When Does a Non-Fungible Token (NFT) Become a Security?

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WHEN DOES A NON-FUNGIBLE TOKEN (NFT) BECOME A SECURITY?

Brian Elzweig* & Lawrence J. Trautman**

ABSTRACT

Non-fungible tokens (NFTs) gained prominence in the news cycle during March 2021 when $69 million was paid in a cryptocurrency known as Ether for a unique digital art piece titled Everydays: The First 5000 Days. Regulating NFTs is complicated because the technology encompasses varied applications. Therefore, it is the particular use of a given NFT that will determine its appropriate regulatory regime. For example, NFTs may take the form of collectibles, data associated with a physical item, financial instruments, or permanent records associated with a person, such as marriage licenses or property deeds. Just like digital art in the form of NFTs, our laws and regulations are in a constant struggle to keep pace with rapid introduction and diffusion of technological changes. Unlike digital or cryptocurrencies which are fungible, NFTs are not. The effective regulation of United States securities markets has a significant impact on capital formation, job creation, economic security, and growth of both the American and global economies. In

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recent years, the advent of the internet has created novel regulatory challenges for the U.S. Securities and Exchange Commission (SEC).

The focus of our Article is how and when an NFT becomes a security for purposes of U.S. securities law. We proceed in six parts. First, we briefly explain the evolution of the digital world and emergence of virtual economies within. Second, we describe blockchain technology and the growth in virtual currencies. Third, we provide an explanation of NFTs along with some examples of their various uses. Fourth, we discuss when an NFT is a security. Fifth, we explore SEC interpretations of when a crypto-asset is a regulatable security. And last, we conclude. Given the importance of U.S. securities markets in fostering job creation and global economic growth, we believe this work contributes to the understanding of this new technology and is of considerable interest to securities issuers, investors, and the regulatory community.
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INTRODUCTION

Non-fungible tokens (NFTs) gained prominence in the news in March 2021 when $69 million was paid in a cryptocurrency, known as Ether, for a unique, digital art piece titled *Everydays: The First 5000 Days*.¹ This highly publicized sale, “fueled in part by the wealth recently created from digital currencies,” influenced a rush of prominent art dealers like Sotheby’s and Christie’s to take advantage of the interest in this rapidly evolving market for digital art.² In less than two decades, the distributed digital ledger, blockchain technology, has spawned over 19,000 digital currencies like Bitcoin, Ethereum, Tether, and NFTs.³ Regulating NFTs is complicated by the fact that the technology encompasses varied applications.⁴ Therefore, the particular use of an NFT will determine its appropriate regulatory regime because the NFT may “alternatively represent a collectible, a financial instrument, or a permanent record associated with a person, digital or physical item, or data.”⁵ Like digital art in NFT form, our laws and regulations are in a constant struggle to keep pace with “[r]apid introduction and diffusion of technological changes.”⁶ Unlike digital or cryptocurrencies that are fungible, NFTs are not.⁷

The effective regulation of United States securities markets has a significant impact on capital formation, job creation, economic

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² *Id.*
⁵ *Id.* (manuscript at 4).
⁷ Houser & Holden, *supra* note 4 (manuscript at 4).
security, and growth of both the American and global economies. In recent years, the advent of the internet created novel regulatory challenges for the U.S. Securities and Exchange Commission (SEC). The financial industry has become an early adopter of blockchain technology, and stock exchanges have proposed using blockchains as a new method for trading corporate equities and tracking their ownership.

The focus of our Article is how and when an NFT becomes a security for purposes of U.S. securities law. We proceed in six parts. First, we briefly explain the evolution of the digital world and the emergence of virtual economies within. Second, we describe blockchain technology and the growth in virtual currencies. Third, we explain NFTs and provide examples of their various uses. Fourth, we discuss when an NFT is a security. Fifth, we explore SEC interpretations of when a crypto-asset is a regulatable security. And last, we conclude. Given the importance of U.S. securities markets in fostering job creation and global economic growth, we believe this work contributes to the understanding of this new technology and is of considerable interest to securities issuers, investors, and the regulatory community.


I. EVOLUTION OF THE DIGITAL WORLD

A. Second Life, Online Gaming, and Virtual Economies

Many observers attribute the genesis of virtual currencies to David Chaum’s 1982 crypto journal article.11 More than two decades ago, economist Edward Castronova wrote, “On March 16, 1999, Verant Interactive, a holding of Sony, launched an on-line computer game called Everquest on five servers in San Diego, California, USA. . . . Some 60,000 people visit Norrath in any given hour, paying for the privilege, around the clock, every day, year-round.”12 In terms of time commitment, “[n]early a third of the adults among them – perhaps some 93,000 people out of Norrath’s 400,000 person user base – spend more time in Norrath in a typical week than they do working for pay.”13 And, even in the early days of virtual economies, “[t]he exchange rate between Norrath’s currency and the US dollar is determined in a highly liquid . . . currency market, and its value exceeds that of the Japanese Yen and the Italian Lira.”14

Virtual assets and marketplaces developed in software games such as World of Warcraft, in other Massively Multiplayer Online Role-Playing Games (MMORPGs), and in other virtual reality environments, such as Second Life, where virtual assets were exchanged for actual sovereign currencies.15 Professors F. Gregory Lastowka and Dan Hunter write, “Representational proxies in these virtual spaces are known as ‘avatars,’ . . . [and] unlike prior video-game alter-egos, can be richly customized and are designed primarily

13. Id. at 3.
14. Id.
for social interaction.”

Avatars may be personalized and “express themselves through appearance . . . . You can choose the face, clothes, and body shape of your avatar and communicate with others through body language . . . . Virtual-world participants design costumes, furniture, and houses for their avatars, and sell their creations to others.” Early on, “[p]erhaps because [these] virtual worlds support this kind of rich social interaction, many of those who have chosen to visit virtual worlds remain residents of them. The average Everquest player and Norrath avatar, for instance, spends about twenty hours a week within the virtual world.” Prominent uses for virtual worlds include “entertainment, academics, military training, medical treatment, and electronic commerce.”

B. The Legal Challenge

Professor Jack Balkin observed as early as 2004 that “legal regulation of virtual worlds is inevitable. If this regulation is not developed by courts through resolving contract and property disputes, it will surely occur through legislation and administrative regulation.” Professors Lastowka and Hunter state that although virtual worlds are “artificial, fictitious, imaginary, intangible, and invented,” they are also real. “All things artificial or invented do not fall entirely outside the ambit of reality. If they did, we would need to banish from reality all manner of human actions and creations, including buildings, languages, and—most importantly for our purposes—laws.”

17. Id.
18. Id.
22. Id.
Like we will see with NFTs, early virtual worlds resulted in “[h]undreds of millions of dollars in revenue . . . flowing into the coffers of Sony, Electronic Arts, and the other companies that own virtual worlds. . . . One might predict that where large amounts of real money flow, legal consequences follow.”  

Professor Joshua A.T. Fairfield writes, “People being people, they defame, harass, and defraud one another even in virtual worlds. Because virtual objects have real-dollar values, people in virtual worlds steal from one another, destroy property, and quarrel over ownership.”

Popular forms of entertainment software games became an inspiration for the development of cyber currencies. Now in just a couple decades, “[t]hese virtual worlds gave rise to virtual currencies for use in the games, and in time some of these ‘escaped’ into real world usage. In a relatively short period of time, these virtual currencies have gained significant traction and became an economic reality in the real world . . . .” Resulting from “the explosive growth of online communities has come the necessity for courts to decide disputes between members . . . . Such litigation is uniformly marked by an odd characteristic: questions of property law, tort law, and even criminal law are uniformly construed by the courts as contract disputes.”

Professor Fairfield additionally observes that

[c]ontracts have a crucial part to play in ordering individual preferences, in maximizing gain from trades, and in enabling commercial parties to plan for the future. But the law and literature have reached a crisis point where freedom of contract has run up directly against other market-critical ideas. Free markets clearly need freedom of contract. But it

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23. Id. at 8 (footnote omitted).
24. Fairfield, supra note 19, at 435 (footnote omitted).
26. Id.
27. Fairfield, supra note 19, at 435.
should be entirely uncontroversial that they also need private property and freedom from force and fraud.

. . . But virtual worlds have heralded a new phenomenon in the use of contract law—that is, contracts that do not tweak default rules, but eliminate or ignore them. If the costs of legal rules are to be kept low, the courts must employ background, default rules to govern reciprocal relationships in large and shifting populations. . . . If the relationships between contract law and the rest of the law is clarified, contracts can become tools for fostering innovation and creativity, for facilitating trades in new forms of property, and for helping courts navigate the unchartered waters of new law governing the day-to-day lives of the millions—and soon billions—of members of online communities. In doing so, contract law would take its proper place in the broader and still-developing social contract of virtual worlds. 28

II. BLOCKCHAIN TECHNOLOGY AND VIRTUAL CURRENCIES

A. Law and Rapid Technological Change

In just a few years, blockchain technology has proven highly “disruptive to business models and entrenched societal institutions.” 29 Once “pillars of the New York Stock Exchange” and “prior darlings of Wall Street,” photography trailblazers Polaroid and Kodak have now been relegated to the “American corporate graveyard.” 30 Entire industries and significant businesses “that were once household names have similarly experienced plummeting demand: pay telephone manufacturers; travel agencies; wrist watch manufacturers; print news media such as newspapers and magazines; and many traditional brick and mortar retailers (replaced by electronic alternatives such as

28. Id. at 476.
Digitized technology has made these businesses “completely or substantially obsolete.”

B. Blockchain Defined

Professors Aaron Wright and Primavera De Filippi write, “The blockchain is a distributed, shared, encrypted database that serves as an irreversible and incorruptible public repository of information. It enables, for the first time, unrelated people to reach consensus on the occurrence of a particular transaction or event without the need for a controlling authority.” In essence, blockchain is a data structure that leverages hash functions and encryption to provide information security unlike anything else. Valentina Gatteschi, Fabrizio Lamberti, Claudio Demartini, Chiara Pranteda, and Victor Santamaría note the progression of blockchain technology:

Three different blockchain evolutions can be identified: Blockchain 1.0, 2.0, and 3.0. Blockchain 1.0 is strongly related to Bitcoin and cryptocurrencies. Blockchain 2.0 is about registering, confirming, and transferring contracts or properties. Application fields range from the use of blockchain as a decentralized copy of local databases (especially for public records and attestations) to more sophisticated applications.

The most relevant feature of Blockchain 2.0 is the integration with smart contracts . . . .

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31. Id.
32. Id.
34. Jabotinsky & Lavi, supra note 33 (manuscript at 14).
In Blockchain 3.0, the application field is no longer restricted to finance and goods transactions, but embraces sectors like government, health, science, education, and more.\textsuperscript{35}

Many excellent explanations of the technical requirements and mechanics involved with blockchain technology exist and far exceed the space limitations for this Article. Accordingly, additional resources are listed in our footnote, and we will not seek to duplicate these here.\textsuperscript{36}

C. Early Applications of Blockchain Technology

The use of “cybercurrencies,” like Bitcoin, as a medium of exchange for goods and services is the most prominent use of blockchain technology to date.\textsuperscript{37} Professors Lawrence J. Trautman and Alvin C. Harrell have previously documented the history of bartering, the evolution of primitive money, the development of a schematic for regulating money in the U.S., and modern approaches to regulation and payment system mechanics.\textsuperscript{38} Early concern focused on the difficulty (or at the time, impossibility) of tracing virtual currencies to

\textsuperscript{35} Valentina Gatteschi, Fabrizio Lamberti, Claudio Demartini, Chiara Pranteda & Victor Santamaría, \textit{To Blockchain or Not to Blockchain: That Is the Question}, IT PRO., Mar.–Apr. 2018, at, 64–65 (footnote omitted).
\textsuperscript{38} See Trautman & Harrell, \textit{supra} note 25, at 1043–50.
facilitate payments for illegal activities such as illicit drugs, payments for weapons, and the like.  

D. Anticipated Uses

Smart contracts based on blockchain technology can be used as governmental vital statistics, real property or automobile titles, and in many other ways.  Professor David Yermack writes that “blockchains have become recognized as an alternative to ownership ledgers based on classical double-entry bookkeeping. Blockchains offer potential advantages in cost, speed, and data integrity compared to classical methods of proving ownership.”  Based on the disruptive magnitude of potential cost savings, consider that

[b]lockchains also have the potential to accommodate debt securities and financial derivatives . . . [and] has motivated investments by venture capitalists and by established players in the financial services industry. Entrepreneurs are actively investigating blockchains’ suitability for recording ownership of a wide range of assets, . . . [including, most particularly] stocks and bonds . . .

III. EMERGENCE OF NON-FUNGIBLE TOKENS (NFTs)

A. Art Market for NFTs Explodes

In a highly publicized sale in March 2021, NFTs gained prominence when $69 million was paid in a cryptocurrency known as Ether for a digital art piece titled Everydays: The First 5000 Days created by the digital artist Beeple.  Reportedly “[f]ueled in part by the wealth recently created from [the robust market for] digital currencies,” this

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40. See Yermack, supra note 10, at 8.
41. Id.
42. Id.
43. Trautman, supra note 1.
NFT sale resulted in prominent art dealers like Sotheby’s and Christie’s rushing to take advantage of the interest in this “rapidly evolving market for digital art.”

The New York Times observed that just a few weeks preceding the Beeple sale, digital art depicting “Donald Trump facedown in the grass, covered in words like ‘loser,’ sold for $6.6 million, a record for an NFT . . . . Fittingly, the image was paid for in Ethereum, a form of cryptocurrency that, among millennials, is almost as well-known as Bitcoin.”

Harvard professor Jonathan Zittrain and Berkman Kline Center researcher Will Marks state in the Atlantic that an NFT’s “first buyer is getting three things: the warm feeling that may accompany financing an artist; the pride that comes with claiming a relationship to a digital artifact and its creator; and perhaps most tangibly, an asset that can be traded.” Consider this:

The buyer is not, however, acquiring anything that they alone can use. In the physical world, if you purchase a candy bar, you can’t give someone a piece of it without losing a few bites of your own. That makes your freedom to take a bite valuable, because the bar has only so much chocolate.

By contrast, an NFT buyer is not purchasing a work, but rather a publicly available token that links to a work. For example, for a digital picture, the token may be a unique number and a link to a copy of the picture, hosted on a service such as IPFS. The token itself is visible to all, as is the work to which it points, so anyone else can look at the work and download it. And most NFT transactions don’t purport to

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convey copyright or other intellectual-property interests regarding the work in question, so owning an NFT tied to an animation of, say, a flying Pop-Tart cat doesn’t put you in a position to use that animation any differently than someone who hadn’t bought it. You have only a token that is hosted publicly online, “registered” as assigned to your digital wallet rather than someone else’s. If you orchestrate your wallet through an app, the app might present you with a handsome visual trophy case listing the NFTs that you’ve purchased. (As you can see, we’re having to reach to describe unique value.)

The “crypto nouveau riche” investors are credited with having “become the frantic obsession of the commercial art world, which is reshaping itself around these new collectors nearly a year after artists . . . sold NFTs . . . for tens of millions of dollars, inspiring the typically technophobic art industry to head into the metaverse.”

B. Sports and NFTs

Various sports franchises soon announced entries into the NFT publication market. For example, on April 12, 2021, the Topps Company announced “the release of 2021 Topps Series 1 Baseball NFT . . . collectibles, ushering in a new era of baseball card collecting in partnership with Major League Baseball and MLB Players, Inc.”

Professor Trautman has previously noted, “The global sports market for NFTs is well-represented by the world’s most popular sport, football (known as soccer in the United States).” Consider the following:

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50. Trautman, supra note 1, at 387.
Of the niche crypto sports platforms, “Sorare and Socios are both blockchain projects involving soccer” and are “‘crossover’ use cases, bringing non-crypto people into the world of blockchain” and “[b]lue-chip teams like Manchester City, AC Milan[,] and Juventus now use Socios tokens as a way to engage their fans.” In terms of rapid growth, “Nonfungible.com ranks Sorare as the third-most active NFT project, trailing only CryptoPunks and SuperRare. Twenty thousand soccer fans played it in February[,] and this exploded to 120,000 in March. When Sorare launched in January 2020, it had $70,000 in trading volume. [During March 2021] it topped $27 million.”

An image taken from a video NFT of basketball star LeBron James doing a reverse dunk as tribute to Kobe Bryant sold for over $387,000. This is the third in a series of fifty-nine NBA Top Shot Moments NFTs. Sports have become a large part of the burgeoning NFT marketplace.

Another indication of the robust market for NFTs was found when “Fanatics, which was last valued by investors at $18 billion, bought the trading cards business from Topps, and . . . expanded into [NFTs].” The Wall Street Journal reports that almost $30 billion was spent during 2021 on NFTs. In 2021 alone, the start-up OpenSea, “which bills itself as ‘an eBay for crypto goods,’ [went] from a tiny player in . . . the tech industry to the biggest NFT platform, listing

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51. Id. at 388 (footnote omitted) (quoting Jeff Wilser, In Europe, Football NFTs and Tokens Are No Fantasy, COINDesk, https://www.coindesk.com/europe-football-nfts-tokens-fantasy-socios-sorare [https://perma.cc/MS27-4FFM]) (Sept. 14, 2021, 8:36 AM)).
53. Trautman, supra note 1, at 386.
more than 80 million . . . ‘digital goods’ for sale and processing more
than $3 billion a month in transactions.”

IV. WHEN IS A CRYPTO-ASSET A SECURITY?

A. Crypto-Assets as Securities

The Securities Act of 1933 (1933 Act) requires registration before
using any instrumentality of interstate commerce to make an offer to
sell any security unless that security is exempt from registration. 57 The
term “security” is broadly defined 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, fractional undivided
interest in oil, gas, or other mineral rights, any put, call,
straddle, option, or privilege on any security, certificate of
deposit, or group or index of securities (including any
interest therein or based on the value thereof), or any put,
call, straddle, option, or privilege entered into on a national
securities exchange relating to foreign currency, or, in
general, any interest or instrument commonly known as a
“security”, or any certificate of interest or participation in,
temporary or interim certificate for, receipt for, guarantee of,
or warrant or right to subscribe to or purchase, any of the
foregoing. 58

56. Id.
58. § 77b(a)(1).
B. *The Howey Test*

When determining whether the sale of digital assets is a security, the most important category of the definition is whether the sale qualifies as an investment contract. This broad definition of the term “security” was scrutinized in the 1946 landmark case of *SEC v. W.J. Howey*. Howey involved “the application of . . . the Securities Act of 1933 to an offering of units of a [Florida] citrus grove development coupled with a contract for cultivating, marketing and remitting the net proceeds to the investor.” The prospective investors in the development were offered a land sale and a service contract and were told “that it [was] not feasible to invest in a grove unless service arrangements [were] made.” The typical service contract was for a duration of ten years and was not cancelable. The company offering the groves (W.J. Howey Company) and the service company (Howey-in-the-Hills Service, Inc.) were under common control and management. The service contract gave Howey-in-the-Hills a leasehold interest that included “‘full and complete’ possession of the acreage[]” that was offered and “full discretion and authority over the cultivation of the groves.” Most of the investors were businesspeople who were unfamiliar with citrus farming, but were “attracted by the expectation of substantial profits.” Most of the purchasers were non-Florida residents, and the sellers admitted that they used “the mails and instrumentalities of interstate commerce” to make the offers of sale.

The SEC sued the sellers averring that the offers of sales of the shares in the citrus grove were an investment contract that required registration with the SEC. In deciding whether the shares in the citrus

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61. *Id.* at 294 (footnote omitted).
62. *Id.* at 295.
63. *Id.* at 296.
64. *Id.* at 294–95.
65. *Id.* at 296.
67. *Id.* at 296–97.
68. *Id.* at 294, 297.
grove were an investment contract, a term not defined in the 1933 Act, the Court stated that “[f]orm was disregarded for substance and emphasis was placed upon economic reality.”69 Although the term was undefined, it was often used in state “blue sky” securities statutes.70 Because the term was used before the 1933 Act, the Court determined that Congress must have been referring to these “blue sky” laws when it included investment contracts as securities.71 In summarizing state court decisions, the Court established what became known as the Howey test.72 The Court, in ruling that the citrus grove leases were investment contracts, stated that an “investment contract for purposes of the Securities Act means a contract, transaction or scheme whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of the promoter or a third party.”73 This broad definition “embodies a flexible rather than a static principle, one that 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.”74

Modern courts now characterize the Howey test as having four elements: “(i) there is an investment of money (or something else of value); (ii) in a common enterprise; (iii) where the purchaser expects to receive profits; and (iv) the expectation of profits is from the essential entrepreneurial efforts of others.”75 These elements are all construed broadly, embodying the Court’s goal of including varying and novel schemes as investment contracts to protect investors.76 If all four factors of the Howey test are not met, an instrument will not be an investment contract and therefore will not be a security.77

69. Id. at 298.
70. Id.
71. Id.
72. See Howey, 328 U.S. at 298; Hector v. Wiens, 533 F.2d 429, 432 (9th Cir. 1976).
73. Howey, 328 U.S. at 298–99.
74. Id. at 299.
75. Goforth, supra note 59, at 649 (footnotes omitted).
V. SEC INTERPRETATIONS OF WHEN CRYPTO-ASSETS ARE A REGULATABLE SECURITY

The Howey test allows for regulation that adapts to meet the “countless and variable schemes” to profit off the money of others. However, the Howey test was derived well before the invention of digital assets, and technology has advanced in this area quicker than regulation. The SEC has issued guidance about when a digital asset meets the Howey test, but that guidance was sparse and inconsistent. The focus of SEC regulation of digital assets has been in the cryptocurrency arena. The SEC brought its first enforcement action relating to digital assets in 2013. In SEC v. Shavers, Shavers “founded and operated . . . Bitcoin Savings and Trust (BTCST).” BTCST was an online investment scheme where all investments were accepted and returns were paid in Bitcoin. Shavers used BTCST as a Ponzi scheme and “repeatedly [made] misrepresentations to BTCST investors and potential investors concerning the use of their [B]itcoins; how he [generated] the promised returns; and the safety of the investments.” Shavers promised investors that they would receive one percent daily or seven percent weekly interest on their investments. When BTCST acquired new investors, Shavers would keep some of the money and pay the rest to older investors. Shavers argued that these transactions did not meet the first prong of the Howey test, which requires an investment of money, and therefore the transactions were not investment contracts that could be regulated by the SEC. The court examined whether there was an investment of
money as required by the first prong of the Howey test. Shavers argued this prong could not be met because BTCST transactions were all in Bitcoin and Bitcoin was not money. The court ruled that because Bitcoin is used to purchase goods and services, it is “clear that Bitcoin can be used as money.” Once the court determined that Bitcoin is money, the rest of the Howey test was easily met, and the court held that BTCST was engaging in investment contracts, subject to SEC regulations. The notion that transactions involving virtual currency could be regulated by the SEC was reiterated shortly after by then-SEC Chair Mary Jo White. Whether the underlying cryptocurrency in itself could be regulated, however, was left to be determined on a case-by-case basis. In a letter addressing regulatory concerns of the Department of Homeland Security about the regulation of cryptocurrency, White noted:

Whether a virtual currency is a security under the federal securities laws, and therefore subject to [SEC] regulation, is dependent on the particular facts and circumstances at issue. Regardless of whether an underlying virtual currency is itself a security, interests issued by entities owning virtual currencies or providing returns based on assets such as virtual currencies likely would be securities and therefore subject to [SEC] regulation.

A. The DAO Report

By analyzing the particular facts and circumstances surrounding a digital asset, the SEC seemed to support the Howey test as the basis to
determine whether a cryptocurrency is a security.\textsuperscript{96} In 2017, the SEC issued an investigative report under section 21(a) of the Securities Exchange Act of 1934 on the sale of the Decentralized Autonomous Organization (DAO) digital tokens.\textsuperscript{97} This became known as the DAO Report.\textsuperscript{98} In the DAO Report, the SEC first found that digital tokens themselves may be securities.\textsuperscript{99} A digital token may be determined to be a security both in its initial offering and when it is traded on a secondary market.\textsuperscript{100}

DAOs are “‘virtual’ organization[s] embodied in computer code and executed on a distributed ledger or blockchain.”\textsuperscript{101} DAO tokens were created by a German blockchain software company, Slock.it.\textsuperscript{102} Slock.it created a document describing its vision of a DAO entity.\textsuperscript{103} The holders of DAO tokens, through smart contracts, would be given voting rights on corporate governance issues through an automated system.\textsuperscript{104} This system “would supplant traditional mechanisms of corporate governance and management with a blockchain such that contractual terms are ‘formalized, automated[,] and enforced using software.’”\textsuperscript{105} The DAO tokens were offered to the public in exchange for the virtual currency Ether (symbolized as ETH).\textsuperscript{106} The DAO intended to profit from funding projects that would give holders a


\textsuperscript{100} DAO Report, supra note 97, at 1–2; Mendelson, supra note 99.

\textsuperscript{101} DAO Report, supra note 97.

\textsuperscript{102} Id.

\textsuperscript{103} Id. at 3.

\textsuperscript{104} Id.


\textsuperscript{106} Id. at 5.
return on their investment through a reward system. Profits would be pooled and held in ETH on the Ethereum Blockchain address associated with the DAO. The DAO token holders would have voting rights to determine whether to use the reward to pay for additional projects or to distribute the reward to the token holders (in the form of ETH). The initial coin offering (ICO) of the DAO tokens netted approximately $150 million worth of ETH—"the largest [digital] token sale at the time." After the DAO’s initial offering, token holders could resell the DAO tokens on secondary markets via several online platforms. Additionally, the DAO tokens could be redeemed for ETH through a process method called a “DAO Entity ‘split’” on the Ethereum Blockchain.

The SEC, using the Howey test, determined that the DAO tokens should be classified as securities subject to SEC registration. The first prong of the Howey test requires an investment of money. To show that the DAO investors invested money, the SEC first cited Uselton v. Commercial Lovelace Motor Freight, Inc. for its holding that an ‘investment’ may take the form of ‘goods and services,’ or some other ‘exchange of value.’ Then the SEC referenced Shavers, explaining that Bitcoin was considered money that met the first prong of the Howey test, despite Bitcoin being a virtual currency.

The second prong of the Howey test requires that the investment be in a common enterprise. There is a circuit split as to what constitutes a common enterprise. Most circuits use a horizontal commonality
test. Horizontal commonality is “the tying of each individual investor’s fortunes to the fortunes of the other investors by the pooling of assets, usually combined with the pro-rata distribution of profits.” Conversely, the Fifth, Ninth, and Eleventh Circuits use various versions of the vertical commonality test. Vertical commonality “focuses on the relationship between the promoter [of the security] and the body of investors.” The fortunes of the investors must be “interwoven with and dependent upon the efforts and success of those seeking the investment or of third parties.” Vertical commonality was used in SEC v. Koscot Interplanetary, Inc. In Koscot, investors were lured into meetings by independent distributors selling cosmetics. The enterprise was a three-level pyramid scheme where the investors were offered to buy cosmetics at a discount. The greater the investment, the greater the discount they would receive. The investors were also encouraged to bring new investors, and they would receive a percentage of the amount that the new investor would bring in. No extra work was required once a new investor bought in. The SEC found the recruitment scheme (not the sale of cosmetics) to be a sale of a security. The Fifth Circuit agreed, based on its definition of a common enterprise, because the “promoters retain[ed] immediate control over the essential managerial conduct of [the] enterprise and . . . the investor’s realization of profits [was] inextricably tied to the success of the promotional scheme.”}

120. Revak v. SEC Realty Corp., 18 F.3d 81, 87 (2d Cir. 1994).
121. Id.; Long, 881 F.2d at 140.
122. Revak, 18 F.3d at 87.
125. Id. at 475.
126. Id.
127. Id.
128. Id. at 476.
129. Id.
130. Koscot, 497 F.2d at 475.
131. Id. at 485.
whereas the Ninth Circuit uses a narrow vertical commonality test, the
difference being the amount of correlation required between “the
promoter’s success or failure and the investors’ profits or losses.”

In the DAO Report, the SEC did not address commonality in its
analysis of the DAO. Some proffer that the SEC did not address
commonality because it was clear from the facts that commonality
existed, and it was thus unnecessary to address. Others argue that
while horizontal commonality was apparent in the facts surrounding
the DAO issuance, vertical commonality may have been lacking.
The SEC, however, “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.’” Unless an ICO
is based on “a non-profit, open-source” network, however,
commonality is likely easily satisfied.

The next element of the Howey test requires the investors to have a
reasonable expectation of profits. The SEC limited its discussion of
this element to a short paragraph when applying it to the DAO in the
DAO Report. The promotional activities that Slock.it distributed
specified that the DAO “was a for-profit entity whose objective was to
fund projects in exchange for a return on investment.” In SEC v.
Edwards, the Court explained that in a Howey test analysis the term
“profits” was construed “in the sense of income or return, to include,
for example, dividends, other periodic payments, or the increased
value of the investment.” Further, the Court noted that “[t]here [was]
no reason to distinguish between promises of fixed returns and
promises of variable returns” under Howey. In the case of the DAO,

    1989)).
134. See, e.g., id.
135. See, e.g., Oren, supra note 98, at 640.
137. Mendelson, supra note 99, at 75.
139. See DAO Report, supra note 97, at 11–12.
140. Id.
142. Id.
already invested ETH was reinvested by the DAO to fund projects. The DAO token holders would then share in the profits from these investments. The SEC concluded that “a reasonable investor would have been motivated, at least in part, by the prospect of profits on their investment of ETH in the DAO.”

The fourth and final element of the Howey test requires that profits be derived from the managerial efforts of others. In Howey, the Court stated that profits in an investment contract must be derived “solely from the efforts of others.” For many years, however, courts have not interpreted the word “solely” literally. Instead, courts focus on “the degree of managerial control over an enterprise.” For example, in Koscot, the court noted that a literal application of the word “solely” “would frustrate the remedial purposes” of the 1933 and 1934 Acts. The court stated that “it would be easy to evade the Howey test by adding a requirement that the buyer contribute a modicum of effort.” The Koscot court noted that this was consistent with Howey, which it quoted stating, “the statutory policy of affording broad protection to investors is not to be thwarted by unrealistic and irrelevant formulae.” The court further stated, “[i]t would be anomalous to maintain that the Court in Howey intended to formulate the type of intractable rule which it had decried.” This keeps with the policy that “in searching for the meaning and scope of the word ‘security’ in the Act, form should be disregarded for substance and the emphasis should be on economic reality.”

143. DAO Report, supra note 97, at 12.
144. Id.
145. Id.
146. Hector v. Wiens, 533 F.2d 429, 433 (9th Cir. 1979).
149. Id.
151. Id. (alteration in original) (quoting SEC v. Glenn W. Turner Enters., 474 F.2d 476, 482 (9th Cir. 1973)).
152. Id. (quoting Howey, 328 U.S. at 301).
153. Id.
In the DAO Report, the SEC argued that the element requiring profits to be derived from the managerial efforts of others was satisfied because “[t]he DAO’s investors relied on the managerial and entrepreneurial efforts of Slock.it and its co-founders, and [t]he DAO’s Curators,” making them essential to the enterprise. The DAO was marketed as having “active engagement” between the DAO, DAO token holders, and Slock.it. Slock.it created and maintained the code that formed the DAO. Additionally, Slock.it chose Curators to screen investment opportunities. The Curators examined potential investments and encouraged DAO token holders to vote for what they thought were the best opportunities. The SEC found that because of Slock.it’s marketing and conduct, Slock.it led investors to trust it to provide “significant managerial efforts required to make [t]he DAO a success.” The SEC noted that these facts led it to conclude that Slock.it actively oversaw the DAO.

The SEC also found that “[a]lthough DAO [t]oken holders were afforded voting rights, these voting rights were limited.” DAO token holders could only vote on proposals that had been vetted by the Curators. This vetting process did not have any mechanism to give the DAO token holders access to enough information to allow them to make informed investment decisions. Further, because the DAO token holders were only pseudonymously identified and were widely dispersed to a large number of investors, the DAO could not operate like a partnership. The SEC found that “[t]hese facts diminished the ability of DAO [t]oken holders to exercise meaningful control over the enterprise through the voting process, rendering the voting rights of

155. DAO Report, supra note 97, at 12.
156. Id.
157. Id.
158. Id. at 13.
159. Id.
160. Id. at 12.
162. Id.
163. Id.
164. Id. at 14.
165. Id.
DAO [t]oken holders akin to those of a corporate shareholder.”\textsuperscript{166} The efforts of Slock.it and its Curators, and not the efforts of the DAO token holders, were what the SEC found to be “undeniably significant” and “essential to the overall success and profitability of any investment into [t]he DAO.”\textsuperscript{167}

Having found that all four prongs of the Howey test were met, the SEC concluded that DAO tokens are investment contracts and therefore are securities that should have been registered.\textsuperscript{168} However, after issuing the DAO Report, the SEC did not refer Slock.it or the DAO for enforcement.\textsuperscript{169} Instead, the DAO Report put issuers of digital tokens on notice that using digital technology did not exempt them from securities regulation.\textsuperscript{170} The SEC stated, “The automation of certain functions through this technology, ‘smart contracts,’ or computer code, does not remove conduct from the purview of the U.S. federal securities laws.”\textsuperscript{171} The entire industry, therefore, was warned that the failure to follow the guidance in the DAO Report would lead to future enforcement actions.\textsuperscript{172}

However, the DAO Report did not stand for the regulation of all virtual currencies.\textsuperscript{173} After the DAO Report, SEC enforcement focused on ICOs.\textsuperscript{174} This enforcement was unsurprising. In November 2017, shortly after the DAO Report’s release, Jay Clayton, then chair of the SEC, remarked during a speech at the Institute for Securities Regulation that he has “yet to see an ICO that doesn’t have a sufficient number of hallmarks of a security.”\textsuperscript{175} Two months prior to making

\begin{footnotesize}
\begin{enumerate}
\item[166.] Id. at 15.
\item[167.] DAO Report, supra note 97, at 15.
\item[168.] Id. at 16.
\item[169.] Mendelson, supra note 99, at 68.
\item[170.] Id. at 68–69.
\item[171.] DAO Report, supra note 97, at 2 (footnote omitted).
\item[172.] Mendelson, supra note 99, at 68–69.
\item[173.] Bull & Harttraft, supra note 77, at 14.
\item[174.] Mendelson, supra note 99, at 70.
\end{enumerate}
\end{footnotesize}
those remarks, the SEC created its Cyber Unit within the Enforcement Division to “focus on targeting cyber-related misconduct.” 176

In one of the Cyber Unit’s early enforcement actions, the SEC clarified that issuances of utility tokens were not exempt from SEC regulation, even in the absence of fraud. 177 This position was in line with the substance over form approach of using the Howey test on a case-by-case basis to determine whether an ICO was an investment contract. 178 Utility tokens are tokens that have a useful function. 179 They may be used to purchase goods or services on a particular blockchain. 180 Holders of utility tokens may also receive rights such as access to special services or the ability to download certain software. 181 Alternatively, like other securities, security tokens give the holder ownership and voting rights including a share of the profits in the venture. 182

A month after the creation of the Cyber Unit, the SEC brought cease-and-desist proceedings against Munchee Inc. 183 Munchee intended to launch a restaurant review app. 184 The app would allow people to receive MUN tokens in exchange for reviews, which could then be used by the holders to purchase meals at participating restaurants. 185 To fund the project, Munchee raised $15 million through an ICO, selling MUN tokens to the general public. 186 The SEC applied the Howey test to the MUN token issuance and found it to be a security offering. 187 The MUN tokens were purchased with Ether or

178. See id. at 18–20.
180. Id.
181. Id.
182. Id.
184. Id. at 1.
185. Id. at 4.
186. Id. at 1, 8.
187. Id. at 2.
Bitcoin, so there was an exchange of money for the tokens, forming the basis for an investment contract. The proceeds from the ICO were “to be used by Munchee to build an ‘ecosystem’ that would create [secondary market] demand for MUN tokens,” giving purchasers a reasonable expectation of profits. Munchee and its agents were solely responsible for creating and revising the “‘ecosystem’ that would increase the value of MUN,” without input from the token holders. Because “[i]nvestors had little choice but to rely on Munchee” and its agents, the SEC concluded that investors’ profits were to be derived from the managerial efforts of others. The marketing of MUN tokens as an investment was instrumental in the SEC’s decisions to order Munchee to cease and desist from making new offerings. The Supreme Court has held that investing in “a commodity for personal consumption,” instead of “reaping profits from the efforts of others,” was not an expectation of profit under Howey. If the tokens were issued to be used only as a reward within Munchee’s ecosystem, without potential for secondary market profits, the SEC likely would not have acted against Munchee. Further, the SEC stated that “[i]nvestors’ expectations were primed by Munchee’s marketing of the MUN token offering.” Assurances regarding Munchee’s new ecosystem gave buyers a reasonable belief that Munchee’s entrepreneurial efforts would drive the value of MUN tokens.

With the initial focus on ICO enforcement, the SEC took few actions against the ongoing use of digital currencies. Within a year of the DAO Report, the SEC took the position that two of the most popular

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188. Id. at 8.
189. Munchee Inc., supra note 183, at 8.
190. Id. at 9.
191. Id.
192. See id. at 6.
194. See Munchee Inc., supra note 183, at 8–9.
195. Id. at 9.
196. Id.
197. See Maughan, supra note 179, at 1134.
digital currencies, Bitcoin and Ether, were not securities.\textsuperscript{198} William Hinman, the director of the Division of Corporation Finance of the SEC, stated this about Bitcoin: “[W]hen I look at Bitcoin today, I do not see a central third party whose efforts are a key determining factor in the enterprise. The network on which Bitcoin functions is operational and appears to have been decentralized for some time, perhaps from inception.”\textsuperscript{199} Similarly, aside from the fundraising efforts to create Ether, under “the Ethereum network and its decentralized structure, current offers and sales of Ether are not securities transactions.”\textsuperscript{200} Because of the decentralized structure of both of these digital currencies, “[a]pplying the disclosure regime of the federal securities laws to the offer and resale . . . would seem to add little value.”\textsuperscript{201} This is consistent with the Commodities Futures Trading Commission’s (CFTC) order, which views virtual currencies as commodities subject to CFTC jurisdiction.\textsuperscript{202}

Consistent with Howey’s principle of disregarding form for substance, the analysis of whether a particular crypto-asset is an investment contract can change over time.\textsuperscript{203} Director Hinman addressed “whether a digital asset offered as a security can, over time, become something other than a security.”\textsuperscript{204} He concluded that it could be in at least two cases.\textsuperscript{205} The first is where, after the ICO, “there is no longer any central enterprise being invested.”\textsuperscript{206} The second is “where the digital asset is sold only to be used to purchase a good or service available through the network on which it was created.”\textsuperscript{207}

\begin{itemize}
\item \textsuperscript{199}Id.
\item \textsuperscript{200}Id.
\item \textsuperscript{201}Id.
\item \textsuperscript{203}Bull & Harttraft, supra note 77, at 19.
\item \textsuperscript{204}Hinman, supra note 198.
\item \textsuperscript{205}Id.
\item \textsuperscript{206}Id.
\item \textsuperscript{207}Id.
\end{itemize}
such, “fully functional” utility tokens may be outside of the scope of the SEC’s regulatory authority. However, Hinman warned that

the analysis of whether something is a security is not static and does not strictly inhere to the instrument. Even digital assets with utility that function solely as a means of exchange in a decentralized network could be packaged and sold as an investment strategy that can be a security. If a promoter were to place Bitcoin in a fund or trust and sell interests, it would create a new security.

To help clarify whether digital assets were securities, the SEC issued guidance in its 2018 “Framework for ‘Investment Contract’ Analysis of Digital Assets” (Framework). The Framework first reiterated that the Howey test’s investment contract analysis is still the main vehicle for determining whether the sale of a cyber asset is a security. The Framework further breaks down the prongs of the Howey test into a series of particular factors to help determine if the prong is met in a sale of cyber assets. The Framework primarily focuses on the whether there is a reasonable expectation of profits derived from the efforts of others. This is seen by some as confusing. It does not state that any of the elements are more important than any others nor does it quantify how many elements must be met in order to satisfy a Howey analysis. After the release of the Framework, SEC Commissioner Hester M. Peirce noted:

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209. Hinman, supra note 198 (footnote omitted).
211. The Framework, supra note 96.
212. Id.
213. Id.
214. See, e.g., Goforth, supra note 59, at 652.
215. Id.
While *Howey* has four factors to consider, the framework lists 38 separate considerations, many of which include several sub-points. A seasoned securities lawyer *might* be able to infer which of these considerations will likely be controlling and might therefore be able to provide the appropriate weight to each. . . . [N]on-lawyers and lawyers not steeped in securities law and its attendant lore will not know what to make of the guidance.\(^{216}\)

The Framework did offer some insight as to how the SEC would pursue enforcement.\(^{217}\) First, it reiterated that a *Howey* investment contract analysis would be used to determine whether a cyber asset was a security.\(^{218}\) Second, it showed that the SEC would emphasize enforcement actions on ICOs.\(^{219}\) In following its guidance, SEC actions after the Framework primarily focused on ICOs.\(^{220}\) Most were cases that involved fraud, but several actions concerned registration violations without fraud.\(^ {221}\) Because of the lack of specific guidance related to NFTs and the absence of significant case law regarding when NFTs are regulatable securities, the case law and guidance on cryptocurrency will likely be the basis of analysis in this area. Commissioner Peirce warned that NFTs may fall within the regulatory jurisdiction of the SEC.\(^ {222}\) Most likely, in determining whether an NFT is a security, the SEC will be using a *Howey* analysis.\(^ {223}\)


\(^ {217}\) See generally *The Framework*, supra note 96.

\(^ {218}\) Id.

\(^ {219}\) Id.

\(^ {220}\) See Guseva, supra note 80, at 11.

\(^ {221}\) Id.


The first prong of a *Howey* investment contract analysis requires an investment of money. In the Framework, the SEC takes the position that “[t]he first prong of the *Howey* test is typically satisfied in an offer and sale of a digital asset because the digital asset is purchased or otherwise acquired in exchange for value, whether in the form of real (or fiat) currency, another digital asset, or other type of consideration.” This prong is likely easily met as long as the NFT was acquired in an exchange for value.

NFTs differ from cryptocurrencies in the second prong of the *Howey* test which requires a common enterprise. Referring to ICOs, the Framework only states that “[c]ourts generally have analyzed a ‘common enterprise’ as a distinct element of an investment contract. In evaluating digital assets, we have found that a ‘common enterprise’ typically exists.” Because NFTs are non-fungible, the relationship between the buyer and seller is different from that of a typical investment contract. Each NFT is unique from all other NFTs. NFTs, although digital, “represent[] a real-world object, most commonly a piece of art, music, or video.” While the analysis of commonality is very fact specific, it is unlikely the SEC would look at most NFTs as a common enterprise. If an NFT that is purchased is a collectible, there are no further ties between the buyer and the seller in that transaction. These type of NFTs are essentially one-of-a-kind.

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224. The Framework, supra note 96.


226. The Framework, supra note 96.

227. Id.

228. Id. (footnote omitted).


230. Id.

products being sold on the market, albeit through blockchain. This is no different than the sale of a traditional painting. Horizontal commonality is not met because the value is not tied to other investors and there is no pro-rata share of investments. There is no pooling of investors whose fortunes depend on the profitability of the enterprise. Also, there is no vertical commonality because there are no promoter’s efforts that would impact the investment past the point of purchase.

A commonality analysis would likely be different for fractional NFTs (f-NFTs). Similar to other NFTs, f-NFTs represent ownership of assets such as art, music, or videos, but as the name suggests, the ownership is fractionalized. The fractionalized ownership is known as a shard, with each shard representing a share of ownership. Courts and Congress use a flexible definition of security. This includes “pools of home mortgage or auto loans, interests in earthworm farms and chinchilla ranches, and various forms of pyramid schemes.” Fractionalizing ownership brings an element of fungibility to f-NFTs. By the nature of f-NFTs, investors are likely engaged in a common enterprise because of their investment in a single token. By selling shards of an f-NFT, both horizontal and vertical commonality may be met. Horizontal commonality may be met because there would be a pool of investors (other shard owners) whose investments are tied to each other in the underlying NFT. Vertical commonality may also be met because the seller of the shard may retain control of the NFT, and therefore, the investor and the seller’s fortunes become

232. Anello, supra note 229.
233. See id.
235. Id.
237. Ortega, supra note 225.
238. Anello, supra note 229.
240. Id.
241. Id.
242. Id.
intertwined. While the Framework emphasizes that the Howey test should be applied on a case-by-case basis, selling shards of an NFT increases the likelihood that a common enterprise would be found. Commissioner Peirce warned that selling f-NFTs could turn an NFT that was not a security into a security.

In the Framework, the SEC conflates the last two prongs of the Howey test. In doing so it noted:

> Usually, the main issue in analyzing a digital asset under the Howey test is whether a purchaser has a reasonable expectation of profits (or other financial returns) derived from the efforts of others. A purchaser may expect to realize a return through participating in distributions or through other methods of realizing appreciation on the asset, such as selling at a gain in a secondary market.

Although commonality may be less frequent in NFTs than in ICOs, the last two prongs of Howey will still be crucial in deciding whether an NFT should be treated as an investment contract. The Framework specifies that these prongs will be decided by objectively analyzing the “economic reality of the transaction.” This inquiry includes the “character the instrument is given in commerce by the terms of the offer, the plan of distribution, and the economic inducements held out to the prospect.” The last two prongs would be met if a “promoter, sponsor, or other third party provides essential managerial efforts that affect the success of the enterprise, and investors reasonably expect to derive profit from those efforts.” The Framework gives

245. The Framework, supra note 96.
246. Id. (footnote omitted).
247. Id. (quoting SEC v. C. M. Joiner Leasing Corp., 320 U.S. 344, 352–53 (1943)).
248. Id.
guidance to determine the economic reality of a transaction, where some characteristics are more applicable to Howey’s third prong (reasonable expectation of profits) and others more applicable to the fourth prong (the entrepreneurial efforts of others).\textsuperscript{249}

Although it must be decided on a case-by-case basis, sales of NFTs that are not fractionalized are unlikely to meet the expectation of profits prong. Instead, they resemble utility tokens. The Framework lists characteristics of a transaction that could make it appear that there is an expectation of profits.\textsuperscript{250} Some of the characteristics include whether holders of a digital asset share in the issuing enterprises’ profits, if there is a secondary market for the asset, whether the issuer holds portions of the digital assets (and is therefore benefitting from its own efforts), and if the purchaser reasonably expects the issuer’s efforts to create a return on the purchase.\textsuperscript{251} These factors are unlikely to be found if an NFT is a collectible (such as a piece of art) and is bought outright from the seller. It would be no different than purchasing non-digital collectibles. The purchaser may have an expectation that the NFT will increase in value, but “[p]rice appreciation resulting solely from external market forces (such as general inflationary trends or the economy) impacting the supply and demand for an underlying asset generally is not considered ‘profit’ under the Howey test.”\textsuperscript{252} Buying an NFT hoping that its scarcity will increase its price is similar to a collector buying a piece of art with the hope that market forces will create demand for the art and therefore increase its price. Neither would be an investment contract under Howey.

\textbf{B. CryptoPunks: The Security?}

However, if an issuer retains part of a collection of NFTs that are sold publicly, the sale may start to resemble an investment contract.

\begin{itemize}
\item \textsuperscript{249} Id.
\item \textsuperscript{250} Id.
\item \textsuperscript{251} The Framework, supra note 96.
\item \textsuperscript{252} Id. (emphasis added).
\end{itemize}
For example, CryptoPunks are marketed as collectibles and are one of the first NFTs created on the Ethereum network, with the most expensive one selling for $7.7 million.253 There were 10,000 unique CryptoPunks NFTs created.254 Upon selling these NFTs to the public, the creators retained 1,000 collectibles.255 The CryptoPunks have steadily increased in price, therefore increasing the value of the 1,000 collectibles.256 While CryptoPunks may not have been originally created as an investment, the sale of interrelated NFTs may be considered to be the equivalent of shares in a common enterprise. The New York Times reported that “Larva Labs created the CryptoPunks in 2017 as a generative project consisting of 10,000 pixelated characters. Dozens of these early NFTs have each sold for more than $1 million in Ethereum cryptocurrency, with overall sales totaling more than $2 billion.”257

Also relevant in determining whether an NFT purchaser has an expectation of profit is the type of targeted buyer and how the NFT was marketed. The Framework notes that a purchase may look more like an investment contract if a “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.”258 If the NFT itself is not a security, but the opportunity to purchase it is marketed as an investment to people who would have no use for the designed utility of the token, it starts to resemble a security. This is analogous to Howey. In Howey, orange groves were marketed, the sale of which by themselves is clearly not

255. Id.  
256. Id.  
258. The Framework, supra note 96.
an investment contract.\textsuperscript{259} However, the opportunity to purchase interest in the groves was marketed to “persons who reside in distant localities and who lack the equipment and experience requisite to the cultivation, harvesting and marketing of the citrus products.”\textsuperscript{260} The potential investors did not want to develop the land as would normally occur with a lease of a citrus farm.\textsuperscript{261}

Similarly, how a digital asset is marketed could be essential in determining whether there is an expectation of profit. In \textit{Howey}, the plots of land were too small to be commercially viable on their own.\textsuperscript{262} Instead, buyers were lured through marketing to invest in the income producing potential of a common enterprise.\textsuperscript{263} The Framework says that if a “digital asset is marketed, directly or indirectly . . . in terms that indicate it is an investment,” then it would be more likely to meet \textit{Howey}’s reasonable expectation of profits prong.\textsuperscript{264} Sales of shards of f-NFTs are particularly likely to meet this prong. Speaking about f-NFTs, Commissioner Peirce warned that “people are being very creative in the type of NFTs they are putting out there . . . . You better be careful that you’re not creating something that’s an investment product—that is a security.”\textsuperscript{265} NFTs may be marketed for their investment potential instead of the underlying purpose of the digital asset.\textsuperscript{266} While NFTs may be marketed to entice a person to be treated like a connoisseur by owning shards of recognized NFTs, many f-NFTs are marketed as investments.\textsuperscript{267} For example, uPunk bought and fractionalized a collection of fifty CryptoPunks though the Unicly

\begin{thebibliography}{99}
\bibitem{Howey} SEC v. W.J. Howey Co., 328 U.S. 293, 295 (1946).
\bibitem{Id} \textit{Id.} at 299–300.
\bibitem{Id2} \textit{Id.} at 300.
\bibitem{Id3} \textit{Id.}
\bibitem{Id4} \textit{Id.} at 298.
\bibitem{Framework} The Framework, \textit{supra} note 96.
\bibitem{Kane1} \textit{Id.}; Arben Kane, \textit{Fractionalized NFT (F-NFTs): All That You Need to Know}, \textit{Medium} (Sept. 9, 2021), \url{https://medium.com/@arbenk/fractionalized-nft-f-nfts-all-that-you-need-to-know-46bc06ea486d} [https://perma.cc/L8MQ-AKUC].
\bibitem{Kane2} Anello, \textit{supra} note 229; Kane, \textit{supra} note 266.
\end{thebibliography}
protocol. There were 250 million shards created on Unicly (called uPunk tokens) which could be bought and resold. This greatly lowers the barriers of entry of ownership of CryptoPunks. UPunk tokens were not specifically marketed as investments, but instead operated as a DAO, allowing shard holders to vote on whether to sell an individual CryptoPunk from its collection. Other f-NFTs, however, are specifically marketed as an investment. The fractionalization of an NFT, which has a secondary market, creates a vehicle in which investors can anticipate a return on their investment due to fluctuations in the price of the shards. CryptoPunk #543 was split into shards by Otis Collection.

Otis marketed the shards stating one can “[b]uy and sell shares in real time” and “[e]arn potential returns.” By marketing shards as an investment for sale on a secondary market, a security is likely created. Again, this analysis is similar to Howey, in which fractionalization of the orange groves lowered the barriers of entry for those who wished to profit from citrus cultivation. This helped create a demand for investors who otherwise would likely have no interest in citrus farming.

The final prong of the Howey analysis requires that “the expectation of profits is from the essential entrepreneurial efforts of others.” In a traditional NFT transaction, this prong is unlikely to be met. The seller usually relinquishes all control of the NFT upon transfer to the

268. Copeland, supra note 253.
269. Id.
270. Id.
272. Id.
274. Id.
277. Anello, supra note 229.
purchaser. However, this may not always be the case. An NFT sale could be analogous to the DAO and its issuance of DAO tokens. Although Slock.it considered itself as a DAO, the SEC found that investors were still reliant on the Curators’ decisions in choosing investments. Sometimes, control is not fully relinquished in an NFT offering. Because the expectation of profit no longer needs to be solely on the efforts of others, a seller of an NFT who retains managerial control could satisfy this test. Per the Framework, satisfaction of this test depends, in part, on whether a promotor is “responsible for the development, improvement (or enhancement), operation, or promotion of the network, particularly if purchasers of the digital asset expect [a promotor] to be performing or overseeing tasks that are necessary for the network or digital asset to achieve or retain its intended purpose or functionality.” While it would have to be determined on an individual transaction, f-NFTs would be more likely to satisfy this prong. Splitting an f-NFT may make an NFT fungible. The shards can be traded, sometimes on exchanges, like stock in a corporation. If an f-NFT is traded and the issuer retains a degree of managerial control over the underlying asset, then the f-NFT is likely to meet this Howey test prong. The amount of control will depend on the analysis of the transaction, but the Framework identifies several indicators that the expectation of profits relied on the managerial efforts of others. They include the following: “Purchasers reasonably . . . expect[ing] that [the promotor’s] efforts will result in capital appreciation of the digital asset and therefore be able to earn a return on their purchase”; “a [promotor] has raised an amount of funds in excess of what may be needed to establish a functional network or digital asset”; “[the promotor] is able to benefit from its efforts as a result of holding the same class of digital assets as those being distributed to the public”; and “[the promotor] continues to expend funds from proceeds or operations to enhance the functionality or value of the network or

278. Id.
279. DAO Report, supra note 97, at 12.
280. The Framework, supra note 96 (footnotes omitted).
281. Id.
digital asset.”

Because shards of f-NFTs can be traded on secondary markets, they may see appreciation in value. If the increase in value is related to the sellers’ efforts, and the seller has retained control of a portion of the underlying asset, this prong will easily be met. This would be similar to Howey, where the orange groves were split into fractional shares, represented by individual land sales contracts that could not be cultivated individually. These contracts represented how “investors provide the capital and share in the earnings and profits [and] the promoter’s manage, control[,] and operate the enterprise.”

NFTs are yet another technological development that creates novel challenges for corporate boards and their audit committees.

CONCLUSION

On March 9, 2022, President Joe Biden signed an executive order requiring federal agencies to review policies related to
cryptocurrencies and other digital assets.\textsuperscript{287} A focal point in the executive order included consumer protection in the purchase of the digital assets.\textsuperscript{288} It called for the cooperation of many federal agencies, including the SEC, to accomplish this goal.\textsuperscript{289} However, with the SEC’s long history of relying on the \textit{Howey} test to determine whether a transaction is an investment contract, it is unlikely to change issue-specific regulation to determine the classification of NFTs and f-NFTs. Instead, the SEC will likely rely on the substance over form approach that adds flexibility to the \textit{Howey} test to analyze NFTs and f-NFTs on a case-by-case basis. With reports that there will be increased SEC scrutiny on NFTs, the SEC should issue guidelines in this area similar to those stated in the Framework.\textsuperscript{290} This guidance would inform the public in a practical way that will promote safety when purchasing and selling NFTs and f-NFTs.

\begin{itemize}
\item \textsuperscript{287} Exec. Order No.14,067, 87 Fed. Reg. 14143 (Mar. 9, 2022).
\item \textsuperscript{288} \textit{Id.}
\item \textsuperscript{289} \textit{Id.} at 14145.
\end{itemize}