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The State of Digital Assets Regulation and Foundational Terminology (Crypto, Stablecoin, and CBDC)

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The last twelve months have seen unprecedented adoption, evolution, and turbulence across the digital assets sphere. Whether cryptocurrencies, stablecoins, or central bank digital currencies (CBDCs), all of which qualify as digital assets, each has seen significant disruption but also, in many instances, meaningful advancement.

Despite the rapid and widespread adoption of digital assets, it is still early innings when it comes to developing a regulatory framework that governs such assets. Though certain existing and thoroughly developed regulations do apply to digital assets, many significant open questions remain. Moreover, the U.S. federal government has yet to develop comprehensive regulatory regimes specific to digital assets. With the beginning of the new year and the marked events that have shaped digital assets in the last twelve months (both positively and negatively), now is an opportune time to discuss key recent developments while also getting back to the basics. This piece will endeavor to do just that. First, it will try to provide a succinct, albeit cursory, summary of the state of U.S. digital assets regulation. Second, it will endeavor to communicate definitions of key, foundational terminology crucial to understanding digital assets.

I. The Executive Order on Ensuring Responsible Development of Digital Assets and Foundational Definitions

On March 9, 2022, President Biden signed an Executive Order titled "Ensuring Responsible Development of Digital Assets" (Executive Order). The Executive Order addressed the rise of digital assets and the potential benefits and detriments that could be caused by this rapidly developing sphere. Relatedly, the Executive Order required relevant federal agencies to draft and submit reports on various aspects of digital assets regulation and administration. For example, the Executive Order required agencies to address "implications of developments and adoption of digital assets and changes in financial market and payment system infrastructures for United States consumers, investors, businesses, and for equitable economic growth[,]" as well as "[…] the conditions that would drive mass adoption of different types of digital assets and the risks and opportunities such growth might present to United States consumers, investors, and businesses[…].[1]

a. Terminology Addressed in the Executive Order

The Executive Order provided the below illustrative definitions of critical digital assets terminology (including what digital assets are). While the Executive Order's definitions are not legally binding or enforceable (outside of the Executive Order itself), they do provide a useful understanding of the assets as well a glimpse into how the Biden Administration viewed them at the time the Executive Order was

released.

To start with, it is important to understand that cryptocurrencies, stablecoins, and CBDCs are all types of digital assets. Digital assets, which is an umbrella term, covers other types of assets as well. That said, cryptocurrencies, stablecoins, and CBDCs are among the most discussed digital assets and are those primarily addressed in the Executive Order.

Cryptocurrencies –

> The term "cryptocurrencies" refers to a digital asset, which may be a medium of exchange, for which generation or ownership records are supported through a distributed ledger technology that relies on cryptography, such as a blockchain.

Stablecoins –

> The term "stablecoins" refers to a category of cryptocurrencies with mechanisms that are aimed at maintaining a stable value, such as by pegging the value of the coin to a specific currency, asset, or pool of assets or by algorithmically controlling supply in response to changes in demand in order to stabilize value.

CBDC –

> The term "central bank digital currency" or "CBDC" refers to a form of digital money or monetary value, denominated in the national unit of account, that is a direct liability of the central bank.

Blockchain –

> The term "blockchain" refers to distributed ledger technologies where data is shared across a network that creates a digital ledger of verified transactions or information among network participants and the data are typically linked using cryptography to maintain the integrity of the ledger and execute other functions, including transfer of ownership or value.

Digital Assets –

> The term "digital assets" refers to all CBDCs, regardless of the technology used, and to other representations of value, financial assets and instruments, or claims that are used to make payments or investments, or to transmit or exchange funds or the equivalent thereof, that are issued or represented in digital form through the use of distributed ledger technology. For example, digital assets include cryptocurrencies, stablecoins, and CBDCs. Regardless of the label used, a digital asset may be, among other things, a security, a commodity, a derivative, or other financial product. Digital assets may be exchanged across digital asset trading platforms, including centralized and decentralized finance platforms, or through peer-to-peer technologies.[2]

Broadly-speaking, the definitions of the above terms remain fluid and evolving. That said, one of the issues many businesses, legislators, and regulating entities hope to have clarified in the coming year is precise definitions for what constitutes cryptocurrencies, stablecoins, and CBDCs.

II. Agency Reports Published Pursuant to the Executive Order and the White House's Comprehensive Framework for Responsible Development of Digital Assets

As noted, the Executive Order required relevant agencies to provide reports on various aspects of digital assets regulation. To support the drafting of these reports, certain agencies published related Requests for Comment seeking public input on digital assets use and development. For example, on May 19, 2022, the U.S. Department of Commerce (Commerce) issued a Request for Comment on "Developing a Framework on Competitiveness of Digital Asset Technologies," and on July 8, 2022, the U.S. Department of the Treasury issued a Request for Comment broadly addressing "Ensuring Responsible Development

of Digital Assets."

In the fall of 2022, executive agencies began to publish those reports required under the Executive Order. At the same time, and informed by the agency reports, the White House released a Fact Sheet concerning a "Comprehensive Framework for Responsible Development of Digital Assets," (Framework). The Framework addressed topics related to both domestic and international U.S. digital assets development, including: protecting consumers, investors, and businesses; promoting access to safe, affordable financial services; fostering financial stability; advancing responsible innovation; reinforcing U.S. global financial leadership and competitiveness; fighting illicit finance; and exploring a U.S. CBDC. Federal agencies released a total of nine reports responding to the Executive Order. These reports are as follows:

- U.S. Department of the Treasury – Action Plan to Address Illicit Financing Risks of Digital Assets
- U.S. Department of the Treasury – Crypto-Assets: Implications for Consumers, Investors, and Businesses
- U.S. Department of the Treasury – The Future of Money and Payments
- U.S. Department of Justice – The Role of Law Enforcement in Detecting, Investigating, and Prosecuting Criminal Activity Related to Digital Assets
- U.S. Department of Commerce – Responsible Advancement of U.S. Competitiveness in Digital Assets
- Financial Stability Oversight Council – Report on Digital Asset Financial Stability Risks and Regulation 2022
- White House Office of Science and Technology – Climate and Energy Implications of Crypto-Assets in the United States
- White House Office of Science and Technology – Policy Objectives for a U.S. Central Bank Digital Currency System
- White House Office of Science and Technology – Technical Evaluation for a U.S. Central Bank Digital Currency System

a. Foundational Definitions Provided by Treasury's Reports

The reports provide useful information and insight relating to the broad development of digital assets. That said, Treasury's report "Crypto-Assets: Implications for Consumers, Investors, and Businesses" provides particularly elucidatory digital assets terminology. As with the Executive Order, the report itself notes that these definitions are provided for illustrative purposes and are "not legal definitions." But here again, the definitions further clarify the digital assets lexicon while also providing a sense of how Treasury considers these terms.

The most important of the reports' defined terms are reproduced below (with minimal grammatical and formatting revisions for clarity):

Crypto-assets –

[For the purposes of this] report, “crypto-assets” refer broadly and generically to all types of representations of value or claims in digital form that rely on the use of a method of distributed ledger technology (DLT), excluding central bank digital currencies (CBDCs).

Crypto-assets may be original and integral creations of an underlying distributed ledger or blockchain— sometimes referred to as being “native” to a given network. Alternatively, they may be “tokenized” representations of assets, including other crypto-assets or assets issued by traditional financial institutions or entities—such as stocks or bonds—with no initial reliance on DLT. Digital o tokenized representations of assets are also included in the term “crypto-assets.” Industry and market participants may use multiple other terms interchangeably with the term crypto-assets, including “coins” and “tokens.” References in this report to coins and tokens should be taken to refer generically to crypto-assets.

Each type of crypto-asset may have different convertibility, fungibility, and other attributes. While there is no universally accepted industry nomenclature, there are some common terms for various categories of crypto-assets, including what are referred to as “utility tokens” and “governance tokens.”

Utility Tokens –

> Utility tokens purport to allow users to access products or services on a decentralized platform […]

Governance Tokens –

> […] governance tokens claim to confer certain voting rights to holders regarding decisions to influence the operation of a decentralized autonomous organization (DAO) or to govern proposed code changes to other decentralized protocols. Other tokens may seek to tokenize traditional financial assets.

Market participants often distinguish between “fungible” or “non-fungible” tokens, with each type being created according to a different token standard.

Fungible Tokens –

For fungible tokens, each token unit must be equal in character and value to other token units, and therefore indistinguishable and interchangeable. Stablecoins are an example of one type of fungible token. Stablecoins are designed with the goal of maintaining a stable value, usually in relation to a fiat currency or other assets.

Non-fungible Tokens (NFTs) –

[NFTs] are crypto-assets that are created using software code that is not fungible with other software code. NFTs purport to represent a claim or receipt on an asset or object that has inherently unique characteristics or that differs from similar assets in some distinguishable way. Although NFTs are tradeable, they are not interchangeable. Proponents of NFTs claim they have many potential applications, such as representations of collectible items (for example, art or music), digital goods, individual identification credentials, access keys, property deeds or titles, or

tickets for travel or events. However, the legal rights afforded by NFTs are unclear and have been subject to litigation.

Wallets, Keys, and Custody –

Digital Wallet –

Another important concept in the crypto-asset ecosystem is the storage of crypto-assets in a digital wallet. A digital wallet is a software application, piece of hardware, or other device or service that stores a user's public and private cryptographic keys, which allow users to interact with one or more blockchains and, inter alia, to send and receive crypto-assets.

Public Key –

A public key is the cryptographic address that a user shares with others on a blockchain to conduct crypto-asset transactions and must be paired with a user's private key to prove ownership of crypto-assets and to authorize transactions.

Private Key –

A private key is the cryptographic password necessary to access the crypto-assets associated with a wallet address, and therefore must be kept secure.

A user's holdings of crypto-assets are not stored in a wallet, but instead are recorded on the blockchain, and can only be controlled with the user's private key. A wallet may be compatible with one specific blockchain (a single-chain wallet), or it may support information from multiple different blockchains (a multi-chain wallet).

Wallets are central to the concept of crypto-asset custody.

Custodial Wallets –

Custodial wallets, sometimes referred to as "hosted" wallets, are provided and maintained by an intermediary or third-party service provider. Custodial wallets generally can be used to facilitate buying, selling, or transferring of crypto-assets, and are provided by many centralized trading platforms.

Non-custodial Wallets –

[W]ith non-custodial wallets, sometimes referred to as "un-hosted" wallets, users are responsible for their own wallets and private keys.

With either type of wallet, if a user's private key is lost, forgotten, or destroyed, for example, there is typically no way to recover access to their crypto-assets.

Digital wallets generally require the use of Internet-connected hardware to receive and transmit the underlying information. While the accessibility of wallets that are directly connected to the Internet (sometimes referred to as "hot wallets") makes them more user-friendly, they can also be more vulnerable to theft and fraud and therefore pose more risks to users. In contrast, "cold wallets" allow users to store their private keys in a physical storage device or other piece of hardware that is maintained offline, making it remote from hacking attempts, but that can be brought online to conduct transactions. Depending on how it is physically stored, a cold-storage wallet can also be vulnerable to loss, theft, damage, or destruction. Just like physical wallets can be lost or stolen,

crypto-asset wallets can be hacked, or private keys can be lost or compromised, leading to a loss of funds or credentials.

> Custodians –
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> A crypto-asset custodian could be a bank, broker-dealer, or other traditional financial institution, or it could be a financial technology (fintech) company. Custody involves holding the customer's private key that controls access to their crypto-asset holdings. Custodians might safekeep crypto-asset owners' keys by encrypting them or using a cold storage system (generating and keeping keys offline) and may provide direct custody (i.e., manage customers' crypto-assets themselves) or use a sub-custodian. […T]here are questions as to which party (the owner or custodian or sub-custodian) has ownership or control over crypto-assets held in hosted wallets, which has important implications in the event of the bankruptcy or receivership of the custodial or sub-custodial provider.[3]

In addition to the above, the report also provides detailed explanations of "Crypto-asset Platforms," "Centralized Platforms (Traditional Venues and Crypto-asset Trading Platforms)," "Decentralized Platforms (DeFi Protocols)," "Miners and Validators," "Data Aggregators," and "Traditional Financial Institutions."

III. The Securities Exchange Commission and the Commodity Futures Trading Commission

One of the most complex aspects of digital assets is determining if and when existing regulations and definitions apply. A matter that has proven particularly complex is determining if and when a digital asset qualifies as a "security" or a "commodity," and, relatedly, whether the Securities Exchange Commission (SEC) or the Commodity Futures Trading Commission (CFTC) is the pertinent regulating agency.

Some argue that the SEC and CFTC have skirted clarifying whether a given digital asset is a security or a commodity and are currently largely "regulating through enforcement." Broadly, this assertion rests on the idea that, instead of the SEC or CFTC developing clear regulations and guidelines for digital assets, including whether and when they qualify as a security or commodity and what regulations apply, these agencies are asserting that a digital asset was one or the other in given instances and filing suit for relevant regulatory malfeasance. Others argue that the SEC and CFTC have been clear about whether a given digital asset or transaction falls under their purview and that existing regulatory regimes apply to said instances and assets. In light of this and other ongoing debates, significant questions remain when it comes to the regulatory oversight and treatment of digital assets.

Some also argue that neither the SEC nor the CFTC are sufficiently well-positioned to govern digital assets and that, instead, Congress should create a new regulatory agency solely for this purpose. Conversely, Former CFTC Chairman Timothy Massad and Harvard Law School professor Howell Jackson recently published a working paper proposing "that the SEC and the [CFTC] jointly create and oversee a new self-regulatory organization (SRO), similar to the Financial Industry Regulatory Authority (FINRA) or the National Future Association (NFA)," to govern crypto-assets. They argue that "[t]he mission of this new SRO would be to protect investors and financial markets by developing and enforcing much-needed standards for the crypto industry[,]" and that, "[c]reating an SRO overseen jointly by the SEC and CFTC could avoid the need to litigate whether digital assets are securities or commodities; it could develop standards common to platforms trading different types of crypto assets."[4]

Whether a digital asset qualifies as a security or commodity and what agency or agencies should

regulate digital assets are central and highly complex questions that are expected to be the subject of significant debate in the coming year.

IV. The Development of CBDCs

Many countries, including the United States, are exploring the issuance of CBDCs. As stated in Congressman Jim Himes' (D-CT) white paper on the issuance of a CBDC by the Federal Reserve, titled "Winning the Future of Money: A Proposal for a U.S. Central Bank Digital Currency," "nearly 105 central banks […] are considering CBDCs.[5] Additionally, "50 countries are in an advanced stage of CBDC exploration, meaning they have moved forward on a pilot program, are testing architecture designs, or have executed a soft launch[, and] 16 of the G20 countries are in the development or pilot phase […].[6] The United States has taken initial steps as it relates to considering the potential development of a CBDC. Treasury, in its report on the "Future of Money and Payments," addressed many topics, including "design choices for a potential U.S. Central Bank Digital Currency (CBDC) in the context of public policy considerations related to building the future of money and payments, supporting U.S. global financial leadership, advancing financial inclusion and equity, and minimizing risks."[7] Also, in early 2022, the Board of Governors of the Federal Reserve System published a paper addressing digital assets and CBDCs titled "Money and Payments: The U.S. Dollar in the Age of Digital Transformation."

The coming year will likely see significant exploration, development, and advancement of CBDC issuance across the globe.

V. Digital Assets Legislation

One way to address many of the matters discussed above would be for Congress to pass comprehensive legislation concerning digital assets. By way of example, this legislation could address what digital assets are, whether they are securities or commodities (or some new asset class), the establishment of digital assets specific regulation and regulatory entities (or clearly identify relevant existing regulations and agencies), and myriad other questions that have arisen in this developing sphere.

In the last twelve months, several legislators have endeavored to address certain aspects of digital assets through legislation. On July 7, 2022, Senator Kirsten Gillibrand (D-NY) and Senator Cynthia Lummis (R-WY) introduced the "Responsible Financial Innovation Act." The Senators noted in a joint press release concerning the Act that, "[this] bipartisan legislation […] will create a complete regulatory framework for digital assets that encourages responsible financial innovation, flexibility, transparency and robust consumer protections while integrating digital assets into existing law."[8] While hearings have been held on this proposed legislation, it has not been passed in the House or Senate. Legislation related to digital assets has also been proposed by Senator Debbie Stabenow (D-MI) and Senator John Boozman (R-AR), Senator Pat Toomey (R-PA), and Senator Elizabeth Warren (D-MA) and Senator Roger Marshall (R-KS).

VI. Digital Assets Regulation – Looking Forward

In recent months, many legislators, industry leaders, and agency officials have called for increased digital assets regulation and oversight. By way of example, on November 16, 2022, Treasury Secretary Yellen released a statement "on Recent Crypto Market Developments." In the statement, Secretary Yellen noted,

> Over the past year, through the President's Working Group on Financial Markets and in response to the President's Executive Order on Digital Assets, the Treasury Department worked with its regulatory partners to identify risks in crypto markets. Some of the risks we identified in these reports, including

comingling of customer assets, lack of transparency, and conflicts of interest, were at the center of the crypto market stresses observed over the past week.

We have very strong investor and consumer protection laws for most of our financial products and markets that are designed to address these risks. Where existing regulations apply, they must be enforced rigorously so that the same protections and principles apply to crypto assets and services. The federal government, including Congress, also needs to move quickly to fill the regulatory gaps the Biden Administration has identified.[9]

Shaped by both legislative and agency efforts, digital assets regulation, and the digital assets sphere more broadly, are likely to see significant developments in 2023.

Kilpatrick Townsend's Digital Assets Regulation Blog

Kilpatrick Townsend's Digital Assets Regulation Blog (DARB) covers various aspects of digital assets regulation, development, and administration, as well as related topics. For more information, please visit our website at Digital Assets Regulation (kilpatricktownsend.com).

Footnotes

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[1] Exec. Order No. 14067, 87 FR 40881 (2022).

[2] *Id*.

[3] U.S. Department of the Treasury, *Crypto-Assets: Implications for Consumers, Investors, and Businesses* (2022).

[4] Timothy Massad & Howell Jackson, *How to Improve Regulation of Crypto Today—Without Congressional Action—and Make the Industry Pay For It*, Hutchins Center at Brookings Working Paper #79 (2022).

[5] Congressman Jim Himes, *Winning the Future of Money: A Proposal for a U.S. Central Bank Digital Currency* (2022).

[6] *Id.*

[7] U.S. Department of the Treasury, *The Future of Money and Payments* (2022).

[8] Press Release, Senator Kirsten Gillibrand & Sentaor Cynthia Lummis, *Lummis, Gillibrand Introduce Landmark Legislation To Create Regulatory Framework For Digital Assets* (Jun. 7, 2022).

[9] Statement, Secretary of the Treasury Janet Yellen, *Statement by Secretary of the Treasury Janet L. Yellen on Recent Crypto Market Developments* (Nov. 16, 2022).