Digital Assets:
A FRAMEWORK FOR REGULATION TO MAINTAIN THE UNITED STATES’ STATUS AS AN INNOVATION LEADER

JAN. 2021
# Table of Contents

I. Digital Assets Overview................................................................. 7
II. An Overview of the Regulatory Landscape Regarding Digital Assets in Financial Services ...................................................... 10
III. When Is a Digital Asset a “Security”? ......................................... 13
IV. Custody of Digital Assets ............................................................... 26
V. Payments ....................................................................................... 32
VI. Digital Asset Money Transmitters ............................................. 36
VII. Central Bank Digital Currencies (CBDCs) ................................ 42
VIII. The Need to Act ..................................................................... 47
IX. Recommendations for Promoting Innovation ............................. 52
X. Conclusion .................................................................................. 61
The digitization of assets has the potential to revolutionize how goods and services are offered and how value is transferred for generations to come. Yet the swift ascent of digital assets based on blockchain technology has often outpaced the willingness of regulators and other policy makers to ensure that regulatory regimes accommodate digital assets in order to foster innovation while protecting against the misconduct of bad actors. With this paper, we provide a framework for regulating the digital assets space so that the U.S. remains an innovation leader. Our particular focus is on financial services regulatory regimes because of their significant impact on digital asset and related blockchain innovation.

We survey the rapidly-evolving regulatory landscape in the U.S., highlighting many opportunities for improving laws, rules, and regulations to achieve the benefits of digital asset innovation. Because some notable initial applications involving digital assets have had an investment component to them, the Securities and Exchange Commission (SEC) has assumed a prominent role in digital asset regulation. As such, there is much to evaluate about the SEC’s approach to digital assets. But the SEC is not alone, and a wide range of other regulators at the state and federal levels have also asserted jurisdiction over different elements of the digital asset ecosystem.

"Far too frequently, regulators have approached the digital assets space by applying laws that were not designed to apply to digital assets, the underlying blockchain technology, or the kind of decentralized transactions that digital assets facilitate."

In the absence of a coordinated federal public policy regarding the regulation of digital assets, government agencies have frequently deployed a piecemeal approach to regulation. With the commendable goals of consumer and investor protection in mind, regulators have at times taken conflicting positions. In some cases, jurisdictional boundaries and the basic rules of the regulatory road have not been clear, even to sophisticated market participants and their experienced legal counsel. In other cases, the rules of the road have changed on short notice without adequate opportunity for stakeholder input. Far too frequently, regulators have approached the digital assets space by applying laws that were not designed to apply to digital assets, the underlying blockchain technology, or the kind of decentralized transactions that digital assets facilitate. Ill-suited regulation has impeded not only the opportunity for innovation in digital assets, but the use of underlying blockchain technology more broadly.
Given the rapid pace at which this innovation is being developed and deployed in real-world settings, especially over the past year as the COVID-19 pandemic has accelerated the trend toward digitization, the stakes are too high to fall behind. For the U.S. to remain at the forefront of global technological innovation, laws, rules, and regulations must encourage entrepreneurs and developers to advance technology and the emergence of the goods and services that technology creates. Expanding American investment, consumption, job creation, and economic prosperity is key to improving people’s lives and addressing many persistent difficulties and challenges.

Beyond spurring U.S. economic activity, there is also a geopolitical dimension to the U.S.’s innovation leadership. Some nations have been actively calibrating their regulatory and supervisory oversight of digital assets to advance their own national interests, which may be at odds with those of the U.S.

Because so much hangs in the balance, this paper puts forward a series of recommendations to help guide policy makers in developing a more-closely coordinated response to the regulation of digital assets so that relevant U.S. regulatory regimes accommodate digital asset innovation instead of impeding it. We seek to advance the best interests of consumers and investors with the essential goal of facilitating innovation to ensure that the U.S. maintains its technological leadership globally.

In brief, our recommendations for promoting innovation in the digital assets space are as follows:

- **Technology-Neutral Regulation** | Regulation should be technology-neutral and activity-based. Further, regulators should articulate clear guidelines that market participants deploying cutting-edge innovations can readily understand and apply.

- **Principles-Based Regulation** | Regulation of the digital assets space should be principles-based and not overly prescriptive. Regulators should not second-guess the good faith application of those principles by companies.

- **Avoid Regulation by Enforcement** | Market participants require fair notice concerning what the law requires of them. Regulatory enforcement actions should not be used to announce new regulation or the material interpretation of existing regulatory requirements.

- **Good Faith Compliance** | Regulators should identify strict liability offenses that create an undue risk of legal liability for those deploying new technology and develop approaches that provide market participants an opportunity to redress potential deficiencies without the fear of an enforcement action.
Self-assessment and Retrospective Review | Statutes, rules, and regulations written years ago with no thought of blockchain or digital assets can create regulatory disconnects that stifle innovation. Regulators should undertake self-assessments and retrospective reviews to identify and update those regulatory requirements requiring modernization.

Regulatory Responsiveness | So that regulatory delays do not frustrate innovation, regulators should evaluate their organizational structures and processes to ensure that innovators receive timely responses to requests for interpretation or relief. Units such as FinHub at the SEC, LabCFTC, and the Office of Innovation at the Office of the Comptroller of the Currency (OCC) offer very useful resources to streamline and expedite interactions with regulators.

Regulatory Flexibility | Regulators should establish frameworks that permit careful experimentation, both to provide innovators an opportunity to demonstrate a technology’s merits and to allow regulators the opportunity to learn about emerging technologies.

Digital Asset Categorization | Regulators and other policy makers should work to fashion a reasonable categorization of digital assets that demarcates the jurisdictional boundaries of applicable regulatory regimes. This categorization should take into account the economics and characteristics of different digital assets and related digital-asset transactions and activities.

Interpreting Howey | The SEC’s Howey test, discussed at length below, when applied rigidly can impede innovation by unduly restricting the dissemination, circulation, and use of digital assets. A guiding principle should be that if the predominant purpose of a digital asset is to allow its holders access to a good or service or some other functionality on a blockchain, then the digital asset should not be treated as a security.
A PATHWAY TO NON-SECURITY STATUS | A unique practical difficulty for blockchain projects is to achieve decentralization or functionality because, as Commissioner Hester Peirce has suggested, Catch-22 exists—decentralization and functionality can require the widespread dissemination of digital assets, but the SEC appears to treat digital assets as securities until there is adequate decentralization or functionality. The SEC should fashion an approach that allows sponsors of blockchain projects to distribute digital assets so long as there is a well-articulated path toward achieving decentralization or functionality and the digital asset holders are properly safeguarded from fraud and manipulation as the project proceeds along that path.

PAYMENT SYSTEM IMPROVEMENTS | The current regulatory environment for payments and money transmission includes a patchwork of multi-state regulation. Given the national-level and society-wide benefits of payment innovation, more regulatory coordination is needed to minimize duplicative and conflicting regulatory requirements.

CENTRAL BANK DIGITAL CURRENCY RESEARCH AND DEVELOPMENT | The U.S. should prioritize the expanded exploration of a U.S. dollar central bank digital currency to ensure that the U.S. dollar remains the reserve currency of choice around the globe.

WHITE HOUSE TASK FORCE | The White House should establish a task force comprising a broad base of stakeholders, including from outside government, focused on promoting digital assets and related blockchain innovation.
I. Digital Assets Overview

The term “digital asset” generally refers to an asset issued or transferred using distributed-ledger technology, such as “blockchain,” rather than in physical or tangible form. Since the first widespread commercial application of blockchain via Bitcoin over a decade ago, digital assets have continued to gain momentum. Digital assets have begun to revolutionize the goods and services individuals have access to and the way businesses and consumers transact with one another.

The “tokenization” of an asset reflects the process of issuing a blockchain-based “token” that digitally represents an underlying asset that in many cases is more akin to a good or service than a financial instrument. While such a “token” may represent a share in a company or participation in an investment fund, it may also reflect an ownership interest in real estate or a work of art, to name just a couple examples, or may afford its holder access to functionality on a blockchain. Ownership of the token is reflected on a distributed ledger, and all purchases and sales of the token are likewise tracked on a blockchain. The possibilities for digital assets are endless.

1. Blockchain is a technology that records transactional information in a shared (or “distributed”) digital database, called a ledger. In a permissioned blockchain, only known participants can make additions to the ledger. In a permissionless blockchain, anyone can participate, and transactions are validated by means of a decentralized blockchain protocol. This type of validation mechanism is used to agree on which transactions are valid and recorded to the blockchain. Once an entry is made in the ledger any subsequent change to an entry will be recorded, providing what's essentially a permanent “immutable” record.

Blockchain is named after the way in which transactions are recorded. Each “block” represents a unique set of transactional data that has been validated under a particular blockchain’s defined protocol. Every time a transaction is validated in accordance with the consensus mechanism, the distributed ledger is synchronized to every participant in the network, linking together a peer-to-peer network. A series of blocks forms a chain. The system relies on cryptographic techniques.

One feature of blockchain technology is its use for “smart contracts.” Smart contracts are self-executing computer code. They automate one or more terms of an arrangement between parties, effectuating an “if-then” sequence. Not all smart contracts contain all the elements of offer, acceptance, and mutual consideration required for a legally-binding contract, although some are structured to do so.
There has been a proliferation of terminology along with the many different types of digital assets that have been created, each having different characteristics and rights attached to it. Because of their technological reliance on cryptography, blockchain-based assets with properties similar to Bitcoin are sometimes referred to as “cryptocurrency.” In addition to “cryptocurrency,” other terms to describe the range of assets that leverage blockchain include “virtual currency,” “digital currency,” “coin,” and “crypto asset.” Some people use the terms “digital securities” and “security tokens” to refer to financial instruments whose primary purpose is investment, as distinguished from other tokens whose primary purpose is a non-investment function. “DeFi,” which is short for “decentralized finance,” connotes the use of blockchain technology to displace an identifiable issuer of securities or financial intermediary and to enable greater peer-to-peer transactions. Some employ these various terms interchangeably, whereas others deliberately differentiate among one or more terms, intending to suggest subtle nuances as to characteristics and rights, such as functionality, exchangeability, purpose, and governance.

Because many of the terms used mean different things to different people, some confusion continues. The terminology matters because important distinctions are elided depending on the words that are used. Not only are Bitcoin and blockchain not one in the same, but cryptocurrencies, stablecoins, central bank digital currencies, and tokenized securities should not be inadvertently—let alone intentionally—lumped together. And just because some digital assets (which this paper uses as an umbrella term) issued by companies might be securities, it does not follow that all digital assets issued by companies are securities. In fact, the purpose of many digital assets has nothing to do with finance or investment, but rather the digital assets provide the means by which a blockchain-based good or service is provided to and accessed by consumers. Any confusion in terminology is problematic, as it can lead to misunderstandings and also inappropriate regulatory treatment if legislators or regulators paint with too broad of a brush.

Innovation is an essential source of new goods and services for consumers, financial inclusion for the underbanked and unbanked, additional investment options for investors, and creative techniques to assist businesses in raising capital. As has been noted, digital assets and blockchain technology are being leveraged to find solutions to problems as varied as food chain safety, public health (particularly noteworthy during the ongoing COVID-19 pandemic), supply chain resilience, etc.

2. Transacting in assets represented in digital rather than physical form can have advantages for end users, including the ease of transacting with a mobile device. For example, Bitcoin can be used to purchase goods and services, and it can be converted into fiat currencies like the U.S. dollar as well as into other cryptocurrencies. In addition to being a medium of exchange, some use Bitcoin as a store of value and others hold it for investment purposes. While Bitcoin still accounts for the majority of cryptocurrency trading volumes, building on what Bitcoin ushered in, today many other cryptocurrencies are available, and the number continues to grow.
Innovation is an essential source of new goods and services for consumers, financial inclusion for the underbanked and unbanked, additional investment options for investors, and creative techniques to assist businesses in raising capital, to name only a few digital asset benefits.

As we detail in this paper, developers of digital asset and blockchain-based solutions face a complicated and uncertain regulatory environment in the U.S. There is no overarching federal policy focused on promoting digital asset innovation that could help spur coordination across regulatory regimes. Few federal laws were drafted with digital assets in mind, leaving regulators in recent years to improvise a series of administrative rules and interpretations governing the space. Many of these rules overlap with one another or do not precisely fit the current state of technology. What’s key now and going forward is to ensure that federal policy encourages the development and deployment of digital assets.

Doing so requires policy makers to be deliberate in developing the right regulatory regime—one that is technology-neutral and guided by the principle that regulatory requirements must be workable given today’s technology so that laws, rules, and regulations do not stifle innovation that will benefit consumers, investors, businesses, employees, communities, and other stakeholders.


II. An Overview of the Regulatory Landscape Regarding Digital Assets in Financial Services

Regulators in the U.S. have treated digital assets in different ways, with the lack of uniformity and multiplicity of regulators leaving a complex regulatory landscape for the marketplace to navigate. At the federal level, regulatory jurisdiction over digital assets has been asserted by numerous financial regulators, including the SEC, the Commodity Futures Trading Commission (CFTC), the OCC, the Federal Reserve Board of Governors (Fed), the Federal Deposit Insurance Corporation (FDIC), and the Financial Crimes Enforcement Network (FinCEN). At the state level, regulators also have claimed varying degrees of regulatory authority over digital assets.

More coordination among regulatory agencies is needed.

Regulatory uncertainty—in combination with some regulators’ approach to enforcement and some rules and regulations that simply need updating—has created an environment in which many market participants do not possess the wherewithal and ability to innovate and do business in the U.S. without an unacceptable risk of running afoul of regulatory requirements, even when they are in good faith endeavoring to comply.

The SEC regulates all aspects of the U.S. securities markets, including capital raising, secondary trading of securities, broker-dealer activities, exchanges and alternative trading systems, investment advisers, investment companies, accounting and auditing, and much more. The SEC has been active in the digital assets ecosystem, perhaps most notably when it comes to so-called initial-coin offerings (ICOs) and other distributions of digital assets that the SEC has treated as securities.

5. Self-regulatory organizations, such as the Financial Industry Regulatory Authority (FINRA) (regulating broker-dealers) and the National Futures Association (regulating the derivatives industry), are part of the regulatory landscape as well, as is the Internal Revenue Service.
Whereas the SEC has jurisdiction over securities and related activities, the CFTC has jurisdiction over commodities and related activities. The CFTC enforces the Commodity Exchange Act (CEA) and its respective rules and regulations, which give the CFTC jurisdiction to regulate the trading of commodity futures, swaps, options, and other derivatives. The CFTC also has jurisdiction to regulate fraud and manipulation involving the cash or spot market for commodities that underlie derivatives.

When it comes to digital assets—which, as noted above, can have different structures, economics, rights, and uses—the distinction between securities and commodities can be unclear. As former CFTC chairman Heath Tarbert acknowledged, the “threshold determination” to the federal regulatory analysis begins with determining whether the instrument is a security under the federal securities laws. If the answer is yes, the SEC has jurisdiction and the digital asset will not be treated as a commodity. Alternatively, if the answer is no, then it will likely fall within the broad definition of “commodity” subject to the CFTC’s jurisdiction. Under the CEA, “commodity” includes, among several specified agricultural products, “all other goods and articles . . . and all services rights and interests . . . in which contracts for future delivery are presently or in the future dealt in.” Indeed, the CFTC has stated that “virtual currencies” fit within the definition of commodity.

In conjunction with other federal regulators, FinCEN enforces anti-money laundering (AML) and combating the financing of terrorism (CFT) regulations under the Bank Secrecy Act (BSA). FinCEN considers “exchangers” and “administrators” of “convertible virtual currencies” as money services businesses (MSBs) subject to FinCEN registration and reporting requirements. Many states also regulate MSBs under state consumer protection laws that target the operation of so-called “money transmitters,” and such state laws have had a significant impact on regulatory oversight of money digital asset businesses.

By nature of their jurisdiction over financial institutions, several federal bank regulators have some measure of regulatory authority in the digital assets space. For example, the OCC is an independent bureau within the U.S. Treasury Department that charters, regulates, and supervises national banks, federal savings associations, and federal branches and agencies of foreign banks. The OCC regulates

---

national banks’ handling of digital assets, including custodial services. The Federal Reserve is the central bank of the U.S. tasked with conducting monetary policy, overseeing payment systems, and regulating banks and other large financial institutions in the U.S. The FDIC regulates federally-insured depository institutions, including state banks that are not members of the Federal Reserve System.

This collection of financial regulators in the U.S. is not new, and efforts to rationalize their organizational structures have been discussed for decades, with occasional changes made over time (such as the merging of the Office of Thrift Supervision into the OCC under the Dodd-Frank Wall Street Reform and Consumer Protection Act). Because digital assets and blockchain create new ways of doing things, the jurisdictional boundaries are less clear-cut than when it comes to traditional capital markets and banking activities.

The following discussion expounds upon many central features of this regulatory landscape and describes many of the challenges that need to be remedied for the U.S. to benefit from digital assets’ innovative potential.

10. The Federal Reserve regulates state-chartered member banks, bank holding companies, foreign branches of U.S. national and state member banks, and state-chartered U.S. branches and agencies of foreign banks. National banks must be members of the Federal Reserve, but are regulated by the OCC. Nonetheless, many large banking institutions fall under the Fed’s purview because of its jurisdiction over bank holding companies.
III. When Is a Digital Asset a “Security”?  

A. Background

To date, the SEC has been active in the digital assets space. The SEC has authority over digital assets to the extent they constitute securities. To conclude that a digital asset is a security is to subject it to the federal securities regulatory regime, assuming none of the typical exemptions from those laws, rules, and regulations applies.  

Whether the SEC has jurisdiction – in other words, whether a digital asset is a security – has been front-and-center concerning digital assets and associated blockchain innovation. If the federal securities laws apply to digital assets, it can be difficult to effectuate the kind of widespread dissemination and circulation of digital assets that are the linchpin to success for many blockchain projects and businesses. When that happens, beneficial uses of digital assets are jeopardized. This is so even when the purpose of the digital asset distribution to users and subsequent transactions is not to raise capital, but to get the digital assets into the hands of those who can and want to use them to access

11 Importantly, if a digital asset is not a security that does not mean it goes unregulated. To the contrary, a particular digital asset may invoke other regulatory obligations that protect consumers and the marketplace even when the federal securities laws are not triggered. As summarized above, financial services regulation encompasses much more than the SEC and federal securities regulation, and blockchain-based goods and services that depend on digital assets can be found in many sectors across the economy, each with its own laws, rules, and regulations that may apply.
an innovative blockchain-based good or service or as a form of currency to buy and sell goods or otherwise transfer value.

The Securities Act of 1933 (Securities Act) and the Securities Exchange Act of 1934 (Exchange Act) both define “security” to include the catch-all term “investment contract.” The SEC and federal courts rely on the term “investment contract” to determine whether a digital asset is a security subject to the federal securities laws, including not only the Securities Act and the Exchange Act, but also the Investment Advisers Act of 1940 (Advisers Act) and the Investment Company Act of 1940 (Investment Company Act). In making this determination, the SEC and courts apply the “Howey test,” which originates from the 1946 U.S. Supreme Court decision in SEC v. W.J. Howey Co.12

Under Howey and subsequent case law, an investment contract (and thus a security) exists if there is (1) an investment of money, (2) in a common enterprise, and (3) the investors have a reasonable expectation of profit, (4) derived from the managerial or entrepreneurial efforts of others. Whether an instrument satisfies the Howey test is determined on a case-by-case basis. The analysis of each transaction depends on the relevant facts and circumstances, and focuses not only on the form of the arrangement, but also the “economic realities” of the transaction.

Section 5 of the Securities Act requires every offer or sale of securities to be registered with the SEC or satisfy an exemption from registration, such as a valid private placement.13 For issuers that do not register their offer or sale and do not satisfy any exemption, Section 5 is a strict liability statute, and, therefore, neither the SEC (in an enforcement action) nor an investor (in a private action) must establish that the company intended to violate the statute or even was negligent in failing to register the offering for Section 5 to be violated. Furthermore, Section 5 can be violated when there is fulsome disclosure to investors and the absence of fraud or manipulation. Section 12(a) of the Securities Act permits investors that purchased securities issued in violation of Section 5 to rescind the sale and get their money back.

The SEC has brought several Section 5 enforcement actions against companies on the grounds that there was a distribution of digital assets that constituted an unregistered public offering of securities. ICOs—which, it is important to note, have represented only a subset of digital asset distributions—are a case in point.

By 2017, ICOs had emerged as a popular fundraising tool for many early-stage companies looking to leverage blockchain. Described simply, an ICO occurs when an enterprise sells a digital asset, typically in the form of a virtual “coin” or “token,” to raise capital.14 The funds are used to finance the launch or development of the issuer’s blockchain project, product, or application.15 If the issuer’s business efforts

---

14. U.S. Securities and Exchange Commission, Investor Bulletin: Initial Coin Offerings, July 25, 2017, https://www.sec.gov/oiea/investor-alerts-and-bulletins/ib_coinofferings. Prior to the ICO boom, the SEC’s enforcement actions involving digital assets largely focused on fraud or other misconduct, such as Ponzi schemes, and the nature of the digital asset itself was not central to the SEC’s analysis. The emergence of ICOs changed the SEC’s regulatory approach, as the SEC began pursuing enforcement actions for unregistered digital asset offerings in violation of Section 5, without any additional allegations of fraudulent behavior or wrongdoing.
15. This paper uses the term “network” broadly to refer to the relevant network, platform, applications, protocol, tokens, and the like. See, e.g., the Staff Framework, infra note 18, at n.15.
are successful, the digital assets are expected to increase in value, providing their holders a financial return.\textsuperscript{16}

ICOs brought into sharp relief the question of when exactly digital assets would be treated as securities. The SEC directly responded in 2017 when it issued a Report of Investigation (DAO Report) involving tokens issued by The DAO.\textsuperscript{17} The SEC made clear that it would apply the traditional \textit{Howey} test to digital assets and explained why, in the agency’s view, The DAO tokens were securities under \textit{Howey}.

As SEC enforcement actions followed the DAO Report, market participants requested further clarity regarding how the SEC would apply \textit{Howey}, given the wide range of facts and circumstances across digital assets. For starters, not all issuances of digital assets are ICOs or even primarily about raising money. Indeed, the term “ICO” took on a negative connotation, underscoring the need to distinguish offerings that are part-and-parcel of capital raising from transactions that are designed to distribute digital assets so that they can be used by their holders to access goods, services, or some other functionality on a blockchain network or as a currency or other mode of transferring value. Some digital assets are simply the means by which consumers use the network itself, analogous to how consumers might use a tangible (rather than digital) product.

To its credit, the SEC has issued several pieces of informal and formal guidance regarding \textit{Howey}. The Chairman, SEC commissioners, division directors, and other staff members have spoken and written on the subject, offering insight into the SEC’s perspective. Of particular note, in 2019, SEC staff issued a Framework for applying \textit{Howey} to digital assets.\textsuperscript{18}

The Framework, although not formal Commission-level guidance, identifies numerous considerations that the SEC views as relevant when determining whether a digital asset is an investment contract under \textit{Howey}. The Framework sheds light on the Commission’s approach, but it nonetheless has raised questions. In expanding considerably upon \textit{Howey}’s original four prongs, it can be difficult to root aspects of the framework in the \textit{Howey} case law. Perhaps more challenging is that the SEC has not explained how the agency balances the Framework’s considerations in determining whether a digital asset is an investment contract.

Insofar as the SEC staff’s \textit{Howey} Framework and other SEC guidance indicates the SEC’s views, it is useful for blockchain entrepreneurs, early-stage investors, and other market participants trying to evaluate the regulatory status of digital assets in an uncertain legal environment. That said, regulatory uncertainty persists, and regulatory requirements often prove unworkable in practice when applied to digital assets.

\begin{itemize}
\item \textsuperscript{16} Arjun Kharpal, \textit{Tokenization: The World of ICOs}, CNBC, April 12, 2019, \url{https://www.cnbc.com/2018/07/13/initial-coin-offering-ico-what-are-they-how-do-they-work.html}.
\item \textsuperscript{17} The DAO Report was issued pursuant to the SEC’s reporting power under Section 21(a) of the Exchange Act. See U.S. Securities and Exchange Commission, Securities Act Release No. 81,207, \textit{Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO}, July 25, 2017, \url{https://www.sec.gov/litigation/investreport/34-81207.pdf}. The SEC did not impose any sanction on The DAO, but used the 21(a) report to warn the marketplace that enforcement actions for ICOs in violation of the federal securities laws would be forthcoming.
\end{itemize}
As explained more fully below, the SEC’s *Howey* interpretation, which extends the reach of the federal securities laws to wide swaths of the digital assets space, can impede blockchain-based innovation that depends on the wide distribution and circulation of digital assets, and renders the road to non-security status for a digital asset especially difficult. When the SEC deems a digital asset to be a security, exemptions from Securities Act registration are not viable for many issuers because of regulatory limitations that do not allow the widespread digital asset distribution and trading needed for the underlying blockchain project to prosper. Such projects cannot begin or reach scale without complying with the public offering requirements of the securities laws, which can be a non-starter.

To help address this, the following offers an application of *Howey* that would better accommodate digital asset innovation.
B. The Securities Regulatory Approach to Digital Assets

In assessing whether a digital asset is a security, the SEC has centered on two questions: (1) whether the digital asset was acquired primarily for profit or for use or consumption, including accessing the functionality of a blockchain network; and (2) whether any such profit derives predominantly from the managerial or entrepreneurial efforts of others.\(^{19}\) If either prong is not met, then there is no investment contract and, accordingly, no security.\(^ {20}\)

In the current regulatory environment, businesses cannot issue digital assets used to access blockchain-based goods or services or some other functionality without risking the costly consequences of violating the federal securities laws. This is so even when the primary purpose for distributing digital

---

19. Although the “expectation of profit” and “efforts of others” prongs receive the most attention, the other two \textit{Howey} prongs also must be satisfied for a digital asset to constitute an investment contract.

First, not every expenditure of money is an investment. For example, the purchaser of a good or service from a business (or on the secondary market) expends money and expects some value in return. But that purchaser is distinct from an investor who acquires an economic interest in an enterprise to earn a financial return based on a management team’s efforts running the business. That the product a purchaser buys might be worth more in the future does not collapse the difference between the purchaser of a good or service and an investor in an enterprise. There is even less likelihood of an investment when the purchaser is not actually funding a company’s capital raise.

Second, commonality takes different forms under \textit{Howey}, and federal courts do not uniformly apply the same test. Some courts require “horizontal commonality.” As one court put it, horizontal commonality is the “tying of each individual investor’s fortunes to the fortunes of the other investors by the pooling of assets, usually combined with the pro-rata distribution of profits.” \cite{revak_v_sec_realty_corp_18_f_3d_81,18_f_3d_81,revak_v_sec_realty_corp_18_f_3d_87,18_f_3d_87} (citations omitted). Other courts require “broad vertical commonality,” which generally requires only that the fortunes of the investors are tied to (i.e., dependent on) the efforts of the promoter of an enterprise. The Second Circuit has rejected broad vertical commonality in that it simply restates \textit{Howey’s} “efforts of others” prong. \cite{revak_v_sec_realty_corp_18_f_3d_88,18_f_3d_88}. A third type of commonality is “strict vertical commonality.” Strict vertical commonality requires that the fortunes of the investors are tied to (or, as some courts have put it, “interwoven with”) the fortunes of the promoter. \cite{stenger_v_r_h_love_galleries_inc_741_f_2d_144,741_f_2d_144,marini_v_adamo_812_f_sup_2d_243,812_f_sup_2d_243}.

Whatever commonality a court adopts, for it to be meaningful, as the Second Circuit has admonished, commonality must require more than merely the participation in or access to the relevant blockchain network. Otherwise, every digital asset would appear to meet the commonality prong by definition. Nor is it enough to find commonality that all holders of a particular digital asset are better off if the value of the digital asset increases, as the same could be said for all owners of some product that rises in value because demand for it goes up.

Furthermore, \textit{Howey’s} facts are instructive. The investment contract in \textit{Howey} afforded individuals financial profits in an orange business proportionate to each individual’s economic interest in the business (much like an investor’s percentage of stock ownership reflects the investor’s claim on a company), and the \textit{Howey} investors could not in any practicable way use or consume the oranges as fruit. This stands in sharp contrast to many blockchain projects, where the digital assets do not afford their holders a financial interest in the project itself or the project sponsor, and where an important reason for acquiring digital assets is because they afford their holders proportionate access to the network’s functionality, which is the digital equivalent of eating the oranges.

All four prongs of \textit{Howey} must be met for an investment contract to exist; none of them should be so easily met as to render them meaningless considerations, as that expands the scope of the federal securities laws beyond what the \textit{Howey} Court envisioned.

20. Digital asset transactions may still be regulated even if the digital asset is not a security. For example, a digital asset that is not a security may be a commodity under the CEA and within the CFTC’s authority.
assets is not to raise capital but to achieve or promote network functionality for the marketplace. As a result, too many backers of digital asset projects face the prospect of being unable to move their businesses forward. When that occurs, the real-world deployment of innovations like blockchain is stifled. Exemptions to the securities offering registration requirements, such as Regulation D and Regulation A+, are not a realistic option for many enterprises, in part because the restrictions underlying the exemptions can preclude issuers from creating a truly decentralized or functional network.

1. USE OR CONSUMPTION

For a digital asset to be an investment contract under Howey, it must have been acquired for the primary purpose of earning a financial profit. Profit can include “capital appreciation resulting from the development of the initial investment or business enterprise or a participation in earnings resulting from the use of purchasers’ funds.” Stated differently, longstanding jurisprudence has determined that transactions primarily motivated by use or consumption do not constitute investment contracts because Howey’s “expectation of profit” prong is not met. This is key when evaluating the regulatory status of a digital asset that allows purchasers to access a digital good or service on a blockchain-in network. Digital use and consumption should be no less consequential under Howey’s investment contract analysis than physical use and consumption are.

In United Housing Foundation, Inc. v. Forman, the U.S. Supreme Court held that shares of what was called “stock” that entitled purchasers to a subsidized apartment in a housing cooperative was not actually the kind of security commonly known as stock (notwithstanding what it was labeled) nor an investment contract. The Court determined that the purchasers’ motivation was to obtain housing, albeit at a reduced rent, not a financial return. The Court summarized the crux of the matter this way: “[W]hen a purchaser is motivated by a desire to use or consume the item purchased—‘to occupy the land or develop it themselves,’ as the Howey court put it . . . — the securities laws do not apply.” Although the leasing activities of the cooperative allowed for the possibility of still further rent reductions, the Court concluded that the possibility of these reductions, even when combined with the initial below-market rents, might have made the stock “more attractive,” but did not satisfy “an ‘expectation of profit’ in the sense found necessary in Howey.”

Pursuant to Forman and subsequent case law, many companies have created a digital asset that is intended by the sponsor to be—and is acquired primarily to be—used on the associated blockchain network, such as to allow purchasers access to a blockchain-based good or service or other blockchain functionality. In other words, the primary purpose of such a digital asset is not financial investment or speculation. Examples of consumptive use cases involving digital assets include, among numerous

21. While the SEC staff can grant “no-action” relief and provide comfort that a particular digital asset is not a security, the process can be a costly and time-consuming one, and to date the SEC staff has published only a few no-action letters under limited conditions.
22. Staff Framework, supra note 18.
24. Id. at 852–53. See also id. at 858 (“What distinguishes a security transaction . . . is an investment where one parts with his money in the hope of receiving profits from the efforts of others, and not where he purchases a commodity for personal consumption or living quarters for personal use.”).
25. Id. at 857.
others, access to social networks that connect users, access to a service ecosystem, the allocation of loyalty or reward points for repeat customers, enhancing the user experience on a platform, facilitating purchases and sales of non-financial assets, and creating new options for payments and transferring value via networks.

If no blockchain network exists when digital assets are disseminated, the SEC seems to conclude that investors are motivated by profit because there is no ability to use or consume goods or services on a network that has not launched. If a network has launched but it is not functional (or is only modestly functional), the SEC has questioned whether the digital asset can be said to have utility. Even if the network is functional when digital assets are issued, the SEC has suggested that the following could sway it to find that a security exists: proceeds from selling the digital assets are used to develop the network further; purchasers acquired the digital assets at a discount to the value of the goods or services on the network; the digital assets are sold to purchasers not reasonably expected to use them to consume a good or service; or there are limited or no restrictions on reselling the digital assets after issuance at a price increase, particularly if the issuer has a role in facilitating secondary trading.26

The marketing tactics and materials used by a company to promote a digital asset issuance have weighed heavily on the SEC’s Howey analysis. In finding that a digital asset is an investment contract, the SEC has routinely cited an issuer’s promotion of a potential financial upside from holding the digital assets.27 On the other hand, it should cut against finding that a digital asset is an investment contract if the project sponsor stresses the functionality of the network and does not highlight that the digital assets might be worth more in the future.

26. Staff Framework, supra note 18.
A tension arises when purchasers hold digital assets because of the utility they afford them but the digital assets could become more valuable, such as if and when the blockchain network becomes more functional and widely used. Case law is again instructive.

Courts have held that a transaction can fall within Forman as a non-security even if there is some expectation of profit so long as the use and consumption motivation is the primary or predominant source of value to the holders. Zero profit potential is not the test, although zero profit potential does take any profit motive off the table.

If the hurdle for sufficient use or consumption under Forman is set too high, the reach of the federal securities laws extends too far. A narrow application of Forman uniquely disadvantages blockchain networks. Blockchain networks are deprived of the opportunity to achieve further functionality when the federal securities laws restrict the kind of widespread distribution and transferability of digital assets that is required for a blockchain project fueled by digital assets to flourish, and the marketplace foregoes the goods and services the network has to offer. This can be mitigated by allowing less-than-full network functionality to bring a digital asset within Forman’s ambit as a non-security, especially when digital asset holders will enjoy additional utility on the network as it continues developing. And the subjective goal of certain digital asset holders to resell at a higher price should not carry more weight in a Howey analysis than a sponsor’s intended business purpose of innovating new goods and services for the marketplace to use and consume.

2. EFFORTS OF OTHERS AND ESTABLISHING A DECENTRALIZED NETWORK

The following have guided the SEC’s “efforts of others” analysis: Assuming an expectation of profit, do purchasers reasonably expect to rely on the efforts of the sponsor or some other third party to generate the profit? If so, are those efforts “undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise”?

Concerning digital assets, the SEC’s answers have turned largely on whether the “essential tasks or responsibilities [are] performed and expected to be performed” by the project sponsor or by an “un-

28. See, e.g., Rice v. Branigar Organization, Inc., 922 F.2d 788, 791 (11th Cir. 1991) (the court found that there was no investment contract, reasoning that “[t]he appellants have not offered any evidence to show that the majority or even a fair number of the buyers bought houses or lots as an investment”); Aldrich v. McCulloch Properties, Inc., 627 F.2d 1036, 1040 (10th Cir. 1980) (stating, “[c]learly the lots are not securities if the purchasers were induced to obtain them primarily for residential purposes” and “if the benefit to the purchasers of the amenities promised by defendants was largely in their own use and enjoyment, the necessary expectation of profit is missing”).


30. Staff Framework, supra note 18 (citing SEC v. Glenn W. Turner Enter., Inc., 474 F.2d 476, 482 (9th Cir.), cert. denied, 414 U.S. 821 (1973)). Although Howey uses the phrase “solely from the efforts of others,” courts have allowed more flexibility by requiring that the profits come “predominantly” from the efforts of others. See, e.g., SEC v. Life Partners, Inc., 87 F.3d 536, 545–48 (D.C. Cir. 1996).
affiliated, dispersed community of network users (commonly known as a ‘decentralized network’).”

If the latter, it refutes the claim that any expectation of profit is from the “efforts of others.” A digital asset that is a security when issued can still morph into a non-security at such time as there is sufficient decentralization of those responsible for the ongoing development and improvement of the network.

The SEC’s director of the Division of Corporation Finance, in a widely-cited speech, made these points in the context of explaining that Bitcoin and Ether (a common digital asset) are not securities:

But this also points the way to when a digital asset transaction may no longer represent a security offering. If the network on which the token or coin is to function is sufficiently decentralized—where purchasers would no longer reasonably expect a person or group to carry out essential managerial or entrepreneurial efforts—the assets may not represent an investment contract. Moreover, when the efforts of the third party are no longer a key factor for determining the enterprise’s success, material information asymmetries recede. As a network becomes truly decentralized, the ability to identify an issuer or promoter to make the requisite disclosures becomes difficult, and less meaningful.

And so, when I look at Bitcoin today, I do not see a central third party whose efforts are a key determining factor in the enterprise. The network on which Bitcoin functions is operational and appears to have been decentralized for some time, perhaps from inception. Applying the disclosure regime of the federal securities laws to the offer and resale of Bitcoin would seem to add little value. And putting aside the fundraising that accompanied the creation of Ether, based on my understanding of the present state of Ether, the Ethereum network and its decentralized structure, current offers and sales of Ether are not securities transactions. And, as with Bitcoin, applying the disclosure regime of the federal securities laws to current transactions in Ether would seem to add little value. Over time, there may be other sufficiently decentralized networks and systems where regulating the tokens or coins that function on them as securities may not be required. And of course there will continue to be systems that rely on central actors whose efforts are a key to the success of the enterprise. In those cases, application of the securities laws protects the investors who purchase the tokens or coins.

The SEC has since indicated various factors it considers relevant when considering the extent and nature of decentralization, although it has not explained just “how much” decentralization it considers enough for an expectation of profit not to come from the efforts of others under Howey.

For example, the SEC staff’s Howey Framework states:

“Where the network or the digital asset is still in development and the network or digital asset is not fully functional at the time of the offer or sale, purchasers would reasonably expect an [Active Participant (AP)] to further develop the functionality of the network

31. Staff Framework, supra note 18.
32. William Hinman, supra note 8.
33. Other than referring to Bitcoin and Ether as non-securities, the SEC has not indicated what it believes is the requisite degree and nature of decentralization to negate the “efforts of other” prong of Howey.
or digital asset (directly or indirectly). This particularly would be the case where an AP promises further developmental efforts in order for the digital asset to attain or grow in value.”

The view that a blockchain network must be decentralized or fully (or nearly fully) functional when digital assets are distributed to avoid being considered investment contracts is untenable for many projects. The way to achieve decentralization and functionality is for digital assets to be distributed widely; however, widely distributing digital assets before decentralization and functionality are achieved runs a considerable risk of a securities law violation under the SEC’s analysis.

SEC commissioner Hester Peirce has put it this way:

We have created a regulatory Catch 22. Would-be networks cannot get their tokens out into people’s hands because their tokens are potentially subject to the securities laws. However, would-be networks cannot mature into a functional or decentralized network that is not dependent upon a single person or group to carry out the essential managerial or entrepreneurial efforts unless the tokens are distributed to and freely transferable among potential users, developers, and participants of the network. The securities laws cannot be ignored, but neither can we as securities regulators ignore the conundrum our laws create.

It is useful to take a step back and place “decentralization” into its jurisprudential context. The Howey case law focuses on “efforts of others.” Decentralization is a lens on this prong, but a lack of it is not a determinative fact or circumstance; nothing from Howey or its progeny mandates that full decentralization (or full functionality) is required for a digital asset to pass muster as a non-security. Indeed, there is room under Howey for a centralized authority—such as an enterprise’s promoter or management team or, by analogy, a blockchain project’s sponsor—to play a meaningful role both pre- and post-launch without finding that an investment contract exists. This is significant for digital assets because, in reality, each blockchain project has a sponsor leading the development up to the launch and, in most cases, the sponsor plays at least some role going forward in maintaining and developing the technology-dependent network and ensuring that any use and consumption based on the network comes to fruition. In fact, the SEC should expressly recognize that complete (or even significant) decentralization is not feasible for some blockchain projects and digital asset issuers, especially at a project’s outset.

To embed into Howey a requirement that a blockchain project must be fully (or nearly fully) decentralized (or functional) would impede innovation because blockchain networks infrequently, if ever, would meet this test at launch or even for a meaningful period of time thereafter.

One further point is in order regarding the “efforts of others” and the potential fluctuation of a digital asset's value. Even if a profit motive predominates over utility and a centralized authority is the essential force behind a blockchain project, it still does not necessarily follow that the digital assets are an

---

34. Staff Framework, supra note 18.
investment contract subject to regulation under the federal securities laws. There are cases pre-dating the emergence of blockchain holding that Howey is not met where the change in the value of an instrument is primarily because of market forces or some external factor and not the managerial or entrepreneurial efforts of the promoter of a business. The ability to resell a digital asset at a higher price does not conclusively mean that there is an investment contract, as there are thousands of items that people buy and sell every day for a profit and yet clearly are not securities.

3. **LACK OF WORKABLE OPTIONS FOR DISTRIBUTION**

If a digital asset is a security, what are the options for distribution?

Under the federal securities laws, issuers can rely on a number of exemptions to the costly and burdensome registration process under Section 5 of the Securities Act, albeit each exemption contains its own requirements and restrictions, including limiting the number or types of purchasers that securities may be sold to or the amount of securities that can be issued. Regulation D and Regulation A+ have been the most likely exemptions for digital asset issuers. Taking a transaction offshore is another possibility to overcome the difficulties of distributing digital assets in the U.S.

Neither Regulation D nor Regulation A+ is practical for most digital asset projects because the conditions each exemption imposes makes it difficult for issuers to achieve adequate functionality or develop a decentralized network.

Regulation D allows a company to issue an unlimited amount of securities in a private placement as long as the securities are only sold to “accredited investors” and up to 35 unaccredited investors, provided the unaccredited investors are sophisticated and receive adequate disclosure. Securities offered under Regulation D contain restrictions on resales for a period of time.

36. See, e.g., *Noa v. Key Futures, Inc.*, 638 F.2d 77, 79 (9th Cir. 1980) (finding that a Contract of Purchase and a Confirmation and Certificate of Ownership concerning the sale of silver did not create an investment contract, explaining that “[o]nce the purchase of silver bars was made, the profits to the investor depended upon the fluctuations of the silver market, not the managerial efforts of Key Futures”); *McCown v. Heidler*, 527 F.2d 204, 208 (10th Cir. 1975) (explaining that “land, as such, is not a security and that a land purchase contract, simply because the purchaser expects or hopes that the value of the land purchased will increase, does not fall automatically within the confines of the Securities Acts”).
Although the Regulation D private placement safe harbor has been used for digital assets, Regulation D is not a workable option for many companies issuing digital assets to support the development and functionality of a blockchain network. The severe limitation on who can acquire digital assets in a private placement impedes progress toward functionality and decentralization and, thus, a project’s success. Regulation D’s transfer restrictions also significantly hinder a company’s ability to create a network because digital assets issued in a Regulation D offering cannot widely circulate through secondary transactions. In addition, Section 12(g) of the Exchange Act requires issuers to register securities with the SEC if the issuer meets certain asset and investor thresholds.

The challenges are accentuated if any subsequent distribution of digital assets well after a valid Regulation D offering might be integrated with the prior Regulation D offering to conclude that the private placement was in fact a public offering in violation of the Securities Act. This is a particularly incongruous result if the subsequently-distributed digital assets are intended to allow their holders access to valuable blockchain functionality. Regulation D is more impracticable still if initial investors in the private offering who resell digital assets they receive from the issuer at some point in the future risk being “underwriters” who violated the Securities Act by failing to register their resales.

Regulation A (also known as a mini-IPO) was expanded by the JOBS Act of 2012 to what is now commonly referred to as “Regulation A+.” Under a two-tiered structure, Regulation A+ allows companies to raise up to $75 million (previously only $5 million) annually and offer securities to the general public, rather than only to accredited investors. Issuers that rely on Regulation A+ must file an offering statement qualified by the SEC and must update their disclosures on an ongoing basis. These registration requirements, although more onerous than what a private placement under Regulation D involves, are less costly and burdensome than what a traditional registration of a securities offering on Form S-1 under the Securities Act requires. Digital assets offered pursuant to Regulation A+ are freely tradeable.

37. Many companies that initially relied on Regulation D in the digital assets context used simple agreements for future tokens (SAFTs). In a SAFT, the issuer raises funds to develop a blockchain network. Rather than receive a token at the time of purchase, investors receive a promise that the sponsor will, at some point in the future as the network develops, deliver tokens to settle the issuer’s SAFT commitment to investors. Issuers have treated the SAFTs themselves as securities. Depending on the facts and circumstances, the tokens, when delivered in satisfaction of the SAFT, may not be securities under Howey if there is adequate use and consumption associated with the tokens or the network has become adequately decentralized.


This sort of “integration” approach is in tension with a facts-and-circumstances test like Howey. Namely, the facts and circumstances as they exist at the time the token is delivered should drive the analysis, especially when the original SAFT transaction complied with the federal securities laws.


41. Id.
While Regulation A+ is another option for some companies to distribute digital assets, it remains of limited practical use. Even for companies that can shoulder the regulatory requirements of Regulation A+, the fast-paced, innovative environment of digital assets and blockchain is at odds with a lengthy regulatory process. While they await regulatory sign-off, companies seeking Regulation A+ approval take an appreciable risk that the market or technology will change or that other components of the regulatory environment will shift. If nothing else, the approval times for SEC qualification of offerings under Regulation A+ should be reduced so that Regulation A+ is a more realistic option for more digital asset issuers and associated blockchain projects.

Shortened Regulation A+ approval times, while helpful, do not address every challenge because Regulation A+, like Regulation D, may restrict companies from offering digital assets to a sufficient number of purchasers to develop a meaningfully functional or decentralized blockchain network. Not only is there a cap on the size of Regulation A+ offerings, but the Regulation A+ exemption from Exchange Act Section 12(g) registration requirements applies only if the issuer meets specific conditions, such as uses a transfer agent and has a maximum annual public float of $75 million.

Regarding secondary trading, to the extent digital assets are securities, the buying and selling of them once permitted after primary issuance must comport with a host of requirements under the federal securities laws relating to, among other things, broker-dealers, transfer agents, trading venues, and custody. Indeed, the SEC has brought enforcement actions against those involved in the trading of digital assets, including for failure to register as a broker-dealer or an exchange. These regulatory obligations can further impede the path to functionality and decentralization.

In light of these and other regulatory challenges, some sponsors of digital asset projects may look to avoid the U.S. market altogether by issuing their digital assets only in foreign jurisdictions. When transactions are taken offshore, the U.S. loses out on the innovation and economic activity, and consumers and others lose out on the blockchain network’s utility.


43. Regulation S under the Securities Act is a safe harbor that excludes off-shore offerings and subsequent resales from Section 5’s registration requirements if the transaction is conducted entirely outside the U.S., to non-U.S. persons, and with restrictions in place to prevent sales, including resales, to U.S. persons. See U.S. Securities and Exchange Commission, Securities Act Release No. 33-6863, Offshore Offers and Sales, April 24, 1990, https://www.sec.gov/rules/final/33-7505.htm.
IV. Custody of Digital Assets

The SEC’s oversight of the securities markets does not end with the offering of securities. The agency also regulates broker-dealers that effect transactions, exchanges and non-exchange alternative trading systems that provide venues for securities trading, clearing agencies that clear and settle trades, transfer agents that maintain stock records, investment advisers, and investment companies that offer portfolios of securities for investors. The SEC’s stance on digital assets issuance has had spillover effects for these and other SEC-regulated entities and activities.

Because custody is considered a lynchpin to more widespread ownership and holding of digital assets that are securities, the regulatory landscape for custodial services has received a great deal of attention. A workable approach to custody under the federal securities laws will foster secondary trading and promote investor safeguards. And the more institutions are able and willing to maintain custody, the more likely it is that digital assets can be used for non-financial purposes as well.

Of course, the way custody is accomplished should be sound. Whether assets are physical or digital, custody speaks to a fundamental concern: Do the assets in fact exist and are investors protected from loss and theft?

“Digital assets recorded on a distributed ledger like blockchain challenge regulators, custodians, and investors to determine what it means to have possession or control of digital asset securities in a manner that meets important regulatory requirements and that satisfies market participants’ interest in ensuring that their (or their clients’) digital assets are secure.”
Custody of securities such as stocks and bonds is a routine matter; over decades, banks, broker-dealers, and other custodial entities have developed well-settled means for properly custodying these types of assets. Digital assets recorded on a distributed ledger like blockchain challenge regulators, custodians, and investors to determine what it means to have possession or control of digital asset securities in a manner that meets important regulatory requirements and that satisfies market participants’ interest in ensuring that their (or their clients’) digital assets are secure.

To possess or control a digital asset, one must generally have both a cryptographic “public key” and a corresponding cryptographic “private key.” The public key is visible to and verifiable by all participants on the blockchain. The private key is intended to be kept confidential. The holder of the private key to a particular digital asset has the ability to transfer the digital asset to anyone via the related blockchain; without the private key, one is unable to do so.

Some digital asset owners store their private keys in a “hot wallet” connected to the internet to permit rapid transactions, but this runs a heightened risk of cyber theft. Others store their private keys offline in “cold wallets” that decrease cybersecurity risk but introduce frictions when the holder seeks to buy, sell, or lend digital assets in cold storage. Moreover, a private key in cold storage could still be stolen, lost, or destroyed.

A digital asset holder may rely on a third party to hold the assets. In that case, holding the assets (i.e., “custody”) has, as noted above, a regulatory dimension to it as well as a technological one.

Under the Exchange Act, any person engaged in the business of effecting transactions in securities for the account of others must register with the SEC as a broker-dealer. Rule 15c3-3 (the Customer Protection Rule) under this Act requires custodial broker-dealers to maintain “physical possession or control” of the securities or to use what is commonly referred to as a “good control location,” with the customer assets safeguarded away from other broker-dealer assets. The Customer Protection Rule was adopted by the SEC to protect customer assets from loss and investors from harm in the event a broker-dealer becomes insolvent or otherwise fails.

So what constitutes the possession or control of digital assets that are securities?

In a 2019 Joint Staff Statement, SEC and FINRA staff indicate how this straightforward question raises several difficulties:

There are many significant differences in the mechanics and risks associated with custodying traditional securities and digital asset securities. For instance, the manner in which digital asset securities are issued, held, and transferred may create greater risk that a broker-dealer maintaining custody of them could be victimized by fraud or theft, could lose a “private key” necessary to transfer a client’s digital asset securities, or could transfer a client’s digital asset securities to an unknown or unintended address.


without meaningful recourse to invalidate fraudulent transactions, recover or replace lost property, or correct errors. Consequently, a broker-dealer must consider how it can, in conformance with Rule 15c3-3, hold in possession or control digital asset securities.

In particular, a broker-dealer may face challenges in determining that it, or its third-party custodian, maintains custody of digital asset securities. If, for example, the broker-dealer holds a private key, it may be able to transfer such securities reflected on the blockchain or distributed ledger. However, the fact that a broker-dealer (or its third party custodian) maintains the private key may not be sufficient evidence by itself that the broker-dealer has exclusive control of the digital asset security (e.g., it may not be able to demonstrate that no other party has a copy of the private key and could transfer the digital asset security without the broker-dealer’s consent). In addition, the fact that the broker-dealer (or custodian) holds the private key may not be sufficient to allow it to reverse or cancel mistaken or unauthorized transactions. These risks could cause securities customers to suffer losses, with corresponding liabilities for the broker-dealer, imperiling the firm, its customers, and other creditors.  

In other words, exactly what a broker-dealer must do to meet its possession or control obligations if it custodies digital asset securities is not clear. Rule 15c3-3 was not written with distributed-ledger technology and cryptographic keys in mind. The Joint Staff Statement identifies tough regulatory hurdles a broker-dealer must address technologically, but does not explain how to resolve them to comply with the federal securities laws.

In December 2020, the Commission itself spoke about broker-dealer custody of digital asset securities. The SEC explained its position as follows: for purposes of possession or control under Rule 15c3-3, if nine “circumstances” are met, then a broker-dealer seeking to custody digital asset securities will not be subject to an enforcement action for failure to take adequate possession or control of the digital assets. This no-enforcement-action position only lasts five years. During this period, a broker-dealer will be subject to examination by SEC and FINRA staff to ensure that the broker-dealer is meeting the circumstances the SEC describes. The SEC added:

The five-year period in which the statement is in effect is designed to provide market participants with an opportunity to develop practices and processes that will enhance their ability to demonstrate possession or control over digital asset securities. It also will

46. See supra note 44 (citations omitted).
The Commission’s position is a useful step insofar as it goes, including its expressed support for innovation. However, the circumstances the SEC imposes as conditions to non-enforcement are quite limiting, such as that the broker-dealer “limits its business to dealing in, effecting transactions in, maintaining custody of and/or operating an alternative trading system for digital asset securities.” Because the SEC statement relates only to a special-purpose broker-dealer, the guidance would not appear to apply to a full-service broker-dealer. In addition, many significant technical and regulatory questions about custodying digital asset securities are still open, among them those the SEC raises in its request for comment. From here, the SEC should prioritize developing and implementing a suitable and durable approach to broker-dealer custody of digital asset securities, well before the end of 2025.

There’s been similar regulatory uncertainty for investment advisers under the Advisers Act.

SEC Rule 206(4)-2 (the Custody Rule) under the Advisers Act generally requires SEC registered investment advisers that have custody of client funds or securities to maintain such funds or securities with a “qualified custodian,” such as a bank or broker-dealer. Custody under the Advisers Act is defined broadly to include not just possession of investor assets but also authority over those assets and the ability to withdraw investor funds. The qualified custodian must maintain an adviser’s client funds and securities according to various SEC requirements either in a separate account for each client in the client’s name or in one or more accounts containing only funds and securities of the client in the name of the investment adviser as agent or trustee for the client. In short, an investor’s assets must be kept separate and secure to protect the assets from misappropriation and other types of wrongdoing that could result in investor harm.

What technological capabilities must a qualified custodian have to satisfy the Custody Rule? The answer remains unclear. Not only must the Custody Rule be met to the SEC’s satisfaction, but investment advisers themselves also must be confident in the qualified custodian’s custody solution given the reputational and business risk advisers face if client assets go missing.

A letter from the SEC’s Division of Investment Management seeking public comment on the Custody Rule in March 2019 provides insight into the Commission’s assessment:

The digital asset market has grown rapidly and some advisers have sought to invest in digital assets on behalf of their clients. In light of this innovation, the Division staff, together with staff of the Commission’s Strategic Hub for Innovation and Financial Technology

49. Id.
(FinHub), has engaged with investment advisers, broker-dealers, service providers, market observers, academics and others to understand and discuss related compliance questions.

Through this dialogue, staff and market participants have discussed, among other things, whether and how characteristics particular to digital assets affect compliance with the Custody Rule. These characteristics include, for example, the use of DLT to record ownership, the use of public and private cryptographic key pairings to transfer digital assets, the “immutability” of blockchains, the inability to restore or recover digital assets once lost, the generally anonymous nature of DLT transactions, and the challenges posed to auditors in examining DLT and digital assets.\(^{50}\)

A separate set of custody requirements applies to SEC-registered investment companies such as mutual funds under Section 17(f) of the Investment Company Act. The Investment Company Act requires registered investment companies to use a regulated intermediary or self-custody assets and, in either case, to meet several requirements. Investment companies can use, among other third-party custodians, banks and members of national securities exchanges (e.g., broker-dealers).\(^{51}\)

Dalia Blass, as director of the SEC’s Division of Investment Management, addressed several digital asset custody-related issues for registered investment companies in a January 2018 letter:

> The 1940 Act imposes safeguards to ensure that registered funds maintain custody of their holdings. These safeguards include standards regarding who may act as a custodian and when funds must verify their holdings. To the extent a fund plans to hold cryptocurrency directly, how would it satisfy the custody requirements of the 1940 Act and relevant rules? We note, for example, that we are not aware of a custodian currently providing fund custodial services for cryptocurrencies. In addition, how would a fund intend to validate existence, exclusive ownership and software functionality of private cryptocurrency keys and other ownership records? To what extent would cybersecurity threats or the potential for hacks on digital wallets impact the safekeeping of fund assets under the 1940 Act?\(^{52}\)

It’s useful that the SEC has identified its custody questions for broker-dealers, investment advisers, and investment companies. Workable guidance on how to address these questions in accordance with regulatory requirements (or an updating of what custody requires under the federal securities laws to

---


51. The rules governing investment company custody are, as written, often outdated. For example, Rule 17f-1 provides: “The securities and similar investments held in such custody shall at all times be individually segregated from the securities and investments of any other person and marked in such manner as to clearly identify them as the property of such registered management company, both upon physical inspection thereof and upon examination of the books of the custodian. The physical segregation and marking of such securities and investments may be accomplished by putting them in separate containers bearing the name of such registered management investment company or by attaching tags or labels to such securities and investments.”

better fit digital assets and blockchain technology) would be welcome. Otherwise, uncertainty about custody will continue to limit the holding of digital assets by both individuals and institutions.

The OCC’s modernized approach to the custody of digital assets by banks, although a different context than federal securities regulation, illustrates how custody can be re-thought in light of emerging technology. In July 2020, the OCC published an Interpretive Letter clarifying the authority of national banks to provide custody services for cryptocurrency and other digital assets. In the Interpretive Letter, the OCC describes safekeeping and custody services for a wide variety of customer assets, both physical and digital, as among the most basic and consequential bank activities to support its finding that providing custody services for digital assets is merely a modern form of traditional bank activities. The OCC thoughtfully expressed that the custody of digital assets is part of the natural evolution of banking services and regulation to account for technological change:

National and state banks and thrifts have long provided safekeeping and custody services, including both physical objects and electronic assets. The OCC has specifically recognized the importance of digital assets and the authority for banks to provide safekeeping for such assets since 1998. In the letter published today, the OCC concludes that providing cryptocurrency custody services, including holding unique cryptographic keys associated with cryptocurrency, is a modern form of traditional bank activities related to custody services. Crypto custody services may extend beyond passively holding “keys.”

Safekeeping services are among the most fundamental and basic services provided by banks. Bank customers traditionally used special deposit and safe deposit boxes for the storage and safekeeping of a variety of physical objects, such as valuable papers, rare coins, and jewelry. As the banking industry entered the digital age, the OCC recognized the permissibility of electronic safekeeping activities. Specifically, the OCC has concluded that a national bank may escrow encryption keys used in connection with digital certificates, finding that the key escrow service is a functional equivalent to physical safekeeping, except it uses electronic technology suitable to the digital nature of the item to be kept safe. The OCC has also concluded that a national bank may provide secure web-based document storage, retrieval and collaboration of documents and files containing personal information or valuable confidential trade or business information because these services are the electronic expression of traditional safekeeping services provided by banks.

Although questions remain, the OCC’s Interpretative Letter takes a step in the right direction by adding some clarity for banks under its supervision that take custody of digital assets. Beyond that more practical progress, the OCC’s Interpretive Letter demonstrates that there are instances where the U.S. can advance regulatory modernization working within the existing regulatory framework to accommodate technological advances. The OCC’s forward-looking approach to the issue is worthy of recognition.

54. Id.
V. Payments

An aspect of banking that blockchain could change significantly is payment systems—the processes for clearing and settling transfers of value between parties. Payment systems in the U.S. are complex and governed by statutes, rules, regulations, and case law at the state and federal levels. The legal principles relevant to a particular payment system generally depend on the method of payment, the types of transactions cleared and settled, and, in some cases, the status of the parties to a payment. Although payment systems have made significant advancements over the past several years, certain elements remain ripe for further improvements that innovation, including blockchain technology and digital assets, can offer.

It is important to distinguish between clearing and settlement. Clearing refers to the process by which instructions to transfer funds are sent from one financial institution to another. Clearing instructions can be transmitted on a bilateral, real-time basis between two financial institutions or can be processed through a centralized party that nets a large body of clearing instructions from multiple financial institutions. Settlement refers to the finalization of the legal transfer of property rights in funds from one party to another.

Cross-border payments, including foreign remittances, are frequently cited as one of the most important opportunities for digital assets in banking. Cross-border payments are transactions involving individuals, entities, or banks operating in at least two different countries. The current framework for cross-border payments is burdened by inefficiencies and various processes and fees, with numerous intermediaries playing a part in each payment. The framework also lacks harmonization and standardization, with different types of systems, payment instructions, and fields that are not interoperable with each other.

Under current cross-border payment systems, several intermediaries are involved in facilitating, confirming, and processing the transaction and information about the parties. Most of these intermediar-
ies charge fees that add to the cost of payment processing for cross-border transfers. Because cross-border payments must move through these intermediaries before settlement can be achieved, the time it takes to transfer money can be lengthy and uncertain, and participants must manage various time zones. Generally, it takes at least some number of days.

Domestic payments, particularly in the U.S., have become increasingly convenient, with quicker processing times. Despite this progress, digital assets can make payment systems even more efficient, timely, and cheaper. Digital assets that use blockchain technology are a way to offer more inclusive banking, opening payments and other financial services to millions of individuals and households who currently face hurdles to enjoying the benefits of a bank account.

Blockchain’s potential—leveraging the powerful combination of digital assets and mobile devices—to streamline and accelerate payments has led many financial institutions, including fintech companies, to invest in blockchain-based payments infrastructure.

For example, stablecoins have emerged as a type of blockchain-based digital asset engineered toward price stability. Stablecoins were introduced to reduce volatility-related risk, as Bitcoin has experienced. Generally, a stablecoin is a digital asset with its value backed by fiat money, commodities, or other cryptocurrencies. Unlike other digital assets, a stablecoin’s value is fixed to a known unit of currency.

“Cross-border payments, including foreign remittances, are frequently cited as one of the most important opportunities for digital assets in banking.”

56. Id.
58. One study found that cross-border payments received the most annual investment for potential applications of blockchain technology. See Bhavin Patel et al., The Role of Blockchain in Banking, OMFIF, May 2020, https://www.omfif.org/blockchainbanking/#text=Major%20banks%20and%20financial%20institutions,application%2C%20though%20regulatory%20barriers%20remain.
(or basket of currencies) or some other asset that essentially collateralizes it. A stablecoin pegged to the U.S. dollar, for example, means that the stablecoin is backed by U.S. dollars held in reserve or tied to an algorithm to track the value of the stablecoin to the U.S. dollar. Stablecoins can combine the speed and cost efficiencies of other digital assets, with price stability akin to that of a fiat currency. For that reason, stablecoins can be a useful payments option.61

Blockchain technology and digital assets can empower direct real-time transactions that lower the expense and time associated with sending, clearing, and settling payments. The savings could be billions of dollars a year.62 In addition, payment innovation provides individuals and small businesses with quicker access to funds to pay bills and to buy what they need when they need it. The need to get government stimulus checks into the hands of individuals and households as quickly as possible during the COVID-19 pandemic demonstrates the value of payments speed and efficiency.63 Moreover, by decreasing the number of actors that information must flow through and offering real-time balance information, using blockchain can further reduce security concerns as well as liquidity risks.

Blockchain technology and digital assets can empower direct real-time transactions that lower the expense and time associated with sending, clearing, and settling payments. The savings could be billions of dollars a year.

By fostering digital assets, blockchain, along with other emerging technologies, can help the unbanked and underbanked. Anyone with a mobile device or access to the internet could use a stablecoin or other digital asset to make payments, without the need to travel to a bank’s physical location. Digital assets evidence the potential of technological innovation more generally to help reduce fees, delays, and inefficiencies.

Despite the opportunities digital assets and blockchain present, when it comes to payments, market participants continue to face regulatory questions in commercializing their products, not least of which being whether the digital assets that are used to make payments are securities. For example, the SEC has made clear that simply labeling a digital asset a “stablecoin” does not decide its regulatory status.

61. Stablecoins can be non-collateralized, instead using algorithms and smart contracts to monitor supply and demand to keep the value stable. See e.g. Corporate Finance Institute, What Is a Stablecoin?, https://corporatefinanceinstitute.com/resources/knowledge/other/stablecoin/ (last accessed January 17, 2021).
62. See supra note 55.
An SEC staff pronouncement has warned, “Whether a particular digital asset, including one labeled a stablecoin, is a security under the federal securities laws is inherently a facts and circumstances determination.” And non-stablecoin digital assets that can fluctuate in value might be treated as a security, even though they offer a concrete use case as a currency that is unrelated to earning an investment return. Furthermore, a stablecoin with characteristics of a deposit can trigger bank licensing requirements, and stablecoins may be considered commodities subject to the CFTC’s jurisdiction. Finally, any administrator or exchanger of digital assets will likely be deemed a money transmitter, subject to both state and federal regulation and licensing requirements.

64. U.S. Securities and Exchange Commission, Public Statement, SEC FinHub Staff Statement on OCC Interpretation, September 21, 2020, https://www.sec.gov/news/public-statement/sec-finhub-statement-occ-interpretation. FinHub noted, however, that “market participants may structure and sell a digital asset in such a way that it does not constitute a security and implicate the registration, reporting, and other requirements of the federal securities laws.”
VI. Digital Asset Money Transmitters

A business that facilitates the exchange of digital assets or issues digital assets may be considered a MSB in the U.S. subject to state and federal regulation. While federal regulation of MSBs focuses on criminal activity, such as AML and CFT, state regulators focus on consumer protection. The broad application of the federal rules for money transmitters to certain digital assets, combined with the patchwork of state licensing requirements, has made money transmitter regulation a particularly important consideration for many market participants.

A. Federal Money Transmission Regulation and AML/CFT

A frequently-cited concern is that digital assets, especially cryptocurrencies, might be misused to conduct criminal and other illicit activity. According to one study, thefts, hacks and frauds involving digital assets totaled at least $1.36 billion from investors in the first five months of 2020, and $4.5 billion in 2019.65

Without question, stopping money laundering and combatting terrorist financing, along with deterring and rooting out other types of wrongdoing, must remain top priorities. At the same time, statutes, rules, and regulations to accomplish this should be clear, easy to understand and apply, and reflect current

technology. These straightforward steps can ensure both that AML/CFT compliance is as robust and effective as practicable and that technological innovation and growth is promoted in the U.S.

At the federal level, FinCEN, which sits within the U.S. Treasury Department, serves as the primary enforcer of AML/CFT regulation in the U.S. by regulating all “financial institutions,” such as money transmitters and other MSBs, under the BSA, although many other federal agencies also play a significant role in AML/CFT.

The federal government has presented a uniform and coordinated approach to AML/CFT in the digital assets space, perhaps because of the shared concern for preventing criminal activity and other serious misconduct.

In October 2019, FinCEN, with the CFTC and the SEC, issued a rare Joint Statement stressing the importance of AML/CFT compliance for crypto businesses, and reminding financial institutions – including MSBs, futures commission merchants and introducing brokers registered with the CFTC, and broker-dealers and mutual funds registered with the SEC – that their digital asset activities are subject to AML/CFT requirements. Echoing the facts-and-circumstances approach to regulation that has raised uncertainty under other legal regimes, the Joint Statement explains:

For the purpose of this joint statement, “digital assets” include instruments that may qualify under applicable U.S. laws as securities, commodities, and security- or commodity-based instruments such as futures or swaps. We are aware that market participants refer to digital assets using many different labels. The label or terminology used to describe a digital asset or a person engaging in or providing financial activities or services involving a digital asset, however, may not necessarily align with how that asset, activity or service is defined under the BSA, or under the laws and rules administered by the CFTC and the SEC. For example, something referred to as an “exchange” in a market for digital assets may or may not also qualify as an “exchange” as that term is used under the federal securities laws. As such, regardless of the label or terminology that market participants may use, or the level or type of technology employed, it is the facts and circumstances underlying an asset, activity or service, including its economic reality and use (whether intended or organically developed or repurposed), that determines the general categorization of an asset, the specific regulatory treatment of the activity involving the asset, and whether the persons involved are “financial institutions” for purposes of the BSA. 66

This Joint Statement followed earlier FinCEN guidance explaining its approach to regulating money

transmitters in the context of digital assets. In that guidance, FinCEN differentiated between activities involving “convertible virtual currencies” (CVCs), which include various digital assets that can be converted into fiat currency or that have monetary value.67

FinCEN declared that “exchangers” and “administrators” of CVCs that do not otherwise meet an exemption are considered MSBs subject to FinCEN registration, reporting, and record-keeping requirements.68 “Exchangers” are those engaged in exchanging digital assets for real currency or other cryptocurrencies, while “administrators” are businesses with the authority to issue or withdraw a digital asset from circulation. As such, FinCEN has confirmed that businesses that accept or facilitate transactions in stablecoins are MSBs under the BSA, regardless of whether the stablecoin is backed by a currency, commodity, basket of other virtual currencies, or algorithm. An issuer of a stablecoin is also considered a MSB, subject to FinCEN regulation.

Exchangers and administrators of CVCs must satisfy BSA requirements, including registering with FinCEN, implementing and maintaining AML and “Know Your Customer” compliance programs, record-keeping, and monitoring and reporting customers and their transactions by filing Suspicious Activity Reports and Currency Transaction Reports. Money transmitters must also comply with the “Travel Rule” for transferred digital funds. The Travel Rule requires MSBs to share information about their customer with other MSBs receiving digital funds. Under the Travel Rule, any transfer of $3,000 or more requires the company to transmit customer data to other financial institutions. FinCEN has warned that it would “strictly enforce” the Travel Rule applied to cryptocurrency exchanges in the U.S. FinCEN has invited comment on a proposed rule to lower the $3,000 threshold to $250 for international transactions.69

Key questions remain unresolved for market participants endeavoring to comply with existing AML/CFT obligations, while new obligations are still being introduced. MSBs and others continue to struggle with the specific obligations that apply to digital assets under the BSA, including how to comply with them in a sensible fashion given the underlying blockchain technology. For example, do the same rules apply to custodians verifying the destination of digital assets that apply to custodians working on compliance with record-keeping requirements? Do these rules change depending on the digital asset? Are stablecoins backed by fiat treated differently for record-keeping and compliance purposes than those backed by a basket of crypto currencies or a commodity?

68. Id.
69. Threshold for the Requirement To Collect, Retain, and Transmit Information on Funds Transfers and Transmittals of Funds That Begin or End Outside the United States, and Clarification of the Requirement To Collect, Retain, and Transmit Information on Transactions Involving Convertible Virtual Currencies and Digital Assets With Legal Tender Status, 85 Fed. Reg. 68005 (proposed October 27, 2020). On January 20, 2021, the Biden administration issued a memorandum freezing all rulemakings pending review, which applies to FinCEN’s proposed rule. See Ronald A. Klein, Assistant to the President and Chief of Staff, Memorandum, Memorandum for the Heads of Executive Departments and Agencies, January 20, 2021, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/regulatory-freeze-pending-review/.
While the Travel Rule serves an important purpose, extending the rule to specific aspects of digital assets raises a variety of complex considerations. For example, if the Travel Rule is applied to categories of digital assets that do not include transmission protocols that allow for transmission of the required information under the rule, then a financial institution will have to use one system or protocol for the actual transmittal of value and create a separate system or protocol for the transmission of the information required under the rule. Additionally, it is not always clear to whom the Travel Rule record should be directed as the “receiving financial institution” may not exist or be easily identifiable.

Extending the current AML/CFT framework to non-custodial wallets could be compared to microchipping cash in a person’s physical wallet. An appropriate regulatory paradigm should balance protecting the privacy of everyday citizens along with addressing legitimate AML/CFT objectives.

Regulatory clarity helps businesses meet their regulatory responsibilities, which should motivate regulators to provide more guidance about the compliance obligations that could be uniquely challenging to digital assets or that may need to be modernized. Accordingly, FinCEN and other regulators that are part of enforcing the BSA should engage with digital asset firms so that AML/CFT obligations can be adapted, as appropriate, to align with digital assets and blockchain technology as distinct from traditional fiat currency. As a guiding principle, regulation should be technology-neutral, and digital assets should not be subject to more stringent or far-reaching regulatory requirements than are non-digital assets.

B. State Money Transmission Laws

Laws adopted in most states require entities engaged in a money transmitter business to obtain a license, maintain minimum net worth standards, pay a surety bond, be subject to periodic examinations, and take other actions to safeguard customer funds. A state license is typically required in any state where the company does or solicits business, regardless of any physical presence in the state. Although they vary some from state to state, most state money transmitter laws regulate the conduct of various non-bank financial services providers, including (1) currency dealers or exchangers; (2) check cashers; (3) issuers, sellers, or redeemers of traveler’s checks, money orders, prepaid access cards,

70. In December 2020, FinCEN announced a proposed rule that would require banks and MSBs to submit reports, keep records, and verify the identity of customers in relation to transactions involving CVC or digital assets with legal tender status held in unhosted wallets or held in wallets hosted in a jurisdiction identified by FinCEN. The proposal reiterates that “a person conducting a transaction through an unhosted wallet to purchase goods or services on their own behalf is not a money transmitter.” U.S. Department of the Treasury, Press Release, The Financial Crimes Enforcement Network Proposes Rule Aimed at Closing Anti-Money Laundering Regulatory Gaps for Certain Convertible Virtual Currency and Digital Asset Transactions, December 18, 2020, https://home.treasury.gov/news/press-releases/sm1216.
and stored value cards; and (4) other businesses involving the transmission of money that are not otherwise subject to another consumer-protection regulatory scheme.

Most state money transmitter statutes were not drafted with digital assets businesses in mind, which has created compliance challenges for innovators. The state money transmission licensing regime has resulted in a lengthy and costly exercise for market participants, as they must work with each state regulator separately to satisfy each state’s respective regulatory requirements. Regarding digital assets, states have been uneven in their application of money transmitter requirements, leaving a patchwork of state regulations for digital asset businesses to navigate and comply with. Indeed, different states have different views on whether a cryptocurrency-focused business must register, or is even eligible to register, as a money transmitter. Because the rules vary and can be unclear, operators of digital assets businesses must devote additional time and attention to licensing matters, along with attendant costs and uncertainty that can frustrate innovation.

New York has adopted an entire regulatory regime for virtual currency businesses—known colloquially as the BitLicense71—and, subject to limited exceptions, governs businesses that engage in virtual currency transmission; store, hold, or maintain custody or control of virtual currency on behalf of others; buy and sell virtual currency as a customer business; perform exchange services as a customer business; or control, administer, or issue a virtual currency.

71. New York requires licensing for custodial activities through the BitLicense framework or through the oversight of banks and trust companies. Businesses “storing, holding, or maintaining custody of virtual currency on behalf of others” in the New York market are deemed to be conducting a “virtual currency business activity” in the state and must either obtain a BitLicense from the New York Department of Financial Services (NYDFS) or otherwise be eligible for an exemption by being chartered under the New York Banking Law and approved to engage in such activity. BitLicensees are required to maintain a trust account with a “qualified custodian,” which is defined differently from the SEC standard to include only federal and New York banking entities in the state’s relevant regulations. Since 2015, under the BitLicense regulation or the limited purpose trust company provisions of the New York Banking Law, NYDFS has granted at least 25 virtual currency licenses and charters. In an effort to encourage more participation under the BitLicense regime, in June 2020 the NYDFS announced, along with other digital asset initiatives, a proposed framework that would allow new entrants to partner with BitLicensees to secure a “Conditional BitLicense” that can be awarded outside of the regular application process. For more information on BitLicense, see https://www.dfs.ny.gov/reports_and_publications/press_releases/pr202006241.
Whether an issuer of a digital asset must register as a money transmitter under state laws is therefore dependent on what each individual state law says, as well as on how courts and regulatory officials have interpreted those laws in a given state. Operators of virtual currency exchanges face a similar dilemma, and the resulting uncertainty has many consequences.

Complying with the current state licensing regime requires significant resources for businesses, including experience, time, and capital. In addition to the expenses associated with the application process for each state, a licensed money transmitter must, as previously noted, maintain net capital or surety bonds. Holding licenses in more than one state often necessitates replicating this financial commitment in each state. Licensees are also subject to examination in each state in which they are licensed. These costs, as well as other features of certain state money transmitter laws, have led some digital asset businesses to avoid certain states. Even worse, as other countries standardize, clarify, and innovate their rules regulating digital assets, market participants without an appetite for navigating a complex patchwork of state requirements have in some cases exited the U.S. market.

Acknowledging these challenges, several state regulators introduced the Multistate Money Services Business Licensing Agreement (MMLA) Program to create a more efficient state licensing regime. The MMLA Program streamlines and standardizes state money transmitter licensing requirements among states. The agreement creates a two-phase process for state licensing applicants. In phase one, one state reviews for compliance with the general license application requirements, including criminal background and credit report verifications. The reviewing state then certifies to all other participating states its findings, which participating states have agreed to accept. In phase two, each state then reviews its remaining state-specific requirements. If the state-specific requirements are met, the state will issue the money transmitter license for that state.

Whether the solution is a multistate agreement that provides a standardized licensing regime or a federal licensing option, regulators of money transmitters should ensure licensing requirements continue to protect consumers and investors, but without hindering technological progress in the U.S. As other countries have taken steps to make the regulation of digital assets more workable, some businesses have opted to avoid the U.S. market, taking jobs, intellectual property, technology, and people with them. For that reason, state and federal regulators in the U.S. should collaborate to offer an efficient solution for money transmission that safeguards against misconduct while encouraging innovation and growth.

VII. Central Bank Digital Currency

Central bank digital currency (CBDC), as the name suggests, is a digital currency issued by a sovereign through its central bank. In short, CBDC is traditional fiat money, backed by the government but in tokenized digital form, and has both wholesale and retail applications.\textsuperscript{73}

CBDC is now a major topic for central banks around the world. For example, a study in 2019 by the Bank for International Settlements (BIS) surveyed 66 central banks on their efforts toward establishing a CBDC.\textsuperscript{74} Eighty percent of respondent central banks reported engagement or research and development related to CBDC. Thirty percent of the central banks indicated active plans to issue some form of CBDC within six years.

One country at the forefront of CBDC is China. Reports are that the People’s Bank of China (PBOC) has been exploring CBDC since 2014, and reports in 2019 indicated that China had accelerated its plans to launch its CBDC.\textsuperscript{75} In March 2020, new reports surfaced that the PBOC had completed its testing of the digital yuan’s basic functioning and was in the process of drafting rules and regulations for its release.\textsuperscript{76} The PBOC’s research institute then announced in April 2020 that trials of China’s CBDC were already underway in at least four cities – Suzhou, Xiongan, Shenzhen, and Chengdu.\textsuperscript{77}

\textsuperscript{73} For a discussion of the differences (although not necessarily incompatibility) between a token-based digital dollar that leverages blockchain technology and an electronic account-based system of banking and payments, see generally The Digital Dollar Project, Exploring a CBDC, May 2020, \url{https://www.digitaldollarproject.org/s/Digital-Dollar-Project-Whitepaper_vF_7_13_20.pdf}.

\textsuperscript{74} Codruta Boar et al., \textit{Impending Arrival – A Sequel to the Survey on Central Bank Digital Currency}, BANK FOR INTERNATIONAL SETTLEMENTS, January 2020, \url{https://www.bis.org/publ/bppdf/bispap107.htm}.


\textsuperscript{76} Li Xuanmin, \textit{China’s central bank moves closer to issuing digital currency: insiders}, GLOBAL TIMES, March 24, 2020, \url{https://www.globaltimes.cn/content/1183579.shtml}.

Agricultural Bank of China is said to have developed and begun testing a mobile application to be used in connection with China’s CBDC.78

The pilot program in Shenzhen concluded in October 2020.79 In that same month, the PBOC published a draft law providing the regulatory framework for a forthcoming digital yuan,80 and in December 2020, the PBOC concluded its second digital asset pilot program, moving still closer to becoming the first major world economy to introduce such a system.81 Some reports have suggested that China hopes to release the digital yuan before the 2022 Winter Olympic Games in Beijing.82 China has been clear that its CBDC efforts are intended to challenge the leadership of the U.S. dollar.83

There are many other examples of central banks around the globe actively taking steps toward a CBDC. For example, lawmakers in Japan announced plans to make studying the feasibility of a digital yen official government policy,84 and the Bank of Japan published a report stating its plans to research a digital yen.85 South Korea’s central bank announced the launch of a pilot program to conduct CBDC-related research.86 The Hong Kong Monetary Authority and the Bank of Thailand joined together for a research project on a joint CBDC for cross-border payments in Hong Kong dollars and Thai baht.87

In early 2020, the European Central Bank (ECB) published a working paper on the issuance of a CBDC in the European Union.88 Soon after, the Bank of England released a report examining the implementation of CBDC in existing markets.89 Sweden’s central bank recently has moved forward with a pilot
program for the country’s blockchain-based digital asset, the e-krona.\textsuperscript{90} In late 2020, the ECB took more concrete steps toward being prepared to issue a digital euro if it decided to do so.\textsuperscript{91}

A group of central banks, including the ECB, the Bank of Canada, the Bank of England, the Bank of Japan, Sweden’s central bank, and the Swiss national bank, together with BIS, announced in 2020 a working group to share experiences as each country assesses potential CBDC use cases.\textsuperscript{92}

The Eastern Caribbean Central Bank (ECCB) is the monetary authority for several different East Caribbean islands. The ECCB launched a pilot in 2019 in which all CBDC tokens are redeemed and verified through financial institutions that provide direct services to the wallet-holders.\textsuperscript{93} In October 2020, the Central Bank of Bahamas launched its CBDC platform called the “Sand Dollar,” a digital fiat currency representing the country’s Bahamian dollar.\textsuperscript{94}

In the U.S., market participants and government officials have acknowledged the need for greater research and development exploring potential uses of a U.S. dollar CBDC. In August 2020, Federal Reserve Board Governor Lael Brainard, who has been outspoken on matters concerning blockchain, explained that innovation offers many benefits, such as to “enhance payments efficiency, expand financial inclusion, speed up settlement flows, and reduce end-user costs,” but also noted that a digital dollar could raise questions or concerns relating to privacy, illicit activity, consumer protection, financial stability, and monetary policy.\textsuperscript{95}

Governor Brainard further said, “Given the dollar’s important role, it is essential that the Federal Reserve remain on the frontier of research and policy devel-

\textsuperscript{95} Board of Governors of the Federal Reserve System, Press Release, \textit{Federal Reserve Highlights Research and Experimentation Undertaken to Enhance its Understanding of the Opportunities and Risks Associated with Central Bank Digital Currencies}, August 13, 2020, \url{https://www.federalreserve.gov/newsevents/pressreleases/other20200813a.htm#text=Given%20the%20dollar's%20important%20role,Reserve%20Board%20Governor%20Lael%20Brainard}. 
opment regarding central bank digital currencies.” To this end, Governor Brainard has described elements of the Fed’s efforts to study the opportunities and challenges relating to CBDC in the U.S. Brainard has explained that, over the last few years, the Fed’s Technology Lab has built and tested a range of blockchain platforms to understand their capabilities, and that the Federal Reserve Bank of Boston, in collaboration with researchers from the Massachusetts Institute of Technology, has taken on a multiyear effort to study and test a hypothetical CBDC. According to Brainard, the study’s findings will be reported on and any code that is developed will be published as open-source software for the public to experiment with.

Summing it up, Governor Brainard captured the Federal Reserve’s approach as follows:

The objectives of our research and experimentation across the Federal Reserve System are to assess the safety and efficiency of digital currency systems, to inform our understanding of private-sector arrangements, and to give us hands-on experience to understand the opportunities and limitations of possible technologies for digital forms of central bank money. These efforts are intended to ensure that we fully understand the potential as well as the associated risks and possible unintended consequences that new technologies present in the payments arena.

Separately, a significant policy process would be required to consider the issuance of a CBDC, along with extensive deliberations and engagement with other parts of the federal government and a broad set of other stakeholders. There are also important legal considerations. It is important to understand how the existing provisions of the Federal Reserve Act with regard to currency issuance apply to a CBDC and whether a CBDC would have legal tender status, depending on the design. The Federal Reserve has not made a decision whether to undertake such a significant policy process, as we are taking the time and effort to understand the significant implications of digital currencies and CBDCs around the globe.

Brainard’s comments followed earlier comments by Federal Reserve chairman Jerome Powell acknowledging that the U.S. was not currently developing a CBDC, but was continuing to “carefully analyze the costs and benefits of pursuing such an initiative in the U.S.”

In March 2020, the Treasury convened a cryptocurrency working session with various industry leaders. At that time, the Treasury Secretary explained that the U.S. must balance innovation with the

96. Id.
98. Id.
need to protect its national security and maintain the integrity of the U.S. financial system.

As part of the federal government’s ongoing evaluation of a U.S. CBDC, the U.S. should remain committed to ensuring that the role of the U.S. dollar is not diminished as CBDC increasingly takes hold in China and elsewhere. If the U.S. dollar’s status as the world’s premiere reserve currency is challenged, serious consequences to the U.S.’s global leadership are likely to follow. For example, it would seriously compromise the effectiveness of economic sanctions issued as part of U.S. foreign policy. Some have suggested that if the need for foreign central banks to hold U.S. dollars were to decrease, then demand for U.S. government bonds would decrease and interest rates that the U.S. government, consumers, and businesses pay to borrow would increase. Plus, one could expect more currency fluctuations around the globe, less confidence in monetary and financial systems, and greater risks of economic and political instability. Outcomes like this need to be protected against.

News of the Fed’s consideration of CBDC is a positive step for the U.S., although the plans and enthusiasm for implementing a CBDC within the federal government remain unclear. Going forward, so that it is a leader in digital currencies, including key private sector innovation, the U.S. should actively pursue research, assess regulatory changes that may be needed to avoid hampering the deployment of a digital dollar if the U.S. decides to launch one, and engage with market participants to share perspectives and address concerns as they arise. One consideration is the Fed’s role in managing the money supply and the related function of banks in distributing money and extending credit.

101. See supra note 73, at 32.
VIII. The Need to Act

The U.S. needs to act to ensure it remains an innovation leader. The following summarizes what’s at stake.

A. Promoting Innovation

Since the earliest days of the Republic, the spirit of innovation and entrepreneurism has driven the expansion of the American economy. Throughout the history of the U.S., inventions as varied as the light bulb, telephone, airplane, and integrated circuit have improved quality of life and fostered prosperity for Americans. We believe promoting innovation should be a central feature of public policy.

The wide variety of blockchain-based technological advances, and, in particular, digital assets, present questions for legislators and regulators concerned with ensuring the fair, orderly, and vibrant operation of the emerging digital assets marketplace. This marketplace has been rapidly evolving, with the regulatory response often unable to match the speed of technological innovation. Calibrating an appropriate regulatory response also presents a dilemma: regulate too tightly and risk crimping valuable innovation, but regulate too lightly and risk allowing fraud and abuse. The recommendations in Part IX below are intended to strike the right balance.

Different regulators have taken different approaches to blockchain and digital assets. Admittedly, regulators have had to make real-time decisions with less than perfect information. Some have elected not to permit the perfect to be the enemy of the good in order to stimulate economic and technological progress. Others have been more reluctant to modernize regulatory requirements to fit today’s technology, with the effect being to keep some people and institutions out of the nascent marketplace, if not impede innovation.

Innovation is essential to ensuring that individuals in the U.S. have access to the expanse of goods and services that make our lives better day-in-and-day-out. And with less innovation, investors have fewer opportunities for growing their retirement savings, and fewer jobs are created to drive the economy.
and promote growth. When it comes to existential threats the U.S. may face – be they public health, food and water safety, climate change, or national security – technological advancement helps overcome them.

**B. Geopolitical Implications**

The U.S. approach to regulating digital assets has geopolitical implications. Some nations have calibrated their regulatory and supervisory oversight of the digital assets space to spur local economic growth and development, while others have used digital assets as a tool to advance geopolitical objectives. Iran and Venezuela, for example, have developed state-sponsored cryptocurrencies in an effort to avoid global economic sanctions.

As noted throughout this paper, the U.S. faces the prospect of falling behind other nations when it comes to blockchain-based innovation. For example, U.S. government efforts toward a digital dollar are not as robust as the efforts other governments around the globe are exerting in developing their own CBDC. The U.S. has not coordinated or spurred the kind of widespread academic and private sector exploration and engagement of CBDC that other countries have.

Of notable concern is the grand strategy that China is developing toward digital assets and payments, particularly a CBDC, such as the digital yuan, that could threaten to supplant the U.S. dollar as the leading global reserve currency. Case in point: integrated into its belt-and-road global infrastructure initiative, a Chinese central bank digital currency cannot be dismissed as a potential medium of exchange in countries around the world where China has been seeking to expand its economic and political influence at the expense of U.S. interests. This is not an idle risk.

The U.S. dollar has served a historic role as the world’s primary reserve currency, carrying with it around the globe American civic values such as the rule of law, free enterprise, individual privacy, and monetary stability. A diminishment of the U.S. dollar’s global role could signal the waning of these and other values embodied in the U.S. dollar, as other currencies replace the U.S. dollar and assume a more significant spot in economies and societies. Those other currencies could carry with them values that are antithetical to those on which the U.S. is based.

In short, vital U.S. interests are at risk if the U.S. does not lead in innovation, with potentially profound adverse impacts. Maintaining the leading role of the U.S. dollar in international markets must be a national priority. This includes ensuring that the U.S. remains a payments infrastructure leader across the board, and that the U.S. dollar continues its central role in facilitating global finance and trade flows.
C. Financial Inclusion

Many Americans are reluctant to use formal financial institutions or face barriers to entering the mainstream financial market. As an example, younger, lower-income, and immigrant consumers and communities of color have remained unbanked or underbanked at far too high a rate because of, among other factors, the fees and costs of bank accounts, the inconvenience of bank branch locations or hours, the lack of information about particular products and services, and concerns about use of their personal information. The FDIC found that in 2019 roughly 7 million U.S. households were unbanked, meaning no one in the household had a bank account in the U.S.102

A lack of access to financial services raises a number of problems that can and should be solved. Individuals without access to financial services find their opportunities for economic advancement frustrated. They are often unable to obtain credit to buy a home or finance other purchases, accrue interest on their savings, save for a child’s education, or enjoy any of the other benefits that banking has to offer. “Fintech,” of which blockchain is a key component, promotes financial inclusion. Fintech refers to the integration of technology into financial services to improve and expand the use and delivery of financial services to individuals, households, small businesses, and others. Some fintech efforts are housed in divisions or other operating units of established businesses, while others are at start-up or development-stage companies.

Fintech uses technology to reduce costs and barriers to entry for consumers and investors, such as by leveraging mobile devices. In turn, people can access services such as money transfer, credit, saving, and investing in a secure and efficient manner and without the need to visit a physical branch. Having immediate access to one’s money can make a tremendous difference. Many fintech applications benefit individuals who have not had access to mainstream financial services in the past, but through the power of innovation can have access to payments, banking, and securities brokerage services, among many other things.

Putting this differently, if the regulatory environment isn’t conducive to fintech innovation, the U.S. loses out on an opportunity for more financial inclusion in society.

D. Regulatory Uncertainty

As with other rapidly evolving technologies, development of digital assets has often outpaced the state of regulation. In turn, the regulatory environment has been criticized for creating regulatory uncertainty and for not adequately accommodating technological change. The harmful consequence is that the U.S. forgoes the gains we otherwise would enjoy from innovation, such as those described above.

102. See supra note 57.
“Regulatory uncertainty” is a multi-faceted term. For some, it refers to a situation where there is no clear answer to a given legal question, such as the treatment of a digital asset under a particular statute, rule, or regulation. Others use the term to refer to a situation where multiple regulators have asserted jurisdiction over the same instrument, product, service, or transaction, and it is unclear where one regulator’s regulation and oversight begins and another’s ends. For still others, regulatory uncertainty expresses their more fundamental substantive disagreement with current regulation and how regulators have chosen to apply and enforce that regulation.

For companies issuing digital assets and developing and deploying blockchain technology, there are many illustrations in U.S. financial markets of regulatory uncertainty, however one characterizes it. High-level examples include: (1) whether a particular regulatory regime or a specific rule within that regime applies to a particular application; (2) how to comply with regulatory requirements that, when enacted, in no way foresaw digital assets and decentralized markets; (3) whether a particular regulator has jurisdiction and over which activities; (4) whether federal law preempts state law and, if it does, to what extent; (5) whether registration or licensure in all 50 states is or should be required; (6) whether regulators will commence an enforcement action given the specific characteristics of a particular product, service, or transaction; (7) why regulators in different jurisdictions employ contradictory approaches to the same basic product, service, or transaction; (8) whether informal advice received from professional staff of a given regulatory agency will have future or binding effect so that it can be relied on; and (9) why some parties are able to engage in particular conduct without the threat of litigation or regulatory enforcement while other parties engaging in what appears to be substantially the same conduct are subject to litigation or enforcement.

As a more concrete example, the developer of a new digital asset must navigate a maze of regulations, interpretations, and enforcement actions. Will the SEC or CFTC (or both) claim jurisdiction? Without more clarity regarding what constitutes a sufficiently decentralized network, other than knowing that Bitcoin and Ether have met the threshold, a developer hoping to achieve decentralization, along with functionality, risks violating the federal securities laws despite good faith efforts to comply.
In addition, must the project sponsor register as a federal money service business or as a state money transmitter? How do AML/CFT requirements apply, if at all, and how can those obligations best be met when blockchain and digital assets are involved? Will persons in certain states or certain groups of consumers be excluded from accessing a blockchain’s functionality because of these or other regulatory uncertainties? Is it economically viable to develop a blockchain-based product if U.S. consumers are not part of the market? What are the consequences of moving a blockchain project offshore, and can that even be done effectively?

U.S. policy makers must take steps to ensure that the U.S. does not cede blockchain and digital assets leadership to jurisdictions overseas.

Answers to each of these questions (and countless others) have real-world impacts, not just on individual businesses, consumers, investors, employees, and communities, but also on the development of the broader digital economy, on economic growth and prosperity in the U.S., and, ultimately, on the position of the U.S. as an innovation leader.

U.S. policy makers must take steps to ensure that the U.S. does not cede blockchain and digital assets leadership to jurisdictions overseas.
IX. Recommendations for Promoting Innovation

In light of what is at stake, the following recommendations are designed to help the U.S. maintain its innovation lead. Underpinning the recommendations is a call for the U.S. to develop a national strategy to promote innovation.

TECHNOLOGY-NEUTRAL REGULATION | Regulation should be technology-neutral and activity-based. The use of a specific technology, such as blockchain, should not be singled out for more stringent regulatory treatment. While there are risks associated with blockchain-based financial services, the benefits of blockchain and digital assets are widespread and considerable, from promoting national security to financial inclusion to offering consumers state-of-the-art goods and services.

Regulators should articulate clear guidelines and frameworks that market participants deploying cutting-edge innovation can readily understand and apply. When regulators believe that a particular use of digital assets in banking or in capital markets constitutes a regulated activity, regulators should explain their reasoning and constructively assist market participants endeavoring to comply. Otherwise, innovative financial services are subject to a more challenging regulatory environment because regulators’ expectations often are uncertain, if not more demanding, insofar as new technology goes.

Regulators should articulate clear guidelines and frameworks that market participants deploying cutting-edge innovation can readily understand and apply.
Technology-neutral regulation recognizes that market participants using cutting-edge technology may have the technological capability to meet regulatory obligations in new and different ways, such as directly building compliance into a blockchain protocol or digital asset. Technology-neutral regulation, therefore, is flexible in allowing market participants to leverage the “regtech” functionality of technology instead of forcing innovation into a more traditional regulatory construct built by legislators and regulators for a different technological time.

**PRINCIPLES-BASED REGULATION** | Regulation of the digital assets space should be principles-based and not overly prescriptive. The nature of technology is that it evolves. Its ongoing development and deployment will take different, and in some cases unknown, shape. Regulation should be nimble enough to accommodate the direction technology takes to avoid impeding its progress.

> To be effective and to counter unnecessary regulatory uncertainty, the principles should be clear-cut enough for market participants to understand what they mean in practice and how the regulator will interpret, apply, and enforce the principles.

To be effective and to counter unnecessary regulatory uncertainty, the principles should be clear-cut enough for market participants to understand what they mean in practice and how the regulator will interpret, apply, and enforce the principles. For example, a regulator should identify and explain the key considerations the regulator will take into account – and how the considerations will be taken into account – in applying the principles-based framework.

Critically, regulators should not unduly second-guess the good faith judgments of companies or individuals concerning how to comply with the principles. Any need to clarify a principle and its application should be through formal interpretive guidance or, if necessary, a rulemaking subject to notice-and-comment under the Administrative Procedure Act. Principles-based regulation should not spawn de facto prescriptive rules through enforcement actions.

**AVOID REGULATION BY ENFORCEMENT** | Sound enforcement is vital when statutes, rules, or regulations are violated. Illicit conduct should not be tolerated. Market participants must have fair notice concerning what statutes, rules, and regulations require of them, which can be difficult to discern when using emerging technology that was not envisioned when the statute or regulation was crafted. Fair notice should always be a
guiding principle, although the lack of fair notice can create unique compliance challenges when it comes to strict liability offenses or more technical regulatory violations.

Enforcement actions should not fashion what amount to new regulatory requirements or be used to provide material interpretations of existing regulatory requirements that go beyond what the marketplace would reasonably expect an existing statute, rule, or regulation to provide for. If a regulator believes there has been or is a gap in the regulatory regime, the proper way to remedy that is, at a minimum, to provide notice of how the regulator will enforce the regime going forward and, if warranted, take other proper steps such as initiating a rule amendment. Regulators should not seek to regulate through enforcement.

**GOOD FAITH COMPLIANCE** | Regulatory uncertainty is distinctly acute in the digital assets space. Determining how longstanding regulatory requirements apply to an emerging technology like blockchain can be difficult because, inherent in the new technology, are new facts and circumstances and ways of doing things that can call into question whether a particular regulatory requirement applies and, if so, what exactly it calls for. As discussed throughout this paper, that uncertainty, in and of itself, can discourage innovation.

But there’s another aspect to the regulatory regime that exacerbates the challenge and jeopardy market participants face. Many regulatory requirements are strict liability offenses – even if a business makes good faith efforts to comply, if the regulator determines that the business missed the mark, the business could face an enforcement action, which can lead to severe consequences. Section 5 of the Securities Act is an example. If a blockchain business, after considerable and careful analysis, concludes that its digital asset is not a security and therefore distributes digital assets widely without registering the distribution with the SEC, the company could be subject to an enforcement action if the SEC disagrees with the company’s “non-security” judgment.

Regulators should identify strict liability offenses that create an undue risk of legal liability in light of the regulatory uncertainty inherent in deploying new technology, and should develop regulatory approaches that provide market participants a reasonable opportunity to redress any deficiencies without fear of an enforcement action so long as the market participant can demonstrate a good faith effort to comply.

**REGULATORY SELF-ASSESSMENT AND RETROSPECTIVE REVIEW** | Regulation needs to align with technology as it advances. Goals like protecting investors from fraud and consumers from unsafe products, encouraging capital raising so businesses can grow, fighting financial crime, promoting efficiency, and driving down costs are as valid for the digital assets space as they are for more traditional finance. The question is how best to achieve these goals in light of innovation.

Statutes, rules, and regulations written years ago with no thought of blockchain and digital assets can create regulatory misfits or disconnects that stifle innovation. As discussed above, custody under the federal securities laws is an example. The focus should not
be on shoehorning blockchain technology into existing regulatory requirements that are not sensible as applied to digital assets. Rather, the effort should be to modernize regulatory requirements so that they are workable for blockchain and digital assets, allowing regulatory objectives to be met but in a more technologically-modern way than regulators have grown accustomed to. Regulatory progress needs to match technological progress. The OCC’s Interpretive Letter on custody illustrates how this can work.

“Goals like protecting investors from fraud and consumers from unsafe products, encouraging capital raising so businesses can grow, fighting financial crime, promoting efficiency, and driving down costs are as valid for the digital assets space as they are for more traditional finance.

To motivate this alignment, each regulator in the digital assets space should undertake a self-assessment and retrospective review of its respective regulatory regime to identify statutes, rules, and regulations that should be modernized so that they do not unduly stifle innovation that would advance the regulatory mission.

REGULATORY RESPONSIVENESS | The pace of regulatory responsiveness should match the pace of innovation and entrepreneurism. Technological change in the marketplace can occur quickly, with enterprises looking to introduce new goods and services. Digital assets are no exception. New ideas and use cases for blockchain and digital assets arise constantly.

In many instances, businesses seek or need regulatory approvals, relief, or guidance, such as a license to do business, a no-action letter, an exemption, or simply feedback to ensure the company is on the right regulatory and compliance course. So that regulatory delays do not frustrate innovation, regulators should evaluate their organizational structures and processes to ensure that innovators receive timely responses. A months-long (let alone years-long) timeline to receive a measure of regulatory certainty or input can thwart innovation, especially for start-ups and other early-stage and growth-stage companies that may not have the funding to survive a prolonged set of regulatory discussions and engagement. Offices within regulators focused on innovation and “one-stop-shopping” for businesses attempting to navigate the regulatory landscape—such as FinHub at the SEC, LabCFTC, and the OCC’s Office of Innovation—are a very useful step in streamlining and expediting interactions with regulators.
REGULATORY FLEXIBILITY | To the extent regulators are uneasy about the potential implications of a new technology and are hesitant concerning the appropriate regulatory requirements, the choice is not a binary one between, on the one hand, not applying a statute, rule, or regulation or, on the other hand, forcing innovation into some traditional set of regulatory interpretations and requirements that may not be compatible with the technology. Rather, regulators should establish frameworks that permit experimentation, both to provide innovators an opportunity to demonstrate a technology’s merits and to allow regulators to learn more about how best to modernize a regulatory regime so it is conducive to the innovation. This combination should result in a regulatory refresh that advances regulatory objectives without discouraging innovation by subjecting it to ill-fitting regulatory obligations.

DIGITAL ASSET CATEGORIZATION | There is often confusion regarding how a particular digital asset is or might be categorized and treated for regulatory purposes (i.e., security, commodity, currency, or property). This can compromise effective compliance because market participants have difficulty discerning which regulatory regime (or regimes) they are subject to and must comply with. Multiple regulators may assert jurisdiction, creating duplicative or conflicting regulation.

To address this, relevant regulatory bodies and other policy makers should work to fashion a reasonable categorization of digital assets that demarcates the jurisdictional boundaries of applicable regulatory regimes. The categorization should take into account the economics and characteristics of different digital assets and related digital-asset transactions and activities. How different regulatory regimes could be triggered based on different digital asset attributes should be carefully identified and described for the marketplace.

INTERPRETING HOWEY | Under a garden variety interpretation of Howey, many digital assets, particularly those that were not issued to raise capital, are not investment contracts and thus are not securities under the federal securities laws, although non-security digital assets are subject to other state and federal regulatory regimes. A more expansive application of Howey by the SEC, combined with regulatory uncertainty, can impede blockchain-based innovation because the dissemination, circulation, and use of digital assets in the economy is restricted.

Beyond Howey’s four prongs, the SEC has enumerated scores of factors it takes into account in determining whether a digital asset is a security subject to the SEC’s regulatory authority. The SEC has not yet explained more fully how it will apply these factors to particular real-world scenarios. In other words, the SEC has not shared how it weighs each factor or balances different factors against one another. To a significant degree, the marketplace has to divine this from enforcement actions. As a result, it can be unduly difficult in many cases to determine with confidence if a particular digital asset is a security under the federal securities laws. So that this uncertainty does not chill innovation, the SEC should provide greater clarity concerning when it believes a digital asset is or is not a security. This would help businesses structure their activities and develop their blockchain networks so they can make progress without unwarranted delay or regulatory risk.
Substantively, the SEC should recognize as a guiding principle that if the predominant purpose for a digital asset is to allow its holders to access a good or service or some other functionality on the relevant blockchain, then the digital asset should not be treated as a security, consistent with longstanding jurisprudence under *Howey*. The possibility that the digital asset may increase in value should not alter this outcome, nor should the fact that the network does not meet the SEC’s test of decentralization. Aside from blockchain, there is a nearly limitless number and range of things that, at core, are about use and consumption. Even though these things (e.g., baseball cards, shoes, livestock) may increase in value and allow their owners to earn a financial return if they are sold, nobody would suggest that they are securities. Reselling for a profit an item that people use or consume is distinguishable from owning an economic interest in an enterprise that one hopes to profit from based on how a centralized management team runs and manages the business.

Stated differently, it should not weigh in favor of finding a security under *Howey* if (1) a blockchain project’s sponsor expends effort to create more opportunity to use and consume goods and services via a digital asset, or (2) the value of the digital asset rises because, as a result of there being more use and consumption, demand for the digital asset increases. It would be an odd result to conclude that when a digital asset becomes more valuable to its holders because there is more use and consumption available to them, then the digital asset is more likely a security, when the crux of *Forman* is the opposite—namely, meaningful use and consumption overcomes a profit motive for purposes of *Howey*’s investment contract analysis.

It is important to stress that even if there is a profit motive, if an instrument’s value is due to market forces and not primarily the managerial or entrepreneurial efforts of a centralized enterprise or organization, then courts have consistently held that the instrument is not a security. Building from this established *Howey* jurisprudence, the SEC should clarify that if there is secondary trading of a digital asset that can or does lead to a price increase, there is still not an investment contract if the driver of the price change is market forces that the project sponsor does not control, as compared with the managerial or entrepreneurial efforts of the sponsor. If the mere fact that secondary trading may lead to a higher price is enough to find an investment contract, then too few blockchain projects can succeed because too many digital assets would be swept into the federal securities laws.

**A PATHWAY TO NON-SECURITY STATUS** *Howey* recognizes that there is not an investment contract if the profit expectation is not derived predominantly from the essential managerial or entrepreneurial efforts of others, or if the reason for holding the asset is primarily use or consumption as compared with investing for a financial return. The plan for many blockchain projects that rely on digital assets to power them is to achieve decentralization, characterized by the community or network members serving a key role in the ongoing maintenance and development of the network, or functionality that affords digital asset holders utility in the form of a good or service on the blockchain. As explained previously, when either decentralization or functionality occurs, a digital asset should not be a security.
A unique practical difficulty for blockchain projects is to achieve decentralization or functionality. Each of these conditions requires widespread distribution and circulation of digital assets among those who want to contribute to the network or access its functionality. Yet until decentralization or functionality has been achieved, the SEC appears to have taken the view that a profit motive predominates (because there is not yet adequate functionality) and the profit expectation depends on the efforts of the project sponsor (because there is not yet adequate decentralization), leading to the conclusion that the digital asset is a security. From this vantage point, it seems blockchain enterprises could not distribute digital assets broadly until there is decentralization or functionality, but decentralization or functionality cannot be achieved until the digital assets are first distributed broadly—the very Catch-22 that Commissioner Peirce has pointed out. This novel dilemma is unprecedented under the federal securities laws and is idiosyncratic to blockchain and digital assets, indicating that it needs to be solved.

If *Howey* is not applied in a way that is compatible with blockchain and digital assets as suggested throughout this paper, then an innovative regulatory accommodation is needed so that blockchain-based businesses that depend on digital assets have workable options. In particular, the SEC should fashion an approach that allows blockchain project sponsors to distribute digital assets so long as there is a well-articulated path toward achieving decentralization or functionality and the digital asset holders are properly safeguarded from fraud and manipulation as the project proceeds along that path. As an element of this, the SEC should clarify the nature and degree of decentralization and functionality it thinks is required to render a digital asset not an investment contract. The safe harbor that Commissioner Peirce has offered is one possible formulation.¹⁰³

¹⁰³. *Supra* note 35. Commissioner Peirce explained the safe harbor she proposed this way:

[The safe harbor would provide network developers with a three-year grace period within which they could facilitate participation in and the development of a functional or decentralized network, exempted from the registration provisions of the federal securities laws, so long as the conditions are met. This objective is accomplished by exempting (1) the offer and sale of tokens from the provisions of the Securities Act of 1933, other than the antifraud provisions, (2) the tokens from registration under the Securities Exchange Act of 1934, and (3) persons engaged in certain token transactions from the definitions of “exchange,” “broker,” and “dealer” under the 1934 Act.

The initial development team would have to meet certain conditions, which I will lay out briefly . . . . First, the team must intend for the network on which the token functions to reach network maturity – defined as either decentralization or token functionality – within three years of the date of the first token sale and undertake good faith and reasonable efforts to achieve that goal. Second, the team would have to disclose key information on a freely accessible public website. Third, the token must be offered and sold for the purpose of facilitating access to, participation on, or the development of the network. Fourth, the team would have to undertake good faith and reasonable efforts to create liquidity for users. Finally, the team would have to file a notice of reliance.

The goal is to afford blockchain projects a reasonable and realistic opportunity to achieve their potential without compromising investor protection.
PAYMENT SYSTEM IMPROVEMENTS | The current regulatory environment for payments and money transmission includes a patchwork of multi-state regulation. Given the national-level and society-wide benefits of payment innovation, more regulatory coordination and consistency is needed so that multiple, duplicative, and conflicting regulatory requirements do not create obstacles that frustrate blockchain-based payment systems that advance U.S. consumer goals, financial inclusion, and geopolitical interests.

The U.S. needs a well-designed regulatory construct for payments. First, there should exist a reasonable federal option that businesses can opt into as an alternative to having to comply with at least certain components of state regulation. Second, assuming states will continue to possess important jurisdiction, there should be a coordinated state-level approach so that regulation is more efficient and understandable, minimizing the need to traverse a labyrinth of state-by-state requirements. To this end, greater uniformity across the application criteria for state money transmitter licenses would ease the compliance burden.

The concept of “passporting” whereby states grant reciprocity in licensure to one another is also a worthwhile reform. By way of example, a money transmitter could obtain a license in its home jurisdiction, which would become its primary regulator, and would not need to repeat a lengthy application process in other states. For many years, Europe has recognized the concept of passporting across member states, and positive elements of that kind of approach could be incorporated into a U.S. interstate compact.

CENTRAL BANK DIGITAL CURRENCY RESEARCH AND DEVELOPMENT | The U.S. should prioritize the expanded exploration of a U.S. dollar CBDC to ensure that the U.S. dollar remains the reserve currency of choice around the globe. The historic role of the U.S. dollar underpins free enterprise and individual freedom. A properly-designed digital dollar also could facilitate payments by reducing costs and frictions, encourage financial inclusion, and afford the Fed and other policy makers new tools for implementing monetary and economic policy.

Keeping pace with and benefiting from advanced technology is critical, and the U.S. dollar is no exception.

“As others have encouraged, a digital dollar is ripe for well-conceived and well-executed pilot programs and other sound experiments involving both the public and private sectors as part of charting a deliberate path.”
Crafting a functional U.S. CBDC would be an enormous undertaking if the U.S. ultimately decided to adopt a digital dollar. A great deal of care, thought, and deliberation from a wide range of perspectives would be essential to making the right design choices. The process cannot be rushed, but nor can next steps be delayed.

One avenue forward is to establish a task force that includes the private sector, the academic community, and other thought leaders to assist the government in developing strategies, conducting appropriate testing, and preparing implementation roadmaps to ensure that the full range of potential costs and benefits are identified and evaluated. As others have encouraged, a digital dollar is ripe for well-conceived and well-executed pilot programs and other sound experiments involving both the public and private sectors as part of charting a deliberate path. A key caveat is that any effort to develop a U.S. CBDC should not crowd out or otherwise come at the expense of valuable private sector blockchain-based payment and stablecoin innovation.

**WHITE HOUSE TASK FORCE** | The White House should establish a task force comprising a broad base of stakeholders, including from outside government, focused on promoting digital assets and related blockchain innovation. Technology moves the U.S. forward as a country, expanding opportunity, fostering growth, and helping society address some of its most vexing challenges. A White House task force could help set the direction for reducing impediments to technological progress while ensuring that vital consumer and investor protections are not compromised. And it could collaborate with regulatory agencies and Congress and help coordinate national-level priorities designed to maintain the country’s global innovation leadership.
X. CONCLUSION

This paper does not advocate for regulators or law enforcement to scale back their efforts to pursue bad actors that unfortunately, but inevitably, have chosen to target the digital assets space for criminal activity and other abuses. The most certain way to ensure that a market will thrive is by driving out fraudsters, scammers, and other wrongdoers.

That said, a basic tenet of due process is fair notice. Regrettably, the rules of the road have not always been clear in the digital assets space, and at times regulators have used enforcement actions to announce new policy or regulatory requirements. Greater transparency from regulators continues to be needed. Laws, rules, and regulations that better accommodate digital assets and related blockchain technology are also needed. We urge regulators and other policy makers to continue engaging with stakeholders in the digital assets ecosystem to develop clear policies that differentiate lawful conduct from unlawful behavior and that promote innovation.

This paper has sought to identify a number of critical gating regulatory issues that must be addressed because they continue to impede the development of the marketplace for digital assets in the U.S. We have also sought to propose tailored solutions to these problems. We stand ready to discuss their future with everyone who is interested.