Digital and Digitized Assets:
Federal and State Jurisdictional Issues

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PREFACE

This White Paper, and the March 2019 version that it updates, were prepared by members of the Jurisdiction Working Group of the Innovative Digitized Products and Processes Subcommittee (IDPPS) and their colleagues, who generously contributed substantial time and effort to this ambitious undertaking. The authors have sought to provide a comprehensive explanation of federal and state laws that may apply to the creation, offer, uses, and trading of digital assets in the United States, along with summaries of key initiatives outside the United States. The White Paper also recommends an analytic framework for considering potential issues of jurisdictional overlap between the Commodity Futures Trading Commission and the Securities and Exchange Commission under the separate federal statutes they each are responsible for administering.

IDPPS was established in March 2018 as a subcommittee of the Derivatives and Futures Law Committee of the Business Law Section of the American Bar Association. We have over 80 members, comprised of attorneys who work extensively in the areas of derivatives law and securities law and related legal fields. We are organized into three working groups, which include, in addition to the Jurisdiction Working Group, a Blockchain Modality Working Group and an SRO Working Group.

IDPPS was formed with the following objectives:

- To educate ourselves, policymakers, and the public about current issues raised by innovative digitized products and processes, such as cryptocurrencies, smart contracts, and blockchain or other distributed ledger technologies;
- To identify and study emerging legal and regulatory issues and their implications for such products and processes;
- To study and understand how the Commodity Exchange Act framework and other statutory and regulatory frameworks may intersect, and identify areas of conflict or other issues that overlapping laws may create; and
- To make appropriate recommendations to address material issues identified.

We offer our appreciation and thanks to the members of the Jurisdiction Working Group and their colleagues who contributed to the original White Paper and the updates reflected in this White Paper. We hope that the White Paper (like its predecessor) will be a valuable resource for legal practitioners and others active in the digital asset arena, as well as for policymakers.

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With respect to this 2020 White Paper, Daren F. Stanaway and her colleague at Paul Hastings, Michael L. Spafford, with the assistance of Jonathan L. Marcus of Skadden Arps, took on primary responsibility as editors for integrating the various updated Sections contributed by the authors into a single, cohesive, updated White Paper and also drafted the updates to the Executive Summary. Contributing authors received the opportunity to review and provide comments on the full updated White Paper.
SECTION 3. FEDERAL SECURITIES REGULATION: SECURITIES ACT AND EXCHANGE ACT*

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2020 UPDATES TO SECTION 3

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The market for digital assets has grown rapidly in recent years, from a global market capitalization of nearly $12 billion as of September 2016 to over $320 billion as of September 2020—albeit down from a high of over $800 billion in January 2018. At the same time, questions concerning the application of the federal securities laws to digital assets and the intermediaries that facilitate transactions in them have come into sharp focus.

The SEC’s earliest digital asset enforcement activities focused on run-of-the-mill fraud or other misconduct, where the digital nature of the instrument was not central to the case. The SEC brought actions in a pair of bitcoin-related Ponzi schemes in 2013 and 2014, though these

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* This Section is current as of September 2020 and does not reflect subsequent developments. The authors wish to thank associates Ledina Gocaj and Adam Fovent for their substantial contributions to this Section, and associates Ledina Gocaj and Jeremy M. Sklaroff and summer associate Brian Pollock for their substantial contributions to the 2020 updates thereto.


somewhat routine fraud cases did little to address the application of the federal securities laws to digital assets generally. July 2017 marked the first time the SEC provided detailed guidance on the application of the federal securities laws to the issuance of digital assets in the absence of fraud allegations. In its section 21(a) report concerning tokens issued by The DAO, a blockchain-based enterprise supported by the German corporation Slock.it UG, the SEC clarified that the agency would apply the traditional test outlined in *SEC v. W.J. Howey Co.* to this new asset class to determine whether an instrument is an investment contract, and therefore a security. Though refraining in that case from bringing enforcement charges, the SEC explained that the report was meant to:

> caution the industry and market participants: the federal securities laws apply to those who offer and sell securities in the United States, regardless whether the issuing entity is a traditional company or a decentralized autonomous organization, regardless whether those securities are purchased using U.S. dollars or virtual currencies, and regardless whether they are distributed in certificated form or through distributed ledger technology.

Since the DAO Report was issued, the SEC has brought a multitude of enforcement actions based on the legal arguments developed in the report.

Three major developments in the wake of the DAO Report have further clarified how the SEC views the application of federal securities laws to digital assets. First, the SEC staff

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281 328 U.S. 293 (1946) [hereinafter *Howey*].

282 DAO REPORT, supra note 87, at 11.


published guidance describing how certain features of a digital asset would make that asset more or less likely to be a security under elements of the Howey test (the “Digital Asset Framework”)—though it has been criticized as overly complex and difficult to apply. The SEC staff also issued the first digital asset-related no-action letters, confirming that two digital assets that essentially function as stored-value cards would not be deemed securities. These no-action letters also have been criticized on the basis that the assets were so clearly not securities that granting conditional no-action relief may add to confusion by implying they might be securities but-for meeting the letter’s conditions.

Finally, the SEC succeeded in its litigation against Kik Interactive, and its enforcement action against Telegram reached an advanced stage of litigation. Both cases tested industry arguments regarding the Simple Agreement for Future Tokens (SAFTs), a digital asset offering structure designed to combine a private offering of securities with a later public distribution of

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288 Hester M. Peirce, Commissioner, SEC, Remarks at the Securities Enforcement Forum: How We Howey (May 9, 2019), https://www.sec.gov/news/speech/peirce-how-we-howey-050919 (“This transaction is so clearly not an offer of securities that I worry the staff’s issuance of a digital token no-action letter—the first and so far only such letter—may in fact have the effect of broadening the perceived reach of our securities laws. If these tokens were securities, it would be hard to distinguish them from any medium of stored value. Is a Starbucks card a security?”).

non-security tokens.\textsuperscript{290} However, there are still significant open questions about how the SEC will apply the \textit{Howey} test to the wide array of novel digital asset types and how the requirements of the federal securities laws will be applied to intermediaries transacting in digital asset securities.

This Section aims to provide a roadmap of the open questions in this area. First, this Section describes the primary legal test to determine whether a digital asset is an “investment contract” and therefore a security, as outlined by the Supreme Court in \textit{Howey}, as well as its fact-intensive application to particular digital assets. The term “security,” as defined under the Securities Act and the Exchange Act, includes not only traditional “securities” such as stocks and bonds, but other instruments that fall into the catch-all category of “investment contracts.” The \textit{Howey} test therefore is critical, as the federal securities laws will apply to a digital asset that is a “security.”

This Section then considers the implications for digital assets that are securities, laying out potentially applicable requirements under the Securities Act and the Exchange Act. Once it is determined that a particular digital asset is a security, a broad swath of federal securities laws and regulations may apply to its offer and sale, as well as to the intermediaries involved in transacting in these products. For example, digital assets that are securities may only be in offerings that comply with the registration and disclosure requirements of the Securities Act,

\footnote{\textit{See Kik, supra} note 289, at 3–6; \textit{Telegram, supra} note 284. SAFTs are designed to segment an offering of digital assets into two phases, in order to avoid SEC registration requirements. Initially, the issuer would raise capital by offering an investment contract representing the right to receive tokens to be created in the future. That offering would be conducted as a private placement on the basis that it would qualify for an exemption from registration under Regulation D. Once the digital asset has been fully developed and has ostensible utility, the SAFT investors and the issuer would sell the tokens to the public, on the basis that the digital asset would not constitute a security at that time. \textit{See, e.g.}, Protocol Labs and Cooley LLP, \textit{SAFT Project: Toward a Compliant Token Sale Framework} (Oct. 2, 2017), https://saftproject.com/static/SAFT-Project-Whitepaper.pdf. For more detail about how SAFTs are structured in relation to the federal securities laws, \textit{see infra} note 425.}
unless the asset or sale qualifies for an exemption. The SEC has focused on ensuring the protections of the Securities Act apply to ICOs, which, according to Chairman Clayton, are often simply “interests in companies, much like stocks and bonds, under a new label.”

Under the Exchange Act, in turn, a determination that a digital asset is a security may implicate, depending on the activity, regulatory requirements applicable to securities broker-dealers, exchanges, alternative trading systems, transfer agents, or clearing agencies.

1. Digital Assets as Securities—The Howey Test

Due to the varying characteristics of digital assets, any analysis of whether a particular digital asset is a “security” is fact-intensive and must be applied on a case-by-case basis. Section 2(a)(1) of the Securities Act and section 3(a)(10) of the Exchange Act each define the term “security.” While the definitions differ slightly, courts do not draw meaningful distinctions between the meanings of the term under the two statutes. Although the definitions of “security” capture a broad swath of instruments, most digital assets that are not specifically

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293 See In re Munchee, Inc., Securities Act Release No. 10445, at III.35 (Dec. 11, 2017) [hereinafter Munchee Order] (“Determining whether a transaction involves a security does not turn on labelling . . . but instead requires an assessment of the economic realities underlying a transaction.” (internal quotation marks and citation omitted)).


295 Securities Act § 2(a)(1) defines “security” as:

any note, stock, treasury stock, security future, security-based swap, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, collateral-trust certificate, preorganization certificate or subscription, transferable share, investment contract, voting-trust certificate, certificate of deposit for a security . . . or, in general, any interest or instrument commonly known as a “security”, or any certificate of interest or participation in, temporary or interim
intended to be securities are only potentially captured by the catch-all term “investment contract.”

The analysis of whether an instrument is an “investment contract” is primarily based on the landmark 1946 Supreme Court decision in Howey. The case involved a company’s sale of 250 acres of citrus acreage to the public, along with a contract to service the groves and sell the produce for investors, while the proceeds of the sale would “help [it] finance additional development.”296 In holding that this transaction constituted an “investment contract”—and thus an illegally unregistered securities offering—the Court laid out a four-part test that continues to underpin the modern interpretation of the term “investment contract.” Under the Howey test, an investment contract exists when there is:

(i) an investment of money;

(ii) in a common enterprise;

(iii) with a reasonable expectation of profits; and

(iv) the expectation of profits is based upon the entrepreneurial or managerial efforts of others.297

Importantly, this test requires that any particular asset satisfy each of its four elements based on a fact-specific analysis of each asset. The Supreme Court emphasized both in Howey and subsequent opinions that the test “embodies a flexible rather than a static principle, one that


[296] Howey, 328 U.S. at 295.

[297] Id. at 301 (“The test is whether the scheme involves an investment of money in a common enterprise with profits to come solely from the efforts of others”); see also United Hous. Found., Inc. v. Forman, 421 U.S. 837, 852–53 (1975) (expanding on Howey definition of an investment contract and holding that the “touchstone” of the test is “the presence of an investment in a common venture premised on a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others.”).
is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits." 298 In the digital asset context, the SEC repeatedly has emphasized that it applies a facts-and-circumstances analysis to each individual token to determine whether it is a security. 299 The SEC also has stressed that “form should be disregarded for substance,” and that the focus must be on the “economic realities underlying a transaction, and not on the name appended to it.” 300

The Howey test eschews any simplistic, one-size-fits-all application to digital assets. In a 2018 speech, the SEC’s Director of the Division of Corporation Finance, William Hinman, expressed his view that two of the most highly valued digital assets—bitcoin and ether—are not securities under the Howey test. 301 At the same time, and in an important departure from any prior SEC statements or analysis, Director Hinman emphasized that whether any particular digital asset is a security is not static, and a digital asset that might have been sold in a securities offering can change its character over time and cease to be a security. 302 The determination whether a digital asset is an investment contract at a particular time, therefore, will be unique not

298 Edwards, 540 U.S. at 393 (quoting Howey, 328 U.S. at 299).

299 See Chairman Clayton Statement, supra note 291.


301 Hinman, supra note 54. The SEC’s Division of Investment Management also has publicly taken the position that bitcoin is not a security, in rejecting a request to register a fund whose assets would consist substantially of bitcoin as an investment company under the Investment Company Act of 1940. See Re: Cipher Technologies Bitcoin Fund Registration Statement on Form N-2 (filed May 13, 2019) Pre-Effective Amendment No. 1 (filed Sept. 11, 2019), File No. 811-23443 (Oct. 1, 2019), https://www.sec.gov/Archives/edgar/data/1776589/999999999719007180/filename1.pdf.

302 Hinman, supra note 54.
only to that digital asset but perhaps also to facts and circumstances at the time it is being sold or resold.

More recently, in April 2019, the SEC’s Strategic Hub for Innovation and Financial Technology (FinHub) published the Digital Asset Framework. While the Digital Asset Framework is not a rule, regulation, or statement of the Commission, and the Commission has not approved its content, it provides guidance regarding FinHub’s view as to whether a given digital asset would be considered a digital asset under Howey. This Section outlines the complex application of the four factors of the Howey test to digital assets.

(a) An “Investment of Money”

Perhaps the most straightforward element of the Howey test is the requirement that a party invest money in the enterprise. At a high level, this element requires the investor “to give up a specific consideration in return for a separable financial interest with the characteristics of a security.” The Supreme Court has stated the consideration must be “tangible and definable.” Government-issued “fiat” currency is plainly “specific consideration,” but the federal courts and the SEC have stated that an investment of “money need not take the form of cash.” Specifically, in the DAO Report, the SEC determined that a purchase of DAO tokens with payment made in ether tokens, another digital asset, fulfilled this first element of the Howey test. Courts similarly have found that payment made in bitcoin, or other digital assets, may

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303 Digital Asset Framework, supra note 285.


305 Id. at 560.

306 DAO REPORT, supra note 87, at 11 (internal quotation marks omitted).

count as investment of money and therefore satisfy the “investment of money” prong of

*Howey*.\(^{308}\)

Beyond fiat currency and other digital assets, the Digital Asset Framework takes the view
that the “investment of money” prong may be satisfied by the acquisition of a digital asset “in
exchange for value . . . in the form of . . . other type[s] of consideration.”\(^{309}\) According to the
Digital Asset Framework, other types of consideration may include digital assets distributed via
so-called “bounty programs,”\(^{310}\) which may include incentives offered to participants for various
activities associated with an initial coin offering, or “air drops,”\(^{311}\) which are “digital asset[s that
are] distributed to holders of another digital asset, typically to promote its circulation.”\(^{312}\) Some
commenters, however, have questioned whether the Digital Asset Framework’s assertions in this
regard are actually consistent with or supported by the applicable case law.\(^{313}\)

There also are open questions regarding how to apply the investment of money prong to
digital assets that are created through “mining.” As described in Figure 1 below, digital assets
available on the market today can be acquired by a variety of methods, including mining. There
are two primary types of mining: proof-of-work mining and proof-of-stake mining. For those

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\(^{309}\) Digital Asset Framework, supra note 285.

\(^{310}\) Id. at n.9.

\(^{311}\) Id.

\(^{312}\) Id.

\(^{313}\) See Joseph A. Hall, *Howey, Ralston Purina and the SEC’s Digital Asset Framework*, 52 REV. OF SEC. &
COMMODITIES REG. 137 (June 19, 2019),
Asset Framework’s “seemingly contradictory” assertion that the “investment of money” prong of *Howey* can be
satisfied without an investment of money).
digital assets that are created by proof-of-work mining, miners compete to resolve mathematical
problems to validate transactions on the network in order to add new blocks to the blockchain.
To oversimplify, the first miner to solve the problem is rewarded by a new issuance of that
digital asset. All bitcoins, for example, were and are initially created through mining alone,
although non-miners can purchase bitcoin in secondary market transactions. Proof-of-work
mining can be energy intensive and requires specialized, costly equipment to perform.314 Proof-
of-stake mining similarly is a way to validate transactions on a blockchain, but rather than
engaging in solving mathematical problems, holders of a particular digital asset (or their
delegates) validate transactions by “staking” an amount of tokens they hold—being rewarded
with newly mined tokens for their efforts—but subject to the risk of their staked tokens being
“slashed” if they attempt to validate transactions improperly.315

A digital asset’s mechanism of creation also may change over time, further complicating
the application of this first element of the Howey test. An amount of ether, in contrast to bitcoin,
was initially created and sold in exchange for bitcoin in a “presale” before the Ethereum network
was fully developed and launched.316 Since the Ethereum network launched, however, new ether
can be created only through proof-of-work mining, although existing and newly mined ether also

314 Jason Evangelho, Mining 101: An Introduction To Cryptocurrency Mining, FORBES (Mar. 13, 2018),
https://www.forbes.com/sites/jasonevangelho/2018/03/13/mining-101-what-exactly-is-cryptocurrency-
mining/#56942555a83a.


316 Vitalik Buterin, Launching the Ether Sale, ETHEREUM BLOG (July 22, 2014),
can be purchased on the secondary market. Further, the Ethereum network is expected to transition to proof-of-stake mining in the future.\footnote{317}

<table>
<thead>
<tr>
<th>Digital Asset</th>
<th>Form of Acquisition</th>
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<tbody>
<tr>
<td>Bitcoin (BTC)</td>
<td>Proof-of-work mining</td>
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<tr>
<td>Ether (ETH)</td>
<td>Proof-of-work mining*</td>
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<tr>
<td>Ripple (XRP)</td>
<td>Sale or giveaway</td>
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<tr>
<td>Bitcoin cash (BCH)</td>
<td>Proof-of-work mining</td>
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<tr>
<td>EOS</td>
<td>Sale</td>
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<tr>
<td>Litecoin (LTC)</td>
<td>Proof-of-work mining</td>
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<tr>
<td>Zcash (ZEC)</td>
<td>Proof-of-work mining**</td>
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<tr>
<td>Stellar Lumens (XLM)</td>
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<tr>
<td>Cardano (ADA)</td>
<td>Proof-of-stake mining***</td>
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<tr>
<td>IOTA (IOT)</td>
<td>Sale</td>
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\begin{tabular}{|l|l|}
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IOTA (IOT) & Sale \\
\hline
\end{tabular}

Figure 1: Selected digital assets and form of acquisition\footnote{318}

* Ether initially was available for purchase through a presale. Since then, all ether must be purchased either by mining or on the secondary market, although the Ethereum network may transition to proof of stake.

** For a period of several years, a portion of mined ZEC was automatically allocated to the founders of ZEC, among others. Although that “Founders’ Reward” has expired, a portion of mined ZEC is now allocated to certain other groups that provide network support.

*** Cardano was initially sold at a presale. Since then, Cardano is issued through proof-of-stake mining.

Whether miners give up “tangible and definable” consideration to obtain digital assets such as to satisfy the “investment of money” element of the Howey test has yet to be answered


by the SEC or the courts, and the concept of mining does not fit neatly into this first element of the Howey test. Proof-of-work miners could be viewed, however, as giving consideration in the form of their labor or the opportunity cost of the resources (including substantial electricity cost) expended to mine the digital assets. Courts have determined that, in specific circumstances, giving up resources that one otherwise would have can be consideration sufficient to fulfill this element of the Howey test. For example, in Uselton v. Commercial Lovelace Motor Freight, Inc., the Tenth Circuit held the investment-of-money element was fulfilled when employees contributed to a voluntary stock ownership plan at their company because the employees “contributed their legal right to a portion of their wages . . . in return for the right to . . . participate in [the employer’s] profit-sharing plan.” 319 In contrast, the Supreme Court held this element was not met in an earlier case, International Brotherhood of Teamsters v. Daniel. 320 In Daniel, employees similarly received a pension plan from their employer as part of their compensation package, but the plan was both “noncontributory” and “compulsory,” meaning that “by definition, [the employee] ma[de] no payment into the pension fund. He only accept[ed] employment, one of the conditions of which [was] eligibility for a possible benefit on retirement.” 321 Exchanging labor for a perceived return therefore may sometimes fulfill this element of the Howey test, but not—as the Daniel court noted—when “[o]nly in the most abstract sense may it be said that an employee ‘exchanges’ some portion of his labor in return for these possible benefits.” 322

319 940 F.2d 564, 575 (10th Cir. 1991).
321 Id. at 558.
322 Id. at 560.
Nonetheless, the Daniel and Uselton cases do not resolve the question for digital assets that are mined. In Daniel and Uselton, the employees were giving up a percentage of a guaranteed and predetermined salary. When proof-of-work miners expend computational power to mine for bitcoin, however, they generally are giving up the opportunity cost of their time and resources. The question whether such opportunity cost is “tangible and definable” consideration is more difficult. Thus, although the “investment of money” element likely will be straightforward for those digital assets that are sold in exchange for fiat currency or other digital assets, mining adds an element of ambiguity in determining whether this element of the Howey test is met. Similarly, the use of proof-of-stake mining in general, and the specific details of how it is used in any given network, also may affect the analysis of this element, as it may be unclear what tangible and definable consideration is given up when engaging in this type of activity.

Another question that has yet to be answered by the SEC or the courts is whether a digital asset that was not a security upon initial issuance (for example, because it was mined rather than sold by an issuer) can become an investment contract by virtue of secondary market trading. For example, although bitcoin is mined in the first instance, it is subsequently purchased and sold in the secondary market. One argument that the purchase and sale in the secondary market do not alter the nature of the underlying asset would hold that a contract’s character is determined upon initial issuance, and no “investment of money” was made in return for the issuance. Indeed, the Supreme Court has noted that, in order to constitute an investment contract under Howey, a purchaser’s profits must stem from “capital appreciation resulting from the development of the initial investment . . . or a participation in earnings resulting from the use of investors’ funds”\footnote{Forman, 421 U.S. at 852.}—but secondary market purchasers’ funds are not used by the issuer. Further, there are numerous
examples in which secondary market trading does not cause an asset to be a security, such as foreign currencies and precious metals.

(b) A Common Enterprise

Broadly, the “common enterprise” element focuses on the ties among individual owners of the asset. Courts have looked to two different methods for fulfilling this element: horizontal commonality or vertical commonality. The analysis of the “common enterprise” element, particularly under vertical commonality, is closely related to the final element of the Howey test regarding the reliance by purchasers on the efforts of others in order to realize their profit. The Digital Asset Framework assumes that this element generally is satisfied (whether by horizontal or vertical commonality) for digital assets.\(^{324}\)

(1) Horizontal Commonality

Courts requiring horizontal commonality look to whether there is “a pooling of investors’ contributions and distribution of profits and losses on a pro-rata basis among investors.”\(^{325}\) In a traditional example of horizontal commonality, the Third Circuit found this element met when a trust’s “solicitation and membership materials stated that [the trust] would pool participant contributions to create highly-leveraged investment power that would yield high rates of return while protecting the investors’ principal contributions.”\(^{326}\) Similarly, the First Circuit held that

\(^{324}\) Digital Asset Framework, supra note 285 (“[I]nvestments in digital assets have constituted investments in a common enterprise because the fortunes of digital asset purchasers have been linked to each other or to the success of the promoter’s efforts.”).


\(^{326}\) Id.
this element was met when the operator of a “fantasy investment game” pooled participants’ funds into a single account.\textsuperscript{327}

Applying this factor to digital assets is a fact-specific inquiry. The relevant factors to assess whether there is horizontal commonality between investors in a digital asset include whether a centralized entity supports the digital asset, whether investors’ assets are pooled in a central location, and whether any entity controls those pooled assets.\textsuperscript{328} An analysis of bitcoin, in particular, draws out the most important considerations for this factor. Purchasers of bitcoin are a disparate, unaffiliated group.\textsuperscript{329} The open-source Bitcoin network permits a purchase of bitcoin to be registered on a public ledger and allows the owners of bitcoin to exchange value over the network. Because all bitcoins are initially mined, there are no assets to pool in the traditional sense. Further, there is neither a central account that holds any assets nor any third party that can be said to have control over any assets. Holders of bitcoin may share in the market value fluctuations of the digital currency on a pro-rata basis, but that feature alone would not seem to fulfill the element of horizontal commonality, as it is present with respect to many commodities that are not securities.

This element also is emblematic of how the Howey analysis of a digital asset may evolve over time. Ether’s origin, for example, differs from the purely decentralized nature of bitcoin and even from ether’s current state. Ether was first sold in a presale of 60 million units of the digital

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\textsuperscript{327} SEC v. SG Ltd., 265 F.3d 42, 49–53 (1st Cir. 2001).

\textsuperscript{328} Telegram suggests that digital assets themselves can constitute a form of asset pooling and therefore satisfy horizontal commonality. See Telegram, supra note 284, at *32 (“[F]urther, horizontal commonality exists after the launch of [the digital asset]. The plain economic reality is that, post-launch, the [digital assets] themselves continue to represent the Initial Purchasers’ pooled funds.”).

\end{enumerate}
\end{footnotesize}
currency in 2014. 330 Whether or not purchasers in the initial sale could be considered to have pooled assets, after the presale, new ether could be generated only by mining. Therefore, much like the case of bitcoin, it is difficult to argue that, today, assets are pooled by miners of ether.

(2) Vertical Commonality

In those circuits that use the test of vertical commonality, courts look to whether the success of the investors is dependent upon the efforts of the promoters. 331 The example of bitcoin illustrates the close ties of vertical commonality with the final element of the *Howey* test regarding reliance on the efforts of a third party. In fact, some circuits have rejected the use of the vertical commonality test on the basis that it collapses the second and final elements of the *Howey* test. 332 For entirely decentralized networks such as the Bitcoin network, it is difficult to say that investors are dependent upon an identifiable third party. Investors in bitcoin are dependent upon the efforts of all of the participants in the Bitcoin network generally in order to sustain the network, but the association between the various, dispersed network participants does not fit the usual paradigm applied by the courts that presumes a construct involving investors, on one hand, and promoters, on the other.

Characteristics that are indicative of vertical commonality in any digital asset would include whether the developers or promoters of the asset hold a significant stake in the asset, such that they would be incentivized to support the value of the asset and third-party holders


331 See, e.g., *SG Ltd.*, 265 F.3d at 49–50.

332 See, e.g., *Revak v. SEC Realty Corp.*, 18 F.3d 81, 88 (2d Cir. 1994).
would expect them to do so. Bitcoin, for example, would not possess these characteristics. There is no identifiable promoter of bitcoin upon whose role, interests, or motivations other owners would depend.

Many other digital assets, however, do have an identifiable promoter. The Telegram court found that the SEC made a substantial showing of strict vertical commonality because investors in the Telegram SAFT “anticipated profits were directly dependent on Telegram’s success in developing and launching” the digital asset. The court highlighted the developer’s financial and reputational interests in the success of the asset it was developing. At the time of the launch, the developer would control a large share of the digital asset, thus the developer’s fate was “inextricably linked” to the fortunes of the digital asset and, by extension, to the digital asset’s initial purchasers. Moreover, if the launch failed, the developer would be contractually bound to return any unspent money to investors. Similarly, the Kik court focused on the developer’s financial stake in the success of its new digital asset, evidenced by the developer’s decision to retain roughly 30 percent of the digital asset it had created. Indeed, though considering reliance on the “efforts of others,” the Digital Asset Framework points to the promoter’s

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333 See Hinman, supra note 54 (asking: “Would purchasers reasonably believe such efforts will be undertaken and may result in a return on their investment in the digital asset?”).

334 See id.

335 Telegram, supra note 284, at *33.

336 Id. at *34.

337 Id.

338 Kik, supra note 289, at 12–13 (“Kik had a unique incentive to increase demand for Kin because it retained for itself 30% of the tokens created.”).
retention of a significant stake in the digital asset as a factor indicating that other purchasers would expect the promoter to engage in efforts to enhance its value.\(^{339}\)

The case of ether indicates how this factor of the analysis may change over time for a particular digital asset. Though ether had centralized origins, the SEC staff seems to have concluded that “putting aside the fundraising that accompanied the creation of ether,”\(^{340}\) there is no longer a central party with a sufficient continuing role to fulfill the elements of the Howey test. For digital assets where there was an identifiable promoter, such as with ether in its early stages, factors such as the evolution of the role of the promoter since the inception of the currency and the extent to which efforts by the promoter are still necessary for the functioning of the currency will affect the analysis.\(^{341}\)

(c) A Reasonable Expectation of Profit

The final two elements of the Howey test are the most complex of the four and also those most indicative of a digital asset’s status as a security.\(^{342}\) The third element—a reasonable expectation of profit—is the “touchstone” of the Supreme Court’s decisions defining a security.\(^{343}\) To assess whether there is an expectation of profit, courts traditionally have defined

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\(^{339}\) See Digital Asset Framework, supra note 285.

\(^{340}\) Hinman, supra note 54.

\(^{341}\) Id. (explaining that, besides Bitcoin and Ethereum, “[o]ver 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.”)

\(^{342}\) Indeed, the Digital Asset Framework cast some doubt on whether the SEC staff believes it is necessary for a digital asset to meet the first two elements of the Howey test—those requiring an investment of money and a common enterprise—for purposes of finding that the digital asset is a security. See Digital Asset Framework, supra note 285, at n.9 (“The lack of monetary consideration for digital assets . . . does not mean that the investment of money prong is not satisfied.”) & n.10 (“The Commission . . . does not require vertical or horizontal commonality per se, nor does it view a ‘common enterprise’ as a distinct element of the term ‘investment contract.’”).

\(^{343}\) Forman, 421 U.S. at 852.
profit as that derived from “capital appreciation resulting from the development of the initial investment,” for example as in “the sale of oil leases conditioned on promoters’ agreement to drill [an] exploratory well.” Profit also may come from “a participation in earnings resulting from the use of investors’ funds,” such as through “dividends on the investment based on [a] savings and loan association’s profits.” Along these lines, the SEC determined that investors purchasing DAO tokens reasonably expected to earn profits because “the various promotional materials disseminated by Slock.it and its co-founders informed investors that the DAO was a for-profit entity whose objective was to fund projects in exchange for a return on investment.” The Digital Asset Framework further views an expectation of profit as likely when “[t]he digital asset gives the holder rights to share in the enterprise’s income or profits or to realize gain from capital appreciation of the digital asset.”

Digital assets may attract investors seeking to profit from the investment, even though the assets also have credible, real consumptive uses that are independent of the expectation of profit. For example, some use bitcoin as a medium of exchange, and spending ether is necessary for its owners to deploy smart contracts to the Ethereum network, which have broad practical applications such as permitting companies to share data securely or trigger the effectiveness of insurance policies.

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344 Id. (citations omitted).
345 Id. (citations omitted).
346 DAO REPORT, supra note 87, at 11–12.
When considering the varying motivations of holders of an asset, courts have asked which of the uses is “incidental” to the other. Stated otherwise, the question for this element is whether “the purchase of a token looks a lot like a bet on the success of the enterprise and not the purchase of something used to exchange for goods or services on the network.” To draw out these different motivations for purchase, courts and the SEC have focused on the actions of the promoter (to the extent there is one), as well as on the behavior of purchasers.

Like the focus on the promotional material used for the DAO, courts and the SEC will scrutinize any statements by the promoters promising a return on investment, as such statements would lead investors to expect profits. In addition, the SEC might look to the characteristics of the investors targeted by promoters in order to ascertain whether there is a true consumptive use being promoted, versus an investment purpose. As such, marketing and selling a digital asset to members of the general public might indicate that the promoters are marketing an item for its potential for profit, while marketing to groups that would be expected to use the digital asset for its consumptive uses would indicate the promoters recognize that consumptive use is a significant driver of the demand for the currency.

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350 See SG Ltd., 265 F.3d at 54.

351 Hinman, supra note 54.

352 See supra note 346.


354 The Digital Asset Framework states that it is more likely there is a reasonable expectation of profit if “[t]he digital asset is offered broadly to potential purchasers as compared to being targeted to expected users of the goods or services or those who have a need for the functionality of the network.” Digital Asset Framework, supra note 285; see also Hinman, supra note 54.
In the Digital Asset Framework, the SEC staff elaborated on certain marketing statements or tactics that will make it more likely that there is a reasonable expectation of profit, including: highlighting the expertise of the promoter, sponsor, or other third party or their ability to grow the value of the digital asset; an implicit or explicit promise to build a business operation, as opposed to delivering currently available goods or services for use on an existing network; the ready transferability of the digital asset as a key selling feature; and an emphasis on the potential profitability of the operations or the network or the potential application of the value of the digital asset.\(^{355}\)

The motivations of purchasers is another critical part of this analysis. For example, the \textit{Kik} court found that Kin token purchasers reasonably expected to earn profits, focusing on statements by Kik’s CEO that as demand for Kin rose, the “value of [Kin] would go up,” such that early purchasers “could make a lot of money.”\(^{356}\) The court evidently agreed with the SEC’s characterization of the Kin token sale as “plainly a capital raising event for which the mere possibility that [the token] could be used in a future, Kik-sponsored, Ecosystem was of secondary importance to investor profits.”\(^{357}\)

Promoters also may reveal an intent to sell digital assets for investment purposes by, for example, selling the assets in increments that correlate with investment, not consumptive,\(^{358}\)


\(^{356}\) \textit{Kik}, supra note 289, at 12.

\(^{357}\) Mem. of Law in Opp. to Def.’s Motion for Summary Judgment at 4, \textit{SEC v. Kik Interactive}, No. 19-cv-5244 (S.D.N.Y. Apr. 24, 2020); see also \textit{Kik}, supra note 289, at 13 (“[W]ithout the promised ecosystem, Kin would be worthless.”).

\(^{358}\) The Digital Asset Framework states that it is more likely there is a reasonable expectation of profit if “[t]he digital asset is offered and purchased in quantities indicative of investment intent instead of quantities indicative of a user of the network.” \textit{Digital Asset Framework}, supra note 285.
uses, or applying other terms that indicate the primary motivation is not for personal use or consumption.\textsuperscript{359} For example, in \textit{Telegram}, the court stated that certain lock-up provisions in the SAFT at issue suggested the asset was a security because “simply put, a rational economic actor would not agree to freeze millions of dollars for up to 18 months (following a lengthy development period) if the purchaser’s intent was to obtain a substitute for fiat currency.”\textsuperscript{360} Conversely, promoters could “buil[d] in incentives that compel using the tokens promptly on the network,”\textsuperscript{361}—like a mechanism that degrades token value over time.\textsuperscript{362} Similarly, the digital asset analyzed in \textit{TurnKey Jet} imposed a discount that essentially penalized redemption of tokens for cash instead of services\textsuperscript{363}—which seemingly would discourage holding the asset for investment and indicate that the promoters are seeking users, not investors. The design of a digital asset’s ecosystem also is relevant. In \textit{Telegram}, for example, the developer’s plan to eventually integrate its new digital asset with its preexisting and widely used messaging platform—combined with the fact that the supply of these tokens would be fixed—in the court’s view supported a finding that a reasonable investor would expect high demand for the digital asset and thus a return on its initial investment.\textsuperscript{364}

Even when digital assets have purported consumptive uses, an important aspect of the inquiry for this element of the \textit{Howey} test will be the extent of development and widespread

\textsuperscript{359} See Hinman, supra note 54.

\textsuperscript{360} \textit{Telegram}, supra note 284, at *41–42.

\textsuperscript{361} See Hinman, supra note 54.

\textsuperscript{362} See id.

\textsuperscript{363} \textit{TurnKey Jet}, supra note 287.

\textsuperscript{364} \textit{Telegram}, supra note 284, at *42–43.
application of those uses. The more proven, actual uses by current holders of the digital asset, the less likely it is that expectation of profit is a motivation of holders of the asset. On the other hand, where the digital asset being sold has only contemplated or speculated future uses, an argument that purchasers had consumptive, rather than investment, intent will be difficult to sustain. Indeed, in *Kik*, the court rejected Kik’s attempt to characterize Kin tokens as having existing consumptive use when offered to the public, finding that such use “would materialize only if the enterprise advertised by Kik turned out to be successful.”\(^{365}\)

Similarly, the Digital Asset Framework suggests that if a digital asset will be redeemable for particular goods or services only in the future—in other words, only once the network is further developed—it typically will be priced at a significant discount to the actual market price of such goods or services, implying that purchasers are purchasing the asset as an investment.\(^{366}\) The Digital Asset Framework provides a long list of factors that the SEC staff believes could distinguish digital assets with real use cases from those with superficial use cases, such as whether the digital asset’s value shows a direct and stable correlation to the value of these goods and services it represents; whether its trading volume corresponds to levels of demand for such goods or services; and whether “any economic benefit that may be derived from appreciation in

\(^{365}\) *Kik*, *supra* note 289, at 13. In its complaint in *Kik*, the SEC focused on whether the intended uses of Kin were genuine, scrutinizing the “Minimum Viable Product” that purportedly gave Kin tokens their functionality, and argued that the tokens were not actually necessary to access features included in the product. *See* Complaint, *SEC v. Kik Interactive*, No. 19-cv-5244 (S.D.N.Y. June 4, 2019), ECF No. 1 (noting that the Minimum Viable Product had such limited functionality that it appeared to be developed solely for “compliance purposes”).

\(^{366}\) *Digital Asset Framework*, *supra* note 285 (noting that “where a digital asset can be used to purchase goods or services on a network, where that network’s or digital asset’s functionality is being developed or improved, there may be securities transactions if . . . the digital asset is offered or sold to purchasers at a discount to the value of the goods or services”).
the value of the digital asset is incidental to obtaining the right to use it for its intended functionality.”

(d) The Entrepreneurial or Managerial Efforts of the Promoter or Other Third Parties

The final and frequently most important element of the Howey test asks “whether the efforts made by those other than the investor are the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise.” Traditionally, in separating securities from non-security commodities, courts have asked whether the increase in value of the instrument purchased derives from the efforts of an identifiable third party or from general market fluctuations. For example, in Noa v. Key Futures, Inc., the Ninth Circuit held that contracts for the sale of silver were not securities because purchasers did not rely upon the efforts of others to realize their profits: “[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 [the sellers].” Similarly, in SEC v. Belmont Reid & Co., the Ninth Circuit held that investors purchasing gold coins on a pre-payment basis were not relying upon the managerial efforts of the promoters because their profits depended upon “the world gold market” and not the skills of the promoters. The gold purchasers acted as ordinary buyers relying on the seller to deliver the goods that they purchased. In contrast, the Second Circuit in Glen-Arden Commodities, Inc. v. Costantino held that purchasers in whiskey warehouse receipts relied upon the managerial efforts

\[367 Id.\]

\[368 SEC v. Glenn W. Turner Enters., Inc., 474 F.2d 476, 482 (9th Cir. 1973).\]

\[369 638 F.2d 77, 79 (9th Cir. 1980).\]

\[370 794 F.2d 1388, 1391 (9th Cir. 1986).\]

\[371 Id.\]
of others because they “entrust[ed] the promoters with both the work and the expertise to make
the tangible investment pay off.” The promoters of the interests in the whiskey and casks—the
warehouse receipts, which were akin to a commodity future—promised the investors that they
would find buyers in the future and investors would double their money in four years.

In considering how this element applies to digital assets, analyzing the case of bitcoin is
illustrative. Bitcoin miners profit by obtaining new tokens as a result of their own mining efforts.
Certainly, a portion of their profits relies upon the greater network of miners and users on the
Bitcoin network, but such reliance on the continued existence of this network is less from the
reliance on the “essential managerial efforts” of others and closer to the reliance on the world
gold market that was deemed not to be sufficient to fulfill this factor in Belmont Reid.

Nonetheless, few digital currencies in recent years have replicated the extensive
decentralization of bitcoin, with many being sold specifically to finance promoters’ efforts at
building a new system or service or based on the expectation that the promoters will support the
project after the sale. For example, in the DAO Report, the SEC stated: “[t]he expertise of The
DAO’s creators and Curators was critical in monitoring the operation of The DAO, safeguarding
investor funds, and determining whether proposed contracts should be put for a vote.” Further,
“[a]lthough DAO Token holders were afforded voting rights,” those voting rights “did not
provide them with meaningful control over the enterprise, because (1) DAO Token holders’

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372 493 F.2d 1027, 1035 (2d Cir. 1974).
373 Id.
374 DAO REPORT, supra note 87, at 12–13.
ability to vote for contracts was a largely perfunctory one; and (2) DAO Token holders were
widely dispersed and limited in their ability to communicate with one another.”

Determining whether the role of the creator of a particular token rises to the level of
essential managerial efforts is a fact-specific analysis. At a minimum, the analysis must take into
account whether there is an identifiable individual or group promoting the asset, and then assess
the specific role of that party. A minimal role, without more, is unlikely to be sufficient to
constitute “efforts of others” for purchasers to rely upon. For example, in Belmont Reid, the gold
purchasers relied upon the promoter to mine gold in order to produce gold coins. The Ninth
Circuit held that this reliance did not change the fact that the investors’ profit was determined by
the world gold market. Instead, the reliance was like “any sale-of-goods contract in which the
buyer pays for advance delivery and the ability of the seller to perform is dependent, in part, on
both his managerial skill and some good fortune.”

Enforcement actions brought by the SEC against the issuers and promoters of ICO tokens
provide further insight into when the SEC believes that the role of the creator of a particular
digital asset rises to the level of “essential managerial efforts.” In its November 2018 cease-and-
desist order against Paragon Coin, Inc., the SEC placed particular emphasis on Paragon’s stated
plans to create an “ecosystem” of uses and applications that it said would increase the value of its
token. Likewise, in its cease-and-desist order entered on the same date against Airfox, which

375 Id. at 13.

376 Belmont Reid, 794 F.2d at 1389.

377 Id. at 1391.

378 Id.

379 Paragon Order, supra note 284, at III.34.
had sold a digital asset (AirTokens) through an ICO, the SEC reasoned that investors’ expected profits “were to be derived from the significant entrepreneurial and managerial efforts of others—specifically AirFox and its agents—who were to create the ecosystem that would increase the value of AirTokens, and facilitate secondary market trading.”

Similarly, in determining whether the involvement of a digital asset’s developer rises to the level of “essential managerial efforts,” the Telegram court endorsed a version of the so-called “Bahamas Test” first proposed by academic commentators. As applied by the court, the test proposes a counterfactual—imagining a scenario in which, immediately after the launch of the digital asset, the development team decamped to an island in the Caribbean and ceased all further efforts to support the asset. If the team thus completely exited the stage, would the digital asset likely exhibit “the mass adoption, vibrancy, and utility that would enable the [initial investors] to earn their expected . . . profits?” In Telegram, the court found the Bahamas Test indicated that there was continued reliance on the developers because the success of the digital asset was dependent on its not-yet-completed integration with the developer’s preexisting messaging platform, among other similar factors. Moreover, the issuer’s pledge to distribute a portion of the new digital asset as a form of compensation to the development team, subject to a lock-up

380 Airfox Order, supra note 284, at III.22.

381 Telegram, supra note 284, at *49 (citing M. Todd Henderson and Max Raskin, A Regulatory Classification of Digital Assets: Toward an Operational Howey Test for Cryptocurrencies, ICOs, and Other Digital Assets, 2 COLUM. BUS. L. REV. 443, 461 (2019)).

382 Id.

383 Id. at *50.
agreement, fed expectations that the team would continue to play a role in the digital asset’s growth post-launch.384

Consistent with the Telegram court, the SEC appears to view post-launch activity to maintain and grow demand for a digital asset as essential managerial efforts by the developer. For example, in granting the SEC’s motion for summary judgment, the Kik court emphasized the central role that the developer of a new cryptocurrency would play in fostering the token’s “ecosystem” and providing integration with the developer’s preexisting social media platform.385 This mirrors many of the arguments made in the SEC’s complaints against Paragon Coin and AirFox, where it emphasized the role of the developers in creating an “ecosystem” that would increase the value of the tokens post-launch.386

Pinpointing whether purchasers are relying upon the efforts of others is important because the separation (and resulting information asymmetries) between those investors and promoters is what underlies the disclosure requirements of securities offerings, discussed in more detail below.387 The protections of the federal securities laws are needed where investors rely upon the efforts of a third party to realize gains from an investment because, in that scenario, “learning material information about the third party—its background, financing, plans, financial stake and so forth—is a prerequisite to making an informed investment decision.”388

384 Id.

385 Kik, supra note 289, at 13 (“The demand for Kin, and thus the value of the investment, would not grow on its own. Growth would rely heavily on Kik’s entrepreneurial and managerial efforts . . . These efforts by Kik were crucial because without the promised digital ecosystem, Kin would be worthless.”).

386 Paragon Order, supra note 284, at III.34; Airfox Order, supra note 284, at III.22.

387 See also Hinman, supra note 54.

388 Id.
Importantly, the SEC seems prepared to take into account how reliance on the efforts of others may change over the course of a digital token’s lifecycle. The Digital Asset Framework, for example, highlights multiple factors used to determine whether a digital asset that previously sold as a security should be reevaluated at the time of later offers or sales. These could include whether the efforts of the developer, promoter, or their successor continue to “be important to the value of an investment in the digital asset;” “whether the network on which the digital asset is to function operates in such a manner that purchasers would no longer reasonably expect [a developer, promoter, or other third party] to carry out essential managerial or entrepreneurial efforts;” and whether a developer, promoter, or other third party has “access to material, non-public information or could otherwise be deemed to hold material inside information about the digital asset.”

Ether’s evolution illustrates how the answers to these questions can change over time and potentially affect a Howey analysis, though the SEC has not spoken with specificity as to how this element of the Howey test applies to ether. The initial developers of ether and the Swiss entity that managed the presale and dissolved upon its conclusion—the Ethereum Switzerland GmbH—had a role in the establishment of the blockchain and the presale. Ether was purposefully established, however, to be an open-source, consensus-based blockchain that would not be controlled by any one holder of ether. Three years after its initial sale, over 30,000

389 Id.


developers participate in the Ethereum platform, a large and disperse enough group that holders of ether can be said to rely significantly less upon the efforts of any identifiable others today than at the time of the presale. Few other tokens initially sold through ICOs, however, have gained such widespread adoption such that the initial development team has fully extricated itself from continued development efforts.

2. Implications for the Requirements of the Securities Act and Exchange Act

Although the ICO and digital asset space has “grown rapidly, gained greater prominence in the public conscience and attracted significant capital” over the past few years, the risks inherent in any under-regulated space “are high and numerous—including risks caused by or related to poor, incorrect or non-existent disclosure, volatility, manipulation, fraud and theft.”

The SEC’s goal in regulating securities is to mitigate these risks while facilitating capital formation through increased transparency, and its authority to do so comes primarily from two statutes: the Securities Act and the Exchange Act. If a particular digital asset is classified as a security, dealings or transactions in that digital asset would be subject to the requirements of

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394 Block.one, which developed the EOS Network, appears to have attempted to mirror this model, selling tokens to fund the development of the network code and then releasing it as open source software and inviting other third parties to initially launch the network. See Brady Dale, How to Watch the EOS Blockchain Launch, COINDESK.COM (June 2, 2018), https://www.coindesk.com/watch-eos-blockchain-goes-live. Nonetheless, the SEC believed that the initial fundraising to fund Block.one’s development of the EOS Network was an unregistered securities offering. See In re Block.one, Securities Act Release No. 10714 (Sept. 30, 2019), https://www.sec.gov/litigation/admin/2019/33-10714.pdf.

395 Chairman Clayton Statement, supra note 291.

396 Id. (stating that the agency’s goals are “to protect investors, maintain fair, orderly and efficient markets and facilitate capital formation”). Other regulators have described their goals in similar terms. See, e.g., Jay Clayton and J. Christopher Giancarlo, Regulators are Looking at Cryptocurrency, WALL ST. J.: COMMENTARY (Jan. 24, 2018, 6:26 PM), https://www.wsj.com/articles/regulators-are-looking-at-cryptocurrency-1516836363 (describing the combined roles of the SEC and CFTC as “to set and enforce rules that foster innovation while promoting market integrity and confidence”).
these statutes. This Section analyzes those requirements and exemptions that may be available to parties transacting in or facilitating transactions in digital assets. It also references some of the challenges of applying existing regulations to this new asset class.

(a) The Securities Act

The Securities Act regulates the offer and sale of securities, including digital assets deemed to be securities, and requires either registration or the reliance on an exemption for the sale of such securities.\textsuperscript{397} It focuses primarily on ensuring transparency and preventing fraud by making it “unlawful [with certain exceptions] for any person . . . to offer to sell . . . any security, unless a registration statement has been filed as to such security”\textsuperscript{398} and the sale is accompanied by a prospectus containing certain required information.\textsuperscript{399}

In practical terms, section 5 of the Securities Act requires that before selling a security, an issuer must register the offering with the SEC or satisfy an exemption from registration; for example, offering the securities in a private placement in accordance with Regulation D. Registration requires issuers to provide extensive disclosure related to both the security being offered and the registrant itself, including details about the financial condition of the company, how it will use the proceeds from the sale, and the risk factors presented by investing in the security.

With respect to digital assets, these disclosure requirements, and the concerns animating them, are especially important for promoters who use digital asset sales in place of conventional securities offerings. These disclosure requirements were not written with digital assets in mind,

\textsuperscript{397} See Securities Act § 2(a)(3).

\textsuperscript{398} Id. § 5(c).

\textsuperscript{399} Id. § 10.
creating compliance difficulties for potential digital-asset issuers. However, over the past year, the SEC has allowed several issuers to successfully offer digital assets that fit within the legal framework for securities offerings. In July 2019, the SEC qualified two Regulation A offerings—a “registration light” exemption from full registration—of security tokens by Blockstack and YouNow. On August 20, 2020, the SEC declared effective the full Securities Act registration by INX Limited of INX Tokens, a digital asset that would entitle holders to a share of the not-yet-operational company’s operating cash flows. On July 6, 2020, Arca Capital Management, LLC, a digital asset investment firm, announced that the SEC had declared effective the registration of its Arca U.S. Treasury Fund. The fund is a closed-end registered investment company built on Ethereum. Building the fund on Ethereum will allow the fund’s shareholders, all of whom are required to be whitelisted by the fund’s transfer agent, to conduct peer-to-peer transactions via blockchain.

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400 See infra text accompanying notes 434–443 discussing Regulation A.


405 Whitelisting requires that each purchaser complete an anti-money laundering/know-your-customer process to establish a fund account with the transfer agent.

Some commenters have argued that in “the wild west of ICOs,” the disclosure requirements in section 5 are particularly crucial.\textsuperscript{407} Indeed, they are the primary means by which the SEC can ensure “transparency in [] securities markets” by “reduce[ing] opacity and, thereby, enhanc[ing] . . . efforts to deter, mitigate, and eliminate fraud.”\textsuperscript{408} This concern about opacity ties into the final element of the \textit{Howey} test—reliance on the efforts of others—because the more holders of digital assets rely on the efforts of others, the larger the concerns about information asymmetries between the promotors and investors.\textsuperscript{409}

The link between failure to disclose accurate information and fraud becomes apparent when examining past SEC enforcement actions. Many of those targeted by the SEC have attempted to issue tokens while making false statements about their activities with the intent of creating an inflated impression of the value of the digital asset. For example, according to the SEC, the co-founders of Centra, which conducted an ICO that raised over $32 million in 2017, claimed that funds raised from their “CTR Token” would help “build a suite of financial products . . . that would allow users to instantly convert hard-to-spend cryptocurrencies into U.S. dollars or other legal tender.”\textsuperscript{410} The SEC alleged that in making these statements, the co-founders claimed to have agreements in place with Visa and Mastercard to create debit cards

\textsuperscript{407} Maksymilian Ewendt, \textit{The Wild West of Initial Coin Offerings}, N.C. J. L. \& TECH. (Feb. 5, 2018), http://ncjolt.org/wild-west-initial-coin-offerings/.


\textsuperscript{409} Hinman, \textit{supra} note 54 (“The impetus of the Securities Act is to remove the information asymmetry between promotors and investors.”).

serving this function.\textsuperscript{411} Although the statements allegedly were false, such statements, along with Centra’s marketing and promotion efforts more generally, supported the value of the ICO. The SEC charged Centra’s co-founders with violating the anti-fraud and registration provisions of the Securities Act.\textsuperscript{412}

Several exemptions potentially are available to market participants, depending upon the nature of the transaction, amount of the offering, and participants involved. The section 4(a)(1) exemption, for example, applies to transactions by anyone other than an issuer, underwriter, or dealer.\textsuperscript{413} However, if a person purchases from an issuer “with a view to, or offers or sells for an issuer in connection with, the distribution of any security,” including digital assets deemed securities, then he or she is operating as an underwriter and cannot rely on the section 4(a)(1) exemption.\textsuperscript{414} This point was raised by the Telegram court, which found that the initial set of purchasers in the defendant’s ICO functioned as statutory underwriters in a “disguised public distribution.”\textsuperscript{415} According to the court, the developer’s goal was “to establish [its tokens] as ‘the first mass market cryptocurrency,’”\textsuperscript{416} which required that the tokens not come to rest with their initial purchasers. Instead, the offering was designed so that the tokens would “reach the public at large via post-launch resales by the [i]nitial purchasers,” thus positioning the initial purchasers as statutory underwriters.\textsuperscript{417}

\textsuperscript{411} Id.


\textsuperscript{413} Securities Act § 4(a)(1).

\textsuperscript{414} Securities Act § 2(a)(11) (defining underwriters).

\textsuperscript{415} Telegram, supra note 284, at *61.

\textsuperscript{416} Id.

\textsuperscript{417} Id. at *62.
Transactions not involving a public offering may qualify for the exemption under section 4(a)(2),\(^{418}\) including by relying on the safe harbor in Regulation D.\(^{419}\) Rule 506 of Regulation D provides that private placements of securities would be deemed to meet the section 4(a)(2) exemption so long as certain conditions are met, primarily that the issuer’s securities are sold only to “accredited investors,” a term that includes, among others, most entities with more than $5 million of assets and individuals that meet certain minimum income or net worth tests.\(^{420}\) For example, in 2017, Overstock.com’s blockchain-focused subsidiary, tZero, Inc., proposed to sell $250 million of preferred equity in the form of blockchain tokens.\(^{421}\) Although tZero conceded the tokens were securities, it sought to issue the tokens in a private placement offering under Regulation D of the Securities Act.\(^{422}\)

Other firms have sought to conduct ICOs of digital assets that may be deemed securities in reliance on Regulation D through SAFTs.\(^{423}\) Generally, SAFT purchasers invest in the developer of a blockchain network or application, but instead of receiving debt or equity

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\(^{418}\) Securities Act § 4(a)(2).


\(^{420}\) Id. § 230.501; see Press Release, SEC, SEC Modernizes the Accredited Investor Definition (Aug. 26, 2020), https://www.sec.gov/news/press-release/2020-191 (expanding the definition of “accredited investor” to include additional groups of investors who have sufficient expertise to invest in private placements, among other changes).


\(^{422}\) t0.com, Inc., Confidential Private Placement Offering Memorandum (Mar. 1, 2018), https://www.sec.gov/Archives/edgar/data/1130713/000110465918013731/a18-7242_1ex99d1.htm. tZero also is a joint venture partner in a platform to facilitate issuing and trading of digital-asset securities, see infra note 489, and Overstock has proposed an alternative trading system to facilitate trading of digital asset securities, see infra note 499.

securities of the developer, they receive a promise that the company will, at some point in the future, once the blockchain system has been developed, deliver to the investors a token that will have some use or value in the system. The theory underlying the SAFT structure is that once the network is developed and the fully functional tokens are delivered, token recipients should no longer be relying on the efforts of the promoters, and as a result, the digital asset would not be a security under Howey.

As noted above, the usefulness of SAFTs, however, has been called into question by the Telegram decision, which rejected the theory that SAFTs as a private placement could be evaluated separately from subsequent public digital asset distribution. The Telegram court stated that both the SAFTs and the future distribution of the token were a “[single] scheme to be evaluated under Howey [consisting] of the full set of contracts, expectations and understandings centered on the sales and distribution of the [token].” However, Telegram was decided by one district court at the preliminary injunction phase and not fully litigated on the merits, so it is possible that future cases may lead to different outcomes.

424 See, e.g., Protocol Labs and Cooley LLP, supra note 290.

425 Id. More precisely, SAFT-based token sales involve two stages. In the first stage, SAFTs are offered to a limited group of investors in compliance with one of the private offering safe harbors in Regulation D. The terms of the SAFTs entitle these investors to an amount of the digital asset to be issued in the future, and can include other commercial provisions like special governance rights over the digital asset and specific development milestones that trigger additional digital asset distributions. Proceeds generated from sales of the SAFTs are used by the digital asset issuer to develop technology and use cases for the underlying digital asset. Once that is complete, the issuer distributes the digital asset to the SAFT investors, as well as to the general public. The wider distribution occurs under the theory that the digital assets do not meet the Howey test due to the extent of their then-existing use cases, and therefore are not securities subject to registration requirements for public offerings.

426 See supra note 290; Telegram, supra note 284, at *60.

427 See Telegram, supra note 284, at *60.

428 Indeed, the judge considering the Kik case indicated in oral arguments that he does not view the Telegram decision as binding precedent. See Sandali Handagama, Telegram’s Defeat Isn’t ‘Binding’ in Kik Case, Judge Tells SEC, COINDesk.COM (July 10, 2020), https://www.coindesk.com/telegrams-defeat-isnt-binding-in-kik-case-judge-tells-sec.
The *Kik* and *Telegram* decisions\(^{429}\) and the SEC’s issuance of subpoenas to ICO companies applying the SAFT framework\(^{430}\) suggest that the agency may be considering whether tokens initially sold through a SAFT structure continue to be securities.\(^{431}\) If the SAFT-derived tokens are securities, even if initially sold in an exempt offering structured to rely on Regulation D, questions arise as to whether investors who received the digital assets through a SAFT can resell them without registration. As previously noted, section 4(a)(1) of the Securities Act exempts from registration transactions by a person who is not an issuer, underwriter, or dealer. Although investors may rely on this exemption to resell securities, they would need to ensure that they would not be deemed to be an “underwriter,” *i.e.*, someone who purchased the securities from the issuer with a view to distribution.\(^{432}\) Persons not affiliated with the issuer who have held the securities for at least one year may be able to rely on a safe harbor from “underwriter” status under Rule 144.\(^{433}\) When considering whether the one-year period begins with the investment in the SAFT or the delivery of the underlying tokens, a complicating factor is the question whether the holding periods can be “tacked” together.

\(^{429}\) See *Kik*, supra note 289, at 3–6, 14; see also *Telegram*, supra note 284.


\(^{432}\) Securities Act § 2(a)(11) (defining underwriters); see also *Telegram*, supra note 284, at *61 (finding that initial purchasers of a token from a developer were acting as statutory underwriters because the developer intended for them to resell the tokens on the secondary market in order to “establish [its tokens] as ‘the first mass market cryptocurrency’”)

\(^{433}\) 17 C.F.R. § 230.144. The application of Rule 144 to digital assets that were sold without reliance on an exemption is less clear. By its terms, Rule 144 is available only with respect to “restricted securities,” which generally is defined as either (i) securities acquired directly or indirectly from the issuer, or from an affiliate of the issuer, in a transaction or chain of transactions not involving any public offering, or (ii) securities sold in reliance on particular exemptions from section 5. If the securities were initially sold in a public offering without reliance on an exemption, they may not be “restricted securities” under Rule 144, and holders may not be eligible for the safe harbor from status as an “underwriter.”
Another alternative for issuers of digital-asset securities is the so-called “Regulation A-Plus,” adopted under the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). The JOBS Act tasked the SEC with implementing rules to exempt small issuers from registration requirements. Regulation A-Plus provides for two tiers of offerings, with Tier 1 encompassing offerings of up to $20 million in a 12-month period with no more than $6 million in offers by selling security holders that are affiliates of the issuer, and Tier 2 encompassing offerings of securities of up to $50 million in a 12-month period with no more than $15 million in offers by selling security holders that are affiliates of the issuer.

Certain basic requirements apply to both Tier 1 and Tier 2 offerings under Regulation A-Plus, such as the requirement that an issuer file an offering statement with the SEC and have it qualified before the issuer may begin selling securities. Tier 2 offerings are subject to additional disclosure and reporting requirements. Accordingly, a Regulation A-Plus offering requires issuers of digital assets to engage more closely with the SEC than they would under a Regulation D offering, primarily because the SEC must “qualify” the offering statement.

A central benefit of a Regulation A-Plus offering is that securities issued in such an offering are not subject to resale restrictions, at least under the federal securities laws. The possibility of immediate trading may encourage the development of a vibrant secondary market.

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434 See Securities Act § 3(b)(2).
435 17 C.F.R. § 230.251(a).
437 See, e.g., 17 C.F.R § 230.257(b).
438 17 C.F.R. § 230.251(d).
market. However, Regulation A-Plus preempts state securities laws (which may separately require registration) only “with respect to primary offerings of securities by the issuer or secondary offerings by selling security holders that are qualified pursuant to Regulation A and offered or sold to qualified purchasers pursuant to a Tier 2 offering.” Tier 1 offerings, and resales of securities purchased in Tier 2 offerings, will still require a state-by-state analysis. As previously noted, the SEC to date has qualified two Regulation A offerings.

Even if a digital asset is exempt from the registration requirements, the digital asset nevertheless may be subject to other requirements under the Securities Act. For example, section 17(a) of the Securities Act makes it unlawful for any person to use fraudulent means to effect any securities sale, including making “any untrue statement of material fact or any omission to state a material fact necessary in order to make the statements made . . . not misleading.” This provision applies regardless of whether the security has been registered.

Section 17(b) likewise makes it unlawful for any person to publish, give publicity to, or circulate any advertisement for a security in exchange for consideration from the issuer, underwriter, or dealer of that security without fully disclosing the receipt of that consideration. Paid promotions or endorsements of digital assets that constitute securities thus may be unlawful absent full disclosure of any underlying consideration being paid for the promotion. Indeed, in


442 Id.

443 See supra notes 401–402.

444 See Securities Act § 17(c).

445 Id. § 17(b).
December 2018, the SEC brought enforcement actions for violation of section 17(b) against boxer Floyd Mayweather Jr.\textsuperscript{446} and music producer DJ Khaled.\textsuperscript{447} The SEC alleged that Mayweather and Khaled had both received consideration from ICO issuers in exchange for promoting the relevant ICOs through social media posts, but failed to disclose their receipt of consideration.\textsuperscript{448} Similarly, in February 2020, the SEC brought claims against actor Steven Seagal.\textsuperscript{449}

(b) The Exchange Act

While the Securities Act focuses on the registration of securities, the Exchange Act regulates secondary trading of securities. The Exchange Act imposes registration requirements and substantive regulations on the financial intermediaries that engage in or facilitate the trading of securities, including broker-dealers, exchanges, transfer agents, and clearing agencies. If a particular digital asset is determined to be a security, then market participants that act in these capacities in connection with the digital asset may be subject to registration and regulation, as they would with any other security. Although the SEC’s initial enforcement actions and public statements involving digital assets largely focused on Securities Act violations, Exchange Act considerations are more recently the focus of attention.\textsuperscript{450} For example, in September 2018, the

\textsuperscript{446} In the Matter of Floyd Mayweather Jr., Securities Act Release No. 10578 (Nov. 29, 2018).

\textsuperscript{447} In the Matter of Khaled, Securities Act Release No. 10579 (Nov. 29, 2018).


SEC brought its first enforcement action against a person the SEC alleged acted as an unregistered broker-dealer in connection with the sale of ICO tokens and facilitation of secondary market trading in the digital assets.\textsuperscript{451}

This subpart highlights certain of the Exchange Act requirements for securities market intermediaries and infrastructure. While the secondary market infrastructure for traditional securities is highly regulated, much of the digital asset trading infrastructure was established without regard to the securities laws. In addition, some of the Exchange Act requirements, and the rules and regulations thereunder, do not apply neatly to digital assets as a class. The application of the Exchange Act requirements to these mostly unregulated activities also may significantly impact this business, and as a result, discourage transactions in digital assets that may be securities.\textsuperscript{452}

\textbf{(1) \hspace{1em} Brokers and Dealers}

Section 15 of the Exchange Act makes it “unlawful for any broker or dealer . . . to induce or attempt to induce the purchase or sale of, any security . . . unless such broker or dealer is registered” with the SEC.\textsuperscript{453} Brokers and dealers (typically referred to as “broker-dealers”), and associated natural persons (“associated persons”), are subject to extensive substantive regulation.

\textsuperscript{451} \textit{In re TokenLot LLC}, Exchange Act Release No. 84075 (Sept. 11, 2018) [hereinafter \textit{TokenLot Order}].


\textsuperscript{453} Exchange Act §15(a)(1). Unless an exemption is available, non-U.S. firms “that, from outside the United States, induce or attempt to induce trades by any person in the United States” also may be subject to U.S. broker-dealer registration. \textit{See} Registration Requirements for Foreign Broker-Dealers, Exchange Act Release No. 27017 (July 11, 1989).
A “broker” is a person “engaged in the business of effecting transactions in securities for the account of others.” This definition has been expansively interpreted by the SEC and courts. In addition to those persons executing securities transactions and holding custody of customers’ funds and securities, a person or entity may be deemed a broker if it assists issuers with structuring a securities offering, identifies potential purchasers, or advertises a securities offering, among other things. The SEC has highlighted that a person who is compensated through the receipt of commissions or similar transaction-based fees in connection with securities activity likely is acting as a broker.

A person is a “dealer” if it is “engaged in the business of buying and selling securities . . . for such person’s own account,” but only insofar as such transactions are part of that person’s “regular business.” Importantly, a person must both buy and sell securities in order to qualify as a dealer. The SEC and courts have distinguished between dealers and traders, who also buy and sell securities, based on whether the dealer is buying and selling as a business, rather than as an investor. Indicia of dealer activity include whether the person holds itself out as willing to buy or sell securities on a continuous basis or provides liquidity to the market (as a market maker), is involved in originating new securities (such as an underwriter), has regular customers

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456 Id. at 2-18.


or clientele, has a regular turnover inventory of securities, and provides securities-related services in connection with its transactions (such as providing advice or extending credit).\footnote{459}

The SEC has focused recently on broker-dealer requirements relating to digital asset activity. In September 2018, the SEC entered a cease-and-desist order against TokenLot LLC and its owner-operators, Lenny Kugel and Eli Lewitt, for unregistered broker-dealer activity.\footnote{460} TokenLot operated a website marketed as an “ICO Superstore,” through which it sold digital assets both in connection with ICOs and secondary market trading.\footnote{461} More than 6,100 individual investors placed over 8,400 purchase orders on the TokenLot platform.\footnote{462} The SEC alleged that TokenLot and its operators acted as brokers by facilitating the sale of digital assets as part of other entities’ ICOs, including by marketing the digital assets, accepting investors’ orders, accepting payment for orders, and working with issuers to transfer digital assets to investors after payment.\footnote{463} The SEC alleged that TokenLot and its operators also acted as dealers by purchasing digital assets for accounts in TokenLot’s name, often at a discount to the ICO price, and then selling the digital assets to investors for profit immediately or at a later time after being held in inventory.\footnote{464} The SEC concluded that TokenLot and its operators violated the Exchange Act by engaging in such activity without the required broker-dealer registration.

\footnote{459}{Id.}

\footnote{460}{TokenLot Order, supra note 451.}

\footnote{461}{Id. at III.3, III.6.}

\footnote{462}{Id. at III.6.}

\footnote{463}{Id. at III.11, III.12.}

\footnote{464}{Id. at III.13.}
More recently, in September 2019, the SEC filed a complaint against ICOBox and its creator Nikolay Evdokimov, alleging in part that the defendants had acted as unregistered brokers for their clients’ ICOs.\textsuperscript{465} ICOBox was a service designed to “structur[e], promot[e], and solicit[] investors” for its clients’ token offerings.\textsuperscript{466} According to the complaint, the service had facilitated token sales for more than 30 clients, raising over $650 million.\textsuperscript{467} In alleging that ICOBox and Evdokimov acted as unregistered brokers, the SEC’s complaint emphasized the “marketing services” that they offered their clients, which included “advising investors on the merits of the clients’ offerings and actively soliciting investors to purchase the clients’ tokens.”\textsuperscript{468} For these services, ICOBox charged clients both a flat fee and a “success fee,” which was tied to the amount raised during the clients’ offerings.\textsuperscript{469} The SEC concluded that ICOBox and Evdokimov violated the Exchange Act by engaging in such activity without broker registration.

Registration and operation of a broker-dealer is not a light undertaking. Firms seeking to comply with the broker-dealer registration requirements face a high compliance burden—made more difficult by the fact that the relevant rules were designed for traditional securities, custody, and transfer models. Broker-dealers are subject to an extensive list of regulatory requirements, including, without limitation:

- minimum regulatory capital requirements;

\textsuperscript{465} Complaint at ¶ 1, \textit{SEC v. ICOBox}, No. 2:19-cv-08066 (C.D. Cal. Sept. 18, 2019), ECF No. 1.

\textsuperscript{466} \textit{Id.} at ¶ 11.

\textsuperscript{467} \textit{Id.} at ¶ 10.

\textsuperscript{468} \textit{Id.} at ¶ 89.

\textsuperscript{469} \textit{Id.} at ¶¶ 92–93.
restrictions on the distribution of assets to affiliates;
regulation concerning the handling of customers’ funds and securities;
restrictions on margin lending;
significant event and financial reporting, as well as annual financial audits;
books and records obligations;
supervision and surveillance requirements;
anti-money-laundering and know-your-customer requirements;
restrictions on communications with the public;
requirements to obtain FINRA approval for material changes in business or certain changes in ownership; and

generally adhering to high standards of commercial honor and just and equitable principles of trade.\textsuperscript{470}

In addition to registration with the SEC, broker-dealers also are generally required to become members of FINRA and register with applicable states. A natural person seeking to become associated with a broker-dealer must pass qualifying examinations administered by FINRA, subject themselves to fingerprinting, and provide disclosure of extensive background information. Registered individuals may be subject to restrictions on the business activities in which they engage outside the scope of their association with the broker-dealer, including personal securities transactions, must meet continuing education requirements, and are subject to various ongoing reporting requirements.\textsuperscript{471} Broker-dealers and associated natural persons are

\textsuperscript{470} See Colby, Schwartz, & Zweihorn, supra note 455, at 2-6–2-9.

\textsuperscript{471} Id.
subject to examination and enforcement by the SEC, applicable states, FINRA, and any other self-regulatory organization of which the broker-dealer is a member.\footnote{\textit{Id.}}

While the SEC insists that persons acting as brokers or dealers in digital asset securities must register with it or face enforcement, its staff has made clear a number of concerns that it has with registered broker-dealers dealing in digital asset securities. Specifically, in a joint statement with FINRA staff, the SEC staff indicated that it has significant concerns regarding how a registered broker-dealer could comply with the applicable customer protection rules when it maintains custody of digital asset securities for customers, and currently appears willing to permit registered broker-dealers to provide only non-custodial digital asset security services.\footnote{Division of Trading and Markets, SEC, Office of General Counsel. FINMA. \textit{Joint Staff Statement on Broker-Dealer Custody of Digital Asset Securities} (July 8, 2019), https://www.sec.gov/news/public-statement/joint-staff-statement-broker-dealer-custody-digital-asset-securities.} The result has left firms seeking to engage in digital asset securities brokerage services legally in a difficult situation—they cannot provide digital asset securities brokerage services without registration, yet the SEC and FINRA appear unwilling to permit them to conduct the full suite of brokerage services even if they register.\footnote{\textit{SEC and FINRA Staffs Highlight Broker-Dealer Regulatory Challenges Raised by Digital Assets—And Hint at Solutions}, Davis Polk Client Memorandum (July 12, 2019), https://www.davispolk.com/files/20190712-sec-and-finra-staffs-highlight-broker-dealer-regulatory-challenges-raised-by-digital-assets-and-hint-at-solutions.pdf.}

\section*{(2) Exchanges and Alternative Trading Systems}

Among other things, the Exchange Act regulates the activities of securities exchanges. Section 3(a)(1) defines an exchange as any entity that “constitutes, maintains, or provides a marketplace or facilities for bringing together purchasers and sellers of securities,” although the
term does not include persons that merely route orders or operate single-dealer platforms.\textsuperscript{475} Section 5 of the Exchange Act makes it “unlawful for any . . . exchange, directly or indirectly . . . to effect any transaction in a security” unless it is registered with the SEC as a national securities exchange.\textsuperscript{476}

Many existing digital asset trading platforms, which maintain limit order books of bids and offers for digital assets and match buyers with sellers, would appear to be acting as an “exchange” if the digital assets traded on the platforms are securities.\textsuperscript{477} Indeed, in November 2018, the SEC brought an enforcement action against Zachary Coburn, the former operator of the EtherDelta online platform, on the basis that EtherDelta had operated as an unregistered exchange in violation of the Exchange Act.\textsuperscript{478} Although ostensibly a “decentralized” exchange operating through a smart contract, EtherDelta’s website provided a user-friendly interface that allowed buyers and sellers to access a secondary market for certain digital tokens, particularly ether and ERC 20 tokens (including many digital assets issued in ICOs).\textsuperscript{479} EtherDelta’s website provided access to the EtherDelta order book, allowing users to enter buy or sell orders for supported digital assets at a specified price and with a specified time for the order to remain

\textsuperscript{475} See 17 C.F.R. § 240.3b-16.

\textsuperscript{476} Exchange Act § 5.


\textsuperscript{478} In the Matter of Zachary Coburn, Exchange Act Release No. 84553 (Nov. 8, 2018) [hereinafter EtherDelta Order].

\textsuperscript{479} Id. at III.1, III.2.
open.\textsuperscript{480} Between July 12, 2016, and December 15, 2017, more than 3.6 million orders were traded on EtherDelta platform.\textsuperscript{481} In this regard, the SEC alleged that EtherDelta operated as a marketplace for bringing together the orders of multiple buyers and sellers in digital assets that constituted securities, and thereby itself constituted an exchange for the purposes of the Exchange Act.\textsuperscript{482} By not registering as an exchange, or qualifying for an exemption from registration, Coburn operated EtherDelta in violation of the Exchange Act.\textsuperscript{483}

The activities of registered national securities exchanges are subject to extensive regulation by the SEC. The exchange’s rules and stated policies, practices, and interpretations are subject to filing with, and in most cases approval by, the SEC before they can become effective.\textsuperscript{484} A national securities exchange’s rules, among other things, must be “designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade . . . and, in general, to protect investors and the public interest.”\textsuperscript{485} National securities exchanges also are themselves SROs and therefore must enforce their members’ compliance with the exchanges’ rules and the federal securities laws.\textsuperscript{486}

\textsuperscript{480} Id. at III.2.
\textsuperscript{481} Id. at III.4.
\textsuperscript{482} Id. at III.26.

\textsuperscript{484} Exchange Act § 19(b)(1).
\textsuperscript{485} Id. § 6(b)(5).
\textsuperscript{486} Id. § 19(g)(1).
In practice, firms wishing to offer a trading platform for digital assets may find that doing so through a registered national securities exchange is impractical. In addition to the extensive regulatory obligations imposed on exchanges, status as a national securities exchange also may limit the business that the platform can undertake. Only registered broker-dealers and their natural person associated persons—rather than direct investors—may become members of a national securities exchange.487 In addition, only securities registered under the Exchange Act may be traded on national securities exchanges.488

One existing national securities exchange sought to create a facility of the exchange that would operate as a platform for trading digital asset securities. The Boston Security Token Exchange, or BSTX, was a proposed facility of the BOX Exchange LLC (“BOX”). As proposed, BSTX would have been “a fully automated, price-time priority execution system to list and trade [National Market System] stocks . . . for which ancillary records of ownership reflecting certain end-of-day security token balances as reported by market participants would be created and maintained using distributed ledger technology built on Ethereum.”489 Note that these would be only “ancillary records”—the securities would actually clear and settle under existing clearing agency rules and procedures.490 Nonetheless, the securities traded on the system would be

487 Id. § 6(c)(1).

488 Id. § 12(a).


referred to as “security tokens.” In order to build the new system, BOX, a preexisting exchange that was co-developing BSTX in partnership with tZero, was required to seek regulatory approval from the SEC for certain rule changes to its corporate governance and trading policies. The SEC instituted proceedings to determine whether to approve or disapprove the proposal, after which the proposal was withdrawn by BOX, which may indicate that BOX anticipated that the SEC would disapprove it.

Given the regulatory burden of operating as a national securities exchange and the limitations on the sorts of securities that may trade, many have considered operating trading platforms for digital assets as an ATS operated by a registered broker-dealer. Although a broker-dealer would meet the definition of an “exchange” by providing a marketplace for bringing together purchasers and sellers of securities, a broker-dealer (although not others) may rely on an exemption from exchange status if it operates an ATS in compliance with Regulation ATS.

While ATS registration is less burdensome than registration and regulation as a national securities exchange, ATSs are subject to regulation as broker-dealers and cannot engage in all of the same activities as national securities exchanges. In particular, under Regulation ATS,

491 See Box Proceedings Release, supra note 489.


493 See BOX Proceedings Release, supra note 489.


495 See 17 C.F.R. § 240.3a1-1(a)(2).

496 ATSs that effect five percent of the trading volume with respect to a non-exchange listed equity security, however, may become subject to Regulation SCI, which seeks to ensure the operational integrity and continuing
ATSs cannot “[s]et rules governing the conduct of subscribers other than the conduct of such subscribers’ trading on such organization” or “[d]iscipline subscribers other than by exclusion from trading.”\textsuperscript{497} ATSs must register as broker-dealers with the SEC in addition to filing Form ATS, and must become members of the requisite SRO.\textsuperscript{498}

At least one firm has structured an ATS to facilitate secondary market trading in digital asset securities, although with limited functionality and limited to only a small number of securities. The tZero ATS, operated by a subsidiary of Overstock.com, currently facilitates trading in only three securities: (i) its own tZero preferred stock, (ii) a preferred stock issued by Overstock.com through a dividend to its existing shareholders,\textsuperscript{499} and (iii) a digital security issued by a third party representing fractional ownership in the St. Regis Aspen Resort.\textsuperscript{500}

Unlike open networks like Bitcoin, which allow anyone to open a wallet and hold the asset, the tZero ATS system is a “closed trading system available only to broker-dealer

\footnotesize{availability of critical securities market infrastructure. See 17 C.F.R. § 240.1000 (clause (2) of definition of SCI alternative trading system).}

\textsuperscript{497} 17 C.F.R. § 242.300(a)(2).

\textsuperscript{498} Id. § 242.301(b); see also SEC, Statement on Potentially Unlawful Online Platforms for Trading Digital Assets, supra note 292.

\textsuperscript{499} While Overstock.com refers to these securities as “digital securities,” they are not digital asset securities in the ordinary sense, as they “are not issued, traded, cleared, settled or custodied using distributed ledger or blockchain technology.” Instead, record ownership of digital securities is kept by:

subscribers. [The system] does not accept orders from non-broker-dealers, nor does it hold, own or sell securities.” Further, one broker-dealer, Dinosaur Securities, “is the only broker-dealer that facilitates trades of any security on the tZERO ATS,” so anyone interested in accessing the ATS must establish an account with that one broker-dealer.\(^5\)

(3) **Clearing Agencies and Transfer Agents**

One of the primary innovations of blockchain technology is that settlement of transactions in digital assets can occur without involving or relying on a particular intermediary. When the digital asset is a security, however, this innovation raises a round hole, square peg problem, as the federal securities laws assume that intermediaries are involved in settlement and seek to regulate those intermediaries. In particular, section 17A(b)(1) of the Exchange Act requires a person acting as a “clearing agency” to register with the SEC. A clearing agency operates as an SRO\(^5\) and is subject to a regulatory regime similar to national securities exchanges—including that it must adopt and operate in accordance with rules that are subject to filing and, typically, approval by the SEC.\(^5\)

A person is a “clearing agency” if, among other things, the person acts as an intermediary to “permit[] or facilitate[] the settlement of securities transactions . . . without physical delivery of securities certificates.”\(^5\) With regard to traditional exchange-traded securities, the Depository

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\(^{50}\) Overstock.com, Quarterly Report (Form 10-Q) (Mar. 31, 2020);

\(^{502}\) See Overstock.com Annual Report (Form 10-K), supra note 499.

\(^{503}\) Exchange Act § 3(a)(26).

\(^{504}\) Id. § 19(b)(1).

\(^{505}\) Id. § 3(a)(23). The definition of “clearing agency” excludes a bank or broker-dealer that would “be deemed to be a clearing agency solely by reason of functions performed by such institution as part of customary banking, brokerage, [or] dealing” activities.
Trust Company and its affiliate, the National Securities Clearing Corporation, are each registered clearing agencies that, together, net down a large number of transactions and maintain records of changes in beneficial ownership among their participants.\footnote{506 See Clearing Agencies, SEC (last updated Dec. 16, 2019), https://www.sec.gov/tm/clearing-agencies.}

For digital assets that are securities, where transactions settle on a blockchain through the activities of miners, it is unclear who—if anyone—might be acting as a clearing agency. At first glance, the miners might fit this definition, as they most directly facilitate settlement, but because their operations are decentralized and uncoordinated, it is difficult to imagine how, practically, they each could be subject to clearing agency registration with the SEC. Further, miners may not even be aware that they are facilitating settlement of securities; for example, many ICO tokens have been built as ERC 20 smart contracts on the Ethereum network, rather than being separately mined. Where these tokens are securities, Ethereum miners may be unwittingly facilitating the settlement of securities transactions. Alternatively, the firm that created the system initially, or the firm that seeks to use an existing system for securities settlement, might be considered to be a clearing agency—but this, too, is unclear, if such a firm is not itself facilitating settlement.

The SEC staff has identified this issue, although its views are not yet known. In connection with an offering of so-called digital securities by Overstock.com, the SEC staff asked “whether [Overstock] anticipate[s] interaction with or involvement of a registered clearing agency.”\footnote{507 Overstock.com, Inc., Amendment No. 1 to Registration Statement on Form S-3/A, Filed June 15, 2015, File No. 333-203607, https://www.sec.gov/Archives/edgar/data/1130713/000110465915055326/filename1.htm.} In part based on the unique structure of its offering, Overstock argued that no clearing agency was involved because (i) changes of ownership were actually reflected on the books of the issuer maintained by its transfer agent, and (ii) certain other functions were
performed by a registered broker-dealer that may benefit from the exemption for certain broker-dealer functions. 508 However, the SEC staff again made at least a passing reference to the issue in a March 2018 warning that the activities of certain online trading platforms “may trigger other registration requirements under the federal securities laws, including broker-dealer, transfer agent, or clearing agency registration, among other things.” 509

One firm has sought to facilitate the settlement of traditional exchange-listed securities using blockchain technology and recognized the potential clearing agency status implications. Paxos Trust Company (“Paxos”) proposed to offer a service using blockchain technology to facilitate settlement and changes to beneficial ownership of securities held by Paxos on behalf of its customers in its own account at the Depositary Trust Company (“DTC”). SEC staff issued a no-action letter to Paxos, confirming it would not recommend enforcement action during a short-term feasibility study. However, the no-action letter imposes significant operational requirements on the system. Among other restrictions, no more than seven participants at a time will be eligible to use the service, volume limits will be imposed on the securities settled on the service, and the service will be subject to ongoing monitoring and reporting requirements. Notably, many of the SEC’s concerns about the use of blockchain technology (e.g., securities becoming irretrievably lost) are not present in this arrangement, because all of the securities Paxos would transfer between its customers ultimately would reside within DTC, not solely on a blockchain.

Status as a “transfer agent” also is potentially triggered by activities involving the settlement of securities over a blockchain, although registration may not actually be required. A “transfer agent” is a person that, on behalf of an issuer, among other things, “register[s] the

508 Id.
transfer of . . . securities” or “transfer[s] record ownership of securities by bookkeeping entry without physical issuance of securities certificates.”

As with clearing agencies, this statutory definition could apply to various parties involved in the settlement of securities transactions over a blockchain.

Although registration as a transfer agent triggers certain regulatory requirements, merely acting as a transfer agent does not always require registration. Under section 17A(c)(1) of the Exchange Act, unless registered, a transfer agent may not engage in transfer agent activities with respect to securities registered under section 12 of the Exchange Act, or certain securities exempt from section 12 registration. Because most digital assets have not been registered under section 12, transfer agent registration may not be a current concern, although it may become one should firms in the future seek to register securities that will settle over a blockchain.

* * *

This Section has sought to explore the regulatory questions and potential hurdles for firms dealing in digital assets that are determined to be securities. The Howey test as applied to digital assets is still very much under development by the SEC and the courts, but it is evident at this early stage that the analysis is necessarily fact-specific and requires a close understanding of

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511 See also Concept Release: Transfer Agent Regulations, Exchange Act Release No. 76743 (Dec. 22, 2015) (“Section 17A(c)(1) of the Exchange Act requires any person performing any of these functions with respect to any security registered pursuant to Section 12 of the Exchange Act or with respect to any security which would be required to be registered except for the exemption contained in subsection (g)(2)(B) or (g)(2)(G) of Section 12 . . . to register.”).

512 In the case of Overstock’s registered preferred stock digital securities, ComputerShare Trust Company, a registered transfer agent, was used and, notwithstanding the blockchain aspects of the offering, the securities ultimately were “issued as book-entry digital securities directly registered in the stockholder’s name in the stockholder books and records maintained for us by Computershare.” Overstock.com, Prospectus Supplement to Prospectus dated Dec. 9, 2015, https://www.sec.gov/Archives/edgar/data/1130713/000104746916016691/a2230280z424b2.htm.
the underlying blockchain technology and the operations of the promoter at present and over
time. This Section has outlined several issues facing intermediaries dealing in digital assets once
a Howey analysis suggests the SEC is likely to view the asset as a security, including the often
high and unexpected burdens associated with registration as a broker-dealer or national securities
exchange. The federal securities laws no doubt will continue to evolve to account for the
particular characteristics of this burgeoning industry. Until then, market participants must
carefully try to assess how the traditional federal securities laws will be applied to the rapidly
developing technology of digital assets.