate and full accounting of its property, both because it would be subject to penalties and sanctions by the bankruptcy court, and may also be denied the benefit of a discharge of its debts and liabilities if it is found to have transferred, removed, destroyed, mutilated or concealed property of the debtor within one year before the commencement of the case or after the commencement of the case.[343]

However, creditors or other interested parties in a case involving a debtor with virtual currencies may consider taking action to assure full disclosure, such as conducting discovery against the debtor for information relating to its virtual currency transactions (including virtual currency addresses, public keys, private keys, exchanges used, digital wallet information, financial and other account statements and emails and other data that may be used to confirm virtual currency transactions), and subpoenaing major exchanges and payment merchants that could have additional information regarding a debtor's virtual currency transactions and holdings. The fact that virtual currencies, digital wallets and exchanges may be located and held in foreign jurisdiction may raise additional hurdles, and discovery may be a costly exercise; however, depending on the amount and value of the virtual currencies owned by the debtor, such costs may be worth the effort of pursuing such discovery.

iii Virtual currencies as cash collateral

As discussed in Section IX, a virtual currency may serve as collateral under UCC Article 9. Thus, it is possible that a debtor in a bankruptcy may own a virtual currency that is subject to a secured creditor's lien. There may be issues with the perfection of such security interest and the virtual currency may be subject to previously filed security interests; however, assuming the debtor's virtual currency is subject to a secured creditor's validly perfected lien, then such virtual currency may constitute cash collateral under the Bankruptcy Code. Under Section 363 of the Bankruptcy Code, cash collateral is defined as 'cash, negotiable instruments, documents of title, securities, deposit accounts, or other cash equivalents whenever acquired in which the estate and an entity other than the estate have an interest and includes proceeds'. Section 363 further provides that a debtor 'may not use, sell or lease cash collateral' unless the relevant secured creditor consents or the court, after notice and a hearing, authorises such use of such cash collateral, typically by providing such secured creditor with adequate protection. Even if the virtual currency is not considered cash collateral, a secured creditor with a valid security interest in the virtual currency may seek similar adequate protection to protect its collateral from the debtor's use, sale or lease of such property.[344] Adequate protection typically is provided in the form of a cash payment, periodic cash payments or additional or replacement liens in order to protect the secured creditor against the diminution of value of the collateral from the debtor's use of such property rather than the return of such property to the secured creditor.[345] Accordingly, a secured creditor would have some protections from the debtor's use of a virtual currency subject to its liens; however, given the volatility in value of virtual currencies, such protection may not be adequate during a bankruptcy case if the value of the virtual currency decreases.

342 See id. § 521; Bankr. Rule 1007.

343 See 11 U.S.C. §§ 521, 523 (2018); Bankr. Rule 1007.

344 See 11 U.S.C. § 363(e) (2018).

345 See id. § 361.

iv Valuation issues and obtaining highest value

The volatility of the value or price of virtual currency owned by a debtor also raises concerns as to how the debtor should maximise the value of its virtual currency, given that any decrease in value would impair the debtor's ability to satisfy unsecured creditors' claims or require additional collateral to protect secured creditors. Accordingly, if a debtor uses its virtual currency as a form of payment or merely holds it as an asset, it may behove the debtor and the creditors of the debtor to convert such virtual currency to cash through a methodology that maximises its value. Depending on the circumstances, that may dictate a prompt sale or a more systematic sale that better preserves its value and captures increases in value (if any). However, if the virtual currency is instrumental to the carrying out of the debtor's business function or the value of the business, or any restructuring depends on the retention and continued use of its virtual currency, then it may be more appropriate (albeit risky, if there is a significant decrease) for the debtor to retain and use its virtual currency in its business either with the court's permission or, if appropriate and within the applicable bankruptcy case law, in the ordinary course of its business.

v Treatment of certain contracts involving virtual currencies

Different provisions of the Bankruptcy Code may apply depending on the nature and type of contract involving a virtual currency. The only bankruptcy case to date dealing with a contract involving a virtual currency is *In re CLI Holdings, Inc*[346] (*CLI Holdings*). In *CLI Holdings*, the debtor, an affiliate of CoinLab, Inc, doing business as Alydian, was a Bitcoin miner using rigs or supercomputers to mine Bitcoins. The debtor entered into several Bitcoin service agreements whereby Alydian agreed to use commercially reasonable efforts to use supercomputers to mine for a specified number of Bitcoins for a customer in exchange for an upfront payment. Alydian determined that it was unable to mine sufficient Bitcoins to perform all of the service agreements because the costs of deploying the supercomputers exceeded the value of the Bitcoins mined. It therefore sought to reject the burdensome contracts pursuant to Section 365 of the Bankruptcy Code, which allows a debtor to reject executory contracts (i.e., contracts where performance remains due and owing from both parties to the contract). Several of the customers and counterparties to these Bitcoin service agreements filed objections to the debtor's motion to reject the contract on the grounds that the contract was not executory since they had fully performed their end of the contract and had no remaining obligations. The court denied the debtor's motion to reject the service agreements, finding that the contracts were not executory in line with analogous cases where the only remaining obligation under the contract is to receive the agreed product. Of further interest, the debtor in *CLI Holdings* subsequently moved to sell its mining rigs on an expedited basis through a Section 363 sale in the bankruptcy case. The bankruptcy court also denied its 363 sale motion, expressing several concerns regarding the ownership of the rigs, the accuracy of the debtor's financial statements and the lack of transparency, which the court observed could cause her to appoint a trustee or dismiss the case, allowing the parties to continue litigation that had been pending but stayed in New York State and federal courts. This further underscores the need for accurate schedules and financial statements and transparency in a bankruptcy case involving virtual currencies.

346 Case No. 13-19746 (W.D. Wash. 2013).

vi Potential safe harbour contracts – currencies, commodities and securities

Other contracts that may be involved in a bankruptcy case involving virtual currencies may provide special protections to counterparties, depending on the determination of whether the virtual currency at issue is a currency, a security or a commodity. As noted previously, different federal regulators, state legislators and courts have given conflicting views on whether virtual currencies are currencies, securities or commodities, and such determination may depend on the specific facts and circumstances involving the virtual currency and its use. A transaction involving currency could be considered a swap agreement under the Bankruptcy Code, given that the definition of swap agreement includes a currency swap, option, future or forward agreement.[347] Similarly, if the virtual currency is considered a security, a transaction involving the 'purchase, sale or loan' of such virtual currency could meet the definition of a securities contract under the Bankruptcy Code.[348] If the virtual currency is considered a commodity, there is a higher hurdle to meet the requirements for a forward contract, which requires that the 'purchase, sale or transfer of a commodity' has a 'maturity date more than two days after the date the contract is entered into'.

If a transaction or agreement involving a virtual currency satisfies the requirements of any of these safe-harboured financial contracts (i.e., a swap agreement, securities contract or commodity contract), then the non-debtor counterparty would be afforded certain rights. Such rights include the ability to terminate, accelerate or liquidate the contracts and foreclose on any collateral held by the non-debtor counterparty, and to exercise rights of netting or set-off, notwithstanding the automatic stay that would typically enjoin non-debtor counterparties from taking such enforcement actions.

Another favourable safe harbour protection that could be available if contracts for virtual currencies are determined to satisfy the definitions of a swap agreement or forward agreement is that the Bankruptcy Code prohibits a debtor from avoiding transfers that would otherwise be a preference or fraudulent transfer (other than actual fraud). Thus, non-debtor counterparties would be protected from having virtual currencies or payments or other transfers in connection with a swap agreement or forward contract made prior to the commencement of the bankruptcy case from being clawed back or avoided and required to be turned over to the debtor.

To be clear, there have been no bankruptcy court decisions with regard to these safe harbour protections in connection with any virtual currencies to date, and as such, the treatment or availability of these protections remain unclear. In addition, although these safe-harboured contract provisions were not legislated with virtual currencies in mind, the definitions of a swap agreement and a forward contract were drafted to include contracts regarding swaps or commodities that in the future become the subject of recurrent dealings in the swap or other derivative markets or the forward contract trade.

vii Avoidance actions

Another area in which virtual currencies and their value will be of significant importance in a bankruptcy case is in the debtor's ability to recover a virtual currency or the value of the virtual currency as an avoidable transfer (as preferences or fraudulent transfers). For the purposes of this overview, an assumption is made that transfers of virtual currencies that

347 See 11 U.S.C. § 101(53B) (2018).

348 See id. § 741(7).

satisfy the requirements of a voidable preference or fraudulent transfer can be voided by a debtor pursuant to Sections 547 and 548 of the Bankruptcy Code. There may be difficulties in identifying transfers of virtual currencies and, more importantly, likely greater difficulty identifying the transferees of such transfers, but here we highlight the issue of whether a court would allow the debtor to recover the virtual currency or the value of the virtual currency under Section 550 of the Bankruptcy Code. Section 550 allows the debtor to 'recover, for the benefit of the estate, the property transferred, or, if the court so orders, the value of such property'. The issue with virtual currencies is whether they would be treated in a bankruptcy case as currency or property. If a virtual currency is treated as currency, then the debtor may only be able to recover the value of the transferred property and may not benefit from any appreciation of the virtual currency. However, a court may take the view that the appreciation of a virtual currency should be recoverable by the estate, and thereby allow the recovery of the virtual currency, which would include any appreciation thereof. The latter approach is in line with Section 550's goal of 'putting the estate back where it would have been but for the transfer'.[349] This approach is also in line with the treatment of virtual currencies as property or a commodity rather than a currency, which seems to be more consistent with the current regulatory trends for the treatment of virtual currencies.

One bankruptcy court was faced with this issue when a liquidating trustee sought to recover Bitcoins for their present value, which had appreciated from the time of transfer. [350] The bankruptcy court ultimately did not decide whether the Bitcoins were currency or a commodity, but found instead that Bitcoins were not US dollars, leaving for a subsequent determination whether it would allow the recovery of the virtual currency or the value of the virtual currency.[351] Given the CFTC's stance that a virtual currency is a commodity, it may be that courts allow the recovery of virtual currencies, including any appreciation thereon.

viii Recognition of foreign proceedings

As many virtual currency exchanges and entities doing business with virtual currencies may not be located or have their primary place of business within the jurisdiction of the United States, related bankruptcy activity may occur outside the United States; however, such foreign bankruptcy proceedings may benefit from the assistance of the United States bankruptcy courts through recognition proceedings under Chapter 15 of the Bankruptcy Code. Such was the case with the bankruptcy proceedings of MtGox Co Ltd in Tokyo, Japan, which sought and obtained recognition of the Japanese bankruptcy proceedings as foreign main proceedings through Chapter 15 of the Bankruptcy Code.[352] Recognition of its Tokyo bankruptcy proceedings provided much-needed relief in the United States, including a stay that enjoined several lawsuits and allowed the Japanese foreign representative full and unfettered access to the US courts. The recognition order expressly provided the foreign representative with the 'right and power to examine witnesses, take evidence or deliver information concerning the [d]ebtor's assets, affairs, rights, obligations or liabilities'; and 'entrusted [the foreign representative] with the administration and realisation of all of the [d]ebtor's assets within the territorial jurisdiction of the United States'.[353] Another such case

349 See *Collier on Bankruptcy* ¶ 550.02[3][a].

350 See *Kasolas v. Lowe (In re Hashfast Techs LLC)*, Adv. No. 15-3011 (Bankr. N.D. Cal.).

351 id.

352 See *In re MtGox Co, Ltd*, Case No. 14-31229, D.I. 151 (Bankr. N.D. Tex. June 18, 2014).

353 id.

was *Cryptopia Ltd* in Wellington, New Zealand, which sought and obtained recognition of the New Zealand bankruptcy proceedings as foreign main proceedings.[354] In addition to recognition under Chapter 15, the debtors in that case obtained provisional relief to prevent the destruction of data hosted in the United States.[355] Thus, recognition by US bankruptcy courts of foreign bankruptcy proceedings involving virtual currencies may assist foreign debtors to identify, preserve and recover their property for the benefit of their creditors.

XI LOOKING AHEAD

The US regulatory environment applicable to virtual currencies and other digital assets is complex. US federal and state lawmakers and regulators are grappling with how to fit these assets into existing legal and regulatory regimes, and whether to develop new laws, rules or guidance to address the unique aspects of digital assets (and the unique issues they raise). Most US regulators continue to educate themselves about blockchain technology and the evolving digital asset landscape, although there is an increasing level of sophistication among the regulators. In some past cases, regulators, and notably the CFTC, attempted to protect the public while not taking aggressive actions that could stifle innovation in this area. It is not clear that this 'first, do no harm' attitude continues to prevail today. Notwithstanding that the CFTC and the SEC have appointed staff members to work with digital asset sponsors and issuers to understand their products and trading platforms, the agencies have brought several enforcement actions to protect the public from fraud and registration abuses. While it is impossible to predict with any certainty the future direction of virtual currency regulation in the United States, it does appear that US regulators recognise that virtual currencies are here to stay. Innovators in the virtual currency space would be well-advised to review this chapter carefully, engage actively with experienced US counsel and follow closely regulatory developments in this area. Failure to fully comply with applicable US regulatory regimes may expose market participants to an unacceptable level of legal, regulatory and reputational risk.

354 See *In re Cryptopia Ltd*, Case No. 19-11688, D.I. 19 (Bankr. S.D.N.Y. June 24, 2019).

355 See *In re Cryptopia Ltd*, Case No. 19-11688, D.I. 11 (Bankr. S.D.N.Y. May 24, 2019).

Appendix 1

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