



# **The Legal 500 Country Comparative Guides**

## **United States BLOCKCHAIN**

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

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## UNITED STATES BLOCKCHAIN



For the purposes of this publication, references to “blockchain” act as a shorthand for all distributed ledger technologies, acknowledging that blockchain is in fact a type of distributed ledger technology. Similarly, references to “smart contracts” are intended to refer to smart legal contracts.

### **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 (“United States” or “US”), Bitcoin is the poster child application of blockchain. As both the oldest and most popular public blockchain network, Bitcoin is also (uncoincidentally) considered the most decentralized.<sup>1</sup> It is Bitcoin’s size, age and dispersed nature that makes it historically one of the least-contested areas of blockchain regulation.<sup>2</sup> Indeed, nearly all of the most interesting and contentious developments in the field (both legal and technological) concern Bitcoin’s progeny: the multitude of alternative blockchain infrastructures that are far less decentralized or provide novel functionality and therefore have attracted significant regulatory and legislative scrutiny. To that end, alternative cryptocurrencies/tokens (“altcoins”) generate much of the blockchain-related news in the US. Such altcoins include Ether (and other such layer-one blockchain infrastructures tokens), Tether (and other “stablecoins”, purportedly pegged in value to some underlying asset) and “governance” tokens such as UNI (used for the management of certain blockchain-based organizations). While recent enforcement actions by the United States Securities and Exchange Commission (“SEC”) and judicial determinations have provided some guidance on the treatment of altcoins under US securities laws, such clarity remains limited.<sup>3</sup> Substantial regulatory uncertainty regarding altcoins remains given the lack of clarity in the application of existing US regulatory

requirements (with guidance to date being case-specific and significantly driven by facts and circumstances), the slow pace to adopt a national legal framework for their regulation, potential discrepancies in the judicial treatment of altcoins and conflicting inter- and intra-agency commentary.<sup>4</sup> A key consideration in the regulation of altcoins is whether they would be deemed securities using the four-part Howey test<sup>5</sup> and the Reves test<sup>6</sup> (see question 12).

In 2022, troubles within the crypto industry came to the forefront and continue to chill crypto markets. In November 2022, FTX, a leading centralized crypto exchange, collapsed, followed by the fall of several crypto-lending companies as well as companies with deep connections to FTX.<sup>7</sup> Several high-profile bankruptcy filings and lawsuits related to fraud and other allegations are ongoing.<sup>8</sup> In November 2023, FTX founder and CEO, Sam Bankman-Fried, was convicted of fraud, conspiracy and money laundering.<sup>9</sup> Although crypto markets have waned, the public sector and businesses continue to explore applications of blockchain in various industries.

One notable development in the public sector pertains to a so-called US Central Bank Digital Currency (“CBDC”). The US Department of Treasury, in conjunction with the White House, the Federal Reserve Board of Governors and others, has been studying the impact and potential efficacy of the United States revamping its dollar through digitization. The CBDC came to the fore in the September 2022 “Comprehensive Framework for Responsible Development of Digital Assets” (the “September 2022 Inter-Agency Framework”) promulgated by the White House in response to an Executive Order issued by President Biden in March of that same year (see question 4). The September 2022 Inter-Agency Framework is the result of input from

various administrative agencies studying the evolution and applications of blockchain technology.<sup>10</sup> The September 2022 Inter-Agency Framework states that the benefits of a CBDC include, among other factors, enabling a more efficient payment system, facilitating faster cross-border transactions, promoting financial inclusion and equity and preserving US global financial leadership by supporting the effectiveness of sanctions. To that end, the September 2022 Inter-Agency Framework reiterated the Biden Administration's call for federal agencies to continue CBDC research and experimentation. While no timeline for a decision on the development and potential adoption of a US CBDC was put forth, the numerous benefits of a hypothetical CBDC extolled by the September 2022 Inter-Agency Framework suggest there is federal interest in exploring the pros and cons of implementing a US CBDC.

Despite the popular focus on bitcoin and altcoins, blockchain applications also extend to a wide cross-section of industries, both in the private and public sectors. For instance, federal agencies, such as the US Food and Drug Administration, the US Department of Health and Human Services, the US Department of Agriculture, the US Department of the Treasury and the US Department of Defense, have launched various blockchain-based initiatives. These initiatives are currently at various stages of maturity, ranging from proof of concept through pilot all the way to production. In one such initiative, the US Food and Drug Administration recruited Frank Yiannas, an expert in traceability technologies in global food supply chains, to work with the agency to incorporate blockchain technology to further strengthen the US Food Supply.<sup>11</sup> The US Department of Agriculture followed suit and certified a Blockchain initiative called BeefChain, which allows customers to trace their beef throughout the supply chain.<sup>12</sup> The US Department of Defense has also been active in the space, awarding multiple contracts to SIMBA Chain, a blockchain application development company, to develop blockchain-based solutions to improve data security systems, provide a secure messaging platform and manage replacement parts inventory for weapons.<sup>13</sup> While not specific to the United States, the United Nations developed Building Blocks, a platform for delivering cryptocurrency-based food vouchers and other aid to refugees around the world.<sup>14</sup> The Building Blocks project has processed over \$529 million in transactions, saving over \$3 million in bank fees. The California Department of Motor Vehicles has plans to issue vehicle titles as NFTs in order to make the process of transferring vehicle titles more efficient, secure and affordable.<sup>15</sup>

Certain states have also shown an interest in facilitating the integration of blockchain by private companies.

Delaware has expressly authorized companies to use blockchain to track corporate shares, clarify property rights, automate cap tables and dividend issuance, provide transparent and accurate proxy voting and to create self-executing certificates of good standing.<sup>16</sup> Elsewhere, Wyoming, Vermont, Tennessee and Utah have each adopted legislation to legally recognize "decentralized autonomous organizations" ("DAOs") organized under their respective state laws (albeit to limited effectiveness in terms of the number of actual registrations by such entities) (see question 17).<sup>17</sup> Since 2015, the New York State Department of Financial Services ("NYDFS") has required a "BitLicense" for engaging in any "virtual currency business activity" as part of its virtual currency regulation (see questions 4 and 5). Furthermore, California is implementing a similar licensing regime regulating "digital financial asset business activity," which will become effective July 1, 2025.<sup>18</sup>

Private sector adoption by major US companies is growing. Over half of the Fortune 100 companies have invested in blockchain initiatives, and over 80% of Fortune 500 executives have already adopted or have plans to adopt blockchain initiatives.<sup>19</sup> We continue to see attempts to incorporate blockchain applications into various facets of companies' operations, from supply chain management and tracking, to making payments, to the core corporate governance of a company. Companies such as IBM and Amazon have offered services that customers can use to build or integrate their own secure blockchain networks.<sup>20</sup> IBM has been developing its IBM Food Trust network that allows participants, including companies like Walmart, to more securely store and share documentation both internally and with third parties in their supply chain and more easily track the location and status of food products.<sup>21</sup> The IBM Food Trust network is also being utilized as a tool to provide customers assurance about the sourcing of certain foods. For example, Nestle uses the IBM Food Trust network to allow customers to scan their coffee products and see the coffee's journey from harvest to shelf.<sup>22</sup> Meanwhile, Proctor & Gamble has partnered with LimeChain to implement smart contracts for its claims management system.<sup>23</sup> Blockchain is finding applications in the financial services industry as well. J.P. Morgan's Liink, a peer-to-peer blockchain network in which over 100 banks are currently participating, allows banks in the network to more easily validate account ownership and receive confirmation of account information in near real time, lowering costs associated with rejected transactions.<sup>24</sup>

## 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.**

It is not possible to fully illustrate the use of digital assets in the US without understanding the history of regulation governing such assets. Until 2018, Initial Coin Offerings (“ICOs”) were the predominant vehicle by which altcoins were offered to the general public.<sup>25</sup> Many altcoins offered during this period were labeled as purported “utility” tokens. At the height of the ICO boom in July 2017, the “SEC” released a Section 21(a) report following an investigation into a German token issuer.<sup>26</sup> The 21(a) report’s analysis for determining whether a digital asset constituted a security disregarded nominal claims of “utility” and instead looked to the four-factor test laid out in the 1946 Supreme Court case of *SEC v. W.J. Howey Co.*<sup>27</sup> In the wake of this report, then-SEC Chairman Jay Clayton stated in 2018 that “every ICO” he had seen, in his view, constituted a security offering.<sup>28</sup> In the end, a flurry of SEC enforcement actions against ICO issuers following the 21(a) report largely halted use of ICOs as an offering mechanism in the United States.<sup>29</sup>

The rise in public interest in cryptocurrencies brought about novel mechanisms by which cryptocurrency developers have sought to offer their tokens to the investing public. For instance, an experimental framework for token-offerings in the wake of the ICO crackdown was the “Simple Agreement for Future Tokens” (“SAFT”). SAFTs were sold as investment contracts in private exempt transactions to accredited investors. The proceeds of such offerings would then be used to develop a blockchain network with the eventual goal of converting such investment contracts into cryptocurrency tokens once the underlying network was sufficiently decentralized to defeat the prospective classification of such tokens as securities.<sup>30</sup> However, the SAFT framework largely died on the vine when the SEC successfully brought actions against two of the framework’s most prolific users in late 2019 for securities law violations stemming from the SAFT’s attempted workaround of securities registration requirements.

Other popular means by which digital tokens have been distributed to the broader public include “play-to-earn” methods of distribution, in which players of certain blockchain-based videogames can earn cryptocurrency yields for time spent performing certain in-game actions.<sup>31</sup> In other instances, developers perform “airdrops” of tokens to network contributors at early stages of development to reward contributions and

create a market for subsequent trading.<sup>32</sup> Still others instead seek to find ways to comply with securities regulation, such as, for example, by offering token sales using the Regulation A+ exemption under the 1933 Securities Act,<sup>33</sup> or, in at least a few instances, a registered token offering.<sup>34</sup>

Taken together, by November 2021, the cumulative global cryptocurrency market cap had reached its all-time peak of about \$3 trillion, with Bitcoin leading the way.<sup>35</sup> This can be partially attributed to US-based companies during this period having added cryptocurrencies, particularly Bitcoin, to their balance sheets as a means of speculation or as a purported store of value.<sup>36</sup> MicroStrategy, a US-based enterprise software company, has been at the forefront of this trend. It has been slowly increasing its reserves since 2020, owning around \$4.9 billion worth of Bitcoin as of October 2023.<sup>37</sup> Notably, the proportionate market cap of the various altcoins that proliferated at this time grew significantly in relation to Bitcoin, with Bitcoin’s value falling from approximately 70% of the total cryptocurrency market in late 2019 to approximately 47% in August 2023.<sup>38</sup> Although 2022 was a volatile year for cryptocurrency with the global market cap falling to below \$1 trillion,<sup>39</sup> the cryptocurrency market has seen general improvement in 2023.<sup>40</sup> In addition, interest in cryptocurrency remains high among investors and in popular culture, as the technology continues to develop, particularly with respect to spot Exchange-Traded Funds (“ETFs”) (see question 13).<sup>41</sup>

In addition, non-fungible tokens (“NFTs”) have quickly gained popularity in the United States, with NFTs linked to everything from digital art, digital trading cards and even digital “land” available for purchase by individuals who viewed the digital space as ripe for investment and providing unique opportunities not otherwise available with physical assets. The NFT market reached \$41 billion in expenditures in 2021 before declining significantly beginning in 2022 and continuing into 2023, with July 2023 marking the third consecutive month with trading volume below \$1 billion.<sup>42</sup>

In the world of digital art, the Bored Ape Yacht Club (“BAYC”), a collection of 10,000 unique “Bored Ape” NFTs, has become the embodiment of the modern crypto art movement through its ability to preserve and effectively market its collection (see question 15).<sup>43</sup> By August 2022, BAYC became the second-largest NFT collection measured by all-time sales volume with more than \$2.3 billion in sales.<sup>44</sup> Just as the production and resale of NFTs continues to fluctuate, the value held by the BAYC NFTs has largely mirrored volatility of the underlying cryptocurrency market.<sup>45</sup> The rapid rise of NFT series like BAYC, as well as other similar NFTs

associated with digital images, might also be partially explained by the fact that regulators had not yet focused on how to treat these “digital trading cards” and issuers therefore perceived wider regulatory berth in which to operate as compared to other digital assets. However, regulatory scrutiny to be applied to over NFT issuers whose offerings resemble securities picked up in 2023, providing what may be a partial explanation for the subdued NFT market performance. For example, in September 2023, the SEC brought an enforcement action against Stoner Cats 2 LLC alleging that the sale of its NFTs to the public through an animated web series called Stoner Cats constituted an unregistered offering of securities in violation of securities laws.<sup>46</sup> The action against Stoner Cats, among others, demonstrated the SEC’s assertion of its authority over the NFT space more broadly.<sup>47</sup>

### **3. To what extent has blockchain technology intersected with ESG (Environment, Social and Governance) outcomes or objectives in your jurisdiction?**

Blockchain technology is often said to have the capability to provide significant social value, such as by hypothetically making financial transactions cheaper and more accessible to the global poor.<sup>48</sup> On the other hand, one of the greatest criticisms of blockchain technology concerns the technology’s environmental impact. The global Bitcoin network consumes an estimated 127 hours of electricity annually, consuming more electricity and emitting more carbon dioxide than entire nations.<sup>49</sup> Some states have started to take this environmental impact into consideration. For instance, the New York State Senate passed a bill in November 2022 implementing a two-year moratorium on new or rendered air permits for energy intensive proof-of-work cryptocurrency mining operations.<sup>50</sup> The bill, signed by Governor Kathy Hochul, is intended to lower fossil fuel and energy consumption through the prevention of new mining operations, which is intended to allow New York to meet its stated carbon emission reduction goals.<sup>51</sup>

On the flipside of the proverbial crypto coin, Texas State Governor Greg Abbott courted crypto-miners to relocate to Texas for the intended ancillary purpose of increasing demand to the Texas power grid, at least during periods of normal usage when energy demand and prices are relatively low.<sup>52</sup> Energy companies in Texas enter into demand response contracts with Bitcoin miners, whereby miners are provided the excess power when there is more supply than demand, but agree to shut off their mining operations at a moment’s notice if there are surges in demand for energy, such as during ice storms or heat waves.<sup>53</sup> In fact, during a June 2023 heatwave

that put stress on the Texas power grid, most industrial-scale Bitcoin miners in Texas shut off their operations—which can consume over 2 gigawatts of energy at their peak—to prevent an outage.<sup>54</sup> Moreover, the guarantee that excess power will be purchased by miners incentivizes investment in additional renewable sources,<sup>55</sup> while also helping balance the Texas power grid to avoid power shortages, like the 2021 power crisis that left more than 4.3 million homes and businesses without power in the middle of a severe winter storm.<sup>56</sup>

Likewise, the federal government has begun to take action regarding the environmental impact of cryptocurrency mining. In 2019, the Congressional Research Service, a research institute that works exclusively with the US Congress, released a paper entitled “Bitcoin, Blockchain, and the Energy Sector”.<sup>57</sup> The paper provides an overview of the environmental concerns relating to blockchain and cryptocurrencies and suggests certain solutions to Congress, including setting minimum energy conservation standards on the equipment and data centers used for mining activities. Additionally, pursuant to Section 5 of the Executive Order issued by President Biden in March 2022 (see question 4), the White House Office of Science and Technology Policy published a report on blockchain technology’s impact on the environment, with a particular focus on cryptocurrency mining.<sup>58</sup>

In May 2023, as part of President Biden’s budget proposal for 2024, the Biden administration introduced the Digital Asset Mining Energy (“DAME”) excise tax, a 30% tax on the cost of electricity that digital asset firms use in their cryptocurrency mining activities.<sup>59</sup> The DAME excise tax was intended to shift the burden of environmental and energy consumption costs of cryptocurrency mining back to the mining firms.<sup>60</sup> It, however, was ultimately not included in the subsequently enacted Fiscal Responsibility Act of 2023.<sup>61</sup> It remains to be seen whether the DAME excise tax or a similar tax to combat detrimental environmental effects of the blockchain industry will be included in future legislation.

US corporations have also started to take environmental impact into consideration in their business practices. Perhaps most notably, in May 2021, Tesla halted its acceptance of Bitcoin as payment for its products, citing the environmental impact of Bitcoin mining as its main concern and stating that it would consider accepting Bitcoin again if more renewable energy is used.<sup>62</sup> Similarly, Wikipedia, which for a time accepted donations in Bitcoin, stopped accepting such payments in early 2022, citing in part the rationalization that Bitcoin was “extremely damaging to the environment.”<sup>63</sup> Likewise, the software development company Mozilla halted



Bitcoin donations in January 2022, citing a need to review the donation policy to ensure it “fits with [its] climate goals.”<sup>64</sup>

While responses by government and private actors have sought to address the environmental costs underlying cryptocurrency mining, the communities that use and mine cryptocurrencies are also considering how they can improve the technology and adapt the protocols to address the intensive energy consumption. One example is the shift from proof-of-work consensus mechanisms to proof-of-stake models. Proof-of-work, the model utilized by Bitcoin and, until September 2022, Ethereum, requires substantially more energy than proof-of-stake to validate transactions. Ethereum’s move to proof-of-stake, in which validators now deploy capital in the form of staked ether rather than energy-intensive computing resources to facilitate network function, was estimated to reduce Ethereum’s energy use by more than 99%.<sup>65</sup> This improvement is recognized in the first institutional-grade crypto ESG ranking, published in 2023, which placed Ethereum at the top of the list.<sup>66</sup> Some remain concerned that proof-of-stake, while undoubtedly better for the environment, may centralize control of the network’s consensus mechanism to those with significant resources (albeit such centralization is also a concern in proof-of-work-based blockchains, especially because cryptocurrency mining requires expensive equipment). There are no serious proposals to move Bitcoin to a proof-of-stake model. However, certain Bitcoin mining operations have sought climate-friendlier forms of mining. For instance, some have adopted technology to capture natural gas seepage from oil extraction facilities to use as fuel to power their energy-intensive Bitcoin mining rigs. According to Crusoe Energy, a company working on this technology, its Bitcoin mining systems reduce up to 63% of carbon dioxide emissions compared to allowing the natural gas to be flared<sup>67</sup> and are diverting 10 million cubic feet per day of natural gas.<sup>68</sup> Other miners have implemented hydro-cooling farms that divert heat generated from mining to greenhouses, fish farms or local communities to reduce climate impact.<sup>69</sup> In any case, blockchain-related environmental concerns will be sure to persist into the immediate future; governments, private actors and cryptocurrency stakeholders will all need to continue to grapple with these issues as blockchain use cases continue to expand.

#### **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?**

Although a clear path to comprehensive regulation for cryptoassets in the US has yet to emerge, policymakers have been considering the issues. In particular, as alluded to in questions 1 and 3, in March 9, 2022, President Biden signed an executive order (“EO”) on ensuring responsible development of cryptoassets. The EO was wide-ranging and required the federal government to study legal, national security and other policy- and technology-related issues with respect to a potential US CBDC and cryptoassets more broadly. The EO suggests that the administration is interested in the policy debate regarding a CBDC and cryptoassets more broadly, particularly because of the intersection of this issue with national security and international financial system leadership.

Three reports published pursuant to Sections 4, 5 and 7 of the EO may be relevant to setting the tone for developing a framework for regulating cryptoassets in the US.<sup>70</sup> The Section 4 report recommended for the Federal Reserve Board (“FRB”) to continue to advance work on a possible CBDC (in case one is determined to be in the national interest), for the US government agencies to encourage use of instant payment systems to support a more competitive, efficient and inclusive US payment landscape, for policymakers to consider establishing a federal framework for payments regulation (in the US, nonbank payment providers are primarily regulated and supervised at the state level), and to prioritize efforts to improve cross-border payments. The Section 5 report broadly encouraged US regulatory and law enforcement authorities to pursue vigilant monitoring of and to issue supervisory guidance and rules for cryptoassets to protect consumers, investors and businesses. The Section 7 report recommended certain priority actions related to illicit financing, including monitoring risks, working with international partners to improve cooperation on and implementation of international anti-money laundering (“AML”)/counter terrorist financing standards, strengthening US regulations and operational frameworks, and improving private sector compliance and information sharing.

Most regulatory scrutiny of blockchain occurs on a case-by-case basis through the federal administrative agencies, particularly regarding the financial industry.<sup>71</sup> Among other things, financial regulators are focused on investor and consumer protection, money laundering and terrorist financing, process and settlement, and

financial stability. Rather than issuing express regulations, agencies have often intervened through the issuance of warnings,<sup>72</sup> guidelines,<sup>73</sup> administrative rulings<sup>74</sup> and, increasingly, enforcement actions,<sup>75</sup> all to further guide industry behavior. However, as federal agencies have seen an increased need for accountability and oversight in the crypto space, this approach is beginning to shift, with agencies conducting reviews of the industry and soliciting comment and guidance from the public with the aim of promulgating express regulations accordingly. For instance, the Financial Crimes Enforcement Network (“FinCEN”) of the US Department of the Treasury recently issued a notice of proposed rulemaking in which it proposed to target illicit financing involving cryptocurrency by identifying cryptocurrency mixing as a class of transactions of “primary money laundering concern”.<sup>76</sup> FinCEN has continued to indicate that additional regulation on the matter is necessary to address the potential uses of cryptocurrency for illicit purposes.

The SEC has also issued official guidance through an agency statement providing a five-year temporary safe harbor for broker-dealers seeking to custody digital assets.<sup>77</sup> The federal bank regulators, the Federal Deposit Insurance Corporation (“FDIC”), the Office of the Comptroller of the Currency (the “OCC”) and the Federal Reserve Board (“FRB”), have issued guidance requiring supervised institutions to notify them if they intend to engage in, or are currently engaged in, any activities involving or related to cryptoassets, as well as statements on the risks posed by activities involving cryptoassets.<sup>78</sup> Additionally, in August 2023, the FRB announced the creation of a so-called “Novel Activities Supervision Program” to focus on enhancing the supervision of novel activities conducted by banking organizations supervised by the Federal Reserve.<sup>79</sup>

While the SEC and Commodity Futures Trading Commission (“CFTC”) would generally oversee the use of blockchain technologies in securities and commodities markets, the FRB, OCC and FDIC together exercise broad supervisory control over US banks and their holding companies, which impacts the ability of these financial institutions to use blockchain technologies, including to provide cryptoasset services. While there is not a settled regulatory framework to date, bank regulators have a number of policy levers at their disposal, including through their interpretation of the scope of permissible activities for banks and their holding companies, determination of the regulatory capital treatment for digital asset holdings, chartering authorities and oversight of the US payments system. The view on a US CBDC has been varied at the FRB and the agency is still in the exploratory phase of the policy process (see question 6).

In recent years, federal agencies have coordinated on developing a set of policy frameworks through interagency “sprint” teams and the President’s Working Group on Financial Markets (“PWG”), which includes Treasury Secretary Janet Yellen, Federal Reserve Chair Jerome Powell and SEC Chair Gary Gensler.<sup>80</sup> An early product of the PWG efforts was a November 2021 report<sup>81</sup> that identified several high-priority risks present in stablecoin markets, including market integrity and manipulation concerns, heightened risk of fraud and money laundering and a potential future risk to the broader financial system caused by over-leverage. The report also indicated that stablecoins may constitute commodities, securities or derivatives, but offered little guidance in distinguishing between each. At the end of June 2022, Treasury Secretary Yellen called a meeting of the PWG to discuss stablecoin risks. The readout from the meeting noted Secretary Yellen’s view that there need to be “serious legislative efforts” and highlights the need for a “federal framework on a consistent and comprehensive basis.”<sup>82</sup> While the banking turmoil that occurred in the spring of 2023 has diverted some of regulators’ attention from developing policy frameworks for blockchain and cryptoassets, the issues remain a priority for the federal financial regulators.<sup>83</sup> It is also noteworthy that, throughout 2023, the SEC brought enforcement actions that alleged stablecoins as part of a broader scheme constituted unregistered securities, including the algorithmic stablecoin UST in an action against Terraform Labs PTE Ltd and Do Hyeong Kwon.<sup>84</sup>

The need for interagency coordination where there is overlapping authority or no clear authority may slow down the policy process without greater clarity from Congress. In September 2021, SEC Chair Gary Gensler noted in his testimony before the Senate Committee on Banking, Housing, and Urban Affairs that there is a regulatory gap in coordination among the agencies that needs to be filled.<sup>85</sup> Regulators have also indicated that certain key policy issues regarding cryptoassets may require additional congressional direction. For instance, in September 2023, Federal Reserve Vice Chair for Supervision Michael Barr said the “Federal Reserve has made no decision on issuing a CBDC and would only proceed with the issuance of a CBDC with clear support from the executive branch and authorizing legislation from Congress.”<sup>86</sup>

To this end, there have also been various blockchain bills in front of the Senate and the House of Representatives over the past several years. Most notable in terms of recent legislative attempts were the introduction of various bills in 2022 and 2023 designed to regulate digital assets. The first such bill, the “Lummis-Gillibrand Responsible Financial Innovation Act” (“RFIA”) (first introduced in 2022 and reintroduced in 2023) would see

digital assets largely regulated as commodities under the supervision of the CFTC, subject to certain qualifying characteristics that distinguish such assets from investment contract securities. The RFIA also provides for a transition period with certain SEC reporting requirements until such a time that the digital asset in question was sufficiently decentralized such that it could defeat categorization as a security; similar to safe harbor proposals put forward by SEC Commissioner Hester Peirce (see question 6). The second bill, the “Boozman-Stabenow Digital Commodities Consumer Protection Act of 2022,” would see the CFTC get exclusive jurisdiction over the digital commodities spot market and, among other things, impose certain AML requirements on digital commodity platforms.<sup>87</sup> These bills demonstrate willingness on the part of some members of the US Congress to carefully consider blockchain technology and examine how best to facilitate and support its adoption, particularly following the collapse of FTX and other large-scale crypto failures with widespread ramifications. While a number of other legislative proposals regulating cryptoassets and/or stablecoins also have been introduced over the past few years, including Senator Pat Toomey’s release of a discussion draft of the Stablecoin TRUST Act of 2022, which would provide licensing options for both banks and nonbank companies to issue stablecoins,<sup>88</sup> the collapse of FTX and other large-scale crypto failures had a major chilling effect on US legislation aiming to provide clarity on the treatment of digital assets.

In July, the House Financial Services Committee (“HFSC”) and House Committee on Agriculture introduced the Financial Innovation and Technology for the 21st Century Act (“FIT”). The bill represents a comprehensive framework for digital asset issuance and trading, divvying up jurisdiction to regulate these assets between the SEC and CFTC.<sup>89</sup> Also in July, the HFSC advanced the Clarity for Payment of Stablecoins Act of 2023 out of committee. If passed by the House and Senate, the bill would create regulatory oversight for the issuance of stablecoins, including bank-like regulation for nonbank issuers. The bill would amend certain US statutes to make clear that payment stablecoins are not securities for purposes of the Investment Advisers Act of 1940, the Investment Company Act of 1940, the Securities Act of 1933, the Securities Exchange Act of 1934 and the Securities Investor Protection Act of 1970.<sup>90</sup>

On stablecoin legislation, most recently, the House approved a version of the Clarity for Payment Stablecoins Act introduced by House Financial Services Committee Chairman Patrick McHenry (the “McHenry Bill”).<sup>91</sup> The bill would establish a regulatory framework for issuers of stablecoins and, among other things, make clear that payment stablecoins are not securities for

purposes of US securities laws. However, the bill is unlikely to be enacted in its current form due to a lack of broad bipartisan support.

Legislative proposals have been put forth that are also aimed at combating money laundering and terrorism financing using cryptocurrencies.<sup>92</sup> Further, an amendment was introduced to the Fiscal Year 2024 National Defense Authorization Act that would require federal regulators to establish examination standards for financial institutions engaged in crypto asset activities.<sup>93</sup> At the state level, legislatures have been more active, with responses ranging from outright hostility to the technology to blanket exemptions from applicable rules. In particular, the state of Wyoming has made a name for itself by passing particularly crypto-friendly legislation and regulation. For instance, in 2019, the Wyoming legislature enacted the Special Purpose Depository Institutions Act, which created a new type of financial institution named a special purpose depository institution (“SPDI”). An SPDI is a state-chartered bank with a focus on digital assets that is permitted to provide typical banking services, such as custody services and fiduciary asset management.<sup>94</sup> The state requires SPDIs to maintain liquid asset reserves valued at 100% of all depository liabilities and prohibits SPDIs from making loans with customer deposits of fiat currency.<sup>95</sup> As of mid-2021, Wyoming had already granted four SPDI charters to financial institutions interested in providing banking services for digital assets.<sup>96</sup> Since 2015, the “NYDFS” has required entities engaging in any “virtual currency business activity” to obtain a “Bitlicense” under its virtual currency regulation (see question 13).<sup>97</sup> California will implement a similar licensing regime regulating “digital financial asset business activity” (see question 1).

The NYDFS has also been active in issuing public guidance for licensees engaged in cryptoasset activities.<sup>98</sup> The NYDFS guidance for stablecoin issuers is particularly notable as there currently is no other comprehensive state or federal law specifically regulating issuance of stablecoins.<sup>99</sup> Since the inception of its virtual currency regulation, the NYDFS has granted licenses to more than 30 entities to engage in virtual currency businesses (see question 14).<sup>100</sup> Other actions by state banking regulators include the Texas guidance that Texas state-chartered banks may provide cryptoasset custody services<sup>101</sup> and Virginia and Louisiana laws setting forth the conditions under which their state-chartered banks may offer cryptoasset custody services.<sup>102</sup>

Further, numerous states have decided to regulate certain payments-related activities involving cryptoassets under their money transmission laws<sup>103</sup> or



standalone regimes (i.e., those discussed above in New York and California). As a general matter, under these laws, persons must obtain a license prior to engaging in regulated activities and thereafter comply with other requirements (e.g., permissible investments, reporting).

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

Certain US financial regulators are active on the enforcement front to address case-by-case issues when they are perceived to violate the existing legal framework.

While the federal banking regulators continue to develop their approach to blockchain and cryptoasset issues, the main requirement issued to date has been for all regulated institutions to notify them before engaging in cryptoasset or cryptoasset-related activities and to implement adequate risk management systems and controls to conduct such activities in a safe and sound manner and consistent with applicable law (see question 4). In early 2023, the banking regulators noted that events in 2022 evidenced significant volatility and vulnerabilities in the cryptoasset sector and that they expected regulated institutions to address a range of key risks associated with cryptoassets and cryptoasset sector participants before engaging in cryptoasset activities.<sup>104</sup> Moreover, the agencies strongly discouraged their regulated institutions from “issuing or holding as principal crypto-assets that are issued, stored, or transferred on an open, public, and/or decentralized network” and from “business models that are concentrated in crypto-asset-related activities or have concentrated exposures to the crypto-asset sector.”<sup>105</sup> Due to these and other concerns, the Federal Reserve Board denied an application by a state bank with a business model focused almost entirely on the cryptoasset sector to become a member of the Federal Reserve System.<sup>106</sup>

The SEC’s role in regulating the cryptoasset industry, among other US agencies, escalated significantly near the end of 2022 leading into 2023 in the wake of the collapse of FTX, once one of the world’s largest cryptocurrency trading platforms/exchanges.<sup>107</sup> Of particular note is the increased number of enforcement actions the agency has taken against centralized exchanges, including Beaxy, Binance and Coinbase.

US agencies continue to evaluate the potential risks to the financial system posed by blockchain and cryptoassets and the need for additional regulatory frameworks to address these risks (see question 4).

Providing additional legal clarity on blockchain and cryptoassets has become a priority for many agencies as the technology continues to become prevalent in the financial markets. For example, in April 2023, the SEC reopened the comment period on its proposed amendments to securities laws to expand the definition of “exchange” to include cryptoasset trading programs, widening the scope of the agency’s purview in the cryptoasset space.<sup>108</sup> The SEC indicated its plan to have the rule finalized in the remainder of 2023.<sup>109</sup> In June 2021, FinCEN released its first list of anti-money laundering and countering the financing of terrorism priorities, which included consideration of “virtual assets” and their uses for illicit activities.<sup>110</sup> In August 2022, the Office of Foreign Assets Control (“OFAC”) sanctioned Tornado cash, a smart contract mixer, claiming the platform helped to launder more than \$7 billion worth of cryptocurrency since its creation in 2019, including over \$455 million stolen by the North Korean-linked hackers Lazarus Group. In the wake of the hack, SEC Chair Gary Gensler reiterated his long-standing and oft-repeated views that digital assets are too often used to “skirt [the US’s] laws with respect to anti-money laundering, sanctions, and tax collection” and that “legislative priority should center on crypto trading, lending, and DeFi platforms.”<sup>111</sup> While the OFAC sanctions were challenged by users of the service, in at least one of the cases challenging the sanctions, the court granted summary judgment in favor of the Department of the Treasury and denied the plaintiff’s motion for summary judgment.<sup>112</sup> Some US agency officials have indicated their intention to take a “careful and cautious approach to crypto activities,” wary of unintended consequences should digital assets be pulled into the regulatory perimeter too hastily.<sup>113</sup> In other words, “for [some] financial regulators, not chasing means sticking to our guns and not lowering our standards when dealing with crypto.”<sup>114</sup>

As the agencies examine the risk of blockchain and cryptoassets, their public reports and other work products provide some insight into the agencies’ views on blockchain technology and digital assets. For instance, the IMF report on stablecoins raised a range of concerns regarding cryptoassets, including the potential for destabilizing runs, legal uncertainty, lack of consumer and investment protections and concentration of economic power.<sup>115</sup> The FRB Vice Chair for Supervision, Michael Barr, reiterated these concerns in a recent speech, emphasizing the importance of “ensur[ing] that we do not allow for new forms of unregulated private money subject to classic forms of run risk, and with the associated spillovers and systemic implications for households, businesses, and the broader economy.”<sup>116</sup> More broadly, the OCC, in its recently published semiannual risk perspective, said that the

“OCC continues to approach crypto-asset products, services, and activities cautiously for a variety of reasons, including high volatility, high-risk lending, excessive leverage, interconnectedness, concentration within the crypto industry, and lack of comprehensive regulation.”<sup>117</sup> Additionally, high-profile SEC enforcement actions against cryptoasset market participants and repeated statements by Chair Gensler provide a clear indication of the agency’s concerns regarding digital assets.

Not surprisingly, given the role of the FRB and Reserve Banks in payment systems in the US as the gatekeeper for access to the Federal Reserve accounts and services, the potential use of cryptoassets, particularly stablecoins, as a means of payment has given the agency some pause. FRB Chair Jerome Powell recently noted during testimony before the House Financial Services Committee that the FRB “see[s] stablecoins as a form of money, and in all advanced economies, the ultimate source of credibility in money is the central bank” and the FRB “believe[s] it would be appropriate to have quite a robust federal role.”<sup>118</sup> Such concerns also may inform FRB views regarding a US CBDC (see question 6).

Certain states and local governments have indicated an interest in using blockchain initiatives as a means to attract investment. Nonetheless, many state officials remain skeptical about digital assets, and enforcement actions brought by state attorneys general against private entities are not uncommon in the cryptocurrency space. For example, NYDFS has had cryptocurrency regulations in place since 2015 (see question 4) and the New York Attorney General’s office (“NYAG”) has issued alerts to investors recommending “extreme caution when investing in virtual currencies.”<sup>119</sup> Notably, in February 2021, the NYAG reached an \$18.5 million settlement with cryptocurrency exchange Bitfinex and stablecoin issuer Tether that required both entities to cease all trading activity in New York. New York Attorney General Letitia James, speaking of cryptocurrency offerings, stated that the NYAG will “not hesitate to take action against anyone who violates the law.”<sup>120</sup> In May 2023, the NYAG proposed legislation to tighten regulations on the cryptoasset industry, advancing what the NYAG describes as the most comprehensive set of regulations on cryptocurrency in the US.<sup>121</sup> More recently, the NYDFS directed cryptocurrency firm Paxos Trust Co. to stop minting the Binance-branded USD stablecoin (“BUSD”) as a result of unresolved issues relating to Paxos’ oversight of the BUSD raised by the SEC.<sup>122</sup> States will need to continue to balance the potential economic opportunities that blockchain technology can provide with the need to protect investors new to the space and the overarching

regulatory efforts of US agencies.

## **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 or a central bank digital currency initiative)?**

Certain US federal agencies and states have followed European countries with a regulatory sandbox approach to develop blockchain in the financial technology industry. The Consumer Financial Protection Bureau (“CFPB”) and CFTC pioneered an early regulatory sandbox for fintech companies, similar to those created in the U.K., aimed at, amongst others, cryptocurrencies and other blockchain-based financial technologies.<sup>123</sup> Some states, such as Arizona, Florida, West Virginia, Wyoming and Utah, followed suit, enacting legislation to create regulatory sandbox initiatives related to cryptocurrency.<sup>124</sup> In April 2021, SEC Commissioner Hester Peirce published the Token Safe Harbor Proposal 2.0, outlining a proposed time-limited safe harbor for token-based startups to launch blockchain networks before having to comply with federal securities laws. The safe harbor proposal, while not adopted, has served as a template for subsequent bills such as the Lummis-Gillibrand proposal (see question 4). Finally, some federal and state bank regulators have started to license and provide guidance for banks seeking to provide cryptoasset or cryptoasset-related services (see question 5). However, much additional work needs to be done and the regulatory landscape remains uncertain.

The US is still very much in an exploratory phase with respect to a US CBDC. In January 2022, the FRB released its long-awaited paper on a potential US CBDC that summarized what are by now fairly well-known risks and benefits of a CBDC and confirmed that the FRB will not issue a CBDC without clear and broad support.<sup>125</sup> As noted above, views on a US CBDC vary at the FRB and in Congress. For example, former FRB Vice Chair Brainard recently stated in a speech that “digital native form of safe central bank money could enhance stability by providing the neutral trusted settlement layer in the future crypto financial system” and could be a “natural evolution” in payments.<sup>126</sup> Governor Michelle Bowman stated in a speech earlier this year that “[i]t is important that we thoughtfully examine the evolving money and payments landscape and digital innovations broadly, including a potential US CBDC.”<sup>127</sup> Representative Tom Emmer (R-MN) recently reintroduced a bill that would prohibit the Federal Reserve from issuing a CBDC and from using a CBDC to implement monetary policy.<sup>128</sup>

Additionally, the Section 4 report published under the EO recommended for the FRB to continue to advance work on a possible CBDC (in case one is determined to be in the national interest).<sup>129</sup>

### **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 blockchain issues. Perhaps most notable is the SEC's specialized Crypto Assets and Cyber Unit, created in 2017 and tasked with enforcement actions brought in relation to securities violations pertaining to cryptocurrency and digital assets. The Crypto Assets and Cyber Unit expanded significantly in 2022, doubling in size and expanding its enforcement actions to encompass digital asset offerings and exchanges, lending and staking products, DeFi platforms, NFTs and stablecoins.<sup>130</sup> To date the SEC has brought more than 100 crypto enforcement actions and recovered more than \$2.5 billion in monetary relief.<sup>131</sup>

As noted above, the FRB in January 2022 published a white paper on a potential US CBDC (see question 6). The PWG also in November 2021 published a report on the potential risks posed by stablecoins (see question 4). The Treasury led a number of additional reports covering cryptoassets and a US CBDC required under President Biden's EO (see question 4). For example, the Treasury, in consultation with a number of other agencies, delivered to President Biden a framework for interagency engagement with foreign counterparts and in international fora as directed by the EO.<sup>132</sup> In addition, the US banking regulators typically adopt prudential standards formulated by the Basel Committee on Banking Supervision. In December 2022, the Basel Committee on Banking Supervision finalized its prudential standard for crypto-asset exposures.<sup>133</sup> The takeaways from these developments are still to be seen, but based on public statements from officials to date, blockchain, particularly as applied to cryptoassets, will likely not escape regulation. In recent speeches, FRB Vice Chair for Supervision, Michael Barr, stated that "[c]rypto-asset related activity, both outside and inside supervised banks, requires oversight so that people are fully aware of the risks they face."<sup>134</sup> Vice Chair Barr's statements indicate that any cryptoasset activity inside banks likely will be regulated "based on the principle that activities that are fundamentally the same should be regulated the same, regardless of where or how the activities occur or the terms used to describe the

activity."<sup>135</sup>

### **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.<sup>136</sup> 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.<sup>137</sup> The SEC's guidance, while helpful, is generally imprecise and fails to offer safe harbors or specific direction to ensure that digital asset offerings do not cross the line to constitute security offerings. Rather than defining a readily applicable bright-line test, the SEC guidance offers many relevant characteristics that provide uncertain degrees of persuasiveness that determine whether a digital asset may constitute a security. Determinations under the framework may therefore become unpredictable when applied to novel, real-world blockchain-based applications. Additionally, as the Ripple Labs case makes clear (see question 18), whether a digital asset is part of a securities offering is a case-by-case determination—such that the same digital asset could be considered part of a securities offering in some transactions but not others.

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. Separately, the CFTC released guidance in October 2020 specifically addressing best practices for how futures commission merchants should hold customer virtual currency funds, including guidance relating to segregation of virtual currencies and depositing such currencies with financial institutions.<sup>138</sup>

Previously, the OCC had released a series of interpretive letters under former Acting Comptroller Brian Brooks that opened the door to and signaled support for the expansion of banking services relating to cryptocurrencies and stablecoins. In July 2020, the OCC issued guidance allowing national banks and federal savings associations to provide custody services for cryptocurrencies, including the safekeeping of cryptographic keys.<sup>139</sup> In September 2020, the OCC issued guidance allowing national banks and federal

savings associations to hold dollar deposits serving as reserves backing stablecoin in certain circumstances.<sup>140</sup> The SEC concurrently released a staff statement encouraging stablecoin issuers to engage with the agency in structuring token offerings to ensure compliance with federal securities laws and noting that SEC staff is prepared to provide confirmation on an ad hoc basis that it will not take enforcement action against particular market participants with respect to specific digital tokens.<sup>141</sup> In January 2021, the OCC published another interpretive letter clarifying the authority of national banks and federal savings associations to (1) act as nodes on an independent node verification network (i.e., distributed ledger) to verify customer payments and (2) engage in certain stablecoin activities to facilitate payment transactions on a distributed ledger.<sup>142</sup> However, under current Acting Comptroller Michael Hsu, the OCC has taken what Hsu has publicly called a “careful and cautious” approach.<sup>143</sup> Specifically, the OCC issued Interpretive Letter 1179, which clarified that national banks and federal savings associations must receive OCC non-objection and demonstrate that their cryptoasset activities can be performed in a safe and sound manner prior to engaging in the activities described under the previous interpretive letters. Acting Comptroller Hsu has stated that the agency intends to maintain this “careful and cautious” approach for the foreseeable future.<sup>144</sup> The other federal banking agencies have adopted similar prior notice requirements (see question 4), and the Federal Reserve Board has also generally imposed the same limits on its regulated banks (when engaging in activities as principal) that the OCC Interpretive Letter 1179 imposes on OCC-regulated banks.<sup>145</sup> Further, in early 2023, the banking regulators issued a joint statement on crypto risks to banking organizations (see question 4). Moreover, the agencies strongly discouraged their regulated institutions from “issuing or holding as principal crypto-assets that are issued, stored, or transferred on an open, public, and/or decentralized network” and from “business models that are concentrated in crypto-asset-related activities or have concentrated exposures to the crypto-asset sector” (see question 4).

A common thread with regard to the various pieces of official guidance from financial regulators continues to be 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. Any future rulemaking will likely follow this trend. For example, the proposal for prudential treatment of cryptoassets put forth by Basel Committee on Banking Supervision in its public consultation applies the concept of “technology neutrality.”<sup>146</sup> The standards were finalized this year, and the US banking regulators typically adopt prudential

standards from the Basel Committee of Banking Supervision. SEC Chair Gary Gensler has also publicly claimed that he is “technology-neutral.”<sup>147</sup>

## 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. However, there is not currently a settled approach to their regulatory treatment as agencies continue to examine their risks. At the state level, the US has a split between pro-blockchain states, which pass favorable regulations such as cryptocurrency exemptions from state securities laws,<sup>148</sup> blockchain-cautious states, which issue warnings mainly related to cryptocurrency investments,<sup>149</sup> and blockchain-restrictive states, which issue cryptocurrency restrictions.<sup>150</sup> 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,<sup>151</sup> while the CFTC has deemed virtual currencies such as Bitcoin to be commodities.<sup>152</sup>

As cryptocurrency trading becomes more popular, the IRS and the federal government have become more focused on ensuring tax compliance. In 2018, the IRS announced the Virtual Currency Campaign to target noncompliance related to the use of cryptocurrency through outreach and examination.<sup>153</sup> And at a virtual tax conference in 2021, the IRS unveiled “Operation Hidden Treasure,” an initiative housed within the IRS’s emerging threats mitigation team and designed to root out and capture gain from unreported crypto transactions.<sup>154</sup>

The IRS’s recent enforcement efforts include leveraging John Doe Summons to produce taxpayer records;<sup>155</sup> launching the Digital Assets Initiative intended to oversee and coordinate the agency’s strategic response for digital assets;<sup>156</sup> and forming partnerships with private sector actors.<sup>157</sup> Further, in 2020, the IRS added a question at the top of Form 1040 (individual income tax return) about virtual currency transactions,<sup>158</sup> and in 2021, the IRS revised the question to be about digital assets transactions.<sup>159</sup> The IRS has also repeatedly reminded taxpayers of their obligation to report gains related to digital assets.

Additionally, late in 2022, the IRS established a new project director of the IRS Digital Assets Initiative, who



will “oversee the implementation and execution of the new IRS enterprise digital assets strategy.”<sup>160</sup> In April 2023, the IRS announced its plans to establish the Advanced Collaboration and Data Center, which will modernize investigative practices to crack down on “highly technical and cryptocurrency-related crimes.”<sup>161</sup> The IRS will likely be able to continue its efforts due to new funding allocations. In August 2022, the Biden Administration signed the Inflation Reduction Act (“IRA”) into law, allocating \$45.6 billion to the IRS to use in enforcement operations over the next decade.<sup>162</sup> The bill specifically mentioned that the IRS enforcement money was intended to support “digital asset monitoring and compliance activities.”<sup>163</sup> Indeed, the agency stated that it will capitalize on the IRA funding and a recent “top-to-bottom review” of its enforcement efforts to “restore fairness to the tax system in FY24.”<sup>164</sup>

In addition to its enforcement efforts, the IRS has provided substantial guidance in various subregulatory materials. In 2014, the IRS released guidance providing that cryptocurrencies constitute property for US federal income tax purposes and discussing tax consequences of common transactions, such as mining, resulting from that treatment.<sup>165</sup> Subsequently, the IRS has released additional guidance clarifying and discussing the treatment of other transactions involving cryptocurrency, including forks and airdrops.<sup>166</sup>

In November 2021, Congress enacted the Infrastructure Investment and Jobs Act (“IIJA”), a \$1 trillion infrastructure bill aimed at replacing and repairing bridges and roads in the United States.<sup>167</sup> To partially fund this expensive undertaking, the IIJA imposes stricter tax-reporting requirements on cryptocurrency brokers.<sup>168</sup> The IIJA also introduced the first legislative definition of “digital asset,” which captures cryptocurrency and similar items, in the US Internal Revenue Code (the “Code”) and expanded the definition of “broker” in the Code to include persons effectuating transfers of digital assets.<sup>169</sup> Congress’ joint committee estimates that these stricter requirements will generate \$28 billion over the next decade.<sup>170</sup> In response to the IIJA, the IRS recently released proposed Treasury regulations that address crypto tax reporting.<sup>171</sup> These proposed regulations would require brokers to report sales and exchanges of digital assets by customers and clarify that the definition of “broker” expanded by the IIJA includes digital asset trading platforms, payment processors and certain wallet providers, but not miners and validators.<sup>172</sup> The regulations would apply to transactions on or after January 1, 2025,<sup>173</sup> and the proceeds would need to be reported to the IRS on new Form 1099-DA, which has yet to be published.<sup>174</sup> The proposed regulations are currently under an extended public comment period through mid-November 2023,<sup>175</sup> with public hearings

scheduled for early November.

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. With the passing of the Anti-Money Laundering Act of 2020, which became law on January 1, 2021, cryptocurrencies and other digital assets were officially brought within the scope of the Bank Secrecy Act—an act that imposes obligations on financial institutions aimed at preventing money laundering and terrorism financing.<sup>176</sup> The Anti-Money Laundering Act, in conjunction with the FinCEN notice of proposed rulemaking in December 2020 that proposed more stringent reporting and identity verification obligations on banks and money service businesses for transactions involving certain cryptocurrency wallets,<sup>177</sup> illustrate the federal government’s focus on ensuring that the threat of money laundering through the use of Bitcoin and other cryptocurrencies is being adequately addressed. In October, FinCEN also issued a notice of proposed rulemaking that identifies crypto mixing services as a class of transactions of primary money laundering concern and proposes to increase reporting requirements for covered financial institutions, which would include many centralized exchanges.<sup>178</sup>

Regarding notable recent enforcement, in October 2020, the Department of Justice (the “DOJ”) announced the indictment of the founders of BitMEX and certain related entities, charging them with conspiracy to violate the Bank Secrecy Act by willfully failing to establish, implement and maintain an adequate anti-money laundering program.<sup>179</sup> In August 2021, the US District Court for the Southern District of New York entered a consent order requiring the five entities charged with operating the BitMEX cryptocurrency platform to pay a \$100 million civil monetary penalty for various violations, including failure to adequately implement an anti-money laundering program.<sup>180</sup>

On August 8, 2022, OFAC added Tornado Cash, a cryptocurrency mixing service that facilitates anonymous transactions, to its Specially Designated Nationals and Blocked Persons list (“SDN list”), claiming Tornado “launders the proceeds of cybercrimes, including those committed against victims in the United States.”<sup>181</sup> The OFAC sanctions effectively prohibit US entities and individuals from interacting with the application. While this was not the first time that a cryptocurrency mixer was sanctioned by OFAC (Blender.io was similarly sanctioned in May 2022), this was the first time that a noncustodial, open-source protocol (as opposed to an identifiable entity) has been



sanctioned by OFAC. The sanctions were challenged in the US District Court for the Western District of Texas and the US District Court for the Northern District of Florida. In August 2023, the court granted summary judgment in favor of the Department of the Treasury and denied the plaintiff's motion for summary judgment in the Western District of Texas case.<sup>182</sup>

## **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 and financial regulations imposed by numerous US regulators, including: (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 FinCEN's applicable regulations. The US may not have an entire regulatory framework specific to cryptocurrencies yet, but this does not exempt cryptocurrency from the regulations which are already in place and may be triggered by such transactions; however, the status of any particular cryptocurrency under existing regulations may not be entirely clear.

## **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 digital asset offerings and to publish various statements for investors warning about the risks and potential for fraud when investing in digital assets.<sup>183</sup> 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. Since then, the SEC has continued to bring enforcement actions against unregistered digital asset issuers and exchanges, and SEC Chair Gary Gensler has called for more comprehensive regulation of the space, expressing serious concern relating to fraud, tax compliance and anti-money laundering issues that he views as rampant in the cryptocurrency sphere.<sup>184</sup>

## **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 digital asset offerings. The issue is whether the digital asset being offered or sold to the public 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; and (4) managerial or entrepreneurial effort from others.<sup>185</sup> 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.<sup>186</sup> An offering or sale of digital assets is not de facto categorized as a securities offering. However, the SEC has stated that a great many digital assets are in fact securities and it can be challenging to determine that a digital asset sale does not involve the sale of securities. Given the attitude of both past and present SEC Chairmen that "every [digital asset offering they] have seen is a security,"<sup>187</sup> the safest approach to avoid violating the securities laws is for companies to either (i) register the offering and issue a prospectus, (ii) seek No Action Letters ("NALs") from the SEC's Division of Corporation Finance to confirm no enforcement actions will be undertaken should the company sell the digital assets without first registering them under the Securities Act of 1933 and the Securities and Exchange Act of 1934 or (iii) conduct the offer and sale of digital assets "offshore" to individuals outside of the United States under the safe harbor of Regulation S.<sup>188</sup> Other than complying with the securities law requirements or requesting a NAL, there is no bright-line approach to determining the status of the digital asset tied to the ICO. The determination as to whether a digital asset is a "security" is very fact-specific and there have been disagreements between the SEC and the courts on this issue.<sup>189</sup>

## **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 trading centers, which allow consumers to trade/exchange their cryptocurrency into various assets, whether it be fiat currencies or other cryptocurrencies. There are also some mainstream financial institutions that offer access to a limited number of cryptocurrencies. Mainstream industry players have become less hesitant and have

taken some steps to become involved with cryptocurrency in different capacities. In October 2022, the Bank of New York Mellon announced that it would begin offering its service offerings for holding and transferring bitcoin and ether.<sup>190</sup> In 2021, Morgan Stanley began offering access to Bitcoin through a third-party issuance from Galaxy Digital.<sup>191</sup> U.S. Bank and Goldman Sachs also announced plans to start offering high-net worth clients access to Bitcoin and Ethereum through Galaxy Digital, executing its first over-the-counter crypto transaction in March 2022.<sup>192</sup> J.P. Morgan Chase developed a platform called Onyx that offers a wide range of services and investment offerings relating to blockchain technology.<sup>193</sup> In 2022, KKR created the first digital asset management platform of its kind that manages and tokenizes institutional-grade products, leveraging blockchain-enabled capital market infrastructure and superior risk management to tailor innovative financial solutions.<sup>194</sup>

Over the past few years, the SEC has rejected several applications to create spot Bitcoin-backed ETFs.<sup>195</sup> In contrast, the SEC has approved multiple Bitcoin futures ETFs.<sup>196</sup> The SEC has expressed its view that the disparate treatment between spot ETFs and futures ETFs is warranted given the purported differences in the underlying markets for the assets that each type of ETF would hold. Namely, futures ETFs hold derivatives contracts to buy or sell Bitcoin at a predetermined price and specified time in the future and trade on a CFTC-regulated exchange. In contrast, spot Bitcoin ETFs do not trade on a CFTC-regulated exchange and hold actual bitcoin (rather than derivatives contracts). Spot Bitcoin ETF performance would therefore be more directly tied to the actual price of Bitcoin. However, in August 2023, a US federal appeals court concluded that the SEC's denial in June 2022 of Grayscale Investment, LLC's application to create a spot Bitcoin ETF was "arbitrary and capricious" given the SEC's failure to differentiate its treatment of spot Bitcoin ETFs from the Bitcoin futures ETFs it had approved.<sup>197</sup> SEC Chair Gary Gensler has since stated that the agency is not planning to appeal the decision. The court's determination may clear a path for the SEC's approval of the June 2022 application, as well as for the eight to ten spot Bitcoin ETF filings awaiting the agency's determination as of October 26, 2023.<sup>198</sup> Recent increases in Bitcoin prices demonstrate the market's optimism for the first SEC-approved spot Bitcoin ETF, with some projecting that the long-awaited approval, once granted, will serve as the means of revitalizing the cryptocurrency market.<sup>199</sup>

In April 2022, the SEC released Staff Accounting Bulletin No. 121 ("SAB 121"), which provides interpretive guidance for SEC-reporting entities that engage in activities in which they have an obligation to safeguard

customers' cryptoassets. SAB 121 requires those entities to record a liability with a corresponding asset, as well as disclosure of the nature and amount of cryptoassets that the entity is responsible for safeguarding.<sup>200</sup> The SEC noted that it has observed an increase in the number of companies providing platform users with the ability to transact in cryptoassets and that performing these services present unique risks, including technological, legal and regulatory risks, associated but not otherwise widely present with more traditional asset classes.

Throughout 2022 and 2023, Gary Gensler made comments regarding the SEC's potential oversight of crypto exchanges. He remarked that intermediaries in the crypto market provide a range of functions regulated by the SEC, including operating as an exchange, broker-dealer, clearing agent and custodian, and should be registered accordingly. Gensler asked SEC staff to work with crypto intermediaries to ensure they register each of their functions.<sup>201</sup> These comments continue to expand the universe of crypto market actors that the SEC believes fall within their regulatory purview and creates uncertainty for these entities and their activities in the market. Consistent with these comments, throughout 2023, the SEC brought enforcement actions against centralized trading platforms/exchanges, including Beaxy, Binance and Coinbase, alleging, among other things, that they operated as unregistered "exchanges, broker-dealers and clearing agencies" in violation of the federal securities laws.

#### **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, the RFA and FIT (discussed in question 4) would provide the CFTC and SEC with respective authority over different aspects of digital assets, providing greater legal certainty.

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

Previously, there had been a question of how cryptoassets should be treated under the Uniform Commercial Code (“UCC”). The UCC is a set of laws adopted by the states that govern commercial transactions, including the creation and perfection of security interests. Notably, UCC § 1-201(a)(24) defines “money” as “a medium of exchange currently authorized or adopted by a domestic or foreign government.”<sup>202</sup> In July 2022, the Uniform Law Commission, which develops and updates model statutes, including the UCC, on which states often base their enacted statutes, revised the definition of “money” under the UCC such that the only cryptocurrencies that could be considered “money” are ones that are created by a government, effectively ensuring that Bitcoin and all other major cryptocurrencies will be treated as general intangibles.<sup>203</sup> At least five states have enacted these amendments (Washington, New Mexico, Colorado, Indiana and North Dakota), providing for greater clarity regarding the perfection, control, and negotiability of different cryptoassets and cryptoasset arrangements, including those used by nonbanks, such as trading platforms.<sup>204</sup>

Another issue that has garnered attention in the United States involves the transfer, or lack thereof, of an NFT’s associated intellectual property rights upon a sale. Under US copyright law, a transfer of copyright ownership requires a signed writing to be valid.<sup>205</sup> In the absence of an agreement to the contrary, the transfer of title to or sale of an NFT does not itself transfer ownership of the underlying copyright associated with the NFT. For instance, upon the sale of an NFT involving a piece of digital art, the buyer would own certain rights to that specific piece of art, but only the copyright holder, likely the artist, would have the right to create copies or derivative works of the digital art or otherwise exploit its associated intellectual property. Art-linked NFTs also raise trademark and copyright infringement concerns based on the visual works associated with each NFT. Three trademark cases this year demonstrate the nexus between NFTs and trademark rights. In February 2023, French luxury design house Hermès was awarded \$133,000 in damages for trademark infringement, trademark dilution, and cybersquatting by Mason Rothschild’s MetaBirkins NFT project, which consisted of 100 NFTs with images of handbags covered in colorful fur, resembling the shape of the Hermès Birkin handbag.<sup>206</sup> In October 2023, Yuga Labs was awarded \$1.6 million in its case against Ryder Ripps for his satirical NFT collection using images entirely identical to those associated with the original Bored Ape Yacht Club NFTs, deeming the satirical collection to be counterfeits rather than satirical art.<sup>207</sup> Lastly, in an ongoing suit before the US District Court for the Southern District of New York, Nike alleges that StockX LLC, an online marketplace and clothing reseller, minted NFTs using

Nike’s trademarks without authorization.<sup>208</sup>

## **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?**

We find there is significant confusion in the US as to what a “smart contract” is and is not. A legal contract involves the “meeting of the minds” between two parties’ promises. A smart contract is autonomously run code that can embody the execution of these promises—but does not embody the contract itself. Many US regulators have conflated these two distinct concepts to conclude smart contracts are akin to traditional legal contracts.<sup>209</sup> A core part of the problem is that there remains no uniform definition of what “smart contracts” are 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.<sup>210</sup>

## **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, including any examples relating to decentralised finance protocols.**

On a technical level, smart contracts available in the US are the same as those available globally. Many of the new initiatives we have described elsewhere, including the rise in popularity of NFTs, altcoins and DAO governance, are all underpinned by smart contracts equally available in the US.

There are a series of US-specific initiatives involving smart contracts. The Smart Contracts Alliance, which is an initiative by the Chamber of Digital Commerce, an American advocacy group founded in 2014, promotes the emerging industry behind blockchain technology, Bitcoin, digital currency and digital assets.<sup>211</sup> More focused initiatives that promote the use of smart contracts in specific industries have also launched. For instance, Blockchain for Energy, a blockchain consortium of energy companies, including Chevron, ConocoPhillips and ExxonMobil, launched its smart contracts research and development program that independently certifies

industry-grade contracts and smart contract templates, offering opportunities for members of the consortium to experiment with their use.<sup>212</sup> As illustrated in the 2018 CFTC primer on smart contracts, there is a plethora of uses for smart contracts 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.<sup>213</sup>

Decentralized finance protocols (applications that rely on smart contracts to execute transactions as opposed to a central authority) are gaining recognition. As private companies begin to experiment with decentralized finance platforms, states such as Wyoming, Vermont and Tennessee are encouraging their creation and use through laws recognizing DAOs as their own form of a limited liability company ("LLC").<sup>214</sup> On May 30, 2018, Vermont became the first state to adopt revisions to its LLC legislation so as to facilitate the registration of blockchain-based companies.<sup>215</sup> While not specifically referencing DAOs, the revision to the state's Limited Liability Company Act lays out various registration requirements that a company with blockchain-based governance may utilize to register as a so-called Blockchain-based LLC in the state of Vermont. One prominent DAO utilizing the Vermont framework is dOrg, which develops DAO-related software.<sup>216</sup> dOrg has no formal management structure, but rather sees LLC members uptake certain specialist roles that match their expertise as projects are proposed and passed through DAO voting mechanisms.<sup>217</sup> On April 21, 2021, the state of Wyoming adopted legislation titled the "Wyoming Decentralized Autonomous Organization Supplement."<sup>218</sup> The legislation, which became effective in July of that same year, allowed DAOs to register as limited liability companies in the state of Wyoming. In July 2021, Wyoming officially recognized the American CryptoFED DAO, a decentralized organization focused on monetary policy and the utilization of digital assets to encourage currency stabilization, as the first entity recognized under this new law.<sup>219</sup> On April 20, 2022, Tennessee passed legislation allowing DAOs (or, rather, "Decentralized Organizations" or "DOs") to register as DO LLCs in the state of Tennessee.<sup>220</sup> The Tennessee statute is based off of the Wyoming legislation and imposes very similar registration and operating requirements.<sup>221</sup> On March 1, 2023, Utah pushed the envelope even further by approving the Utah DAO Act, which created a new legal entity called limited liability decentralized autonomous organization ("LLD"). LLDs allow DAO members to limit liability to their on-chain contributions, and DAO members cannot be held personally liable beyond DAO assets.<sup>222</sup>

Even in jurisdictions without official "DAO" entity types, a number of DAO entities have organized themselves as conventional LLCs registered in jurisdictions such as Delaware, using the flexibility of the Delaware Limited Liability Company Act to govern in a manner conducive to decentralized membership. An early and perhaps the most prominent example of this relatively novel approach is "The LAO," an "investment club" DAO organized as a Delaware limited liability company in 2020 and administered through a decentralized app and related smart contracts.<sup>223</sup> Building off of the success of The LAO, a more recent legal service called KALI claims to provide a service through which DAO developers can organize their DAOs as Delaware LLCs managed by KALI.<sup>224</sup> KALI, in collaboration with a legal services DAO called LexDAO, provides DAO developers with LLC formation and compliance resources.<sup>225</sup> Templates provided by KALI DAO for LLC formation include social DAOs, Investment Club DAOs and Company DAOs, each with different default (and customizable) voting periods, quorum requirements, supermajority thresholds and token transferability characteristics.

## 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 digital asset/security sphere, examining unregistered, non-exempt ICOs involving securities, starting with the DAO ICO in 2016 and continuing to this day with cases dealing with the offering of digital asset securities. Perhaps the highest profile example is the SEC's enforcement action against Ripple Labs, Inc. The SEC filed suit in December 2020 alleging that Ripple raised over \$1.3 billion through an unregistered, ongoing digital asset securities offering of XRP.<sup>226</sup> At the time of the suit, XRP was the third-largest cryptocurrency by market value.<sup>227</sup> In July 2023, a US District Judge found that Ripple's sales of its XRP tokens on public exchanges and Ripple's distributions of XRP as a form of payment for services did not constitute unregistered securities offerings in violation of securities laws, although Ripple's sales of XRP to institutional investors pursuant to written contracts did, granting a partial win to both Ripple and the SEC. However, following the Ripple decision (also in July 2023), a US District Judge in Terraform explicitly rejected the approach in Ripple and ruled in favor of the SEC on motion to dismiss, finding that the SEC asserted a plausible claim that sales of Terraform's cryptoassets are securities offerings.



In February 2023, the SEC charged two subsidiaries of the cryptocurrency exchange Kraken for failing to register its “staking-as-a-service” program as a securities offering. Kraken agreed to cease operations of its staking program in the US and to pay the SEC \$30 million in fines. In June 2023, the SEC charged Coinbase, the US’s largest cryptoasset trading platform, and Binance, the world’s largest cryptoasset trading platform, for operating as unregistered exchanges in violation of the federal securities laws and, akin to the charge Kraken faced, for failure to register their respective staking-as-a-service programs as securities offerings.<sup>228</sup> The SEC’s enforcement actions to date provide valuable insight into the SEC’s views of the application of US securities laws to digital assets and the SEC’s jurisdiction in the digital asset space.

In conjunction with pursuing securities law enforcement actions, former 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.<sup>229</sup> 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.<sup>230</sup> As noted in question 9, the IRS has continued to ramp up its enforcement and compliance efforts regarding unreported cryptocurrency transactions. Due to the global nature of blockchain, enforcement is not limited to US-centric actions and the Treasury Department, through FinCEN and OFAC, cannot be excluded from this discussion, as discussed in question 9.

States have also become involved in litigation surrounding cryptocurrencies and the NYAG has been particularly active in the space. For example, in February 2021, the NYAG entered into an \$18.5 million settlement with Bitfinex and Tether relating to Tether’s allegedly fraudulent representation that it maintains US dollar reserves adequate to back up the amount of Tether in circulation.<sup>231</sup> In addition to the monetary penalty, Tether also agreed to cease trading with residents and entities in New York and to provide more regular and transparent disclosures.<sup>232</sup> The NYAG also filed a lawsuit in February 2021 against Coinseed, a cryptocurrency trading company, alleging that the company was illegally trading cryptocurrencies without being registered as a broker-dealer in New York. In June 2021, Coinseed ceased operations.<sup>233</sup> Additionally, in February 2023, the NYDFS ordered cryptocurrency firm Paxos Trust Co. to cease the issuance of its Binance-branded USD stablecoin, BUSD, as a result of unresolved issues relating to Paxos’ oversight of BUSD raised by the SEC.<sup>234</sup>

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

Federal enforcement actions, especially in the sphere of digital asset offerings, rely on the courts to interpret blockchain concepts and enforce federal securities laws against infringers. One example involves an enforcement action brought against Kik Interactive by the SEC relating to a \$100 million ICO of digital tokens. A US federal court granted summary judgment in favor of the SEC after finding that the digital tokens involved in the offering were investment contracts and that, therefore, Kik’s offering constituted an unregistered sale of securities.<sup>235</sup> The court’s determination as to when XRP transactions constituted a securities offering in Ripple also provides some clarity, although another federal district judge declined to follow this interpretation in Terraform (see footnote 4).<sup>236</sup> Other examples include recent court decisions holding that Bitcoin is money for purposes of interpreting money transmission laws in Florida<sup>237</sup> and Washington D.C.<sup>238</sup> 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.<sup>239</sup>

## **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. The end of 2022 saw a number of high-profile bankruptcies in the blockchain space, driven by a general decline in crypto asset values and contagion stemming from the rapid collapse of FTX. Notable crypto-related chapter 11 filings with a direct link to FTX’s downfall included: BlockFi Inc. and Genesis Global Capital, LLC.

In addition, US bank regulators have indicated their concerns that cryptoasset firms are misleading customers about the treatment of their assets in the event of bank insolvencies. Specifically, the FDIC published an advisory notice to FDIC-insured institutions that which would require them to confirm and monitor the cryptoasset companies with which they have



relationships in order to ensure that they do not misrepresent the availability of deposit insurance in their marketing materials and related disclosures.<sup>240</sup> This includes making sure that the cryptoasset firm clearly and conspicuously (a) states that they are not an insured bank; (b) identifies the insured bank(s) where any customer funds may be held on deposit; and (c) communicates that cryptoassets are not FDIC-insured products and may lose value. In this regard, the FDIC also issued cease and desist letters to cryptoasset-related companies for making false or misleading representations about deposit insurance.<sup>241</sup> In their January 2023 Joint Statement on Crypto-Asset Risks to Banking Organizations, the FDIC, FRB and OCC reiterated the risks, among others, of “[i]naccurate or misleading representations and disclosures by crypto-asset companies, including misrepresentations regarding federal deposit insurance, and other practices that may be unfair, deceptive, or abusive, contributing to significant harm to retail and institutional investors, customers, and counterparties” and “[l]egal uncertainties related to custody practices, redemptions, and ownership rights, some of which are currently the subject of legal processes and proceedings.”<sup>242</sup>

Congress may ultimately have to pass laws to clarify the insolvency treatment of cryptoassets, including stablecoins, for both banks and nonbanks. Indeed, some lawmakers have considered this issue in the bills that have been proposed to date (see question 4).

With the spread of blockchain applications come additional layers of regulatory hurdles, such as the data privacy requirements of the California Consumer Privacy Act (“CCPA”) and Health Insurance Portability and Accountability Act of 1996. The CCPA provides California residents certain rights relating to their personal information, including the right to notice relating to collection and the right to request deletion of personal information.<sup>243</sup> In July 2023, Colorado and Connecticut began enforcement of its state privacy laws, the Colorado Privacy Act (“CPA”) and Connecticut’s Data Privacy Act (“CTDPA”). While not yet in effect, Utah, Virginia, Delaware, Indiana, Iowa, Montana and Tennessee have also enacted privacy laws that provide their residents similar rights as the CCPA, including the right to request the correction or deletion of their personal information. Any personal information stored on a public permissionless, decentralized blockchain will be difficult, if not impossible, to manage if businesses must comply with a data subject request that such personal information be deleted. Instead, businesses must consider keeping such information off the blockchain to the extent feasible or relying on private blockchains to ensure an individual’s rights under applicable data privacy frameworks can be maintained. Generally, 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 in the US 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.

## 22. Footnotes

[1] Bitcoin transaction volume surged to 700,000 daily transactions worldwide in September 2023. Venkatesh Jartarkar, *Bitcoin Transaction Volume Hits Two-Year High with Over 700K in a Day*, Investing (Sept. 20, 2023), [https://www.investing.com/news/cryptocurrency-news/bitcoin-transaction-volume-hits-twoyear-high-with-over-700k-in-a-day-93CH-3178565?utm\\_source=yahoo&utm\\_medium=referral&utm\\_campaign=yahoo\\_finance](https://www.investing.com/news/cryptocurrency-news/bitcoin-transaction-volume-hits-twoyear-high-with-over-700k-in-a-day-93CH-3178565?utm_source=yahoo&utm_medium=referral&utm_campaign=yahoo_finance).

[2] To this point, SEC Commission Chair Gary Gensler previously stated that Bitcoin is a commodity. *SEC Chair Gary Gensler discusses potential crypto regulation and stablecoins*, at 1:00 (June 27, 2022, 10:43 AM), <https://www.cnbc.com/video/2022/06/27/sec-chair-gary-gensler-discusses-potential-crypto-regulation-and-stablecoins.html?&qsearchterm=gary%20gensler>.

[3] For example, in July 2023, a US District Judge found that Ripple Labs Inc.’s sales of its XRP tokens on public exchanges and Ripple’s distributions of XRP as a form of payment for services did not constitute unregistered securities offerings in violation of US securities laws. Although this long-awaited decision seemed to grant the cryptocurrency issuer a rare victory against the SEC, the Judge also concluded that certain of Ripple’s sales of XRP tokens (*i.e.*, sales directly to institutional investors pursuant to written contracts) did in fact violate securities laws. See *SEC v. Ripple Labs, Inc.*, No. 20-10832 (S.D.N.Y. July 13, 2023), ECF 874. Note that the SEC’s motion to appeal in the *Ripple Labs* case was ultimately denied in October 2023.

[4] In July of 2023, a US District Judge stated in their

ruling in favor of the SEC on its motion to dismiss that the SEC had a “plausible claim” that Terraform Labs’ Terra USD stablecoin was a security when sold on public exchanges. *SEC v. Terraform Labs Pte. Ltd.*, No. 23-CV-1346, July 31, 2023 Opinion and Order (Docket No. 51), at 3-4 (Rakoff, J.), [https://storage.courtlistener.com/recap/gov.uscourts.nysd.594150/gov.uscourts.nysd.594150.51.0\\_1.pdf](https://storage.courtlistener.com/recap/gov.uscourts.nysd.594150/gov.uscourts.nysd.594150.51.0_1.pdf). When viewing the *Terraform Labs* decision against the ruling in *SEC v. Ripple Labs*, each decided in the Southern District of New York, it becomes clear that courts are taking divergent approaches towards the regulation of cryptoassets. See *id.* (casting doubt on Judge Torres’ earlier opinion in *Ripple*, Judge Rakoff stated that “*Howey* makes no such distinction [as made by Judge Torres] between purchasers. And it makes good sense that it did not.”) The outcomes of similar SEC enforcement actions against Binance and Coinbase, two of the largest cryptocurrency trading platforms by market capitalization, among others, remain uncertain. Adding to the confusion are various conflicting messages by officials. In 2018, then-SEC Chairman Jay Clayton stated that while simply calling a digital asset a “currency” does not foreclose the possibility that it is a security, Bitcoin and other such cryptocurrencies that simply serve as replacements for sovereign currencies are not securities. See <https://www.cnbc.com/2018/06/06/sec-chairman-clayton-says-agency-wont-change-definition-of-a-security.html>. Similarly, William Hinman, then-Director of the Division of Corporation Finance at the SEC, stated in a 2018 speech that “putting aside the fundraising that accompanied the creation of Ether”, the “present state” of both Ether and Bitcoin appeared to be sufficiently decentralized such that applying the disclosure regime of federal securities laws to Ether and Bitcoin transactions would “add little value”. In that same speech, Director Hinman also noted that other similarly decentralized cryptocurrency networks may also be exempt from Section 5 registration requirements. See <https://www.sec.gov/news/speech/speech-hinman-061418>. In a 2019 letter to US House Representative Ted Budd, Jay Clayton endorsed Hinman’s method of analysis, leading many commentators to conclude that Clayton likewise had concluded that Ethereum was not a security. See <https://finance.yahoo.com/news/sec-chairman-confirms-ethereum-isn-144009375.html>; <https://www.coincenter.org/app/uploads/2020/05/clayton-token-response.pdf>. More recently, former CFTC Commissioner Dan Berkovitz stated that it’s legally possible for Ether to be both a security and a commodity. See Tom Mitchellhill, *ETH can be both a security and a commodity*, former CFTC commissioner says, Cointelegraph (May 24, 2023), [https://cointelegraph.com/news/eth-can-be-security-and-](https://cointelegraph.com/news/eth-can-be-security-and-commodity-says-former-cftc-commissioner)

[commodity-says-former-cftc-commissioner](https://cointelegraph.com/news/eth-can-be-security-and-commodity-says-former-cftc-commissioner).

[5] The four factors considered are whether there was (i) an investment of money, (ii) in a common enterprise, (iii) with the expectation of profit and (iv) to be derived from the efforts of others. *SEC v. WJ Howey Co.*, 328 U.S. 293, 298-99 (1946).

[6] See also *Reves v. Ernst & Young*, 494 U.S. 56 (1990). Note this test is infrequently applied to digital assets in comparison with *Howey*.

[7] See Candice Choi, *Crypto Crisis: A Timeline of Key Events*, Wall Street Journal (June 6, 2023), <https://www.wsj.com/articles/crypto-crisis-a-timeline-of-key-events-11675519887>.

[8] *Id.*

[9] Eli Tatn and Tori Newmyer, *Bankman-Fried Convicted on All Charges After Weeks-Long Criminal Trial*, Washington Post (Nov. 2, 2023), <https://www.washingtonpost.com/business/2023/11/02/sf-bankman-fried-trial-ftx/>.

[10] *FACT SHEET: White House Releases First-Ever Comprehensive Framework for Responsible Development of Digital Assets*, The White House Briefing Room (Sept. 16, 2022), <https://www.WhiteHouse.gov/briefing-room/statements-releases/2022/09/16/fact-sheet-white-house-releases-first-ever-comprehensive-framework-for-responsible-development-of-digital-assets/>. The September 2022 Inter-Agency Framework highlighted seven categories that will likely be the focus of policymakers’ debates going forward: (1) protection of consumers, investors and businesses; (2) promoting access to safe, affordable financial services; (3) fostering financial stability; (4) advancing responsible innovation; (5) reinforcing U.S. global financial leadership; (6) fighting illicit finance; and (7) exploration of a CBDC.

[11] U.S. Food & Drug Administration, *Deputy Commissioner Champions More Digital, Transparent Food Safety System* (2019), <https://www.fda.gov/food/conversations-experts-food-top-ics/deputy-commissioner-champions-more-digital-transparent-food-safety-system>; See Mason Marks, *Blockchain and the FDA’s Blueprint for a New Era of Smarter Food Safety*, Stanford Law School Blog (Mar. 10, 2021), <https://law.stanford.edu/2021/03/10/fda-blockchain-blueprint/>.

[12] See Tommy Peterson, *Blockchain Makes Inroads at Federal Agencies*, FedTech (Aug. 26, 2020), <https://fedtechmagazine.com/article/2020/08/blockchain-makes->

inroads-federal-agencies.

[13] See SIMBA Chain, *Simba Chain Awarded a Contract to Develop Blockchain-Based System for Securing Sensitive R&D Data by U.S. Department of Defense*, PR Newswire (May 12, 2020, 8:00 ET), <https://www.prnewswire.com/news-releases/simba-chain-awarded-a-contract-to-develop-blockchain-based-system-for-securing-sensitive-rd-data-by-us-department-of-defense-301057217.html>; see also *Simba Chain wins another \$1.5m blockchain project from U.S. Navy*, Ledger Insights (Jan. 13, 2021), <https://www.ledgerinsights.com/simba-chain-wins-another-1-5m-blockchain-project-from-u-s-navy/>; *Navy in \$9.5m Contract for SIMBA Blockchain Messaging*, Ledger Insights (Feb. 7, 2020), <https://www.ledgerinsights.com/us-navy-blockchain-simba-chain-secure-messaging/>; *US Air Force Looks to SIMBA Chain to Deliver Financial Accountability Across Supply Chain Spend*, Business Wire (June 16, 2022), <https://www.businesswire.com/news/home/20220616005104/en/US-Air-Force-Looks-to-SIMBA-Chain-to-Deliver-Financial-Accountability-Across-Supply-Chain-Spend>.

[14] See United Nations World Food Program Building Blocks, <https://innovation.wfp.org/project/building-blocks> (last visited Oct. 30, 2023).

[15] See Will Canny, *California Leads The Way as U.S. Federal, State Agencies Consider Blockchain's Applications: Bank of America*, CoinDesk (Mar. 24, 2023), <https://www.coindesk.com/business/2023/03/24/california-leads-the-way-as-us-federal-state-agencies-consider-blockchains-applications-bank-of-america/>.

[16] 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 Delaware Senate Bill No. 69, 149th General Assembly, <https://legis.delaware.gov/json/BillDetail/GenerateHTMLDocument?legislationId=25730&legislationTypeId=1&docTypeId=2&legislationName=SB69>. This was part of a broader (now stalled) initiative by Delaware to adopt blockchain technologies in state government. Furthermore, according to Delaware's 2021 Annual Report statistics, 66.8% of all Fortune 500 companies are incorporated in Delaware. Del. Div. of Corp., Annual Report 1 (2021), <https://corpfiles.delaware.gov/Annual-Reports/Division-of-Corporations-2021-Annual-Report.pdf>.

[17] See, e.g., Jordan Teague, *Starting a DAO in the USA? Steer Clear of DAO Legislation A Primer on DAO Legislation in Multiple States*, Yahoo Finance (June 7, 2022),

<https://finance.yahoo.com/news/starting-dao-usa-steer-clear-111735475.html>.

[18] See Assem. Bill 39, 2023-2024 Regular Session (Cal. 2023).

[19] Coinbase, *More Than Half The Fortune 100 Are Developing Blockchain Initiatives To Stay Competitive*, Coinbase (June 22, 2023), <https://www.coinbase.com/blog/more-than-half-the-fortune-100-are-developing-blockchain-initiatives-to-stay>.

[20] See IBM Blockchain Platform (offering a public cloud service), [https://www.ibm.com/blockchain?mhsrc=ibmsearch\\_a&mhq=blockchain](https://www.ibm.com/blockchain?mhsrc=ibmsearch_a&mhq=blockchain) (last visited Oct. 29, 2023); see also Amazon Managed Blockchain (a fully managed service that makes it easy to join public networks or create and manage scalable private networks using the popular open-source frameworks), <https://aws.amazon.com/managed-blockchain/> (last visited Oct. 29, 2023).

[21] Customize IBM Food Trust for your Business, IBM, <https://www.ibm.com/blockchain/solutions/food-trust/modules> (last visited Oct. 29, 2023).

[22] Dani Nelson, *Nestle Partners With Rainforest Alliance to Trade Coffee Beans*, CoinDesk, <https://www.coindesk.com/markets/2020/04/06/nestle-partners-with-rainforest-alliance-to-trade-coffee-beans/> (Sept. 14, 2021).

[23] *Procter & Gamble Aims to Sort Out Claims Management Challenges Using Blockchain*, LimeChain (last visited Nov. 4, 2023), <https://limechain.tech/client-portfolio/procter-and-gamble/>.

[24] See *JPMorgan Uses Liink Network to Help FI's Innovate Payments Economics*, PYMNTS (Mar. 30, 2021), <https://www.pymnts.com/blockchain/2021/jpmorgan-uses-liink-network-to-help-fis-innovate-payments-economics/>.

[25] Tokenized assets, ranging from real estate to bank deposits, gained traction in the US throughout the ICO boom. 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 cryptoasset); and the JPM Coin (a private-blockchain stablecoin).

[26] SEC Release No. 81207, Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO (July 25, 2017),

<https://www.sec.gov/litigation/investreport/34-81207.pdf>.

[27] The four factors considered are whether there was (i) an investment of money, (ii) in a common enterprise, (iii) with the expectation of profit and (iv) to be derived from the efforts of others. *SEC v. WJ Howey Co.*, 328 U.S. 293, 298-99 (1946).

[28] Jules W. Carter, *'I Believe Every ICO I've Seen is a Security': Securities Regulation in the Age of Cryptocurrency-Based Investment Contracts*, Westlaw Today (May 4, 2021), [https://today.westlaw.com/Document/lf01f459eadbc11ebbea4f0dc9fb69570/View/FullText.html?contextData=\(sc.Default\)&transitionType=Default&firstPage=true&bhcp=1](https://today.westlaw.com/Document/lf01f459eadbc11ebbea4f0dc9fb69570/View/FullText.html?contextData=(sc.Default)&transitionType=Default&firstPage=true&bhcp=1).

[29] See Kollen Post, *The Death of the ICO: Has the US SEC Closed the Global Window on New Tokens?*, CoinTelegraph (May 23, 2020), <https://cointelegraph.com/news/the-death-of-the-ico-has-the-us-sec-closed-the-global-window-on-new-tokens>.

[30] Juan Baitz-Benet, et al., *The SAFT Project; Toward a Compliant Token Sale Framework* (Oct. 2, 2017), <https://www.saftproject.com/static/SAFT-Project-Whitepaper.pdf>, <https://www.saftproject.com/static/SAFT-Project-Whitepaper.pdf>.

[31] A prolific example of a play-to-earn platform is Axie Infinity, which, incidentally, was subjected to a significant attack in which hackers stole \$540 million in play-to-earn cryptoassets. See Paul Vigna, *Hackers Steal \$540 Million in Crypto From 'Axie Infinity' Game*, Wall Street Journal (Mar. 29, 2022, 6:13 PM), <https://www.wsj.com/articles/hackers-steal-540-million-in-crypto-from-axie-infinity-game-11648585535>.

[32] See Taylor Locke, *Crypto Projects are Increasingly Airdropping Free Tokens—But Investors Should Be Cautious*, CNBC (Jan. 4, 2022, 11:32 AM), <https://www.cnbc.com/2022/01/04/token-airdrops-are-common-in-crypto-but-investors-should-be-cautious.html>.

[33] See Daniel Payne, *Blockstack Token Offering Establishes Reg A+ Prototype*, Law360 (Aug. 12, 2019, 3:44 PM), <https://www.law360.com/articles/1186166/blockstack-token-offering-establishes-reg-a-prototype>.

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than a dozen amendments and supplements to the registration statement to realize the offering. INX used the proceeds to launch its digital trading platforms—initially two separate platforms, one for cryptocurrencies and one for security tokens. In September 2022, INX merged its two trading platforms—cryptocurrencies and securities—into one platform called “INX One.” INX claims that its platform constitutes the first fully regulated trading platform for both security tokens and cryptocurrencies. See generally INX Ltd.’s EDGAR filings at <https://www.sec.gov/edgar/browse/?CIK=0001725882> (last visited Nov. 2, 2023). In May 2020, Overstock, the Nasdaq-listed online retailer and technology company, registered and offered a digital dividend (an “airdrop”) to its 40 million shareholders, where one digital voting Series A-1 preferred share was distributed for every 10 shares of Overstock. The stock paid a 16 cent annual dividend, sharing liquidation rights of common shares, and would be available for trade only through broker-dealer subscribers to tZero (a blockchain-based ATS marketplace owned by Overstock’s subsidiary). See generally Overstock.com, Inc.’s Edgar filings at <https://www.sec.gov/edgar/browse/?CIK=0001130713>. But see *SEC Charges Alternative Trading System for Failing to Comply with Certain Requirements of Regulation ATS*, SEC (Jan. 10, 2022), <https://www.sec.gov/enforce/34-93938-s>.

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<https://www.bloomberg.com/news/articles/2022-09-07/crypto-market-cap-sinks-below-1-trillion-bitcoin-near-2022-low?leadSource=uverify%20wall>.

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[https://www.dfs.ny.gov/virtual\\_currency\\_businesses](https://www.dfs.ny.gov/virtual_currency_businesses).

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<https://www.dob.texas.gov/sites/default/files/files/news/IndustryNotices/in2021-03.pdf>.

[102] VA Code § 6.2-818.1 (2022); LA Rev. Stat. § 6:1402 (2022).

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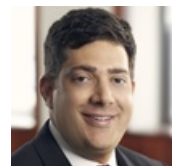
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