The Legal 500 Country Comparative Guides

United States: Blockchain

This country-specific Q&A provides an overview of blockchain laws and regulations applicable in United States.

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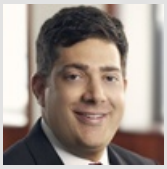

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1. **Please provide a high-level overview of the blockchain market in your jurisdiction. In what business or public sectors are you seeing blockchain or other distributed ledger technologies being adopted? What are the key applications of these technologies in your jurisdiction?**

In the United States of America ("US"), Bitcoin is the poster child application of blockchain. Cryptocurrencies generate much of the blockchain-related news in the US, including, amongst others, Ether and more recently, Facebook's announcement of the Libra stablecoin.[1] Cryptocurrency is so commonplace in the US that certain states have acted to legalize cryptocurrencies as a payment option for paying state taxes.[2] Despite the focus on cryptocurrency, the application of blockchain in the US goes well beyond this and involves a wide cross-section of industries in both the private and public sector. On the public front, federal agencies, such as the Food and Drug Administration, the Department of Health and Human Services, the Department of the Treasury and the Department of Defense, have launched various blockchain-based initiatives, which are currently at various stages of maturity ranging from proof of concept through pilot all the way to production. In one such initiative, the Food and Drug Administration has recruited an expert in traceability technologies in global food supply chains, Frank Yiannas, to work with the FDA to incorporate blockchain technology to further strengthen the US Food Supply.[3] In the private sector, blockchain is still in its infancy but we are seeing attempts to incorporate blockchain applications into various facets of companies' operations, from supply chain management and tracking, to making payments through the core corporate governance of a company. Companies such as IBM and Microsoft are now starting to offer services that customers can use to build or integrate their own secure blockchain networks.[4] States also have shown an interest in the integration of blockchain by companies. Delaware, in which the greatest number of major US corporations are incorporated, has expressly authorized companies to use blockchain to track corporate shares to help clarify property rights, to automate cap tables and corporate actions such as dividend issuance, to provide transparent and accurate proxy voting and to provide self-executing certificates of good standing.[5] However, the initial enthusiasm has slowed and it is still uncertain where, outside of cryptocurrency, blockchain will find its applications. That is not to say there is not significant interest: the US has the most blockchain-related patents issued or applied for of any country in the world. In the first six months of 2020, there were as many patent applications relating to blockchain as in all of 2019 (which had three times as many as 2018).[6]

[1] The Libra Association is based in Switzerland. However, any application in the US would be subject to the U.S. Financial Crimes Enforcement Network and all the relevant Know Your Customer and Anti-Money Laundering laws and has been the topic of debate in multiple Senate hearings.

[2] In November 2018, Ohio was the first state to accept Bitcoin for tax payments. *See* Ohio's cryptocurrency tax payment portal available at OhioCrypto.com (last visited September 10, 2019). Arizona and Georgia also successfully attempted to allow crypto tax payments and Illinois is still weighing proposals at the end of 2018.

[3] *See* Data Foundation, *Bringing Blockchain Into Government: A Path Forward for Creating Effective Federal Blockchain Initiatives*, Appendix I: Identified Federal Blockchain Projects, June 2019.

[4] *See* IBM Blockchain Platform (offering a public cloud service), *available at* www.ibm.com/IBM-Blockchain/Platform (last visited September 9, 2019); *see also* Microsoft Azure (offering to develop, test, and deploy secure blockchain apps), *available at* https://azure.microsoft.com/en-us/solutions/blockchain/ (last visited September 9, 2019).

[5] Delaware expressly authorized the use of blockchain technology to keep track of stockholders and outstanding stock in August 2017 by amending the Delaware Code relating to the General Corporation Law. *See* Senate Bill No. 69, *available at* https://legis.delaware.gov/json/BillDetail/GenerateHtmlDocument?legislationId=25730&legislationTypeId=1&docTypeId=2&legislationName=SB69. This is part of Delaware's broader initiative to adopt blockchain technologies in state government. Furthermore, according to Delaware's 2018 Annual Report statistics, 67.2% of all Fortune 500 companies are incorporated in Delaware (*available at https://corpfiles.delaware.gov/Annual-Reports/Division-of-Corporations-2018-Annual-Report.pdf*).

[6] *See* The Current State of Blockchain Patents – A comprehensive study by KISSPatent, *available at* https://kisspatent.com/blockchain-patents-study (last visited September 30, 2020).

2. **To what extent are tokens and virtual assets in use in your jurisdiction? Please mention any notable success stories or failures of applications of these technologies.**

ICOs, also referred to as token sales, predominated the use in this area. These have mainly concerned utility tokens but the tokenization of assets is also budding, allowing for either a fractional ownership of the tangible asset in the shape of a token or the pegging of a cryptocurrency to some secondary source to minimize volatility. Tokenized assets, ranging from real estate to collateralized stablecoins, had been gaining traction in the US.[7] However, ICOs have largely been stopped as a result of SEC enforcement of the US federal securities laws and there is significant uncertainty regarding the ability to sell tokens that could represent securities without registration under the securities laws.

[7] *E.g.*, THIRTEEN EAST + WEST (a New York City apartment development that intends to raise funding by tokenizing the asset in Manhattan on Ethereum); TheArtToken (allowing for fractional ownership of artwork); Pax Gold (a gold-backed crypto asset); the JPM Coin (a fiat-backed stablecoin); and Facebook's Libra (backed by the Libra Reserve, which is said to be comprised of a collection of low-volatility assets).

3. **Has COVID-19 provoked any novel applications of blockchain technologies in your jurisdiction?**

   COVID-19 has undeniably presented significant public health challenges to governments and societies. The grave public health challenge has required organizations, both public and private, to be flexible and nimble in adapting new business models, technologies and approaches to continue operating during the pandemic. One major issue that governments and healthcare providers faced was addressing the severe shortage of medical devices, personal protective equipment other medical supplies needed to care for patients during the pandemic. As traditional supply struggled to keep up with demand, the unique ability for blockchain technologies to create decentralized trust among arm's-length parties has led to some novel supply chain applications during the COVID-19 pandemic. For example, in April 2020, IBM announced the launch of IBM Rapid Supplier Connect, a blockchain-based network designed to help government agencies and healthcare organizations identify new, non-traditional suppliers who have pivoted to address the shortage of personal protective equipment, medical devices and other supplies needed for COVID-19 relief efforts.[8] When many businesses from outside the traditional healthcare procurement system pivoted to produce the essential supplies needed to support the healthcare sector, IBM Rapid Supplier Connect helped buyers such as hospitals, state procurement divisions, pharmacies and others connect with these non-traditional suppliers and facilitated the vetting and onboarding of new suppliers and understanding their real-time inventory availability. This blockchain application enabled healthcare organizations and government agencies to access a wider pool of suppliers and reduced the time to get essential medical supplies to the location where they were most needed. In a related measure, the Bill to Enhance Transparency of Supplies in Strategic National Stockpiles, which would require the use of blockchain technology to monitor the availability of personal protective equipment, ventilators and other vital equipment, was introduced in the House of Representatives in April.[9] The focus on the critical nature of the supply chain, especially for healthcare equipment, may serve as a catalyst for broader adoption of the use of blockchain technology in supply chain management in the US.

   [8] *See* IBM Rapid Supplier Connect (offering a blockchain-based supply chain network), *available at* https://www.ibm.com/blogs/blockchain/2020/04/ibm-rapid-supplier-connect-getting-covid-19-responders-the-equipment-they-need/ (last visited September 28, 2020).

   [9] *See* Strategic National Stockpile Enhancement and Transparency Act, H.R. 6607, 116th Congress, *available at* https://www.congress.gov/bill/116th-congress/house-bill/6607/text.

4. **Please outline the principal legislation and the regulators most relevant to the use of blockchain technologies in your jurisdiction. In particular, is there any blockchain-specific legislation or are there any blockchain-specific regulatory frameworks in your jurisdiction, either now or envisaged in the short or mid-term?**

Blockchain regulation is not unheard of at the state or federal level in the US despite the minimal to non-existent formal rulemaking, but there is no comprehensive set of legislation to govern such technologies. There is a general acknowledgment that blockchain technology is an important part of the US's objective to remain at the forefront of innovation; however, similar to the reach of the technology, the legal questions remain widespread and ill-defined. The concerns are both industry-specific and application-specific, thus affecting a broad spectrum of the legal framework, ranging from tax law, securities law, intellectual property law, consumer protection/data privacy law, sales and banking regulations, advertising law as well as estate planning, and various cross-border implications of the borderless technology. However, across all these fields, the US's approach thus far has been to "wait-and-see", with the impact of any legislation or regulation being carefully considered, in part due to a lack of full understanding of the technology and in part due to the effects on innovation such regulation could result in. This hesitation is reflected at the federal level, with most attention to blockchain coming from the federal administrative and agency level, with a focus on the financial industry and cryptocurrency assets.[10] Rather than issuing express regulations, warnings and guidelines have been the preferred method of intervention. At the state level, legislatures have been more active, mainly in the cryptocurrency sphere (see question 9) but these range from outright hostility to the technology to blanket exemptions from applicable rules. The US generally prefers case-by-case enforcement on specific applications of blockchain technologies (see question 18); however, there have been active attempts to put blockchain bills in front of the Senate. In February 2019, the Blockchain Promotion Act was introduced in the House of Representatives and would establish a blockchain working group within the Department of Commerce to provide a formal definition of blockchain that is able to keep abreast of the fast evolution of the technologies and application of blockchain, which would be another step in the direction of enabling coherent legislation.[11] In April 2019, another blockchain-related bill was introduced, the Token Taxonomy Act, which could clarify the status of certain cryptocurrency activities.[12] In September 2020, the Blockchain Innovation Act was introduced in the House of Representatives. This proposed legislation would direct the Secretary of Commerce, in consultation with the Federal Trade Commission ("FTC"), to conduct a study and submit to Congress a report on the state of the blockchain technology, covering (i) trends in the commercial use of and investment in blockchain technology, (ii) best practices in facilitating public-private partnerships in blockchain technology, (iii) potential benefits and risks of blockchain technology for consumer protection, (iv) how blockchain technology can be used by industry and consumers to reduce fraud and increase the security of commercial transactions, (v) areas in federal regulation of blockchain technology where greater clarity would encourage domestic innovation, and (vi) any other relevant observations or recommendations related to blockchain technology and consumer protection.[13] These bills demonstrate willingness on the part of some in the US Congress to carefully consider blockchain technology and examine how best to facilitate and support its adoption.

[10] This includes: The Securities and Exchange Commission, the Commodities and Federal Trading Commission, the Federal Trade Commission and the Department of Treasury via the Internal Revenue Services and the Financial Crimes Enforcement Network.

[11] *See* Blockchain Promotion Act of 2019, H.R. 1361, 116th Congress, *available at* https://www.congress.gov/bill/116th-congress/house-bill/1361/text.

[12] *See* Token Taxonomy Act of 2019, H.R. 2144, 116th Congress, *available at* https://www.congress.gov/bill/116th-congress/house-bill/2144.

[13] *See* Blockchain Innovation Act, H.R. 8153, 116th Congress, *available at* https://www.congress.gov/bill/116th-congress/house-bill/8153/text.

5. **What is the current attitude of the government and of regulators to the use of blockchain technology in your jurisdiction?**

Despite the US's legislative "wait-and-see" approach, US agencies are active on the enforcement front to address case-by-case issues arising from blockchain and its offshoots when they are perceived to violate the existing legal framework. This activity has spread to the courts, which are also getting involved through state and private actions. Other than in a few states that have been expressly hostile, blockchain is generally viewed by the states as an opportunity to attract investment and even local governments have started implementing blockchain-centered initiatives.[14]

[14] *E.g.,* Delaware, has recognized blockchain for corporate finance uses and entered into a contract with IBM to develop plans for a new corporate filing system based on blockchain technology. There has even been talks about having UCC filings on the blockchain even though these projects have yet to be seen to fruition. *See* Karl Baker, *Delaware awards $738,000 single-bid blockchain contract to IBM,* Delaware Online, July 3, 2018*, available at* https://www.delawareonline.com/story/news/2018/07/03/state-awards-738-000-single-bid-blostate-awards-738-000-single-bid-blockchain-cckchain-contract-ibm/751001002/. Other states have also created working groups to consider blockchain technologies as government tools, such as Connecticut, Illinois, Colorado, Tennessee, West Virginia and several other states.

6. **Are there any governmental or regulatory initiatives designed to facilitate or encourage the development and use of blockchain technology (for example, a regulatory sandbox)?**

The US is following its European counterparts with a regulatory sandbox approach to develop blockchain in the financial technology industry. The Consumer Financial Protection Bureau ("CFPB") and Commodity Futures Trading Commission ("CFTC") have joined forces to create a regulatory sandbox for fintech companies, similar to those created in the U.K., aimed at, amongst others, cryptocurrencies and other financial technologies based on blockchain (the "Disclosure Sandbox").[15] Other states, including Arizona, Wyoming and Utah, have also enacted legislation to create regulatory sandbox initiatives related to cryptocurrency.[16] As these sandboxes are still works-in-progress (Wyoming and Utah are still seeking applicants, Arizona has just eight participants in its regulatory sandbox and the CFPB recently revised its policy following a period of public comment),[17] the legal field has yet to see the outcome of

these initiatives but the goal (per Mick Mulvaney, acting director of the CFPB in 2018) is to find the regulatory "sweet spot" with respect to regulation to protect investors and instill confidence in the markets, without discouraging people from entering the marketplace in the first place due to overregulation. The Blockchain Innovation Act, discussed above, represents another government effort to identify regulatory priorities to encourage innovation in the area.

[15] *See* Yuka Hayashi, *CFPB Wants to Help Launch New Fintech Products*, July 18, 2018, available at https://www.wsj.com/articles/cfpb-wants-to-help-launch-new-fintech-products-1531953587.

[16] Arizona's FinTech Sandbox website, available at https://www.azag.gov/fintech (last visited September 10, 2019); Wyoming's FinTEch Sandbox website, available at http://wyomingbankingdivision.wyo.gov/home/areas-of-regulation/laws-and-regulation/financial-technology-sandbox (last visited September 29, 2020); Utah's Fintech Sandbox website, available at https://commerce.utah.gov/sandbox.html.

[17] *See* CFPB Issues Policies to Facilitate Compliance and Promote Innovation, available at https://www.consumerfinance.gov/about-us/newsroom/bureau-issues-policies-facilitate-compliance-promote-innovation/ (last visited September 29, 2020); *see also* CFPB's latest iteration of the Policy to Encourage Trial Disclosure Programs, available at https://files.consumerfinance.gov/f/documents/cfpb_final-policy-to-encourage-tdp.pdf (last visited September 29, 2020).

7. **Have there been any recent governmental or regulatory reviews or consultations concerning blockchain technology in your jurisdiction and, if so, what are the key takeaways from these?**

The federal government has created various task forces to address the various blockchain issues, ranging from the specialized Cyber Unit, created in 2017 by the Securities and Exchange Commission ("SEC"), in charge of securities violations pertaining to cryptocurrency and digital assets, to the more recent working group within the Department of Commerce to define blockchain in 2019. Consultations have also taken the shape of calls for public comment, such as in the context of the Disclosure Sandbox. For the more recent projects, the takeaways are still to be seen but from the analysis to date, blockchain will not escape the existing legislative and regulatory framework and the agencies are keen to avoid possible issues of fraud and manipulation that can be caused by such technologies.

8. **Has any official guidance concerning the use of blockchain technology been published in your jurisdiction?**

At the federal level, agency guidance thus far provides the best insight into the application of the legal framework to blockchain. With the rise of ICOs in 2016 and 2017, the SEC issued various statements to investors warning about the risks and potential for fraud when

investing in ICOs.[18] To complement these initial releases, in April 2019, the SEC also published specific regulatory guidance for token issuers that outlines when these may fall under securities classifications.[19] The SEC is not the only agency to become involved, and as early as 2014, the CFTC found Bitcoin to be a commodity, subject to sales regulations, but stopped short of expanding the commodity designation to other cryptocurrency assets and announced it would decide individual cryptocurrency asset designations on a case-by-case basis. The Internal Revenue Service ("IRS") also released guidance regarding the tax implications of transactions involving virtual currencies. The guidance on virtual currencies is a bit dated, going back to March 2014 and treats virtual currencies as property for US federal tax purposes without a *de minimis* exemption.[20] This was followed in July 2018 by a virtual currency compliance campaign and in 2019, the IRS started sending letters to taxpayers regarding reporting of past virtual currency transactions.[21] This year, the SEC and the Office of the Comptroller of the Currency engaged in a review of the authority of national banks to hold "reserves" on behalf of customers who issue stablecoins backed on a one-to-one basis by fiat currencies and, in September 2020, determined that banks that otherwise comply with applicable laws and regulations and conduct adequate due diligence are authorized to hold stablecoin "reserves" as a service to bank customers.[22]

A common thread with regard to the various pieces of official guidance is that they mainly relate to the application of blockchain to cryptocurrency assets, rather than the overarching technology of blockchain, for which the US has yet to see any detailed guidance.

[18] On July 25, 2017, the SEC issued a report of investigation pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DOA and an investor Bulletin: Initial Coin Offerings. On August 28, 2017, the SEC issued an investor alert: Public Companies Making ICO-Related Claims. On December 11, 2017, the SEC Chairman, Jay Clayton, made a public statement on Cryptocurrencies and Initial Coin Offerings, *available at* https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11.

[19] *See* Bill Hinman, Statement on "Framework for 'Investment Contract' Analysis of Digital Assets", April 3, 2019, *available at* https://www.sec.gov/news/public-statement/statement-framework-investment-contract-analysis-digital-assets; *see also* SEC Guidance, Framework for "Investment Contract" Analysis of Digital Assets, *available at* https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets.

[20] IRS Virtual Currencies Guidance, *available at* https://www.irs.gov/pub/irs-drop/n-14-21.pdf (last visited September 10, 2019).

[21] The IRS has begun sending letters to virtual currency owners advising them to pay back taxes, file amended returns as part of the agency's larger efforts; *see* IRS New Release, July 26, 2019, *available at* https://www.irs.gov/newsroom/irs-has-begun-sending-letters-to-virtual-currency-owners-advisi

ng-them-to-pay-back-taxes-file-amended-returns-part-of-agencys-larger-efforts.

[22] OCC Chief Counsel's Interpretation on National Bank and Federal Savings Association Authority to Hold Stablecoin Reserves, *available at* https://www.coindesk.com/wp-content/uploads/2020/09/2020-125a.pdf (last visited September 29, 2020).

9. **What is the current approach in your jurisdiction to the treatment of cryptocurrencies for the purposes of financial regulation, anti-money laundering and taxation? In particular, are cryptocurrencies characterised as a currency?**

Cryptocurrency is the focus of most of the blockchain-related questions arising in the US. As discussed earlier, there has been some acceptance of Bitcoin, but concerns about new cryptocurrencies, such as Facebook's Libra, are still in full debate in the Senate. The US has a split between pro-blockchain states, which pass favorable regulations such as cryptocurrency exemptions from state securities laws,[23] blockchain-cautious states, which issue warnings mainly related to cryptocurrency investments,[24] and blockchain-restrictive states, which issue cryptocurrency restrictions.[25] While there is not complete regulatory clarity, currently cryptocurrencies are generally treated as property, rather than as a currency, including by the IRS for tax purposes.[26]

One issue attracting particular attention from US regulators is the potential for cryptocurrency exchanges to facilitate money-laundering activities. Regulators have honed in on ensuring that cryptocurrency exchanges and other actors implement sufficiently robust anti-money laundering compliance programs. In October 2020, the Department of Justice announced the indictment of the founders of BitMEX, charging them with conspiracy to violate the Bank Secrecy Act by wilfully failing to establish, implement and maintain an adequate anti-money laundering program.[27]

[23] *E.g.,* Wyoming (exempting cryptocurrencies from property taxation; Colorado (promoting the use of blockchain for government recordkeeping); Arizona (taking steps to legalize Bitcoin as a payment option for tax purposes).

[24] *E.g.,* California and New Mexico.

[25] *E.g.,* New York (requiring a license for virtual currency activities from the New York State Department of Financial Services).

[26] *See* Frequently Asked Questions on Virtual Currency Transactions, *available at* https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions (last visited September 30, 2020).

[27] *See* Sealed Indictment, *U.S. v. Hayes, Del, Reed & Dwyer*, 20 Cr. 500 (S.D.N.Y. 2020).

10. **Are there any prohibitions on the use or trading of cryptocurrencies in your jurisdiction?**

The US has no outright ban on the use or trading of cryptocurrencies. That said, any such use or trading remains subject to various non-cryptocurrency-specific rules governing the financial regulations imposed by (i) the CFTC, which, for example, found Bitcoin to be a commodity and subject to its jurisdiction; (ii) the SEC, if the cryptocurrency is deemed to be a security; and (iii) the IRS and Financial Crimes Enforcement Network's applicable regulations. The US may not have created many rules specific to cryptocurrencies, but this does not exempt cryptocurrency from the regulations which are already in place and may be triggered by such transactions

11. **To what extent have initial coin offerings taken place in your jurisdiction and what has been the attitude of relevant authorities to ICOs?**

With the development of ICO funding beginning in 2014, and following its initial rise in 2016, the SEC created a new Cyber Unit to, among other things, investigate and bring charges against ICOs and issue various statements to investors warning about the risks and potential for fraud when investing in ICOs.[28] ICOs reached their peak in late 2017 and early 2018, but with the increased scrutiny by the SEC, which published additional guidance in April 2019 further reinforcing that ICOs could fall under the purview of securities laws and therefore under the SEC, ICOs are no longer viewed as a medium to bypass the regulatory framework associated with traditional funding sources to raise money.

[28] On July 25, 2017, the SEC issued a report of investigation pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DOA and an investor Bulletin: Initial Coin Offerings. On August 28, 2017, the SEC issued an investor alert: Public Companies Making ICO-Related Claims. On December 11, 2017, the SEC Chairman, Jay Clayton, made a public statement on Cryptocurrencies and Initial Coin Offerings, providing further warnings against the risk or fraud and manipulation through ICOs. Last, on April 3, 2019, the SEC issued fresh guidance on how cryptocurrencies may fall under securities classification.

12. **If they are permissible in your jurisdiction, what are the key requirements that an entity would need to comply with when launching an ICO?**

Securities laws are the main concern when it comes to ICOs. The issue is whether the cryptocurrency underlying the ICO qualifies as a security under the *Howey* test, which looks at the four factors in light of the April 2019 SEC guidance, including whether there is: (1) an investment of money; (2) a common enterprise; (3) a reasonable expectation of profits; (4) managerial or entrepreneurial effort from others.[29] If found to be a security, a public offering or sale must be made pursuant to either an effective registration statement on file with the SEC or under an exemption from registration.[30]

An ICO is not *de facto* categorized as a securities offering. However, the SEC has stated that a great many ICO tokens are in fact securities and it can be challenging to determine that a token sale does not involve the sale of securities. The safest approach to avoid violating the securities laws is for companies to either (i) register the ICO and issue a prospectus, or (ii) seek No Action Letters ("NALs") from the SEC's Division of Corporate Finance to confirm no enforcement actions will be undertaken should the company sell the cryptocurrency assets without first registering them under the Securities Act of 1933 and the Securities and Exchange Act of 1934.[31] Such action will prevent a situations such as the SEC issuing a cease-and-desist order if it determines an ICO is an unregistered, non-exempt securities offering.[32] Some companies have relied on exemptions from registration to sell ICO tokens, in particular Regulation D. However, this approach has significant risk as highlighted by the Telegram ICO. In 2018, Telegram sold approximately 2.9 billion tokens, raising more than $1.7 billion in capital. While it claimed the exemption from registration under Regulation D, the SEC brought an action[33] that, in June 2020, resulted in a court-approved settlement under which Telegram agreed to return $1.2 billion to investors and pay a $18.5 million penalty,[34] which demonstrates the uncertainty of relying on such exemptions in the ICO context.

Other than complying with the securities law requirements or requesting an NAL, there is no bright-line approach to determining the status of the cryptocurrency asset tied to the ICO.[35] The determination as to whether an ICO cryptocurrency asset is a "security" is very fact-specific and there have already been disagreements between the SEC and the courts on this issue.[36]

[29] *See SEC v. W.J. Howey Co.*, 328 U.S. 293, 298-99 (1946).

[30] *See* Securities Act of 1933, Section 5(a) and (c).

[31] *E.g.,* Pocketful of Quarters, Inc. NAL issued on July 25, 2019; TurnKey Jet, Inc. NAL issued on April 3, 2019; Blockstack registered ICO in June 2019. It should be noted these NAL are quite specific and limited and may not be useful for many projects seeking to raise capital via an ICO.

[32] *E.g.,* the SEC issued a cease-and-desist order against Munchee Inc. in 2017 as well as against Gladius Network LLC in 2019. Note that in the Gladius case, the company self-reported its potential violation and cooperated throughout the investigation which may have saved it from monetary penalties the SEC could have imposed.

[33] *See* SEC Halts Alleged $1.7 Billion Unregistered Digital Token Offering, *available at* https://www.sec.gov/news/press-release/2019-212 (last visited October 5, 2020).

[34] *See* Telegram to Return $1.2 Billion to Investors and Pay $18.5 Million Penalty to Settle SEC Charges, *available at* https://www.sec.gov/news/press-release/2020-146 (last visited

October 5, 2020).

[35] Note, if the 2019 Token Taxonomy Act is passed, utility tokens may become exempt from securities laws.

[36] *See SEC v. Blockvest LLC, et al.*, Civil Action No. 18-CV-2287-GPB(MSB) (S.D. Cal.) (denying the SEC's motion for preliminary injunction in the first instance as the SEC had not yet fully demonstrated how the particular token met the definition of a "security"; the order was later reconsidered and the SEC obtained a preliminary injunction against Blockvest).

13. **Is cryptocurrency trading common in your jurisdiction? And what is the attitude of mainstream financial institutions to cryptocurrency trading in your jurisdiction?**

There are a multitude of cryptocurrency exchanges, which allow consumers to exchange their cryptocurrency into various assets, whether it be fiat currencies or other cryptocurrencies. These are, for the most part, available online, but there are a few brick-and-mortar businesses as well. There are also a few mainstream financial institutions that offer limited access to a limited number of cryptocurrencies. Nevertheless, with the 2018 Bitcoin crash, there has been some hesitation among the largest financial institutions to transact in cryptocurrencies. The hesitation is likely caused by increased business risk and decreased demand from customers following increased SEC enforcement in the wake of the crash and other sources of regulatory uncertainty. Many of the US cryptocurrency exchanges limit their operations to Bitcoin and Ether (and their derivations) because those cryptocurrencies are generally accepted to not be securities. Providing trading platforms for other tokens that may be securities introduces significant regulatory complexity.

The many failed applications to the SEC for approval to offer an Exchange Traded Fund backed by Bitcoin illustrates the regulatory risk for even established financial institutions entering the cryptocurrency market.[37] In addition to federal regulation, some states have been active in regulating exchanges and trading activity; for example, the New York State Department of Financial Services adopted a set of regulations requiring a "bitlicense" to engage in any "virtual currency business activity".[38] Nevertheless, Baakt, a bitcoin futures exchange and digital assets platform, launched in 2019 as a product of the Intercontinental Exchange, the parent company of the New York Stock Exchange.[39]

[37] *E.g.,* in January 2019, Cboe Global markets withdrew its ETF application and the SEC rejected the Bats/Winklevoss Bitcoin Trust ETF application in March 2017.

[38] N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2(p) (this regulation applies beyond exchanges to any virtual currency business activity undertaken by a New York resident or company conducting business in New York).

[39] *See* Kelly Loefller, *Cleared to Launch*, Bakkt, August 16, 2019, *available at*

https://medium.com/bakkt-blog/cleared-to-launch-8dfc3e6f9ed0.

14. **Are there any relevant regulatory restrictions or initiatives concerning tokens and virtual assets other than cryptocurrencies (e.g. trading of tangible property represented by cryptographic tokens)?**

    At the federal level, the SEC and CFTC have not distinguished between types of cryptocurrency, *e.g.*, asset-backed tokens (deriving value based on the underlying asset that does not exist on the blockchain) or utility tokens (deriving value from the demand for the issuer's service or product). However, in April 2019, members of the US House of Representatives reintroduced the Token Taxonomy Act, which would establish digital tokens as a new digital asset, and would mainly address utility tokens, which would be exempt from securities laws and subject to a different tax structure.[40]

    [40] *See supra* note 10.

15. **Are there any legal or regulatory issues concerning the transfer of title to or the granting of security over tokens and virtual assets?**

    In addition to the securities issue (see question 11), another issue specific to tokens and virtual assets that have properties other than as a store of value and medium of exchange is the accounting for such assets. There is little guidance on the accounting treatment of such assets, which could fall under a variety of different standards.[41] For example, if purchased with the intention of resale, the tokens partially meet the definition of "inventory" under both US GAAP and IFRS, despite not being tangible in nature. There is also the potential for treating these as "intangible assets" for accounting purposes because tokens and virtual assets have the potential for indefinite use, with no expiration date or limit of the period within which they can be exchanged for cash, goods or services.

    [41] *See* PwC, *In depth: A Look at Current Financial Reporting Issues*, September 2018, *available at* https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-16/cryptographic-assets-related-transactions-accounting-considerations-ifrs-pwc-in-depth.pdf (running the analysis in the context of IFRS).

16. **How are smart contracts characterised within your legal framework? Are there any enforceability issues specific to the operation of smart contracts which do not arise in the case of traditional legal contracts?**

    The US is still relying on its traditional legal contract regime to account for smart contracts, including state law implementation of the statute of frauds and the Uniform Commercial Code ("UCC"); some non-blockchain-specific technology-related updates, such as the Electronic Signatures in Global and National Commerce Act; and state laws modelled on the Uniform Electronic Transactions Act ("UETA"). Both at the federal and state level, these laws ensure a

general recognition that e-signatures are legal and can create a binding contract.[42] There has been little litigation, so it is difficult to determine if the current infrastructure is sufficient. There is some debate as to whether states that do not expressly recognize that contracts can be formed via an "electronic agent" technically recognize smart contracts.[43] Over the past few years, several states have sought to clarify the enforceability of smart contracts, treating them akin to legal agreements.[44] However, similar to the issues with blockchain legislation as a whole, there remains no uniform definition of "smart contracts" and what they encompass. From this seminal issue of what is being legislated flows the uncertainty of which legal regime to apply. As a consequence, there have been movements urging for a clear classification of smart contracts and even urging for the creation of a new category specific to smart contracts affecting blockchain-based assets.[45]

[42] The CFTC primer on smart contracts recognizes that smart contracts can be binding legal contracts and expressly states that "[e]xisting laws and regulation apply equally regardless what form a contract takes. Contracts or constituent parts of contracts that are written in code are subject to otherwise applicable law and regulation." *See LabCFTC, CFTC, A Primer On Smart Contracts (2018), available at* https://www.cftc.gov/sites/default/files/2018-11/LabCFTC_PrimerSmartContracts112718.pdf.

[43] These states include New York, Illinois and Washington.

[44] *E.g.*, the states of Arizona, California, Nevada, Tennessee and Ohio have amended the UETA specifically to make records maintained on a blockchain, "electronic records" within the meaning of the UETA.

[45] *See* Chamber of Digital Commerce and Smart Contracts Alliance, *Smart Contracts: Is the Law Ready?*, 60, September 2018.

17. **To what extent are smart contracts in use in your jurisdiction? Please mention any key initiatives concerning the use of smart contracts in your jurisdiction.**

One main proponent of the movement to provide a clear classification of smart contracts is the Smart Contracts Alliance, which is an initiative by the Chamber of Digital Commerce, an American advocacy group founded in 2014 that promotes the emerging industry behind blockchain technology, bitcoin, digital currency and digital assets.[46] As illustrated in the 2018 CFTC primer on smart contracts, there is a plethora of uses for smart contacts from the very basic use in vending machines, to more complex transactions such as credit default swaps. To help navigate this technology, the CFTC issued a primer to be used as an educational tool to understand the implications as well as highlight some of the risks and challenges associated with smart contracts.[47]

[46] The Smart Contracts Alliance's website can be found at https://digitalchamber.org/initiatives/smart-contracts-alliance/ (last visited September 9,

2019).

[47] *See supra* note 35.

18. **Have there been any governmental or regulatory enforcement actions concerning blockchain in your jurisdiction?**

The federal agencies have been actively bending blockchain to the existing legal framework, especially as it relates to its cryptocurrency applications. The SEC has been active in the ICO sphere, examining unregistered, non-exempt ICOs involving securities, starting with the DAO ICO in 2016. In conjunction with pursuing securities law enforcement actions, SEC Chairman Jay Clayton emphasized that cyber-enabled crime is a focus of the SEC and that the regulators should work together to find solutions for these risks.[48] Since then, the FTC has clamped down on alleged pyramid schemes involving cryptocurrencies, the DOJ has initiated suits regarding alleged schemes to defraud investors through the marketing and selling of fraudulent virtual currency and the CFTC plays an active role in cryptocurrency enforcement.[49] The IRS, through its recent guidance and IRS 6173 letters, has indicated that there will be enforcement action should corrective filings for cryptocurrency transactions not be reported.[50] Due to the global nature of blockchain, enforcement is not limited to US-centric actions and the Treasury Department, through its Financial Crimes Enforcement Network and the Office of Foreign Asset Control, cannot be excluded from this discussion.

[48] *See* Chairman Jay Clayton, *Remarks on the Establishment of the Task Force on Market Integrity and Consumer Fraud*, July 11, 2018, *available at* https://www.sec.gov/news/speech/task-force-market-integrity-and-consumer-fraud (noting that SEC has frozen tens of millions of dollars in assets raised in certain allegedly fraudulent ICOs).

[49] *E.g.,*Temporary restraining order obtained by the FTC in front of the U.S. District Court for the Southern District of Florida against the promoters of three cryptocurrency-related referral programs – My7Network, Bitcoin Funding Team and Jetcoin. FTC Complaint filed February 20, 2018*, available at* https://www.ftc.gov/system/files/documents/cases/dluca_-_bitcoint_funding_team_complaint.pdf; *United States v. Randall Crater*, 19-cr-10063 (D. Mass, filed Feb. 26, 2019) (following the indictment of Randall Crater, founder and principal operator of My Big Coin Pay Inc. for alleged participation in a scheme to defraud investors by marketing and selling fraudulent virtual currency); *United States v. Zaslavskiy*, 2018 WL 4346339 (EDNY, Sep 11, 2018) (involving the coordination of the DOJ and SEC in enforcing the securities laws over token sales).

[50] *See supra* note 18.

19. **Has there been any judicial consideration of blockchain concepts or smart contracting in your jurisdiction?**

Federal enforcement actions, especially in the ICO sphere, rely on the courts to interpret blockchain concepts and enforce federal securities laws against infringers. At the same time, private litigation, mainly pertaining to cryptocurrency, is also developing at the state and federal levels and has brought to light other kinds of legal violations related to the use of blockchain beyond those connected to federal securities laws, including patent infringement, breach of contract and antitrust issues.[51]

[51] *E.g., Founder Starcoin, Inc. v. Launch Labs, Inc.*, 2018 WL 3343790 (S.D. Cal. July 9, 2018) (denying a motion for preliminary injunction barring the defendant from selling celebrity-sponsored collectible digital tokens); *United American Corp. v. Bitmain, Inc.*, No. 1:18-cv-25106-KMW (S.D. Fla. filed Dec. 6, 2018) (alleging that Bitmain Inc. led a "tight knit network of individuals and organizations to manipulate the cryptocurrency market for Bitcoin Cash").

20. **Are there any other generally-applicable laws or regulations that may present issues for the use of blockchain technology (such as privacy and data protection law or insolvency law)?**

Due to blockchain's applicability across a range of industries, a vast range of laws are triggered by its use, including laws relating to insolvency, where issues around whether cryptocurrency of a debtor constitutes part of the debtor's estate are still undecided. With the spread of blockchain applications come additional layers of regulatory hurdles, such as the development of blockchain in the healthcare sphere and the corresponding data privacy requirements of the Health Insurance Portability and Accountability Act of 1996. There remains great uncertainty as to whether blockchain should be governed by its own regulatory scheme and regarding the scope of applicability and transferability of the current legal regime to blockchain issues.

21. **Are there any other key issues concerning blockchain technology in your jurisdiction that legal practitioners should be aware of?**

With the lack of an established blockchain framework at a federal level, the US has developed a broad and somewhat inconsistent approach to blockchain at the state level. This double layer of complexity is not unheard of in other areas and, until federal law preempts state law, as proposed by the Token Taxonomy Act, it is something to consider carefully when transacting in the US.