

From Initial Coin Offerings to Security Tokens: A U.S. Federal Securities Law Analysis

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ABSTRACT

Cryptocurrencies and initial coin offerings (ICO) are all the rage in startup financing. Until mid-2017, these ICOs existed in a wild west environment, a regulatory limbo, with some companies raising hundreds of millions of dollars in days and others crashing and burning in the same amount of time. Like Wyatt Earp in Dodge City, the Securities and Exchange Commission declared its jurisdiction over these ICOs, laying down the law in the “DAO Report” with the legal equivalent of a double barrel shotgun. The SEC was right to do so. There is no doubt that the overwhelming majority of ICOs involve the sale of securities and companies who ignore this conclusion do so at their own risk. Yet the law of ICOs and digital token financing is by no means final or clear, and with little official guidance to go on, startups are left to fend for themselves in a sea of self-declared experts. Few scholarly articles to date have addressed the regulatory status of these ICOs from a securities law perspective. This article provides a legal framework and method for analysis in the aggressive, case-by-case approach laid down by the SEC in the DAO Report, and recommends best practices for companies considering an ICO to follow.

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INTRODUCTION

The rise of Bitcoin and Ethereum has led to the rapid creation of new networks built on blockchain technology and supported by new cryptocurrencies or digital tokens. According to “coinmarketcap.com,” over 2,100 cryptocurrencies’ tokens are traded on a daily basis.¹ In the first half of 2018, over US\$11.69 Billion was raised through token sales, frequently called “initial coin offerings” or “ICOs.”² This is almost six times the amount raised through traditional angel investment and early stage venture capital funding. Digital token sales have in large part bypassed traditional financial institutions such as investment banks, accounting firms, and Wall Street law firms. Yet the true value of these tokens is hard to quantify, based on thin information and driven largely by investor sentiment and enthusiasm, rather than finance fundamentals.

Through July 2017, virtually all of these ICOs were held without any kind of government filings that would normally be required in a public financing event.

1. *All Cryptocurrencies*, COINMARKETCAP, <https://perma.cc/FD3R-MTT6> (archived Oct. 19, 2018 3:12 PM PST).

2. Peter Terlato, *ICO Market More Than Doubles in Q2 2018, yet More Than Half Have Failed: Report*, FINDER (Aug. 9, 2018), <https://perma.cc/59GH-BX6F>.

“Dumb money” has followed “smart money,” which is to say that investment in digital tokens and blockchain projects is no longer the sole province of technically and, to a lesser degree, financially sophisticated investors with the training and experience to evaluate the viability of a given project. Articles on blockchain, Bitcoin, and token sales abound in the popular press. Even celebrities such as boxing champion Floyd Mayweather have been in the news for the endorsement of legally questionable ICOs.³

ICOs had operated in a regulatory gray area, with many turning a blind eye to whether securities regulation applied. The exuberance in the marketplace has made ICOs and token purchasers the targets of scams, pyramid schemes, large cyberthefts, and flash price crashes. The potential for fraud on token purchasers is significant.⁴

With the release of a 21A investigative report (the “DAO Report”) in July 2017 on “The DAO,” the Securities and Exchange Commission (“SEC”) has stepped center stage into the fray, declaring that digital tokens may be investment contracts and therefore securities subject to the regulation of the SEC, both in their initial sale and in secondary market trading.⁵ In the post-DAO Report environment, companies must perform a thorough technical network analysis and an equally thorough regulatory analysis to determine whether their tokens could be considered a security. The decision may also depend on the functions of the token and the stage of the blockchain network’s development. If the primary goal is to raise money, rather than to build a network, the benefits of conducting a token sale raise both legal and business issues that require thorough consideration.

It is not clear, however, the extent to which a digital token is a security under the investment contract test set forth in *Securities and Exchange Commission v. W.J. Howey Co.*,⁶ the seminal case heard before the Supreme Court in 1946 that has been legal doctrine for over seventy years, and the basis for the SEC’s recent determination in the DAO Report.

It is not obvious that cryptocurrencies and digital tokens fit neatly into a single

3. Nikhilesh De, *Founders of ICO Endorsed by Floyd Mayweather Indicted for Fraud*, COINDESK (May 15, 2018, 8:00 AM UTC), <https://perma.cc/2NKV-VJMT>.

4. See Ana Alexandre, *New Study Says 80 Percent of ICOs Conducted in 2017 Were Scams*, COINTELEGRAPH (July 13, 2018), <https://perma.cc/F7ZY-95DD>.

5. U.S. SECURITIES AND EXCHANGE COMMISSION, REPORT OF INVESTIGATION PURSUANT TO SECTION 21(A) OF THE SECURITIES EXCHANGE ACT OF 1934: THE DAO 1-2 (2017) [hereinafter U.S. SECURITIES AND EXCHANGE COMMISSION].

6. 328 U.S. 293 (1946).

category of regulation. In addition to the SEC, the Commodities Futures Trading Commission, the Treasury Department, and the Office of the Comptroller of the Currency have asserted some form of jurisdiction over these new units of value.⁷ Arguably, cryptocurrencies are a new class of assets altogether that defy easy categorization into the existing legal framework. However, for the purposes of this paper, I only address digital tokens through a securities lens.

This paper is not intended to make grand declarations or sweeping generalizations on what the law governing digital tokens should be. Rather, this paper takes the existing legal framework established to date and provides a method of analysis to determine whether a given digital token constitutes a security under U.S. federal law. This paper also makes recommendations for best practices for companies contemplating an ICO to follow.

Published academic work to date on this topic is scant. Important works of note include the securities framework published by Coin Desk and Debevoise & Plimpton, the writings of David Yermack at New York University Stern School of Business, and the works of David Lee Kuo Chuen at the Lee Kong Chian School of Business in Singapore. The works of these authors are cited in this paper. Other than the Coin Desk–Debevoise paper, which pre-dates the DAO Report’s release by seven months (a long time in this new field), the majority of the work is both business school oriented and focused on Bitcoin, rather than alternative tokens. To date, the literature has not provided a comprehensive assessment of the factors to consider when working with counsel to make the security/not security determination. My contribution to the developing literature is a post-DAO Report securities regulation analysis and recommendation of best practices for an ICO.

The first section of this paper provides a technical and general historical overview of Bitcoin, Ethereum, and alternative tokens. The second section provides a history of the initial coin offering. The third section presents an overview of federal securities laws and what is a security generally. This leads into the fourth section, which addresses the DAO Report, the *Howey* test analysis, and SEC actions taken to date. In the fifth section, I proceed to apply the *Howey* test analysis to digital tokens generally, following analogous *Howey* case law and using the DAO Report as a backdrop. Section six discusses financing options for start-up token-based networks

7. See, e.g., *Cryptocurrency Update: CFTC Reaffirms Jurisdiction over Certain Virtual Currency Transactions*, ROPES & GRAY (Oct. 19, 2017), <https://perma.cc/2HM6-L4RU>; *OCC Opens FinTech Bank Applications, Paves Way for Crypto Exchange Regulation Streamlining*, BITCOIN EXCHANGE GUIDE (Aug. 2, 2018), <https://perma.cc/UVZ5-JT6D>.

under existing SEC safe harbors. Section seven addresses best practices for companies that are intent on holding an ICO, followed by a discussion of the current state of affairs and questions to be addressed going forward.

I. DIGITAL TOKENS: BLOCKCHAIN BITCOIN, ETHEREUM, ALTCOINS

While the subject matter has been addressed extensively in both technical journals and the popular press, no discussion of initial coin offerings or digital token sales is complete without at least a high-level overview of the underlying technology on which these networks and their digital assets are grounded. The programming and mathematical principles on which these networks are based will not be discussed in this paper as there are far better sources widely available that the reader can use as a reference, regardless of one's background in computer science.

EARLY DIGITAL AND CRYPTOCURRENCY SYSTEMS

It is worth noting that neither Bitcoin, nor Ethereum, nor other blockchain networks in use as virtual currencies were the first to appear on the Internet. Forms of digital currency and token systems have existed since the late 1990s, in the form of loyalty points earned as a reward for using an ecommerce platform to purchase goods and services or virtual currency systems that are used exclusively inside gaming systems (such as the “gold” currency in World of Warcraft). eCash⁸ and e-Gold⁹ were early pre-blockchain micropayment and currency systems used with varying degrees of success and not without technical and legal problems of their own. PayPal, too, is a form of payment system—not a currency in and of itself, but a money transfer business and method of processing payments through participating vendors backed by credit cards and requiring third party verification. With the advent of blockchain technology, we are finally beginning to see the widespread usage and proliferation of virtual currencies and payment systems that do not require third party intermediaries.

BLOCKCHAIN – DISTRIBUTED LEDGER TECHNOLOGY

Blockchain, the information technology buzzword of the moment, is most

8. See *Ecash*, WIKIPEDIA, <https://perma.cc/8CPD-V9PV> (archived Oct. 19, 2018 3:18 PM PST).

9. See *E-gold*, WIKIPEDIA, <https://perma.cc/6GPT-EQQB> (archived Oct. 19, 2018 3:18 PM PST).

simply defined as a shared, immutable system for recording and storing information in such a way that the record cannot be altered retroactively without altering all subsequent records or blocks.¹⁰ The “blocks” on the blockchain are the records of the valid transactions across the network, coded with a hash function. Each subsequent block includes the hash of the prior block, linking them together.¹¹ This “chains” the blocks together, hence the term “blockchain.” As the number of transactions grows, so does the blockchain, which records the time and sequence of each new block.¹²

The blockchain, therefore, is a “shared, distributed ledger that facilitates the process of recording transactions or tracking assets in a business network.”¹³ As such, it is a distributed database for recording transactions.¹⁴ By “distributed,” we mean that there is no centralized storage location such as a central server or a cloud computing platform; rather, the information and technical transactions are spread across a wide network of computers. In the blockchain model, the network is based on a peer-to-peer distributed architecture that requires consensus calculations or algorithms to ensure that the transactions across the blockchain network are replicated so that the ledger maintains its integrity. There is no central repository of data and no central processor executing the algorithms. Anyone with access to the blockchain network will see the same information. Blockchain technology was developed to meet the need for an efficient, cost-effective, reliable, and secure system for conducting and recording financial transactions.¹⁵ Blockchain networks can be public and accessible by anyone, such as Bitcoin and Ethereum, to be discussed further below, or private and permissioned, such as a corporate network for asset tracking and require access control. The blockchain concept was first coined in the Bitcoin white paper by Satoshi Nakamoto, in which the distributed ledger is referred to as “a chain of blocks.”¹⁶

10. See MANAV GUPTA, BLOCKCHAIN FOR DUMMIES 1 (2017); see also *Blockchain*, WIKIPEDIA, <https://perma.cc/FN5L-BLLA> (archived Oct. 19, 2018 4:03 PM PST) (citing *Blockchains: The Great Chain of Being Sure About Things*, THE ECONOMIST (Oct. 31, 2015), <https://perma.cc/NJ9C-4E38>).

11. See GUPTA, *supra* note 10, at 14.

12. See *id.* at 13.

13. *Id.* at 3.

14. See *id.* at 15.

15. See *id.* at 15-16.

16. SATOSHI NAKAMOTO, BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM 7 (2008), <https://perma.cc/43H5-QCSK>.

BITCOIN

Bitcoin is the first practical solution to a longstanding problem in computer science called the Byzantine Generals Problem. The problem is how to establish trust between otherwise unrelated parties over an untrusted network like the Internet. The original paper defining the B.G.P. explains:

“[Imagine] a group of generals of the Byzantine army camped with their troops around an enemy city. Communicating only by messenger, the generals must agree upon a common battle plan. However, one or more of them may be traitors who will try to confuse the others. The problem is to find an algorithm to ensure that the loyal generals will reach agreement.”¹⁷

On October 31, 2008, a person or group of persons under the name of Satoshi Nakamoto published a white paper entitled, “Bitcoin: A Peer-to-Peer Electronic Cash System” on bitcoin.org.¹⁸ In that paper, Nakamoto proposes a peer-to-peer distributed ledger platform for the processing of financial transactions without relying on trusted third parties for their execution.¹⁹ The blockchain is a record of the Bitcoin transactions. Trust is incorporated into the structure of the network.

The Bitcoins themselves are units of account on the system or ledger. “You buy into the ledger by purchasing one of a fixed number of slots, either with cash or by selling a product and service for Bitcoin. You sell out of the ledger by trading your Bitcoin to someone else who wants to buy into the ledger. Anyone in the world can buy into or sell out of the ledger any time they want – with no approval needed, and with no or very low fees.”²⁰

Users can apply computing power to solve mathematical puzzles to validate the Bitcoin transactions across the network and write them to the network, creating a new blockchain. The successful completion of these puzzles rewards the victor with new Bitcoins and possibly transaction fees. Those who attempt to solve these calculations are called “miners,” the Bitcoin method of mining is called a “proof of work” system.

17. Marc Andreessen, *Why Bitcoin Matters*, N.Y. TIMES (Jan. 21, 2014), <https://perma.cc/W4T5-Z3PS> (quoting Leslie Lamport et al., *The Byzantine Generals Problem*, 4 ACM TRANSACTIONS ON PROGRAMMING LANGUAGES & SYS. 382, 382 (1982)).

18. Nakamoto, *supra* note 16.

19. *Id.* at 1.

20. Andreessen, *supra* note 17.

The Bitcoin code was released as open source in 2009. Originally used by computer scientists, hackers, and other tinkerers, Bitcoin became the gold standard for digital currency, also called cryptocurrency (a portmanteau of cryptography and currency). Cryptocurrencies have been used for both legitimate and illegal transactions, gaining both credibility and notoriety. “A growing ecosystem surrounds Bitcoin, including exchanges, transaction services providers, market information and chart providers, escrow providers, joint mining operations and so on.”²¹

A growing demand for an independent currency system has skyrocketed the value of Bitcoins. In October of 2011, a single Bitcoin was worth approximately US\$2.00. In December 2017, Bitcoin reached a high of nearly US\$20,000. Over-speculation and high-profile cyber thefts of digital wallets have cut this down to size. As of October 10, 2018, a single Bitcoin is traded at approximately \$6,653—still well above its early value, and relatively stable for the time being. Secondary exchanges have also grown to facilitate the use of government-issued (“fiat”) currency to buy or sell Bitcoins.

As a unit of value, Bitcoin has no connection to fiat currency and therefore has no intrinsic value. It only has value because the global user community believes it to have value. Furthermore, Bitcoin accounts or wallets are uninsured by either government programs or private industry, although the latter may change over time. The extent to which Bitcoin itself is a currency, a commodity, or an asset is not examined here. Professor David Yermack of New York University’s Stern School has addressed this subject very well already.²²

Recognizing the importance of Bitcoin, but seeing room for improvement, others created newer cryptocurrency ecosystems. The most important of these today arguably is Ethereum, the cryptocurrency platform on which many new digital tokens are created and new ICOs are launched.

ETHEREUM

Like Bitcoin, Ethereum was first described in a white paper—in this case, one

21. Reuben Grinberg, *Bitcoin: An Innovative Digital Currency*, 4 HASTINGS SCI. & TECH. LJ 160, 165 (2012).

22. See DAVID YERMACK, IS BITCOIN A REAL CURRENCY: AN ECONOMIC APPRAISAL (National Bureau of Economic Research, Ser. No. 19747, 2014) (arguing that Bitcoin behaves less like a currency and more like a speculative asset akin to Internet stocks in the late 1990s, giving further credence to the subject matter of this paper). Regardless, Bitcoin in and of itself is unlikely to be regulated as a security by the Securities and Exchange Commission. *Id.*

written by Russian-Canadian programmer Vitalik Buterin in 2013. Ethereum initially released as a functional network in 2015. The value token on the Ethereum network is called “Ether” (traded on cryptocurrency exchanges under the symbol “ETH”). Ethereum builds on the Bitcoin network by adding certain features and functionality, discussed below. Whereas Bitcoin can be understood as a system for generating a shared global ledger that securely records bitcoin balances, Ethereum applies many of the same principles to generate a shared global computing platform that can flexibly but securely run a variety of applications, including virtual currencies.²³

For the purposes of our discussion on ICOs, the most important of Ethereum’s new features are (1) “smart contracts” which are, in a general sense, automatically executed agreements for the exchange of goods or services through the execution of computer code transacted through Ether tokens, rather than through the exchange of documents and the actions of individuals and (2) the ability to create additional digital tokens (“altcoins” or “colored coins”) based on the Ethereum platform without having to build an entirely new independent network.²⁴ It is the colored coin protocol that has allowed start-up projects to launch token sales fairly rapidly, and led to their exponential growth.

The value of Ether has grown rapidly as well but is still dwarfed by Bitcoin. Ether hit a high of almost US\$1,400 in late January 2018, and like Bitcoin, it has come back down to earth. As of October 19, 2018, Ether trades for approximately US\$203.²⁵ The Ethereum ecosystem appears to have a greater value as a platform for startups building new blockchain networks on which to hold an ICO through the use of colored coins, rather than an innate use as a virtual currency.

II. THE INITIAL COIN OFFERING

As Bitcoin and Ethereum became more established, new projects developed that added new functionality and mining concepts, improved on the existing protocol, and addressed security. One project, called Mastercoin, is notable as the first major project to undertake a crowdfunding digital token sale. Mastercoin, now

23. See Vitalik Buterin, *What is Ethereum?*, COIN CENTER (Mar. 9, 2016), <https://perma.cc/EKW8-UE96>.

24. See Vitalik Buterin, *A Next Generation Smart Contract and Decentralized Application Platform*, GITHUB, <https://perma.cc/T2T6-8NYK> (archived Oct. 19, 2018).

25. *All Cryptocurrencies*, *supra* note 1.

known as Omni,²⁶ is a digital currency and communications protocol built on the Bitcoin protocol; it aims to enable complex financial functions in a cryptocurrency.²⁷ The objective of Mastercoin was to establish a protocol on which other altcoins could be built.²⁸ This is the model that Ethereum subsequently pursued to much greater success, which is evident from the number of ICOs that have based their tokens on the Ethereum platform.

The Mastercoin white paper was published in January 2012, and the project officially launched on July 31, 2013.²⁹ Mastercoin held a month-long public sale of digital tokens to raise money for the project, selling “Mastercoins” to approximately 500 purchasers and raising US\$500,000 in the process.³⁰ As the first public sale of digital tokens,³¹ this could be considered the first real ICO. At the end of December 2013, Mastercoin traded for approximately US\$181 per coin, with a market capitalization established at over US\$112M; the value has dropped considerably over time as the project has stagnated.³² Mastercoin rebranded as Omni in 2015³³ and traded at US\$99.82 with a total market capitalization of approximately US\$60M as of January 10, 2018.³⁴

Other token sales followed that of Mastercoin. The MaidSafe ICO in 2014 was based on the Mastercoin protocol.³⁵ While it raised around US\$7M in its token sale, the value dropped significantly and swiftly to US\$5.5M as the value in Mastercoin dropped, demonstrating a particular problem of tokens dependent on another underlying platform.³⁶ Another pertinent example can be found in Storj.

26. *Omni (Mastercoin) (OMNI)*, COINGECKO, <https://perma.cc/ZB47-PGNS> (archived Nov. 11, 2018).

27. *See Mastercoin*, BITCOIN WIKI, <https://perma.cc/8XFQ-J98N> (archived Oct. 25, 2017); *see also Omni Layer*, OMNI, <https://perma.cc/R6HN-CMNM> (archived Dec. 18, 2018).

28. *Id.*

29. COINGECKO, *supra* note 26; *see also* Vitalik Buterin, *Mastercoin: A Second-Generation Protocol on the Bitcoin Blockchain*, BITCOIN MAGAZINE (Nov. 4, 2013 5:15pm), <https://perma.cc/9CTW-76R5>.

30. Chris Abraham, *The Origin Story of the Initial Coin Offering (ICO) Token Sale History*, NEWCONOMY (Oct. 13, 2018, 11:00 AM), <https://perma.cc/SYD8-VCRE>; COINGECKO, *supra* note 26.

31. Laura Shin, *Here's The Man Who Created ICOs And This Is The New Token He's Backing*, FORBES (Sep. 21, 2017, 12:06 PM), <https://perma.cc/QDM4-47V8>.

32. *Omni (OMNI)*, COINMARKETCAP (last visited Nov. 14, 2018), <https://perma.cc/9ZR4-Q749>.

33. *See id.*

34. *See id.*

35. *See* Danny Bradbury, *MaidSafe COO Reflects on Lessons Learned from Crowdsale*, COINDESK (last updated Jun. 26, 2014, 17:52 UTC), <https://perma.cc/Y3S6-DEA9> (describing “crowdsale,” or initial coin offering, of MaidSafe).

36. *See* Nirupama Devi Bhaskar et al., *Bitcoin IPO, ETF, and Crowdfunding*, in HANDBOOK OF

Storj, a decentralized peer-to-peer file storage platform, closed their ICO in mid-October 2014, raising just 910BTC, only 9% of its goal.³⁷

Other ICO examples include GigaWatt, which raised \$15M in token sale to establish a network for a more efficient collective Bitcoin mining,³⁸ and Gnosis, a predictive marketing blockchain network coupled with artificial intelligence algorithms, which sold 5% of its tokens in an ICO US\$12M in just 10 minutes, for a total valuation of approximately US\$300M.³⁹ As of October 19, 2018, the market capitalization of Gnosis was approximately US\$21M.⁴⁰

One of the largest ICOs to date is Tezos, a new cryptocurrency similar to Ethereum with enhanced capabilities that raised over US\$232M.⁴¹ Tezos is a US-based company that established a Swiss non-profit foundation through which the ICO was held in July 2017. Possibly recognizing the looming specter of federal securities regulation, Tezos sought to avoid regulatory requirements by creating a non-profit foundation, claiming that purchases of Tezos coins were donations. Tezos has been hit with two class action lawsuits alleging, among other things, mismanagement, fraud, and the unauthorized sale of securities.⁴² Other class actions have followed, all alleging violations of securities laws in their complaints, including suits against GigaWatt (a decentralized hedge fund) and a crypto cannabis startup.⁴³ These cases will be ones to watch carefully, as they have the potential to shape the legal landscape for years to come. Notably, these cases are private actions and not enforcement actions by the SEC.

The success of Ethereum, with its enhanced functionality and colored coin capabilities, has enabled the exponential proliferation of ICOs. The cryptocurrency

DIGITAL CURRENCY 529, 552 (David Lee Kuo Chuen ed., 2015); *see also* COINMARKETCAP, *supra* note 32.

37. *See id.* at 553.

38. *GigaWatt ICO Raises \$15 Million to Let You Mine Bitcoin For \$600 Through an Ethereum Token*, TRUSTNODES (Jul. 11, 2017, 4:57 PM), <https://perma.cc/6FLR-ZTL4>.

39. William Suberg, *Fastest-Ever ICO: Ethereum-based Gnosis Creates \$300 Mln in Minutes, Raising \$12 Mln*, COINTELEGRAPH (Apr. 25, 2017), <https://perma.cc/J9MF-ZUQ6>.

40. *All Cryptocurrencies*, *supra* note 1.

41. Stan Higgins, *\$232 Million: Tezos Blockchain Project Finishes Record-Setting Token Sale*, COINDESK (updated Jul. 13, 2017, 1:08 PM UTC), <https://perma.cc/7DGX-YYZ3>.

42. *See* Stan Higgins, *Tezos Founders Sued for Securities Fraud in Potential Class Action*, COINDESK (updated Nov. 5, 2017, 5:05 PM UTC), <https://perma.cc/JW3V-YXQG>; *see also* Aaron Stanley, *Tezos Founders Hit with Second Class Action Suit*, COINDESK (updated Nov. 16, 2017, 12:38 PM UTC), <https://perma.cc/N4JX-B8QW>; *In re Tezos Securities Litigation*, No. 17-cv-06779-RS (N.D. Cal. Aug. 7, 2018) (denying defendant's motion to dismiss).

43. *See* Complaint, *Stormsmedia, LLC v. Giga Watt, Inc.*, No. 17-438 (E.D. Wash. Jan. 19, 2018); Complaint, *Hodges v. Monkey Capital, LLC*, No. 17-81370 (S.D. Fla. Dec. 19, 2017); Complaint, *Davy v. Paragon Coin, Inc.*, No. 3:18-CV-00671 (N.D. Cal. Jan. 30, 2018).

market has shown a high increase in daily trading volume.⁴⁴ It is arguable that the proliferation of new tokens has changed their status from a technical protocol for distributed networks to a vehicle for financial speculation. Regardless of what is claimed in the network's white paper, ICOs appear less about the utility of the token and more about raising money. As more cryptographic tokens are created and continue to grow on an exponential basis, they rise and fall in value dramatically and are traded openly on exchanges and in peer-to-peer environments. Accordingly, cryptographic tokens are forming an entire asset class for alternative investments, with a large cross-section from which to choose.⁴⁵

The success of ICOs to date for both company issuers and token buyers has been mixed. The proliferation of ICOs has also led to a parallel growth in both insufficiently developed business plans and, unfortunately, fraud and cybertheft. "The presence of free-riders and fraudsters, however, does not imply a fundamental weakness of the asset class; it stems from the sudden growth in the early stages of a new market and from the presence of many unknowledgeable participants."⁴⁶ These problems are not unique to the ICO market; they have existed throughout the history of securities. The presence of fraud and weak businesses does not mean, however, that a new financial product should be banned outright. Acknowledging that ICOs do represent significant risk, it is still better for us to examine what the current law requires in order to protect consumers from those risks and to give companies a greater degree of regulatory certainty. Different jurisdictions have taken different approaches, from the outright ban in China, to light touch regulation and encouragement in the Isle of Man, to the DAO Report analytical framework in the US, following a middle-of-the-road, case-by-case analysis for the foreseeable future.

While there is ongoing debate about whether altcoins should legitimately be characterized as currencies or digital assets, they undisputedly represent an alternative investment with the evolution of their technological and financial value of key importance. From the perspective of their owner, next to their usefulness as media of exchange, their capabilities as stores of value are critical. "The emergence of a broad cross-section of different coins has prompted the necessity to assess the

44. See HERMANN ELENDNER, ET. AL., *THE CROSS-SECTION OF CRYPTO-CURRENCIES AS FINANCIAL ASSETS: AN OVERVIEW* 15 (2016) (observing the cryptocurrency market from March 30, 2014 to July 24, 2016).

45. See *id.* at 3.

46. *Id.*

risk and return profiles of hundreds of different assets, as well as considerations of diversification and portfolio management.”⁴⁷

III. OVERVIEW OF US FEDERAL SECURITIES LAW – WHAT IS A SECURITY

The stock market crash of 1929 was precipitated in no small part by the exponential growth in high volume, low quality securities investments with very limited regulatory oversight. No longer were securities investments the province of a relatively small cadre of highly sophisticated individual and institutional investors who backed only high-quality projects. Joe Kennedy and Bernard Baruch reportedly claimed that they knew the market was out of control when they began receiving stock tips from taxi drivers and shoeshine boys; it was a clear indication of a market out of control and time to sell up and get out.⁴⁸ Unfortunately, the majority of Americans were left holding the bag, and poverty and the Great Depression followed. As a result, Congress enacted two statutes in relatively quick succession: the Securities Act of 1933 (the “1933 Act”) and the Securities Exchange Act of 1934 (the “1934 Act”). These statutes transformed securities markets by (1) creating a federal agency to regulate the issuance and trading of securities; (2) establishing a disclosure-based regulatory system, focused on the adequacy of information to investors; and (3) providing enforcement mechanisms for the failure to comply with applicable regulation and to penalize noncompliance and deter future wrongdoing, particularly fraud and misrepresentation. The 1933 Act regulates the issuance of securities while the 1934 Act regulates the trading of issued securities. The 1933 Act is of primary concern for our analysis of digital tokens and their crowdsales.⁴⁹

1933 ACT – SECTION 2: IS THERE A SECURITY?

Under the 1933 Act, all securities issued in the United States must either be

47. See *id.* at 11 (quoting YERMACK, *supra* note 22).

48. The story of the shoeshine boy and taxi driver is relevant to the current environment surrounding ICOs, and many leaders in the traditional financial community, as well as early cryptocurrency investors, have commented as such. See, e.g., John Rothchild, *When the Shoeshine Boys Talk Stocks It Was a Great Sell Signal in 1929. So What Are the Shoeshine Boys Talking About Now?*, FORBES (Apr. 15, 1996), <https://perma.cc/DJ3Z-EM4L>.

49. State securities laws, also referred to as “Blue Sky Laws,” see James Chen, *Blue Sky Laws*, INVESTOPEDIA (Nov. 15, 2017), <https://perma.cc/4EGG-R4AY>, are not addressed or analyzed in this paper. Any practical, real-world issue of securities in the United States, however, would not be complete without a full analysis of the requirements of these laws and regulations.

registered with the SEC or fall under an exemption: either a class of securities exemption or a transactional exemption.⁵⁰ The first stage in the registration analysis is to determine whether there is a security to be offered.

The 1933 Act, §2(a)(1) defines a security as follows:

The term “security” means 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.⁵¹ (Emphasis added).

In short, a security is an interest in a corporation or other legal entity with certain rights such as voting, ownership, cash flows, assets, statutory or contractual rights, corporate governance rights, and the expectation of profit. Stocks, bonds, commercial debt, futures, derivatives, and the list of traditional characters populate this list. If a security exists, it must be registered with the SEC pursuant to §5 of the 1933 Act or fall under a registration exemption. Exemptions can include types of securities such as government bonds or types of transactions such as private sales to accredited investors.⁵² In our digital token analysis, it is the concept of an investment contract on which the SEC has staked its jurisdictional claim and therefore requires our scrutiny.

INVESTMENT CONTRACTS AND THE *HOWEY* TEST

A catch-all category of securities, the investment contract received clarity

50. 15 U.S.C. §§ 77c-d (2017).

51. 15 U.S.C. § 77b(a)(1) (2017).

52. 15 U.S.C. §§ 77c(a), 77d(a)(2) (2017).

through the Supreme Court's opinion in the seminal case of *Securities and Exchange Commission v. W.J. Howey Co.*⁵³

Howey concerned the sale of real estate contracts in Florida citrus groves.⁵⁴ Under company's the business model, Howey sold sections of the orange groves and the purchasers leased the land back to Howey, whose company would farm the land and market the produce on behalf of the purchasers. Purchasers would share in the revenue. Most purchasers had no experience in agriculture and none would tend to the land themselves. Howey did not file a statement to register these contracts as securities and the SEC intervened. In the final decision, the Supreme Court held that these sale-leaseback arrangements were investment contracts under §(2)(a)(1) of the 1933 Act. In doing so, the Court established the test for determining the existence of an investment contract.⁵⁵ There are four criteria to this test:

- (1) An investment of money;
- (2) In a common enterprise;
- (3) With the expectation of profits;
- (4) Solely from the efforts of others.⁵⁶

This jurisprudence of this case remains generally unchanged in over seventy years and is known among securities law practitioners as “The *Howey* test.” We will take a further look at each of these criteria as applied to digital tokens by the SEC and the courts in the next sections.

IV. THE *HOWEY* TEST, THE SEC, AND THE DAO 21A REPORT

“The DAO,” which stands for Decentralized Autonomous Organization, was intended to be just that: a virtual company run by algorithms and smart contracts executed on a blockchain, rather than by the active decisions of human beings. The DAO was conceived as a virtual company and an investment vehicle. As stated in the SEC's report on the company,

The DAO was created by [blockchain software company] Slock.it and Slock.it's co-founders, with the objective of operating as a for-profit entity that would create and hold a corpus of assets through the sale of DAO Tokens to investors, which

53. 328 U.S. 293 (1946).

54. *Id.* at 294-95.

55. *Id.* at 301.

56. *Id.*

assets would then be used to fund “projects.” The holders of DAO Tokens stood to share in the anticipated earnings from these projects as a return on their investment in DAO Tokens. In addition, DAO Token holders could monetize their investments in DAO Tokens by re-selling DAO Tokens on a number of web-based platforms (“Platforms”) that supported secondary trading in the DAO Tokens.⁵⁷

The DAO raised approximately US\$150 million in an ICO of Ether-based tokens.⁵⁸ After the tokens were sold, The DAO was to begin funding projects for investment.⁵⁹ Token holders were not restricted from resale of their tokens, which were freely traded on cryptocurrency exchanges (in effect, secondary market trading platforms).⁶⁰ Unfortunately, The DAO was hacked and approximately one third of its funds were stolen.⁶¹ These funds were later refunded to investors through a technical work-around called a “hard-fork” in the blockchain.⁶² As the largest token sale at the time, coupled with the hack, the DAO received significant attention in the press, and eventually, the attention of the SEC.⁶³

The SEC’s investigation into The DAO addressed the fundamental question of whether the tokens sold should be classified as securities.⁶⁴ The SEC directly applied the *Howey* test to the DAO Tokens in its 21A report, determining that they were, in fact, securities that should have been registered under section 5 of the 1933 Act.⁶⁵ Let us examine the four factors of the *Howey* test under the SEC’s analysis of The DAO.

(1) DAO tokens involved the *investment of money*. DAO investors purchased tokens with fiat currency and other cryptocurrencies. Citing to *Uselton v. Comm. Lovelace Motor Freight, Inc.*, 940 F.2d 564, 574 (10th Cir. 1991), the SEC affirmed that an investment of money need not be limited to cash and extended the definition of money to cryptocurrencies.⁶⁶

(2) The DAO was a *common enterprise*. This is clear from the facts and the SEC felt no need to address this point in its report.

57. See U.S. SECURITIES AND EXCHANGE COMMISSION, *supra* note 5, at 1.

58. See *The DAO (organization)*, WIKIPEDIA, <https://perma.cc/C8RT-NYKW> (archived Nov. 11, 2018).

59. *Id.*

60. *Id.*

61. *Id.*

62. *Id.*

63. *Id.*

64. See U.S. SECURITIES AND EXCHANGE COMMISSION, *supra* note 5, at 1.

65. See *id.*

66. *Id.* at 11.

(3) DAO token-holders had a *reasonable expectation of profits*. The DAO was a commercial, for-profit venture. Citing to *SEC v. Edwards*, 540 U.S. 389, 394 (2004), the SEC noted that profits can include the increase in value. The stated purpose of The DAO was to fund projects in exchange for a return on investment.

(4) DAO profits would be *derived from the efforts of others*. Although DAO token-holders had a direct vote and therefore a voice in what investments should be pursued and to what extent, the SEC held that such token-holders did not have a genuine say in the running of the virtual business. The SEC said that token-holders had to rely almost exclusively on the expertise of the Slock.it founders, who were, in fact, actively overseeing this so-called autonomous organization and choosing investment vehicles for token-holder consideration. Therefore, any profits received were derived not from the efforts of the 11,000 or so individual investors, but from the DAO founders, who were, in fact, managing the company.⁶⁷ In so holding, the SEC effectively questioned the importance of voting rights at all in a blockchain network enterprise. After all, common stock securities generally have voting rights but remain securities regardless.

In reaching its conclusion, the SEC stressed that “the U.S. federal securities law may apply to various activities, including distributed ledger technology, depending on the particular facts and circumstances, without regard to the form of the organization or technology used to effectuate a particular offer or sale.”⁶⁸ In other words, merely using new technology does not exempt financial offerings or products from securities regulation in the United States. If the asset in question resembles a security pursuant to the statute or established case law, then it is, regardless, a security. Simply put, if a digital token is a security, its sale must be registered unless it falls within an established exemption under the 1933 Act or SEC Rules. However, not all tokens or token sales may involve securities and therefore the SEC appears determined to take a case-by-case approach.

The SEC also notes that the *Howey* test is a *flexible* test, “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.”⁶⁹

It is important to note that the SEC chose not to refer the matter for enforcement or prosecution. Rather, it put the entire digital token community on notice

67. *See id.* at 12-14.

68. *Id.* at 10.

69. *Id.* at 11 (quoting *Howey*, 328 U.S. at 299).

that failure to heed the principles stated in the report may lead to enforcement actions.

It is also important to note how the cryptocurrency market reacted on the release of the DAO Report. Cryptocurrency values dropped significantly but rebounded within the week. The price of Bitcoin as of January 10, 2018 was nearly five and a half times greater than its price on the date the DAO Report was released.⁷⁰ Ethereum was similarly up by a factor of 5.7 over the same period.⁷¹ Interest in cryptocurrencies and new ICOs appears undaunted.⁷²

According to press reports, following the release of the DAO Report, the SEC contacted several enterprises on their token sales to warn them about possible violations.⁷³ “Protostarr” is one such start-up contacted by the SEC, and subsequently shut down their ICO and refunded investor money.⁷⁴ By contrast, a different start-up, the advertising platform “Benjacoin” contacted the SEC and sent a No Action Request Letter⁷⁵, after posting about their interaction with SEC staff on its corporate blog.⁷⁶ The company proceeded with their ICO, asserting their token to be a “utility” and not a security. No further action appears to have been taken as of the date of this article.

Publicly, SEC leadership has been highly critical of ICOs, asserting that the financial mechanism is ripe for scam artists. In September 2017, Steven Peikin, Co-Director of the Enforcement Division compared those seeking to leverage the

70. See *Bitcoin (BTC)*, COINMARKETCAP, <https://perma.cc/2LL3-Q6XW> (archived Dec. 19, 2018) (compare price between January 10, 2018 and July 25, 2017).

71. See *Ethereum (ETH)*, COINMARKETCAP, <https://perma.cc/7TQ7-2SMV> (archived Dec. 19, 2018). Note that the cryptocurrency market remains highly volatile. By the time this article is published, the price of both Ether and Bitcoin may go up or down significantly.

72. See Nathaniel Popper, *Despite S.E.C. Warnings, Wave of Initial Coin Offerings Grows*, N.Y. TIMES (Aug. 7, 2017), <https://perma.cc/UH4G-9MWF>.

73. See Laura Shin, *After Contact By SEC, Protostarr Token Shuts Down Post-ICO, Will Refund Investors*, FORBES (Sept. 1, 2017), <https://perma.cc/3KHD-8AZM>.

74. See *id.*

75. “An individual or entity who is not certain whether a particular product, service, or action would constitute a violation of the federal securities law may request a “no-action” letter from the SEC staff. Most no-action letters describe the request, analyze the particular facts and circumstances involved, discuss applicable laws and rules, and, if the staff grants the request for no action, concludes that the SEC staff would not recommend that the Commission take enforcement action against the requester based on the facts and representations described in the individual’s or entity’s request. The SEC staff sometimes responds in the form of an interpretive letter to requests for clarifications of certain rules and regulations.” *No Action Letters*, U.S. SECURITIES AND EXCHANGE COMMISSION (last modified Mar. 23, 2017), <https://perma.cc/7LL4-UY74> [hereinafter SEC, *No Action Letters*].

76. See *Release: Benja Responds to SEC Initial Coin Offering Investigation*, BENJA (July 26, 2017), <https://perma.cc/Q6L5-FYJH>.

blockchain use case improperly to roaches.⁷⁷ Newly minted SEC Chairman, Jay Clayton, referenced ICOs in remarks on cyber-fraud risks to the investing public.⁷⁸ One week prior to these remarks, the SEC suspended trading of securities in three blockchain-related companies.⁷⁹ These suspensions, while limited in duration, indicate that the SEC wants to ensure the sufficiency of disclosures made to investors by blockchain startups intending to hold an ICO.

Following these actions and remarks, the SEC created a new Cyber Unit in the Enforcement Division, with broad mandate to address cyber-related misconduct, including, expressly, ICOs and digital token sales.⁸⁰ Within days, the new unit brought charges against two ICOs, one involving investments in real estate (“RE-Coin”) and diamonds (“DRC World”) for fraud and the unregistered sale of securities.⁸¹ Fraud and investor protection appear to be the main focus of this unit on the ICO front, and more, similar investigations and charges are likely to follow. In a speech on October 26, 2017, Stephanie Avakian, Co-Director of the Division of Enforcement and the new Cyber Unit, said,

Blockchain technology presents many interesting issues and can of course present legitimate opportunities for raising capital. But, like many legitimate ways of raising capital, the popular appeal of virtual currency and blockchain technology can be an attractive vehicle for fraudulent conduct. We think that creating a permanent structure for the consideration of these issues within the Cyber Unit will ensure continued focus on protecting both investors and market integrity in this space.⁸²

77. Rachel Rose O’Leary, *‘Roaches’: SEC Chief Speaks Out Against Malicious ICOs*, COINDESK (Sept. 6, 2017), <https://perma.cc/9HLU-98E5> (archived Nov. 14, 2018).

78. John McCrank, *SEC Chief Says Cyber Crime Risks Are Substantial, Systemic*, REUTERS (Sept. 5, 2017), <https://perma.cc/PNN3-Y6KP> (archived Nov. 14, 2018).

79. *See SEC Suspends Trading in Securities of Three Blockchain-Related Companies*, REED SMITH (Aug. 29, 2017), <https://perma.cc/85KH-R9FN> (archived Nov. 14, 2018).

80. Press Release, U.S. Securities and Exchange Commission, *SEC Announces Enforcement Initiatives to Combat Cyber-Based Threats and Protect Retail Investors* (Sept. 25, 2017), <https://perma.cc/4GPW-KEB4>.

81. Press Release, U.S. Securities and Exchange Commission, *SEC Exposes Two Initial Coin Offerings Purportedly Backed by Real Estate and Diamonds*, (Sept. 29, 2017), <https://perma.cc/UQZ5-QWSH> (claiming in its allegations both ICOs are outright fraud, with neither scheme having retained staff, let alone started the build of a network or the digital tokens to support it).

82. Stephanie Avakian, *The SEC Enforcement Division’s Initiatives Regarding Retail Investor Protection and Cybersecurity*, U.S. SECURITIES AND EXCHANGE COMMISSION (Oct. 26, 2017), <https://perma.cc/5H7U-65AX>.

Chairman Clayton has been more aggressive in his remarks. On November 9, 2017, in an unscripted remark in the middle of a speech at the Institute for Securities Regulation in New York City, he said, “I have yet to see an ICO that doesn’t have a sufficient number of hallmarks of a security,” indicating a potentially more aggressive stance on digital token sales will follow.⁸³

The Cyber Unit kicked off by pursuing two notable, well publicized actions against ICOs. The first action was against Canadian company PlexCorps and its founders, described as “recidivist” securities violators, who raised US\$15M from US, Canadian, and other investors in an ICO while promising thirteen-fold returns in less than a month.⁸⁴ Legal action was filed by the SEC in Federal District Court in Brooklyn against PlexCorps alleging violations of the registration requirements of section 5 of the 1933 Act and the anti-fraud provisions of section 10b of the 1934 Securities Exchange Act.⁸⁵ The second action of note was a cease-and-desist order taken against Munchee, a California-based company, which, as a result, agreed to refund all funds raised in its own ICO.⁸⁶ In an administrative proceeding before the SEC, Munchee tokens, ostensibly for a restaurant review network, were found to be investment contracts under *Howey* and therefore securities; as Munchee did not register the tokens or assert an exemption, the administrative court held the ICO to be in violation of section 5 of the 1933 Act.⁸⁷ These actions demonstrate the SEC’s intent to pursue not only fraudulent schemes, but also registration requirement violations that fail the *Howey* test, even where no fraud is alleged, and the likely approach to each scenario.

Official statements from the SEC confirm their intent to follow the case-by-case approach and application of the *Howey* test to ICO token sales going forward. Remarks by William Hinman, Director of the SEC Division of Corporate Finance clearly indicate that investor expectation and the economic realities of the tokens in question would be central to its analysis under the framework set forth in the

83. Dave Michaels & Paul Vigna, *SEC Chief Fires Warning Shots Against Coin Offerings*, WALL ST. J (Nov. 9, 2017 5:31 PM EST), <https://perma.cc/2VZC-D94Z>.

84. Press Release, SEC Emergency Action Halts ICO Scam (Dec. 4, 2017), <https://perma.cc/K7BL-CH38>; see also Michelle Price, *U.S. SEC’s Cyber Unit Files Charges in Alleged Initial Coin Offering Fraud*, WALL ST. J (Dec. 4, 2017 9:36 AM), <https://perma.cc/3HBY-9LNB>.

85. See *id.*; see also 15 U.S.C. § 78j(b); Complaint at 29, 31, *S.E.C. v. PlexCorps*, No. CV 17-7007 (E.D.N.Y. Dec. 1, 2017).

86. Stan Higgins, *SEC Halts Multimillion-Dollar ‘Munchee’ ICO for Securities Violations*, COINDESK (Dec. 11, 2017), <https://perma.cc/VUJ6-US72>.

87. See *id.*; see also *Munchee Inc.*, Securities Act of 1933 Release No. 10445 (Dec. 11, 2017).

DAO Report.⁸⁸ In Director Hinman's own words, "... the economic substance of the transaction always determines the legal analysis, not the labels."⁸⁹ Significantly, in his remarks Hinman acknowledged that there may be circumstances when ICO tokens are not securities, based on contractual or technical structuring methods so that they function more like a consumer item.⁹⁰ At the Georgetown FinTech Conference, Mr. Hinman further indicated that the SEC would release "plain English" guidance for ICO entrepreneurs.⁹¹ Chairman Clayton's testimony before Congress further confirmed the case-by-case approach.⁹² As of the date of this article, no answers to "No Action Request" letters have been published by the Commission that would provide additional guidance. Formal rulemaking proceedings on digital tokens seem unlikely in the near future in this author's opinion.

Despite this case-by-case approach, the Cyber Unit appears to be conducting an aggressive investigation, issuing dozens of subpoenas and information requests to crypto startups for information on ICO sale and pre-sale structures.⁹³ It is to be expected that more enforcement actions will result, as the SEC strives to rein in the market, make public examples of wrongdoers, and assert its jurisdiction unequivocally. A salient example is the case against Maksim Zaslavskiy brought by the SEC in the Eastern District of New York.⁹⁴ Zaslavskiy created two crypto ventures, one focused on real estate, the other a diamond-backed cryptocurrency, and held two ICOs accordingly.⁹⁵ The U.S. Attorney and the SEC brought filed a criminal complaint against Zaslavskiy and co-conspirators for materially false and fraudulent

88. See Director, Division of Corporate Finance, SEC, William Hinman, *Digital Asset Transactions: When Howey Met Gary (Plastic)*, Remarks at the Yahoo Finance All Markets Summit: Crypto (Jun. 14, 2018), <https://perma.cc/253D-Q4TE> (archived Nov. 18, 2018).

89. *Id.*

90. See *id.*

91. See SEC Plans 'Plain English' Crypto Securities Guide, BLOOMBERG LAW (Nov. 5, 2018 11:26 AM), <https://perma.cc/PV5M-Z2UW> (archived Nov. 18, 2018) (The author was in attendance at the conference during which Mr. Hinman made these remarks).

92. United States. Cong. House. Committee on Financial Services, *Hearing on "Oversight of the U.S. Securities and Exchange Commission"*, 115th Cong. (2d Sess. 2018) (Statement of Jay Clayton, Chairman, SEC) (retrieved on Oct. 30, 2018), <https://perma.cc/8B9F-EJT4> (archived on Nov. 18, 2018) ("determining what falls within the ambit of a securities offer and sale is a facts-and-circumstances analysis, utilizing a principles-based framework that has served American companies and American investors well through periods of innovation and change for over 80 years").

93. See Jean Eaglesham & Paul Vigna, *Cryptocurrency Firms Targeted in SEC Probe*, WALL ST. J (Feb. 28, 2018 6:47 PM EST), <https://perma.cc/XAR8-DH9Y> (archived Oct. 25, 2018).

94. Complaint at 1, *United States v. Zaslavskiy*, No. 17-CR-0647, 2018 WL 4346339 (E.D.N.Y. Sept. 11, 2018).

95. *United States v. Zaslavskiy*, No. 17-CR-0647, 2018 WL 4346339, at *2 (E.D.N.Y. Sept. 11, 2018).

misrepresentations in violation of the Securities Act.⁹⁶ In denying the defendant's motion to dismiss, the district judge held that a reasonable jury could conclude that the facts alleged in the indictment could satisfy the *Howey* test.⁹⁷ Both ICO white papers expressly claimed the likelihood of high returns such that if the facts hold, a reasonable jury could conclude not only that the *Howey* test factors had been satisfied, but also that the primary motivation for purchasing the tokens was investment and therefore expectation of profits.⁹⁸ Defendant Zaslavskiy pleaded guilty on November 15, 2018 and faces up to 37 months in prison.⁹⁹

V. WHEN ARE DIGITAL TOKENS SECURITIES? – THE HOWEY ANALYSIS

An important hallmark of the DAO Report is the SEC's commitment to a fact-specific, case-by-case analysis of each ICO, based on the *Howey* test and the economic realities of each token sale. With few cases and enforcement actions to review at this time, it is useful to examine the courts' interpretation of *Howey* over seventy years, and the fact patterns of significant cases that may be relevant to digital tokens and blockchain networks.

(1) INVESTMENT OF MONEY

One element of the *Howey* test is the investment of money. Many purchasers of digital tokens use Bitcoin, Ether, or similar cryptocurrencies rather than fiat currency. This does not avoid the condition of the test regarding an investment of money. Jurisprudence is quite clear that an investment of money is not limited to currency, but may also include assets, goods, notes, and other forms of consideration.¹⁰⁰ In *International Brotherhood of Teamsters v. Daniel*, for example, the court held that an employer's compulsory pension plan, into which individual employees made no financial contributions, still amounted to an investment of money, because

96. *See id.*

97. *See id.* at *4.

98. *See id.* at *3. (noting that the defendants never purchased any assets behind their proposed business plans, real estate or diamonds).

99. Patricia Hurtado, *First Initial Coin Offering Fraud Case Ends in Guilty Plea*, Bloomberg (Nov. 15, 2018, 5:17 PM EST), <https://perma.cc/ZF5F-ACQA>.

100. *See, e.g., Int'l Bhd. of Teamsters v. Daniel*, 439 U.S. 551, 560 n.12 (1979); *see also* Coinbase et. al., *A Securities Law Framework for Blockchain Tokens*, (2016), <https://www.coinbase.com/legal/securities-law-framework.pdf>.

they had provided their labor to the employer in exchange for a compensation package which included pension benefits.¹⁰¹

Another relevant example can be found in *Tcherepnin v. Knight*.¹⁰² In *Tcherepnin*, the Supreme Court held withdrawable capital shares in a savings in loan to be investment contracts and therefore securities, where the savings of individuals constituted the investment of money which formed the basis for the money lending enterprise of an Illinois savings and loan association.¹⁰³

Greater clarity, still, is found in *Majors v. South Carolina Securities Commission*.¹⁰⁴ The *Majors* court held that an investment of money under *Howey* means that an investor must have committed assets to the enterprise in such a manner as to subject himself to financial loss.¹⁰⁵ Token purchasers, whether using cash, Bitcoin and other cryptocurrencies, or providing an exchange of services, are exposing themselves to financial loss through their purchase. Tokens are not neither fiat currencies nor are they government backed financial products. Accordingly, from established case law and due to the flexible interpretation of the elements of the *Howey* test, it would seem that purchases of new digital tokens, by means other than fiat currencies, would still qualify as an investment of money.

(2) COMMON ENTERPRISE

In the DAO Report, the SEC did not address this element of the *Howey* test, other than in passing, and then only to make a declarative statement that token purchasers were investing in a common enterprise.¹⁰⁶ The focus of the common enterprise element is tied to a pooling of funds in contemplation of the expectation of profits, which is addressed in the next section.

In *Continental Marketing Corp.*, the court found that Continental was engaged in a common enterprise, the very heart of which was a chance to invest money through multiple contracts amounting in reality to an “investment contract” within the meaning of the applicable statute.¹⁰⁷ The *Continental* court further stated that

101. See *Int'l Bhd. of Teamsters*, 439 U.S. at 559-560 (holding that despite the satisfaction of the first prong of the *Howey* test, the pension plan is not a security).

102. *Tcherepnin v. Knight*, 389 U.S. 332 (1967).

103. See *id.* at 338-340.

104. *Majors v. S.C. Sec. Comm'n*, 644 S.E.2d 710 (S.C. 2007).

105. *Id.* at 716; see also *Hector v. Wiens*, 533 F.2d 429, 432 (9th Cir. 1976); *SEC v. Pinckney*, 923 F. Supp. 76, 80 (E.D.N.C. 1996).

106. U.S. SECURITIES AND EXCHANGE COMMISSION, *supra* note 5, at 11.

107. *Continental Marketing Corp. v. SEC*, 387 F.2d 466, 469 (10th Cir. 1967).

the element of control was not essential to the finding of a common enterprise; rather, emphasis should be placed on the economic realities of the venture and the nature of the investor's participation in said enterprise.¹⁰⁸ Specifically, the court said, "If [the investor's participation] is one of providing capital with the hopes of a favorable return then it begins to take on the appearance of an investment contract notwithstanding the fact that there may be more than one party or other than a principal party and his agent on the other end of the transaction or transactions."¹⁰⁹ It would seem, then, that unless the underlying network for which the ICO is being held is purely a non-profit, open-source project, the common enterprise element is easily met.¹¹⁰

(3) (A) WHEN THE TOKEN DOES NOT YET EXIST – PRE-TOKEN SALES AND THE EXPECTATION OF PROFIT VS. RISK CAPITAL

What happens when a person buys the right to use digital tokens on a network that has not yet been launched? At the time of purchase, there is no operating network and there are no digital tokens. The purchaser is buying the right to use these tokens in the future, for whatever stated purpose the network has been created to fulfill. Is the purchase of a future token, even a token that once launched can only be used within its established network, a security under the *Howey* test?

An analogous situation can be found in the case of *Silver Hills Country Club v. Sobieski*.¹¹¹ *Silver Hills* involved the sale of memberships at a discount to a country club under construction. Members would still be required to pay annual dues and pursuant to the bylaws, had no right to the income or assets of the club. Memberships would be transferable, with board approval as a prerequisite. The court concluded that the sale of these memberships were securities, stating as follows:

Petitioners are soliciting the risk capital with which to develop a business for

108. *Id.* at 470.

109. *Id.*

110. Cases in other federal and state courts have reached the same conclusion. Courts have held that the common enterprise element of the *Howey* test could be satisfied where an investor purchased a share in a common investment fund, the investment depended on the efforts of a promoter, or third party managerial efforts affected the fortunes of the enterprise. *See, e.g.*, SEC v. Brigadoon Scotch Distributors, Ltd. 388 F. Supp. 1288, 1291-92 (S.D.N.Y. 1975); SEC v. Glen Turner Enterprises, Inc. 474 F.2d 476, 482 (9th Cir.), cert. denied, 414 U.S. 821, 94 S. Ct. 117, 38 L. Ed. 2d 53 (1973). *See also* John F. Wagner Jr., "'Common Enterprise' Element of Howey Test to Determine Existence of Investment Contract Regulable as 'Security' Within Meaning of Federal Securities Act of 1933 (15 U.S.C.A. § 77a et seq.) and Securities Exchange Act of 1934 (15 U.S.C.A. § 78a et seq.)", 90 A.L.R. Fed. 825, at § 6 (1988).

111. *See Silver Hills Country Club v. Sobieski*, 361 P.2d 906 (Cal. 1961).

profit. The purchaser's risk is not lessened merely because the interest he purchases is labelled a membership. Only because he risks his capital along with other purchasers can there be any chance that the benefits of club membership will materialize.¹¹²

As the above quote suggests, this theory under the investment contract test is known as the risk capital test. While not universally accepted across the courts,¹¹³ it provides useful guidance where the four defined prongs of the *Howey* test fall short in performing the investment contract analysis. It is also useful to note the *Hawaii Market Center* case, in which the Hawaii Supreme Court held that "founder-member purchasing contract agreements" whereby individuals purchased cookware or sewing machines at a significant premium for the right to become distributors constituted the sale of unregistered securities.¹¹⁴

Like the country club, most blockchain startups offering ICOs are selling tokens for networks that have not yet been built. Following the reasoning of *Silver Hills* and comparable cases, pre-sales of tokens are likely to be viewed as securities.¹¹⁵ Many start-ups are wising up to this reality and consulting with legal counsel on structuring their ICOs, employing new model agreements such as the Simple Agreement for Future Tokens, or "SAFT," which addresses the security element of the sale. I will address the SAFT in further detail in the following section on best practices to follow in an ICO.

(3) (B) EXPECTATION OF PROFIT: INTENT TO USE V. INTENT TO PROFIT

Let us take the next stage of the scenario. The network has been built, at least on a basic level, and tokens have some functional use. Whether the sale of the tokens constitutes a security under *Howey* will depend in large part on making an "economic reality" assessment with regard to their purpose.¹¹⁶ Is it usable solely within the network environment for which it is created, or is it fungible and tradable such that its value may increase with the growth or success of the enterprise?

112. *Id.* at 908.

113. *See, e.g.,* *Sec. Adm'r v. Coll. Assistance Plan (Guam) Inc.*, 533 F. Supp. 118, 123 (D. Guam 1981) (rejecting the risk capital test, because it is unsettled whether it applies only to start-up capital or whether it also extends to subsequent financing rounds, in the sale of educational funding plans).

114. *See State v. Hawaii Market Center, Inc.*, 485 P.2d 105, 109-110 (Haw. 1971).

115. *See also, Jet Set Travel Club v. Corp. Comm'r of Or.*, 535 P.2d 109, 112 (Or. Ct. App. 1975) (holding that the sale in travel club memberships were securities because the benefits of membership had not been realized at the time of the sale).

116. *See SEC v. Howey*, 328 U.S. 293, 298 (1946).

Leaving the world of digital tokens for a moment, we turn to the “kickstarter” concept.¹¹⁷ Kickstarter and similar platforms offer creators the opportunity to pre-sell their goods, such as books, art, games, and tickets to films or plays to be produced. In general, such products are not securities, and would not pass the *Howey test* or fit within any of the statutory definitions. One merely pre-purchases a physical object, or a ticket to an event. These items can be resold free of restrictions on platforms like eBay, yet this does not grant them security status, as the general motivation for purchase is not investment but rather use and enjoyment. This is a non-security crowdfunding platform. In contrast, start-up enterprises wishing to raise general capital may sell securities to the public through an SEC-registered crowdfunding platform, under the rules established by the JOBS Act in Regulation A and Regulation Crowdfunding.¹¹⁸ The amounts that can be raised under these offerings is much smaller than the amounts ICO issuers hope to receive to fund their projects and new companies.

Howey itself provides a good example. Investors were purchasing interests in orange groves, where the oranges to be cultivated were not for personal use but for resale and profit.¹¹⁹ Another example can be found in the SEC case against MA Lundy Associates.¹²⁰ In this case, the defendants sold receipts in scotch whiskey barrels.¹²¹ The defendants contended that the purchase of raw whiskey was not a common enterprise as purchasers could do what they wanted with the barrels. Despite their protestations, the barrels clearly were not intended for to be personally held by receipt purchasers, but rather aged in a warehouse and sold at a point in time in the future at a profit. Applying *Howey*, the court found that the project did indeed involve an investment of money in a common enterprise with a reasonable expectation of profits derived from the efforts of others and had marketed the project to the public as such.¹²² Emphasizing the economic realities of the project, the court cited to established case law under *Howey* in reaching its decision:

The more critical factor is the nature of the investor’s participation in the enterprise. If it is one of providing capital with the hopes of a favorable

117. See, e.g., KICKSTARTER, <https://perma.cc/97CH-B46U> (archived Dec. 19, 2018), for examples of the projects discussed in this paragraph.

118. See Regulation A, 17 C.F.R. § 230.251 et seq. (2016); see also Regulation Crowdfunding, 17 C.F.R. §227.100 et seq. (2017).

119. See *Howey*, 328 U.S. at 295.

120. *SEC v. M.A. Lundy Assocs.*, 362 F. Supp. 226 (D.R.I. 1973).

121. *Id.* at 229.

122. *Id.* at 237.

return then it begins to take on the appearance of an investment contract notwithstanding the fact that there may be more than one party or other than a principal party and his agent on the other end of the transaction or transactions.¹²³

Accordingly, the court rightly found that the whiskey project was an unregistered sale of securities in violation of § 5 of the 1933 Act.

Contrast this case with cases involving the sales of an interest in residential properties intended for occupancy. In *United Housing v. Forman*, tenants of a massive New York City housing cooperative brought suit against the owners alleging securities fraud and the sale of unregistered securities, among other claims.¹²⁴ Right of occupancy in the co-op apartments required the purchase of a number of shares in the co-op which were expressly called “stock.”¹²⁵ No rights were conferred to the stock owners, other than occupancy; under the lease terms, stock could not be sold for more than their purchase price plus a fraction of the mortgage amortization paid during tenancy.¹²⁶ Despite being labeled as stock, the US Supreme Court held that such shares were not securities and did not meet the conditions of *Howey*. Writing for the majority, Justice Powell stated that, when viewed in terms of their substance (the economic realities of the transaction) rather than their form, the instruments involved here were not shares of stock in the ordinary sense and conferred none of the normal rights associated with stock or other securities.¹²⁷ Following this logic, digital tokens sold for use in established networks that only have utility within those networks, such as loyalty points, game tokens, and the like, might appear less likely to be considered securities.

SEC Chairman Clayton appears to take a contrary view, casting a dark shadow over the concept of a utility token. In an official statement, Chairman Clayton stated,

Merely calling a token a “utility” token or structuring it to provide some utility does not prevent the token from being a security. Tokens and offerings that incorporate features and marketing efforts that emphasize the potential for profits based

123. *Id.* at 238 (quoting *Cont’l Mktg. Corp. v. SEC*, 387 F.2d 466 (10th Cir. 1967) (referring directly to *Howey* in making this statement).

124. *See United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 837 (1975).

125. *Id.*

126. *Id.* at 843.

127. *See id.* at 838.

on the entrepreneurial or managerial efforts of others continue to contain the hallmarks of a security under U.S. law.¹²⁸

History ultimately will decide whether the courts will follow *Forman* or Clayton in assessing whether token purchases are motivated by the desire to build and use a product or to generate investment profits. Yet we do have indications to aid our analysis under this scenario in both the above case law and recent SEC public statements. If the motivation is focused more on investment, speculation, and creating a secondary market for token sales, rather than functional token use or “utility,” it is likely that the token will be considered a security and subject to regulation. If the functional token sale is intended to build a market for the product and develop network participation, or in other words, to get people to use the tokens and thereby grow the network and demand for the digital products, it is less likely to be considered a security, taking on “kickstarter-like” characteristics. Whether the tokens appreciate in value due to scarcity, thus encouraging peer-to-peer, eBay-like trading, in and of itself should not affect this analysis. Whether the ICO is capped at a number of tokens or a dollar value may also have an impact on this analysis. Does the company really need \$200M to build a blockchain network? The characteristics of the sale are as important as the underlying motivation. This gets us to a central question every entrepreneur must answer honestly—what is the motivation for holding a token sale and how central is the token (and blockchain itself) to the design and use of the company’s products?

Regardless, in and of itself, this analysis is still no guarantee that a company that actively lists usage tokens on a secondary market could not inadvertently find them considered as securities in the eyes of the law. Take the case of *Gary Plastic Packaging Corporation v. Merrill Lynch*.¹²⁹ Gary Plastics purchased certificates of deposit (“CD”) from Merrill Lynch in the amount of US \$1.2M. Merrill Lynch created a secondary market for these CDs. Conventional CDs are not considered securities.¹³⁰ However, by creating a secondary market for their CD product, Merrill Lynch was engaged in a “common enterprise” and therefore converted these basic financial instruments into securities pursuant to the *Howey* test.¹³¹ Furthermore, investors like Gary Plastics derived their profits not so much from the interest rates

128. Jay Clayton, *Public Statement: Statement on Cryptocurrencies and Initial Coin Offerings* (Dec. 11, 2017), <https://perma.cc/GGW8-ZKZM>.

129. See *Gary Plastic Packaging Corp. v. Merrill Lynch*, 756 F.2d 230, 230 (2d Cir. 1985).

130. See *id.* at 239-240 (citing *Marine Bank v. Weaver*, 455 U.S. 551, 560 (1982)).

131. See *id.* at 240.

but from the active efforts of Merrill Lynch.¹³² Accordingly, digital token issuers must beware. Your token, in and of itself and based on its usage, may not constitute a security, but actively listing those tokens on an exchange creates a secondary market which may reverse the classification in the eyes of the SEC. Note also that in the DAO Report, the SEC expressly states that secondary market trading platforms constitute securities exchanges and must *also* be registered with the SEC under applicable rules.¹³³

(4) THE EFFORTS OF OTHERS

Most courts do not appear to take the “solely from the efforts of others” element of the *Howey* test literally, focusing instead on the degree of managerial control over an enterprise.¹³⁴ Within the context of a blockchain network, the primary factor to consider when determining the degree of managerial control seems to be the extent to which token-holders participate in the development and design of the network and in the core decisions of the enterprise. Simply put, the central question is how much control the investors retain. The greater the control, the less likely you are to have an investment contract.

An important case pertaining to this question is *ETS Payphones*.¹³⁵ Here, a promoter sold payphones to investors who leased them back for a monthly fee; the 11th Circuit Court of Appeals affirmed the district court finding that the arrangements were likely investment contracts.¹³⁶ In addressing the “efforts of others” element of the *Howey* test, the court stated that, “the more control investors retain, the less likely it becomes that the contract qualifies as a security.”¹³⁷ In this case, the ETS investors had retained minimal control over the telephones, and relied on ETS for profits.¹³⁸

In the case of The DAO, the SEC determined that token-holders’ rights to vote on investment decisions were insufficient to establish that they had direction and control over the direction of the entity, as the managerial efforts of Slock.it directed

132. *Id.* at 239.

133. See U.S. SECURITIES AND EXCHANGE COMMISSION, *supra* note 5, at 16.

134. See, e.g., SEC v. Glenn W. Turner Enters., 474 F.2d 476, 482-83 (9th Cir. 1973).

135. SEC v. ETS Payphones, Inc., 408 F.3d 727 (11th Cir. 2005).

136. *Id.* at 736-37.

137. *Id.* at 732.

138. *Id.*

the choices token-holders could make.¹³⁹ A truly democratic blockchain network must give genuine opportunity to participate in the direction the network will take, and encourage, if not require, participation to a certain degree. This is a challenge for most for-profit companies as it goes against a traditional business model of strategic direction and control from a cadre of senior managers.

Contrast these cases, however, with *Endico v. Fonte*, where the court found that there was no investment contract when the membership interests in an apartment building for a rehabilitation project required buyers to perform construction work and manage the project themselves.¹⁴⁰ Consider also *Williamson v. Tucker*, where the court stated, “so long as the investor has the right to control the asset he has purchased, he is not dependent on the promoter or on a third party for ‘those essential managerial efforts which affect the failure or success of the enterprise.’”¹⁴¹

A word must be said about token mining and whether the acquisition of tokens by mining done through one’s own efforts is different from tokens directly purchased in an ICO. Does this make a difference in determining the existence of an investment contract under *Howey*? The short answer is no.

On the surface, the acquisition of tokens by mining is done through the investor’s efforts, rather than the efforts of others. However, how the token derives fundamental value is ultimately the central question. If mining also grants other rights and control, such as in a proof of stake system, perhaps the “managerial efforts of others” standard is not met. Compare this situation to the purchase of silver bars from a promoter, where the value of the investment, once acquired, depends on fluctuations of the silver market, rather than the efforts of the promoter.¹⁴² More and more, Bitcoin seems to resemble this scenario, since its value is tied more to speculation rather than its use as a digital tool. Yet if one merely acquires the token by mining as opposed to purchasing, and the value of the token is tied to the efforts of managers, promoters, and developers, i.e. third parties, the balance is likely to tip the other way. Mining does not change the analysis. Based on the majority of ICOs

139. See U.S. SECURITIES AND EXCHANGE COMMISSION, *supra* note 5, at 13 (“Investors had little choice but to rely on [Slock.it’s] expertise.”).

140. See *Endico v. Fonte*, 485 F. Supp. 2d 411, 415 (S.D.N.Y. 2007).

141. *Williamson v. Tucker*, 645 F.2d 404, 421 (5th Cir. 1981). The 5th Circuit found that there were sufficient doubts that the interests in a real estate joint venture were due to the managerial efforts of others and therefore could be considered investment contracts. The Circuit Court reversed and remanded to the lower court. *Id.*

142. See *Noa v. Key Futures, Inc.*, 638 F.2d 77, 79 (9th Cir. 1980).

to date, mining would appear to have no impact on the security determination under *Howey*. The majority of tokens created by a new blockchain network generally are created to be sold, not to be mined. Mining may be a nice incentive from a business development perspective, but it is not a game changer in the securities regulatory analysis.

Overall, therefore, the analysis is likely to depend on the significance of the efforts of the management team or network designers (the “others”) as compared to token purchasers and token miners (the “investors”). In the seminal case *SEC v. Glenn W. Turner Enterprises*, the Second Circuit stated that a key factor in its determination was “whether the efforts made by those other than the investor are the undeniably significant ones, i.e. those essential managerial efforts which affect the failure or success of the enterprise.”¹⁴³

SUMMARY NOTE

As the case law suggests and the SEC confirmed in the DAO Report, there is no blanket, bright-line rule across all industries or scenarios, or even within the four factors of the *Howey* test. SEC Commissioner Peirce, who favors a more measured approach to token regulation and new technologies, recently stated, “the application of *Howey* to one particular ICO does not answer every question.”¹⁴⁴ Investment contracts vary widely, unlike common stock and other express statutory securities. While a factual case-by-case analysis is imperative prior to holding an ICO, the rebuttable presumption will be that most ICOs involve the sale of securities and are therefore subject to SEC regulation. A concerted effort factoring network design, business development strategy, and legal analysis will be required to overcome the presumptive outcome.

VI. ADAPTING TO THE POST-DAO REPORT ENVIRONMENT: PRACTICE GUIDELINES

To date, the DAO Report has not dampened the market for ICOs or the appetite for new digital tokens. Nor does it appear that there has been a mass exodus of

143. 474 F.2d 476, 482 (9th Cir. 1973).

144. Hester Peirce, *Wolves and Wolverines: Remarks at the University of Michigan Law School* (Sep. 24, 2018), <https://perma.cc/7KQT-7HRF>.

ICOs from the US market. While the SEC has drawn a line in the sand, other countries like China¹⁴⁵ and South Korea¹⁴⁶ have issued an outright ban on all ICOs and cryptocurrency exchanges. The extent to which these bans will remain in force over the long term remains to be seen. Still other jurisdictions like Gibraltar, the Isle of Man, Singapore, and Switzerland appear to have declared their intentions to develop a light-touch, friendly regulatory environment to attract this developing industry.¹⁴⁷

For the present, and unless and until the SEC issues further guidance or rule-making proceedings on digital tokens as securities, one must fit into the existing framework as the SEC expressly stated in the DAO report.

The first stage of deciding how to conduct an ICO is a thorough technical and legal analysis of the network to be constructed and its digital token. The utility of the token within and outside of the network must be addressed in this analysis, as well as the stage of development of the network itself. A good rule of thumb for any aspiring blockchain entrepreneur is that if the token is not an essential element of either the network or the system, first, it is not needed, and second, an ICO is probably not a good idea. This technical assessment facilitates the legal review of the proposed token and ICO under the *Howey* test. For the sake of the discussion below, we will assume that our hypothetical token is a security.

With a security token, capital financing options must fit into the existing SEC regulatory framework. Our startup venture has a few safe harbor options to avoid registration under §5 of the 1933 Act: Regulation A, Regulation D, Regulation Crowdfunding, and Regulation S.

(1) REGULATION A(+)

Regulation A provides exemption from general registration Section 5, allowing companies to offer and sell securities to the public with limited disclosure requirements and at a capped amount of money that can be raised. The rules are intended to provide access to capital for small and medium size enterprises without incurring

145. Tian Chuan & Rachel-Rose O'Leary, *China Outlaws ICOs: Financial Regulators Order Halt on Token Trading*, COINDESK (Sept. 4, 2017, 13:40 UTC), <https://perma.cc/9U8L-W93U>.

146. Rachel Rose O'Leary, *South Korean Regulator Issues ICO Ban*, COINDESK (Sep. 30, 2017 at 08:50 UTC), <https://perma.cc/ERJ5-255H>.

147. See, e.g., Jeff John Roberts, *Tax Havens Eye a New Sideline: Initial Coin Offerings*, FORTUNE (Sep. 26, 2017), <https://perma.cc/MDB3-LCZ3> (discussing Gibraltar, the Isle of Man, and Switzerland); Joshua Althaus, *Singapore Becomes Favored ICO Destination for Blockchain Companies*, COINTELEGRAPH (Sept. 5, 2017), <https://perma.cc/4KX5-QCV8> (discussing Singapore).

the significant costs of registration, and to open investment to unaccredited investors under certain conditions, limiting their investment amount based on annual income and net worth.¹⁴⁸ Regulation A was amended through the Jumpstart Our Business Startups Act or JOBS Act of 2012, establishing revised categories for equity crowdfunding.¹⁴⁹ The categories are Tier 1 and Tier 2, respectively. Under a Tier 1 financing, a company may raise up to US\$20M in a given 12-month period without having to file a registration statement with the SEC, but will still be subject to state securities regulations and registration requirements, to the extent applicable, where offered for sale.¹⁵⁰ This can still be an expensive proposition, costing in excess of \$1M in legal and other expert fees, as well as state registration fees. Tier 2 financing (an undertaking at least as expensive as Tier 1) allows companies to raise up to US\$50M in a given 12-month period without having to file a registration with the SEC. Tier 2 exempts companies from state securities laws and registration requirements. To qualify for a Tier 2 financing, companies must have at least two years of audited financial statements; they must also file annual, semiannual, and current events reports, and limit offering to unaccredited investors contributions to 10% of the investors' annual income or net worth. All financing under Regulation A must go through an SEC-registered broker or dealer, or an equity crowdfunding portal.¹⁵¹

(2) PRIVATE PLACEMENT: SECTION 4(A)(2) AND REGULATION D

Section 4(a)(2) of the 1933 Act exempts from registration transactions not involving any public offering.¹⁵² Such an offering may be called a "private placement." It is important to note that private placements eclipse public offerings by a significant margin. The seminal *Ralston Purina* case further explored private placements, stating that the central issue in any such offering was the sophistication of the investors, that is whether the investors could "fend for themselves" and make an evaluation of the proposed investment in securities.¹⁵³ While companies may

148. An accredited investor is someone with a net worth of at least US\$1,000,000 excluding the value of the primary residence, or net income of US\$200,000 (US\$300,000 combined for married couples). See SEC Rule 501, 17 C.F.R. § 230.501 (2017).

149. SEC, *Press Release: SEC Adopts JOBS Act Amendments to Help Entrepreneurs and Investors*, Rel. No. 2017-78 (Apr. 5, 2017), <https://perma.cc/9H54-8BAA>. (The release provides a historical summary of the regulatory changes implemented following passage of the JOBS Act.)

150. See 17 C.F.R. § 230.251 (2017).

151. 17 C.F.R. § 227.100(a)(3) (2018).

152. See 15 U.S.C. § 77d(a)(2) (2017).

153. See *SEC v. Ralston Purina Co.*, 346 U.S. 119, 125 (1952).

still conduct private placements under the statute itself, the SEC established formal rules under Regulation D for their conduct pursuant to Rules 504, 505, and 506.¹⁵⁴ With the recent repeal of Rule 505, only Regulation D financing under Rules 504 and 506 remain.¹⁵⁵

The current version of Rule 504 allows privately held, non-reporting companies to offer securities in a private placement of up to US\$5,000,000 in a given 12-month period (less the aggregate price for all securities sold within the prior 12 months).¹⁵⁶ There are no limits on the number of investors who may participate.¹⁵⁷ General solicitation and advertising of Rule 504 offerings is prohibited, and securities must be held for at least one year before they can be resold.¹⁵⁸ Issuers must still comply with state securities laws wherever they are sold.

Rule 506 is an attractive option for companies needing to raise significant capital. Both private and public companies may offer securities under Rule 506. There is no dollar limit to the amount of capital that may be raised, but only accredited investors and up to 35 unaccredited investors may participate, provided that they are “sophisticated” and sufficient information is disclosed to the unaccredited investors to allow them to make an informed decision. Rule 506(c) allows for general solicitation and advertising, but is limited to accredited investors whose accreditation status must be verified. Like Rule 504 offerings, securities sold under Rule 506 must be held for at least one year before resale.¹⁵⁹

Rule 506(c) is garnering greater interest in the ICO and digital token world. Filecoin, a data storage network in construction, recently held a Rule 506 offering through an SEC-registered portal called Coinlist, and raised over US\$257M total, including pre-sales to certain accredited investors and the ICO itself.¹⁶⁰

(3) REGULATION CROWDFUNDING

154. See 17 C.F.R. §§ 230.504, 506 (2017); see also 17 C.F.R. § 230.505 (repealed 2016).

155. See 17 C.F.R. § 230.505 (2017); see also Exemptions To Facilitate Intrastate and Regional Securities Offerings, 81 Fed. Reg. 83,494 (Nov. 21, 2016) (to be codified at 17 C.F.R. pts. 200, 230, 239, 240, 249, 270, and 275).

156. 17 C.F.R. § 230.504 (2018).

157. *Id.*

158. See 17 C.F.R. § 230.144; 17 C.F.R. § 230.905 (2018).

159. See *id.*

160. See Stan Higgins, *\$257 Million: Filecoin Breaks All-Time Record for ICO Funding*, COINDESK (Sep. 7, 2017, 20:45 UTC), <https://perma.cc/W8G2-6J3S>; see also Brady Dale, *Here's How Filecoin's Token Sale Won't Irk the SEC (Like The DAO Did)*, OBSERVER (Aug. 3, 2017, 5:27 PM), <https://perma.cc/23W7-JDCW>.

Crowdfunding is a relatively new and evolving method of using the Internet to raise capital to support a wide range of ideas and ventures. An entity or individual raising funds through crowdfunding “typically seeks small individual contributions from a large number of people.”¹⁶¹ Title III of the Jumpstart Our Business Startups (JOBS) Act of 2012 added Securities Act Section 4(a)(6), which provides an exemption from registration for certain crowdfunding transactions.¹⁶² “Regulation Crowdfunding” was adopted by the SEC in 2015 and went into effect on May 16, 2016.¹⁶³

All securities issued under Regulation Crowdfunding must go through an SEC-registered and -approved crowdfunding portal.¹⁶⁴ The maximum capital that may be raised under this regulation is US\$1,070,000 in a given 12-month period.¹⁶⁵ As with Regulation A, investor contributions are limited based on annual income or net worth.¹⁶⁶ Although the amount of expert fees is quite a bit less costly than for standard Regulation A financing, the capital raised is very limited and may not reach its goal to be sufficiently beneficial for funding operations. Regulation Crowdfunding is a good alternative to traditional angel investment for early stage startups that do not require significant capital to fund operations or product development.

(4) REGULATION S – OFFSHORE TRANSACTIONS

U.S. companies may also choose to offer equity or debt securities under Regulation S.¹⁶⁷ Regulation S offerings are not subject to full registration in the United States, but must meet certain criteria and comply with the local laws of the countries in which they are offered.¹⁶⁸

Nonetheless, holding a Regulation S offering does not mean the ICO will be welcomed abroad. On September 5, 2017, China outlawed both the initial sale or

161. See SEC, REGULATION CROWDFUNDING: A SMALL ENTITY COMPLIANCE GUIDE FOR ISSUERS n.2 (May 13, 2016, updated Apr. 5, 2017), <https://perma.cc/7GKU-V4LH>; see generally 17 C.F.R. §§ 227.100-.503 (2018).

162. See Press Release, U.S. Securities and Exchange Commission, SEC Adopts Rules to Permit Crowdfunding (Oct. 30, 2015), <https://perma.cc/PDP3-3FQU>.

163. *Id.*

164. See 17 C.F.R. §§ 227.100(a)(3) (2018).

165. 17 C.F.R. § 227.100(a)(1) (2018).

166. 17 C.F.R. § 227.100(a)(2) (2018).

167. 17 C.F.R. §§ 230.901-905 (2018).

168. *Id.*

ICO and the secondary trading of digital tokens, stating that the financing mechanism is illegal under PRC law.¹⁶⁹ Chinese regulators also made specific reference to the potential of digital tokens for fraud, abuse, and criminal activities.¹⁷⁰ South Korea followed suit shortly thereafter, banning all ICOs on September 29, regardless of whether the offering was already subject to local securities or banking laws.¹⁷¹ The UK's Financial Conduct Authority ("FCA") appears to be taking a case-by-case approach comparable to the SEC's; however, it has issued a warning to potential investors on the perils of ICOs.¹⁷² Further action from the UK FCA is expected as it continues to study the issue.¹⁷³

But a number of countries are courting blockchain and digital token entrepreneurs actively. The Isle of Man, a Crown Dependency located in the Irish Sea, is primarily a financial services center and a known business and tax-friendly jurisdiction.¹⁷⁴ The Isle of Man developed a cryptocurrency legal framework in 2015 and began to solicit interest from would-be ICOs in 2016.¹⁷⁵ The first Isle of Man ICO was held in 2017 by "Adel Ecosystem" and several more are in the regulatory pipeline.¹⁷⁶ Isle of Man ICOs require only a short form registration rather than a license.¹⁷⁷ In the Isle of Man, ICOs are registered with the Isle of Man Financial Services Authority for oversight of AML/CFT; this registration does not constitute full financial services licensing.¹⁷⁸ If, however, the ICO is deemed to be an offering of securities, a "collective investment scheme" license is required by the Isle of Man Financial Services Authority.¹⁷⁹

169. See Chuan and O'Leary, *supra* note 145; see also Wolfie Zhao, *China's ICO Ban: A Full Translation of Regulator Remarks*, COINDESK (Sep. 5, 2017 14:00 UTC), <https://perma.cc/ZQ4D-P8TK> (describing and translating a statement from the Chinese government).

170. *Id.*

171. Cynthia Kim, *South Korea Bans Raising Money Through Initial Coin Offerings* (Sept. 28, 2017 10:46p.m.), REUTERS, <https://www.reuters.com/article/us-southkorea-bitcoin/south-korea-bans-raising-money-through-initial-coin-offerings-idUSKCN1C408N>.

172. See UK FINANCIAL CONDUCT AUTHORITY, *Initial Coin Offerings* (Sep. 12, 2017), <https://perma.cc/BW5Y-RHEJ>.

173. See Damian Fantato, *Digital Currencies Could Be Hit by FCA Regulation*, FT ADVISOR (Oct. 30, 2018), <https://perma.cc/M5XT-MFUH>.

174. Telephone Interview with Brian Donegan, COO, E-Business and FinTech Innovation, Isle of Man Gov't (Oct. 31, 2017) (on file with author).

175. *Id.*

176. *Id.*

177. *Id.*

178. *Id.*

179. *Id.*

Singapore has been a favored destination for ICOs, particularly of foreign companies.¹⁸⁰ Although the Monetary Authority of Singapore declined to regulate virtual currencies, the rapid increase in ICOs led it to issue a clarification statement that digital tokens would have to register as securities if they fell within the legal definition of capital markets products under the Securities and Futures Act and were not exempted.¹⁸¹ Like the United States, Singapore appears to be taking a case-by-case approach but does not appear intent on regulating ICOs as aggressively.

VII. BEST PRACTICES FOR U.S. COMPANIES PLANNING AN ICO

The foregoing review shows that the Securities and Exchange Commission will evaluate digital tokens sold under an ICO based on the factors of the *Howey* test to determine whether such sales constitute an investment contract. Statements from the new SEC chairman clearly indicate that a positive finding is likely to be the default position and rebuttable presumption.¹⁸² With this in mind, we will consider, within the investment contract framework, how a startup can best prepare for an ICO. It must be noted that the opinions expressed herein do not constitute legal advice, and that anyone with the intent of launching an ICO needs to retain legal counsel. The SEC has indicated that its emphasis will be on transparency and protecting investors from fraud and scams.¹⁸³ A start-up company developing a bona-fide blockchain network and digital token system would do well to heed these warnings or potentially face a call from the Enforcement Division's new Cyber Unit.

(1) THE WHITE PAPER

Most ICOs contain a document called a "White Paper" that describes the network to be built and the business to be established. They range in structure from academic-like technical papers, crammed with algorithms and diagrams, to bare-

180. Althaus, *supra* note 147.

181. See Monetary Authority of Singapore, *MAS Clarifies Regulatory Position on the Offer of Digital Tokens in Singapore* (Aug. 1, 2017), <https://perma.cc/R5YL-YAXK>; see also Monetary Authority of Singapore, *A Guide to Digital Token Offerings 2* (Nov. 14, 2017), <https://perma.cc/B97Y-6RUH>.

182. See Jack Mathis, *ICOs Are Securities, 'Don't Know How Much More Clear I Can Be,'*: SEC Chairman, CRYPTOCURRENCY NEWS (Jun. 14, 2018 02:00 CET), <https://perma.cc/Z5UL-USS5>.

183. See SEC, *No Action Letters*, *supra* note 75.

bones marketing leaflets. In the post-DAO world, neither end of the spectrum is acceptable. Although a statutory prospectus under the requirements of Section 10(a) of the 1933 Act are not required, in the Regulation A, D, Crowdfunding, and S options discussed above, the document should contain sufficient information for an investor to make an informed decision. Disclosure to investors and transparency of information will help to demonstrate the viability of the project. In short, the document that the ICO industry calls a white paper needs to resemble a private placement memorandum, even if the information contained therein does not meet all of the statutory requirements of a Section 10(a) prospectus. A Regulation D offering is still a Regulation D offering, regardless of the purpose of the business or the underlying technology employed to raise capital. The disclosures need to resemble investment bank-grade documentation, to inspire investor confidence, meet regulator concerns, and mitigate risk. This means pro forma financial statements, sufficient MD&A, and other elements common to a private placement memorandum.

(2) PROOF OF CONCEPT AND PROTOTYPE

A startup company intending to hold an ICO should already have its network development well underway. Without giving away proprietary IP, startups should make executable code available for prospective investors (or their advisors) to test as a demonstration of the network to be built. This can be as basic as a “proof of concept,” i.e. a demonstration that the project is viable; however, a more robust prototype network, even if self-contained and with limited functionality, is better. Entrepreneurs and coders alike frequently post such software to sites like GitHub, a web-based, version-control software platform for developers.¹⁸⁴

(3) CYBERSECURITY

A benefit of the blockchain network concept is improved security, and the virtual inability to alter or erase an entry once it is coded to the blockchain. However, the security of ICO web platforms, and “digital wallets” that serve as a repository for your tokens, Bitcoin, Ether, etc., is far less certain. A contributing factor to the

184. See GITHUB, <https://perma.cc/YW5N-TT2W> (archived Oct. 28, 2018), for examples of various software projects in development. Most projects on GitHub are open source software-based and posted to demonstrate their technological capabilities, rather than to build a business. Nevertheless, it is one of the standard repositories for software development and highly respected in the tech community.

SEC's selection of the DAO as its test case was the high-profile hack that compromised millions of dollars of invested funds. While this is not directly a securities regulation issue for an ICO, lack of adequate protections for investors during an ICO could give rise to litigation from private investors at a minimum. Cybersecurity measures must protect not only the company but also its investors.

(4) TERMS AND CONDITIONS OF SALE

Terms and conditions of ICOs for US-based start-ups to date have varied greatly. At a minimum, pre-DAO Report, terms and conditions have addressed the mechanism for purchasing tokens, assumption of risk, and contractual boilerplate; many included a statement that the token is not a security.¹⁸⁵

Some companies and attorneys saw the writing on the wall and developed a new form of agreement that has seen increasing adoption—the “Simple Agreement for Future Tokens,” or SAFT. The SAFT project was an outgrowth of a similar document called the “Simple Agreement for Future Equity,” or SAFE, developed in 2013 by Y Combinator, a seed funding accelerator based in Mountain View, California.¹⁸⁶ SAFE is an agreement with an investor that provides rights to equity to the investor without specifying a price for share.¹⁸⁷ It was intended to replace a convertible debt instrument and acts like a warrant, entitling the purchaser to shares in the company. It has been used successfully in Regulation D offerings.

Y Combinator, Angellist (an online startup community), and others built on the work of SAFE to make the SAFT. The impetus behind the SAFT structure is the fact that there is no bright line rule that determines which types of tokens are securities and which are not.¹⁸⁸ Under the SAFT, an investor purchases the right to own tokens once the network is completed.¹⁸⁹ The startup developing the network conducts the sale under an SEC-approved financing method such as Regulation D. Once the network is up and running, the company issues the tokens to the investor, who may use them on the network or sell them, after any contractual or regulatory lock-up period, hopefully at a profit. The company will also be free to sell tokens

185. Retrieved examples include ICO terms and conditions for “Patientory” “Wagerr,” “Storj,” and “Suncontract.” It is unknown whether these terms and conditions are still available online (on file with the author).

186. See *Simple Agreement for Future Equity*, WIKIPEDIA, <https://perma.cc/2GS2-5XQF> (last visited Nov. 15, 2017).

187. See *id.*

188. See Jerry Brito, *The SAFT Is a Symptom of Regulatory Uncertainty*, COINDESK (Nov. 13, 2017 14:00 UTC), <https://perma.cc/J6HE-YYFG>.

189. See THE SAFT PROJECT, <https://perma.cc/KZ9L-CZK6> (last visited Dec. 5, 2017).

on the market, through a private sale or an SEC-approved exchange. Rather than delivering a non-functional, or “pre-functional” token to a user, the company sells a security in the tokens to be developed.¹⁹⁰ The tokens are delivered when the network becomes operational. Whether, on network launch, the token morphs into a utility, a commodity, or something other than a security, is irrelevant for purposes of the initial sale. The SAFT, it is claimed, falls within the US securities regulatory framework by establishing that a security in a token and its network is what is being sold. Yet there is no guarantee that the US Government will agree with this supposition; indeed, both SEC Chairman Clayton’s remarks and the number of subpoenas issued in 2018 would suggest to the contrary.¹⁹¹ The SEC has not commented officially on the SAFT as of the time of this article.

Whether companies opt to use the SAFT or a more traditional securities subscription contracting vehicle may depend on the purpose of the token and blockchain network supporting it. Tokens that share the characteristics of a utility more than an investment vehicle on deployment may benefit from the SAFT. Tokens that are clearly part of an investment opportunity may do well to fall back on a traditional subscription-like agreement.

VIII. STATE OF THE MARKET POST DAO REPORT

The full impact of the DAO Report and subsequent creation of an Enforcement Cyber Unit at the SEC will not be realized for some time. So far, the enthusiasm for ICOs has not dampened, and new ICO announcements come out almost every day. Bitcoin, Ether, and other major cryptocurrencies continue to appreciate at break-neck pace, despite outright legal bans and the scorn and condemnation of billionaire bankers.

The extent to which blockchain start-ups are seeking professional legal advice or continuing to throw caution to the winds remains to be seen. The Cyber Unit is likely to bring more enforcement actions against ICOs, stopping them in their tracks. Yet whether they will focus on obvious fraudulent schemes, with little or no intention of building a network, or on well-meaning but misguided development projects, remains to be seen.

190. See Marco Santori, *Appcoin Law Part 2: The SAFT Solution*, COINDESK (Oct. 3, 2017 12:00 UTC), <https://perma.cc/M94C-XS8L>.

191. See Michaels and Vigna, *supra* note 83; see also Aaron Kaplan, *SEC Subpoenas Show the SAFT Approach to Token Sales Is a Bad Idea*, VENTUREBEAT (Mar. 3, 2018 12:11pm), <https://perma.cc/U598-9WC2>.

For those that choose the conservative route, there is little doubt that the cost to issue an ICO will go up significantly. Lawyers, accountants, SEC-registered token listing platforms, and would-be token investment bankers do not come cheap. Whether this will drive ICOs overseas en-masse remains to be seen.

Regulatory authorities in major bitcoin and token markets such as Russia, Singapore, the UK, and Canada are issuing, if not new regulations, then at least statements, warnings, and investor advisories that tokens might be securities under existing laws. It is also likely that China and South Korea will re-enter the digital token world at some point in the near future, albeit under a new legal framework giving the central government a greater degree of control and regulation.

When we will see legislative or regulatory action in the US is also unknown. It is likely that the government will focus on enforcement actions and further study before they are ready to consider a new rulemaking or suggest developing an enabling statute that might create a new securities financing regulation similar to Regulation Crowdfunding.

In the positive, the DAO Report and Cyber Unit can help to weed out the hucksters and fraudsters, and force new, well-meaning but inexperienced back-of-the-napkin startups to take more time on both product and business development before turning to the market for a large infusion of capital. It may also encourage more industry coordination and development of self-regulation standards and best practices. ICO consultants such as Smith and Crown in Brooklyn, New York are developing their own rating and analysis system for ICOs and publishing review reports on select projects.¹⁹² Others are following suit.¹⁹³ The development of common standards for review, based on sound corporate finance valuation principles, and the advent of premier “ratings agencies,” for lack of a better term, will serve the token finance community well, addressing the SEC’s valid concern of investor protection. Such developments are not on the immediate horizon.

The flip side of the SEC’s concern is not being addressed, however. Like the gold rush miners of the mid-19th century who overpaid for mining supplies and bad claims to con artists and schemers, today’s blockchain entrepreneurs are potential prey for huckster “consultants,” charging six figure fees and double-digit

192. See SMITH + CROWN, <https://perma.cc/NVK6-WMAG> (archived Oct. 27, 2018).

193. Websites that provide ICO ratings and analysis continue to proliferate. See, e.g., ICOBENCH, <https://perma.cc/568P-HHJ> (archived Nov. 10, 2018); ICORATING, <https://perma.cc/E8L3-6J8G> (archived Nov. 10, 2018).

percentages of raised capital for their so-called experience. If the ICOs are cockroaches on the market, the leeches that would prey upon them must also be regulated, if not prosecuted.

IX. CONCLUSION

What digital tokens are and how they function varies greatly from network to network and startup to startup. Is the token a share of equity? Does it grant the right to future profits? Do token-holders get a say or a vote in the future of the network or the company building it? How is the token used on the network? Is a token sold before it can be used analogous to the pre-sale of a future product or service, or does it have independent value? Does it matter whether the tokens, once purchased, can be resold right away? Does it matter how they are sold, whether on a central exchange or privately, peer-to-peer? Even if the answer to every question above is in the negative, can it still be considered a security?

Digital tokens have the potential to radically change the way companies go about capital formation and fundraising. Through the invention of “smart contracts” and other hard coded algorithms, digital token sales can bypass or significantly reduce the dependence on expensive traditional financial services providers, leaving greater funding available for product and market development. At the same time, there is a real need for regulatory supervision to prevent fraud on the public, and to provide companies with a degree of certainty and a framework to assess whether their tokens are securities.

The SEC has clearly drawn a line in the sand by asserting regulatory authority over ICOs pursuant to the *Howey test*. Major international regulators have followed suit, although known tax and business-friendly jurisdictions appear to be establishing light-touch regulatory frameworks to attract investment. Creators of digital tokens intent on holding an ICO must therefore perform a careful, thorough legal and technical analysis before offering tokens for sale.

Yet the law is by no means settled and additional questions within the subject of this paper remain. Can pre-sale tokens convert from a security to a commodity or something else? Will there or should there be a new SEC regulation category to encourage ICOs while protecting investors, similar to Regulation Crowdfunding? Can blockchain technology developers create a legally-binding, technology-based framework to eliminate the need for investment bankers, lawyers, and accountants, solving the capital finance equivalent of the Byzantine Generals Problem?

There are many exciting questions yet to be addressed in this rapidly changing new industry. In a very salient way, the development of cryptocurrencies provides an insight into how our profession must evolve. The legal profession must evolve to keep pace with both technical and financial innovations if we are to continue to add value for our clients.