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## For Love or For Profit? – Crafting a Suitable Securities Framework for Initial Coin Offerings

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# FOR LOVE OR FOR PROFIT? – CRAFTING A SUITABLE SECURITIES FRAMEWORK FOR INITIAL COIN OFFERINGS

*Elliot Brake*

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## ABSTRACT

The spectacle of Bitcoin has largely overshadowed the development of the cryptocurrency's underlying structure – the blockchain. The blockchain is a type of digital ledger that performs a number of traditional record-keeping functions in a more efficient and reliable manner. Organizations around the globe continue to invest heavily in blockchain technology for a myriad of purposes. To fund these innovative projects, many organizations hold an Initial Coin Offering (“ICO”) in which “tokens” -- a blockchain's primary means of exchanging value, proving ownership, and/or paying for network services -- are sold to purchasers in exchange for U.S. dollars.

In many ways, ICOs are the modern equivalent of a traditional initial public offering (“IPO”). Tokens are often bought as a financial investment, with purchasers hoping to capitalize on cryptocurrency mania and reap a large return. Indeed, some ICOs have exploited overzealous investors by holding fraudulent ICOs without any real intention of developing a functioning blockchain network. As a result, the Securities and Exchange Commission largely regulates ICOs in the same manner as IPOs, imposing stringent reporting requirements and liability on startups and developers.

However, these bad apples are in the minority and moreover, certain tokens sold through ICOs do not meet the classic definition of a “security.” Utility tokens, in particular, are functionally distinct from a traditional security with any rise in value being incidental to the token's primary utility. Treating all crypto-tokens sold through ICOs as securities stifles development by imposing onerous requirements upon novice developers. Current securities law exemptions are inadequate and given the popularity and success of many ICOs, their offerings should not be forced into poorly tailored regulations. The SEC should acknowledge the unique nature of certain blockchain tokens and provide tailored guidance for future ICOs if this burgeoning industry is to flourish.

## INTRODUCTION

“You can call me Floyd Crypto Mayweather from now on” tweeted the flamboyant professional boxer.<sup>1</sup> Bullish on cryptocurrencies, Mayweather urged his followers to purchase the coins offered by Centra Tech in its Initial Coin Offering (“ICO”).<sup>2</sup> Social media guru DJ Khaled quickly followed suit, describing Centra Tech and its new crypto-token as a “Game changer.”<sup>3</sup> However, the two celebrities failed to disclose the payments each received in exchange for promoting the ICO. Several months later, the SEC filed a civil action against Centra Tech for holding a fraudulent ICO.<sup>4</sup> In conjunction with its enforcement action against Centra Tech, the SEC ordered Mayweather and Khaled to disgorge their payments with interest.<sup>5</sup>

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<sup>1</sup> Press Release, Two Celebrities Charged with Unlawfully Touting Coin Offerings (Nov. 29, 2018), <https://www.sec.gov/news/press-release/2018-268> [<https://perma.cc/BF8W-3HDC>].

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

Both agreed not to promote cryptocurrencies or other securities for several years.<sup>6</sup> Through these celebrity endorsements, Centra Tech hoped to capitalize on the mania surrounding cryptocurrencies and attract customers to its coin offering.

While Centra Tech was ultimately just another fraudulent financial scheme, to many, cryptocurrencies are the printing press of the modern age—a currency for a globalized generation distrustful of traditional institutions. Bitcoin has grabbed headlines with tales of fortunes won and lost, while the technical foundation of cryptocurrencies—the blockchain—has evolved, quietly seeping into new markets and industries. The blockchain is a type of electronic ledger, a system for verifying transactions, maintaining online identities, and transferring digital assets.<sup>7</sup> In many ways, the blockchain is nothing new, providing the same functions as an accountant’s books, a company’s document software, or a bank’s transaction log. It verifies and proves that buyers have the money to spend and sellers actually deliver the product.<sup>8</sup> What distinguishes the blockchain from traditional forms of record-keeping is its integrity, security, and decentralized structure—blockchains remove intermediaries from transactions and record keeping, seeding control to the parties while providing an immutable record of those parties’ actions.<sup>9</sup>

Many blockchain networks utilize cryptographic tokens (“crypto-tokens”) as part of their procedures and protocols. These tokens serve many purposes: as an incentive to encourage active participation in the network, as a marker to signal an ownership interest, and as a fuel to power applications and services.<sup>10</sup> Like Bitcoin, crypto-tokens often have monetary value, a consequence of the token’s utility or the success and size of the network. Thus, crypto-tokens can become appreciated assets whose value may fluctuate over time. For new blockchain projects, the network’s tokens may be the company’s most valuable asset. Quite recently, companies have begun to raise capital through ICOs—a novel type of public sale. Similar to IPOs, investors purchase a blockchain’s tokens using an agreed upon currency; the company receives capital to further develop its network while the buyer receives an appreciable asset.<sup>11</sup> ICOs have exploded in popularity—since 2014 over twenty billion in capital has been raised through initial coin offerings.<sup>12</sup> Despite this success, ICOs pose significant regulatory issues—the SEC has classified many ICOs as investment contracts and labeled various crypto-tokens as securities.

This Comment addresses the current regulatory limbo facing ICOs and companies utilizing blockchain technology. Increased oversight is overdue as blockchain technology continues to grow and adapt, often in ways that harm investors and companies as seen in a number of recent enforcement actions, failed

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<sup>6</sup> *Id.*

<sup>7</sup> See generally Klint Finley & Gregory Barber, *The WIRED Guide to the Blockchain*, WIRED (Jul. 9, 2019), <https://www.wired.com/story/guide-blockchain/> [<https://perma.cc/6435-MKYZ>].

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> Shermin Voshmgir, *Tokens, Cryptocurrencies & Other Cryptoassets*, BLOCKCHAIN HUB BERLIN (2019), <https://blockchainhub.net/tokens/> [<https://perma.cc/B92P-4MU9>].

<sup>11</sup> Jake Frankenfield, *Initial Coin Offering (ICO)*, INVESTOPEDIA (Dec. 20, 2018), <https://www.investopedia.com/terms/i/initial-coin-offering-ico.asp> [<https://perma.cc/5PBP-HG6V>].

<sup>12</sup> *ICO Tracker – Summary Statistics*, COINDESK, <https://www.coindesk.com/ico-tracker> [<https://perma.cc/W5F7-EKFT>] (last visited Apr. 7, 2019).

offerings, and consumer fraud. Furthermore, the meteoric ascension of Bitcoin and Ethereum, the world's most popular cryptocurrencies, attracted hordes of new investors looking to earn quick profits and returns. While certain blockchains and their respective tokens do present as security offerings, to characterize all tokens as securities would injure many blockchain initiatives. Without narrowly tailored regulations, startups and emerging blockchain technology will be stifled by registration requirements and the threat of fines and sanctions. The SEC has a rare opportunity to craft regulations that will accommodate the unique nature of blockchain technology and ICOs while still protecting investors from fraud and other economic harm. ICOs need not be another example of the law failing to catch up with technology. This Comment will attempt to provide recommendations to meet this admittedly lofty goal.

Because blockchain technology is technologically complex, it is first important to establish a firm foundation before applying modern securities laws. Thus, Part I will introduce blockchain technology broadly, beginning with a brief history of its origins as a component of the cryptocurrency Bitcoin. Part I will also explore blockchain functionality and how its benefits are currently applied across various markets. Part II will examine the structure of ICOs, their ostensible purpose, and their execution. Part III will look at the SEC's traditional framework for defining and governing the sale of securities under the Howey Test. The Howey Test is construed broadly and historically and has been applied to a number of non-traditional securities settings. However, the SEC has formally stated that *some* ICOs may qualify as securities offerings, depending on a number of individualized factors and circumstances. Part III will look closely at these factors as well as the various actions (or lack thereof) the SEC has taken against ICOs. Finally, Part IV will forecast the future of ICO regulations, including voluntary attempts by blockchain networks to bring their offerings into compliance with U.S. law.

Defining ICOs as securities offerings and bringing them under the regulatory umbrella of the SEC will have significant benefits to both individual and institutional investors. The greater oversight will almost certainly eliminate the fraudulent offerings and projects that currently plague the industry. However, it is this Comment's position that given the unique character of purpose of blockchain technology, a blanket securities classification would prohibitively disrupt and undermine the small start-ups looking to develop and market products that could revolutionize global transactions.

#### SIGNIFICANCE OF A SECURITIES CLASSIFICATION

As a threshold matter, it is worth addressing the significance of registering ICOs as securities. Given the consequences of running afoul of the SEC, some may wonder why blockchain developers do not simply register their securities and abide by the regulations governing their sale. Some larger-scale ICOs that are integrated within larger companies certainly have the resources and legal counsel to do so safely. However, for small-scale blockchain developers hoping to secure additional funding, registering a token as a security comes with significant burdens. As one commentator notes, "[r]egistration of a traditional underwritten public offering is time consuming and expensive, and, once an issuer becomes public, carries with it

extensive reporting requirements.”<sup>13</sup> For one, Section Five of the Securities Act of 1933 (“‘33 Act”) prohibits the advertising or sale of any security in the absence of an effective registration statement.<sup>14</sup> Registration statements are detailed, requiring, among other things, three years of audited financial statements including any debt obligations, the number of shares, total market capitalization, etc.<sup>15</sup> While the SEC provides relaxed standards for “emerging growth companies,” even these reduced standards mandate two years of audited financial history.<sup>16</sup> Much of this information is simply unavailable to early-stage blockchain companies who have yet to establish a viable product, customer base, or a financial history complete enough to satisfy registration requirements.

Additionally, virtually any party<sup>17</sup> who helped to prepare the registration statement is strictly liable in law or equity for any material misstatements contained therein.<sup>18</sup> While Section Eleven provides a safe harbor for non-expert statements made in good faith,<sup>19</sup> it is unlikely developers could take advantage of this immunity given the highly technical nature of blockchain products—expert statements would almost certainly be required in any registration statement. More significantly, Rule 10b-5 of the Exchange Act prohibits any fraudulent act or omission in connection with the sale of a security.<sup>20</sup> While Rule 10b-5 requires that a plaintiff properly plead all the necessary elements (including scienter), the Rule remains incredibly popular in securities class actions because it contains an implied private right of action.<sup>21</sup> Rule 10b-5 poses a serious threat to ICOs registered with the SEC; powerful law firms across the country scour the securities landscape for failed offerings, often initiating specious class actions based solely on a security’s decline in value. For example, in *Blue Chip Stamps v. Manor Drug Stores*, the Supreme Court noted how an objectively weak complaint still has substantial value to a plaintiff if he can move past the dismissal and summary judgement stages:

[I]n the field of federal securities laws governing disclosure of information even a complaint which by objective standards may have very little chance of success at trial has a settlement value to the plaintiff out of any proportion to its prospect of success at trial so long as he may prevent the suit from being resolved against him by dismissal or summary judgment. The very pendency of the lawsuit may frustrate or delay normal business activity of the defendant which is totally unrelated to the lawsuit.<sup>22</sup>

Given that blockchain technology is still in its infancy, it is inevitable that some

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<sup>13</sup> Kennedy Luvai, *The End of the ICO Gold Rush: The Regulatory Squeeze on Token Offerings as a Funding Mechanism for Blockchain-Related Ventures?*, 31 UTAH B.J. 20, 20 (2018).

<sup>14</sup> See 15 U.S.C. § 77e(c) (2012).

<sup>15</sup> See 15 U.S.C. § 77aa(1)–(32) (1998).

<sup>16</sup> 15 U.S.C. § 77g(a)(2) (2012).

<sup>17</sup> Including every individual who signed the registration statement as well as the company’s directors, accountants, engineers, appraisers or underwriters.

<sup>18</sup> 15 U.S.C. § 77k(a)(1)–(5) (1998).

<sup>19</sup> See § 77k(b)(3).

<sup>20</sup> 17 C.F.R. § 240.10b-5 (2010).

<sup>21</sup> See *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723, 737 (1975) (characterizing Rule 10b-5 as a “judicial oak which has grown from little more than a legislative acorn”).

<sup>22</sup> *Id.* at 740.

ICOs will collapse and fail, with any tokens losing their monetary value. These failed offerings will be subject to a litany of lawsuits if ICOs are forced to abide by securities regulations. Even a nominal decline in value—contrary to representations made in a prospectus or registration statement—will trigger potential liability. Small ICOs simply do not have the resources to defend such lawsuits and will needlessly expend funds combating their claims.<sup>23</sup> Furthermore, the SEC’s current registration requirements impose financially onerous burdens on companies. One report by PricewaterhouseCoopers found IPO registration requirements cost companies an estimated \$3.7 million.<sup>24</sup> The average ICO will be unable to afford these costs.

## I. BLOCKCHAIN HISTORY AND FUNCTIONALITY

### A. *Bitcoin Origins*

Since its inception in 2009, the enigmatic cryptocurrency Bitcoin continues to inspire technology zealots, irritate the Department of Justice, and above all, confuse the public.<sup>25</sup> Satoshi Nakamoto, the pseudonymous creator of Bitcoin, envisioned the cryptocurrency as a decentralized payment system for Internet commerce that eschewed financial institutions or third-party intermediaries.<sup>26</sup> Bitcoin itself is nothing more than a line of code, its value derived from the amount in circulation and its use within the economy.<sup>27</sup> Bitcoins are stored in virtual “wallets” consisting of a “public” key and a “private” key.<sup>28</sup> The public key, as the name implies, is publicly available, functioning as an address to which Bitcoins can be sent.<sup>29</sup> By contrast, the private key is a closely guarded cryptographic secret because it permits a wallet’s owner to access, spend, and/or transfer Bitcoins across the network.<sup>30</sup> However, because Bitcoin only exists electronically, the person to whom Bitcoins are sent cannot verify that the sender did not spend the same coins somewhere else,

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<sup>23</sup> Securities law contains a number of exemptions to registration, such as a private placement for accredited investors. *See* Luvai, *supra* note 13, at 20. This option, while attractive, would unfairly limit investment to only the wealthiest individuals or corporations.

<sup>24</sup> Kenyon Briggs, *Taming the Wild West: How the SEC Can Legitimize Initial Coin Offerings, Protect Consumers from Bad Actors, and Encourage Blockchain Development*, 2 *BUS. ENTREPRENEURSHIP & TAX L. REV.* 424, 443 (2018).

<sup>25</sup> *See* Zoë Bernard, *Everything You Need to Know About Bitcoin, Its Mysterious Origins, and the Many Alleged Identities of its Creator*, *BUS. INSIDER* (Nov. 10, 2018), <https://www.businessinsider.com/bitcoin-history-cryptocurrency-satoshi-nakamoto-2017-12#why-would-the-inventor-of-the-worlds-most-important-cryptocurrency-choose-to-remain-anonymous-12> [<https://perma.cc/U6FM-F4NR>].

<sup>26</sup> Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, <https://bitcoin.org/bitcoin.pdf> [<https://perma.cc/AP8W-LRF8>] (last visited Aug. 29, 2019).

<sup>27</sup> David Perry, *Why Bitcoin Has Value*, *NASDAQ* (Jan. 13, 2017, 11:17 AM), <https://www.nasdaq.com/article/why-bitcoin-has-value-cm733313> [<https://perma.cc/YS44-M49N>] (noting that Bitcoin creates value by “splitting a finite currency supply more ways”).

<sup>28</sup> Joseph Guzzetta, *How Bitcoin Works: A Technological Description of Blockchain-Based Cryptocurrencies for Non-Technical Lawyers*, 59 *ORANGE COUNTY L.* 34, 35 (2017).

<sup>29</sup> *Id.*

<sup>30</sup> *Id.* Guzzetta references the collapse of Mt. Gox, a popular Bitcoin wallet and exchange platform, as one prominent example of why private keys are valuable to the user and system. *Id.*

a problem referred to as the “double spending” problem.<sup>31</sup> To resolve this issue in the absence of a trusted third party, Nakamoto theorized that all Bitcoin transactions must be publicly recorded. More importantly, the network must reach a consensus on a single history of transactions that accurately reflects the true order in which Bitcoins were received and spent.<sup>32</sup>

Anticipating the double spending problem, Nakamoto built a solution into the Bitcoin network. Nakamoto introduced a public ledger system where each Bitcoin transaction is collected into a “block” which is then distributed to various nodes in the network.<sup>33</sup> Using a complex cryptographic process known as “hashing,” a group of nodes (“miners”) attempt to reconcile the previous block of transactions with the new block by solving a difficult mathematical puzzle.<sup>34</sup> This process is known as “proof of work” and requires an enormous amount of computing power to properly execute.<sup>35</sup> The result is a permanent and immutable history of every Bitcoin transaction, mathematically “chained” together and organized into blocks.<sup>36</sup> To undermine such a system, an actor would have to alter the entire transaction history (the hash) of that particular coin by redoing the proof of work for that block and every subsequent block—a task that increases exponentially in difficulty as more blocks are added to the chain.<sup>37</sup> This trusted and immutable record of transactions is referred to as the blockchain.

As mentioned, mining and validating a block of transactions requires an immense amount of computing power and thus an immense amount of electricity.<sup>38</sup> To incentivize miners to perform this difficult cryptoanalysis, the Bitcoin blockchain rewards the first miner to solve the block’s mathematical puzzle with newly minted Bitcoin.<sup>39</sup> The release of new Bitcoins serves the dual purpose of distributing new coins into circulation (because no central authority exists, such as a bank, to mint new coins) while also rewarding miners for the electricity and CPU power consumed.<sup>40</sup> Glynn Bird, in an article written in the IBM Watson and Cloud Learning Center provides a succinct summary of the mining process:

As well as securing the list of transactions cryptographically, block chains also provide a distributed consensus of the state of the database. It ensures that value transfers happen once or not at all, giving the application developer the peace of

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<sup>31</sup> Nakamoto, *supra* note 26.

<sup>32</sup> *Id.*

<sup>33</sup> Mike Orcutt, *Blockchain: What Is It?*, MIT TECH. REV., May/June 2018, at 18, 19.

<sup>34</sup> *Id.* at 20; *see also* Guzzetta, *supra* note 28, at 36.

<sup>35</sup> Orcutt, *supra* note 33, at 21.

<sup>36</sup> *Id.* at 22.

<sup>37</sup> Nakamoto, *supra* note 26, at 3; Guzzetta, *supra* note 28, at 37 (observing that by adding the previous block’s hash to the new block, the chain becomes “locked down” such that any fraudulent changes reverberate through the network and become quite obvious). The difficulty of altering a previous block is the central reason why the ledger itself remains secure over time.

<sup>38</sup> For example, a Bitcoin mining operation with 7,000 machines in St. Hyacinthe, Quebec, uses about ten megawatts of electricity a day, more than double the usage of a neighboring hockey arena on a sold-out night. Kathryn Miles, *The Little Coin That Ate Quebec*, MIT TECH. REV., May/June 2018, at 34, 38.

<sup>39</sup> Orcutt, *supra* note 33, at 19.

<sup>40</sup> Nakamoto, *supra* note 26, at 4 (“The steady addition of a constant of amount of new coins is analogous to gold miners expending resources to add gold to circulation. In our case, it is CPU time and electricity that is expended.”).



mind that, once stored, their data is both immutable and trusted. The block chain network effectively picks a random node to generate the next block in the chain by giving that privilege to the node that solves a mathematical task that takes a *lot* of computing power. The node that finds a solution to the problem nominates the next block in the chain and publishes it, where it is verified by others in the network. The winning node is rewarded for this “proof of work” with freshly minted cryptocurrency and transaction fees collected from the transactions’ creators.<sup>41</sup>

The significance of the mining process is that instead of trusting a bank, government, or other financial third party to validate a transaction, trust is mathematically guaranteed throughout the network.<sup>42</sup> The blockchain itself functions as the trusted intermediary through which transactions are executed and verified. Consider the following description of the blockchain:

Blockchain is a technology that allows computers connected over the Internet to reach agreement over shared data. A block is a defined storage space over a distributed network of such computers. Every time these computers—called nodes—cryptographically reach agreement over a transaction, a new block gets added to the last transaction in the chain of blocks. In this way, each transaction gets permanently recorded and sequentially updated, thereby keeping an inerasable historical trail of transactions starting from the very first transaction.<sup>43</sup>

Put a different way “[the] blockchain is an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way.”<sup>44</sup> Because it is so difficult to alter a previous transaction block, the ledger is virtually immune from fraudulent changes.

However, it is also worth noting the Bitcoin ledger is functionally restricted—it can only track and authenticate the movement of Bitcoins from one address to the next. Nakamoto’s primary impetus for creating the blockchain was to solve the double spending problem inherent in non-tangible digital assets.<sup>45</sup> Nakamoto was not concerned with creating a general purpose blockchain that could verify any kind of transaction, he was only interested in developing a new digital currency.

### B. *Blockchain Applications in the Market*

Since 2013, Bitcoin has experienced an astronomical rise in value—on May 20, 2013, a single Bitcoin was worth 131 U.S. dollars,<sup>46</sup> but by December 17, 2017, it

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<sup>41</sup> Glynn Bird, *Block Chain Technology, Smart Contracts and Ethereum*, IBM DEVELOPER (May 19, 2016), <https://developer.ibm.com/clouddataservices/2016/05/19/block-chain-technology-smart-contracts-and-ethereum/> [<https://perma.cc/MVM4-QWGY>].

<sup>42</sup> *What is Bitcoin Mining?*, BITCOINMINING.COM, <https://www.bitcoinmining.com/> [<https://perma.cc/C7E4-Z9M4>] (last visited Aug. 30, 2019) (“The primary purpose of mining is to allow Bitcoin nodes to reach a secure, tamper-resistant consensus.”).

<sup>43</sup> Jaipat Jain, *Introduction to Blockchain for Lawyers*, N.Y.C. BAR ASS’N, (May 10, 2018), at 20180510P NYCBAR 1).

<sup>44</sup> Marco Iansiti & Karim Lakhani, *The Truth About Blockchain*, HARV. BUS. REV. (Jan.-Feb. 2017), <https://hbr.org/2017/01/the-truth-about-blockchain> [<https://perma.cc/64WC-XTFN>].

<sup>45</sup> Nakamoto, *supra* note 26, at 2.

<sup>46</sup> *Bitcoin Price*, MARKETS INSIDER, <https://markets.businessinsider.com/currencies/btc-usd> [<https://perma.cc/N8QB-YGQ2>] (last visited Oct. 29, 2019).

was worth almost twenty thousand U.S. dollars.<sup>47</sup> The almost absurd rise in value led many financial experts to declare the currency an economic bubble, the result of intense speculation and an overhyped market.<sup>48</sup> One need only take a look at recent Bitcoin headlines to see the media's obsession with the currency's value, its illicit use, and the general confusion regarding its existence.<sup>49</sup> Much of this criticism is warranted; the currency's history is marred by fraud, contraband, and fortunes won and lost.<sup>50</sup> However, this fixation obfuscates the truly innovative nature of Bitcoin's underlying technology: the blockchain itself.<sup>51</sup>

While the Bitcoin network may have been the blockchain's first practical application, it soon became apparent the technology had significant potential to support the world's increasingly complex web of transactions. For one, any application run on the blockchain does not require its own storage; transaction records are stored across the distributed network.<sup>52</sup> Furthermore, the decentralized ledger distribution provides a trusted consensus—a function currently performed by third party intermediaries.<sup>53</sup> Additionally, anonymity is inherent to the structure of the blockchain, and while this feature has been widely disclaimed by the media as a tool of online drug dealers, it is easy to envision a different application in which anonymity is essential.<sup>54</sup>

Smart contracts have emerged as one viable application for the blockchain; negotiated terms and conditions are encoded onto the blockchain and important events are automatically executed upon the occurrence of specified conditions.<sup>55</sup> The

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<sup>47</sup> David Morris, *Bitcoin Hits a New Record High, But Stops Short of \$20,000*, FORTUNE (Dec. 17, 2017), <http://fortune.com/2017/12/17/bitcoin-record-high-short-of-20000/> [<https://perma.cc/B55P-9KY4>].

<sup>48</sup> *Id.*

<sup>49</sup> See, e.g., Binyamin Appelbaum, *Is Bitcoin a Waste of Electricity, or Something Worse?* N.Y. TIMES (Feb. 28, 2018), <https://www.nytimes.com/2018/02/28/business/economy/bitcoin-electricity-productivity.html> [<https://perma.cc/2NMR-CU3W>]; Noah Smith, *Yep, Bitcoin was a Bubble. And it Popped*, BLOOMBERG (Dec. 11, 2018), <https://www.bloomberg.com/opinion/articles/2018-12-11/yeah-bitcoin-was-a-bubble-and-it-popped> [<https://perma.cc/BZ2X-92BX>].

<sup>50</sup> See, e.g., Manoj Sharma, *5 Bitcoin Disasters of All Time; Why It's Never Safe to Invest in Virtual Currency*, BUSINESS TODAY, <https://www.businesstoday.in/exclusive/rebrain-or-rot/bitcoin-disasters-virtual-currency-cryptocurrency-invest-in-bitcoin/story/265555.html> [<https://perma.cc/G8R5-6EV9>] (last updated Dec. 22, 2017); Nathaniel Popper & Rachel Abrams, *Apparent Theft at Mt. Gox Shakes Bitcoin World*, N.Y. TIMES (Feb. 24, 2014), <https://www.nytimes.com/2014/02/25/business/apparent-theft-at-mt-gox-shakes-bitcoin-world.html> [<https://perma.cc/2ACX-Z292>].

<sup>51</sup> See also Iansiti & Lakhani, *supra* note 44 (describing blockchains not as disruptive technology that will usurp traditional business models but as a foundational technology with “the potential to create new foundations for our economic and social systems”); Michael Casey & Paul Vigna, *In Blockchain We Trust*, MIT TECH. REV. 10, 12 (May/June 2018) (“The real promise of blockchain technology, then, is not that it could make you a billionaire overnight or give you a way to shield your financial activities from nosy governments. It’s that it could drastically reduce the cost of trust by means of a radical, decentralized approach to accounting—and, by extension, create a new way to structure economic organizations.”).

<sup>52</sup> Bird, *supra* note 41.

<sup>53</sup> *Id.*

<sup>54</sup> *Id.*

<sup>55</sup> *We Have a Few Words for You*, MIT TECH. REV. 25, 25 (May/June 2018) (defining smart contracts as “a computer program stored in a blockchain that automatically moves digital assets between accounts if conditions encoded in the program are met. It serves as a way to create a mathematically guaranteed

Ethereum Project is one popular platform for building and executing smart contracts.<sup>56</sup> Applications created in Ethereum “can hold value, store data, and encapsulate code to perform computing tasks,”<sup>57</sup> functionality applicable to a broad range of services. Like all public blockchains, the cryptography and hashing algorithms needed to ensure the accuracy and reliability of transactions requires immense computing power distributed across the network. In the case of Ethereum, the network pays for computing power through the exchange of the network’s native token “Ether.”<sup>58</sup> Ether is “the crypto-fuel for the Ethereum network” and is exchanged between developers and miners alike.<sup>59</sup> Thus, any application running on the Ethereum platform requires Ether to validate transactions or execute contract. Similar to Bitcoin, Ether may be acquired through mining (successfully completing the proof of work needed to verify a block of transactions) or purchased on a secondary exchange.<sup>60</sup>

In many ways, the Ethereum platform was the spark that illuminated the potential of blockchain technology. On a commercial level, companies across various industries have begun to develop blockchain products. For instance, in the financial sector, both Goldman Sachs and JP Morgan recently contributed capital to blockchain start-up Axoni, helping the company to raise thirty-two million dollars in funding.<sup>61</sup> Even more notably, Axoni partnered with the Depository Trust and Clearing Corporation (“DTCC”), a behemoth in the post-trade securities processing industry, to convert DTCC’s Trade Platform Warehouse (which services virtually every derivatives dealer across the globe) to a blockchain platform.<sup>62</sup> Axoni’s technology advertises robust data privacy, full lifecycle management, and automated regulatory reporting as some of blockchain’s many benefits.

Even the State Department has begun exploring blockchain technology as the Department updates their IT infrastructure.<sup>63</sup> For example, a spokesman for the Department identified foreign aid as one possible application for blockchains, helping to combat fraud, corruption and inefficiency within the distribution chain.<sup>64</sup> In a similar vein, the World Food Programme recently instituted “Building Blocks”—a blockchain application designed to reduce the transaction costs associated with

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promise between two parties.”); Tiffany L. Minks, *Ethereum and the SEC: Why Most Distributed Autonomous Organizations are Subject to the Securities Act*, 5 TEX. A&M L. REV. 405, 406 (noting that “[o]nce certain terms within the contract are fulfilled, the smart-contract automatically moves to the next step without any human input required.”).

<sup>56</sup> Bird, *supra* note 41.

<sup>57</sup> *Id.*

<sup>58</sup> Minks, *supra* note 55, at 413-14.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at 414.

<sup>61</sup> Michael Castillo, *Goldman Sachs and J.P. Morgan Join \$32M Series B in Enterprise Blockchain Startup Axoni*, FORBES (Aug. 14, 2018), <https://www.forbes.com/sites/michaeldelcastillo/2018/08/14/goldman-sachs-and-jp-morgan-join-32m-series-b-in-enterprise-blockchain-startup-axoni/#5dfb230a6276> [<https://perma.cc/8V LH-DQ2V>].

<sup>62</sup> *Id.* DTCC processes roughly 1.6 quadrillion securities transactions annually. *Id.*

<sup>63</sup> Henry Kenyon, *State Department Ponders Using Blockchain Technology*, CQ ROLL CALL (Oct. 12, 2017).

<sup>64</sup> *Id.*

providing foreign aid.<sup>65</sup> Running on a private version of Ethereum,<sup>66</sup> Building Blocks allows the WFP to transfer cash directly to individuals who then verify their identity using an iris scanner.<sup>67</sup> As of October 2018, more than 100,000 refugees in Jordan redeemed foreign aid through this program, reducing transaction fees by ninety-eight percent.<sup>68</sup>

Beyond humanitarian aid, even the legal profession has taken notice of the blockchain. For example, in a recent *Above the Law* post, finance professor Michael McDonald noted how much of the work attorneys perform involves facilitating the secure transfer of assets<sup>69</sup>—a service that could be made obsolete through blockchain and smart contracts. Another commentator noted that “the underlying technology behind Bitcoin, known as blockchain, is being used by a growing number of companies, banks and financial institutions, and it could fundamentally change the legal industry in the coming years.”<sup>70</sup> Indeed, several companies have begun to offer blockchain based products directly to the legal industry.<sup>71</sup> For example, blockchain start-up Integra recently introduced a “utility” blockchain built on IBM’s own blockchain platform.<sup>72</sup> Integrating directly into a company’s existing document software, Integra is designed to improve data exchanges between law firms and corporate legal departments.<sup>73</sup> Integra’s software does not run on a publicly available blockchain nor is it powered by a cryptocurrency, rather, it is a privately held network “governed by the legal industry itself.”<sup>74</sup>

On a policy level, 250 companies, law firms, and universities recently created

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<sup>65</sup> Russ Juskalian, *The Place Where Life Hangs by a Chain*, MIT TECH. REV. 42, 44 (May/June 2018).

<sup>66</sup> Private blockchain networks will be explained shortly, but in this context, it refers to the WFP’s control over the network’s participants.

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> Michael McDonald, *Lawyers and Bitcoin and Blockchain*, ABOVE THE L. (Jul. 25, 2017), <https://abovethelaw.com/2017/07/lawyers-and-bitcoin/> [<https://perma.cc/S78J-DMFL>] (“From mortgage closings and business sales to divorce proceedings and securities law, asset ‘management’ in many ways enters regularly into the practice of law.”).

<sup>70</sup> Victor Li, *Bitcoin’s Blockchain Technology Being Used in Business, Finance and Contracts*, ABA J. (Mar. 2016), [http://www.abajournal.com/magazine/article/bitcoins\\_underlying\\_technology\\_blockchain\\_gains\\_use\\_in\\_business\\_finance\\_and](http://www.abajournal.com/magazine/article/bitcoins_underlying_technology_blockchain_gains_use_in_business_finance_and) [<https://perma.cc/X8CA-SM9M>].

<sup>71</sup> See *LegalZoom to Offer Smart Legal Contracts with Clause*, PRNEWswire (Sept. 17, 2018), <https://www.prnewswire.com/news-releases/legalzoom-to-offer-smart-legal-contracts-with-clause-300713717.html> [<https://perma.cc/L8K9-R3DV>]; *Smart Legal Contracts: How the Law Benefits with Blockchain*, IBM BLOG (June 27, 2018), <https://www.ibm.com/blogs/blockchain/2018/06/smart-legal-contracts-how-the-law-benefits-with-blockchain-2/> [<https://perma.cc/EU5A-FJCR>]; *NetDocuments Announces Blockchain Integration Proof of Concept*, NETDOCUMENTS (Jan. 31, 2018), <https://www.netdocuments.com/en-us/blog/blockchain-integration-proof-of-concept> [<https://perma.cc/S69X-S5AX>].

<sup>72</sup> *What is the Integra Ledger?*, INTEGRA, <https://integralledger.zendesk.com/hc/en-us/articles/360010251734-What-is-the-Integra-Ledger-> [<https://perma.cc/G2HT-GTEQ>] (last visited Aug. 29, 2019).

<sup>73</sup> *Id.* (noting that the Integra ledger can be used to “confirm authenticity of contracts, confirm contract status, improve security and privacy of documents and contracts”).

<sup>74</sup> *Integra Ledger Launches Tools to Add Blockchain Tech to All Legal Software*, ARTIFICIAL L. (Oct. 16, 2018), <https://www.artificiallawyer.com/2018/10/16/integra-ledger-launches-tools-to-add-blockchain-tech-to-all-legal-software/> [<https://perma.cc/446B-Y3C5>].

the Global Legal Blockchain Consortium to “develop standards to govern the use of blockchain technology in the business of law.”<sup>75</sup> The group helps to facilitate the integration of blockchain platforms (including the Integra ledger mentioned above) into existing legal software.<sup>76</sup> While much of the technology pioneered by these companies remains in its infancy, the trend is unmistakable—blockchain ledger technology is here to stay and the legal industry would be remiss if it was not at least generally familiar with its functions and principles.

### C. *Blockchain Classifications*

While all blockchains generally share similar characteristics (a distributed ledger and cryptographic mechanisms for achieving network consensus<sup>77</sup>), progressive research has led to a functional divergence as new blockchain projects attempt to meet the needs of private industry—creating what are now known as public and private (or “permissioned”) blockchains.<sup>78</sup> In contrast to public blockchains where any participant can join, private blockchains require the network’s permission before a participant is granted entry and allowed to execute the network’s protocols.<sup>79</sup> Private blockchains, which are popular among industries where “security, identity, and role definition are important,”<sup>80</sup> are often configured to restrict access to certain information and provide network participants with a defined role.<sup>81</sup> For example, Ripple is a private blockchain that uses a native crypto-token as a “bridge currency” to assist financial institutions with cross border payments.<sup>82</sup> The Ripple network only permits certain “validators” such as Microsoft or MIT to participate, allowing the network to control new entrants.<sup>83</sup> However, private blockchains such as Ripple have faced criticism for not being decentralized enough.<sup>84</sup>

By contrast, public blockchains such as Bitcoin are open to any participant willing to download the software and execute the consensus protocol. Transactions may be viewed by anyone in the network and certain addresses quickly become linked to specific individuals or organizations. Additionally, they require an

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<sup>75</sup> *What is the GLBC?*, GLOBAL BLOCKCHAIN CONSORTIUM, <https://legalconsortium.org/what-is-the-gbbc/> [https://perma.cc/Z8ZJ-GCSJ](last visited Aug. 29, 2019).

<sup>76</sup> *Id.*

<sup>77</sup> WORLD BANK, *DISTRIBUTED LEDGER TECHNOLOGY (DLT) AND BLOCKCHAIN 5* (2017).

<sup>78</sup> Praveen Jayachandran, *The Difference Between Public and Private Blockchain*, IBM BLOCKCHAIN BLOG (May 31, 2017), <https://www.ibm.com/blogs/blockchain/2017/05/the-difference-between-public-and-private-blockchain/> [https://perma.cc/B3T3-YSWR].

<sup>79</sup> *We Have a Few Words for You*, MIT TECH. REV., May/June 2018, at 25, 25.

<sup>80</sup> *Id.*

<sup>81</sup> Jake Frankenfield, *Permissioned Blockchains*, INVESTOPEDIA (Aug. 17, 2019), <https://www.investopedia.com/terms/p/permissioned-blockchains.asp> [https://perma.cc/6WSK-Y4DW].

<sup>82</sup> *Cryptocurrencies Are Not Created Equal*, MIT TECH. REV., May/June 2018, at 26, 26.

<sup>83</sup> Michael del Castillo, *Ripple’s Distributed Ledger Network Passes 50-Validator Milestone*, COINDESK (July 17, 2017, 8:03 PM), <https://www.coindesk.com/ripples-distributed-ledger-network-passes-50-validator-milestone> [https://perma.cc/A82K-NBAQ]; see also Samburaj Das, *Ripple Unveils Strategy to ‘Become More Decentralized than Bitcoin’*, CCN (Nov. 5, 2017), <https://www.ccn.com/ripple-unveils-strategy-become-decentralized-bitcoin/> [https://perma.cc/UAP3-KKS5].

<sup>84</sup> Das, *supra* note 83. A more practical criticism of private blockchains is that the central entity responsible for controlling the ledger’s participants is vulnerable to cyberattacks. WORLD BANK, *DISTRIBUTED LEDGER TECHNOLOGY (DLT) AND BLOCKCHAIN*, at X (2017).

immense amount of electricity for their proof-of-work and in terms of sheer volume, process far more transactions than private blockchains. Finally, these ledgers most often require crypto-tokens to incentivize network nodes to perform the necessary proof-of-work. While the trust mechanism may be more powerful within a public network, public ledgers lack scalability and continue to struggle with slow transaction processing times.<sup>85</sup>

While a public ledger is essential for Bitcoin to function as a currency, it does little to incentivize private industry adoption where parties have defined roles and little tolerance for slow processing speeds. This is why permissioned or private blockchains are favored among private industry and business enterprises—they permit only identified parties to participate in the network, allow for certain transactions to remain confidential, and are able to scale up processing output to meet network demand.<sup>86</sup> Furthermore, permissioned blockchains generally do not require a native cryptocurrency to incentivize proof-of-work. Instead, each node is incentivized by the desire for lower costs, higher speed and ease of information sharing.<sup>87</sup> By reducing network size and scope, permissioned networks increase processing speed and overall efficiency.<sup>88</sup> However, greater speed and efficiency come at a cost: Permissioned ledgers require a centralized service or authority to grant network entry and trust is achieved through the network's unique consensus algorithm rather than through a public consensus.<sup>89</sup> While the central entity does not process or authenticate transactions, it is still the keyholder to the network itself. Finally, permissioned blockchains are often limited in their ability to transfer digital assets—a necessary feature in the execution and/or deployment of smart contracts.<sup>90</sup>

Whether a blockchain utilizes a private or public ledger has additional consequences relevant to this Comment, specifically the need for a crypto-token. For example, Hyperledger is a fast growing blockchain platform launched by the Linux Foundation and “has become the de-facto standard for enterprise blockchain platforms.”<sup>91</sup> Like Ripple, Hyperledger Fabric is a private ledger marketed to

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<sup>85</sup> See Toshendra Sharma, *What Are the Differences Between Private & Public Blockchain?*, BLOCKCHAIN COUNCIL (July 26, 2017), <https://www.blockchain-council.org/development/difference-private-public-blockchain/> [https://perma.cc/EH8Z-SWT2]; Laura Jaeger, *Public Versus Private: What to Know Before Getting Started with Blockchain*, IBM BLOCKCHAIN BLOG (Oct. 4, 2018), <https://www.ibm.com/blogs/blockchain/2018/10/public-versus-private-what-to-know-before-getting-started-with-blockchain/> [https://perma.cc/5J5K-WEN4].

<sup>86</sup> Jayachandran, *supra* note 78.

<sup>87</sup> Anant Kadiyala, *Nuances Between Permissionless and Permissioned Blockchains*, MEDIUM (Feb. 17, 2018), <https://medium.com/@akadiyala/nuances-between-permissionless-and-permissioned-blockchains-f5b566f5d483> [https://perma.cc/J9LQ-XGL6].

<sup>88</sup> See John Kingston, *Sorting out the Advantages and Disadvantages of Public vs. Private Blockchains*, LINKEDIN (Feb. 3, 2018), <https://www.linkedin.com/pulse/sorting-out-advantages-disadvantages-public-vs-private-john-kingston/> [https://perma.cc/5QDH-BYLG].

<sup>89</sup> *Id.*

<sup>90</sup> Kadiyala, *supra* note 87.

<sup>91</sup> *Hyperledger: Blockchain Collaboration Changing the Business World*, IBM BLOCKCHAIN, [https://www.ibm.com/blockchain/hyperledger?cm\\_mmc=OSocial\\_Blog\\_-\\_Blockchain+and+Watson+Financial+Services\\_Blockchain\\_-\\_WW\\_WW\\_-\\_The+difference+between+public+and+private+blockchain+In+Text+Hyperledger+Webpage&cm\\_mmc\\_a1=000026VG&cm\\_mmca2=10005805&](https://www.ibm.com/blockchain/hyperledger?cm_mmc=OSocial_Blog_-_Blockchain+and+Watson+Financial+Services_Blockchain_-_WW_WW_-_The+difference+between+public+and+private+blockchain+In+Text+Hyperledger+Webpage&cm_mmc_a1=000026VG&cm_mmca2=10005805&) [https://perma.cc/ZRE6-988W] (last visited Aug. 19, 2019).

enterprises with known participants, confidential transactions, and a growing need for fast, decentralized transaction verification.<sup>92</sup> Hyperledger is “cryptocurrency agnostic” meaning the platform does not require a cryptocurrency for the ledger to function.<sup>93</sup> However, token use is not entirely precluded; developers are permitted to “code in” tokens for specific applications, perhaps as a way to manage digital identities, assets, or value transfers.<sup>94</sup>

One Hyperledger platform, Sawtooth, heralds itself as “highly modular,” and “aims to keep distributed ledgers distributed and to make smart contracts safe for enterprise use.”<sup>95</sup> However, because Sawtooth is a blockchain platform designed for generalized enterprise use, some smart contracts deployed on Sawtooth will involve value transfers and will likely require crypto-tokens to facilitate such a purpose.<sup>96</sup> However, smart contracts laden with crypto-tokens are not necessarily permitted to interact with other smart contracts on the platform.<sup>97</sup> This problem is further exasperated by Sawtooth’s generalized operability—the platform supports smart contracts written in different programming languages which, without a shared language, will have difficulty interacting with one another.<sup>98</sup> To solve this problem, developers from the company Pokitdok published a detailed proposal and guide for integrating general token functionality into Hyperledger Sawtooth.<sup>99</sup>

The Pokitdok whitepaper draws attention to limitations of blockchains operating without any token functionality. Say, for example, a supply chain adopted a permissioned blockchain structure to automate and track goods as they traveled through commerce. As with all permissioned networks, the central authority will invite network participants while allocating roles and refining permissions among the participants. If the supply chain needs to interact with a secondary smart contract or a third party, the new entrant will need to be verified and invited into the private network before any value or monetary exchange can occur. Furthermore, if the secondary smart contract uses a programming language different from the other network participants, it will have trouble transferring value or communicating with the central, permissioned blockchain. The Pokitdok white paper attempts to simplify this process by introducing a crypto-token that, when deployed and exchanged by smart contracts operating on a Sawtooth network, will permit value transfers and identify verifications between different “families” of smart contracts.<sup>100</sup> The token

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Hyperledger Fabric, in particular, was recently chosen as the foundation for IBM’s own blockchain platform. *Id.*

<sup>92</sup> *Id.*

<sup>93</sup> *An Introduction to Hyperledger*, HYPERLEDGER, 11 (July 2018), [https://www.hyperledger.org/wp-content/uploads/2018/07/HL\\_Whitepaper\\_IntroductiontoHyperledger.pdf](https://www.hyperledger.org/wp-content/uploads/2018/07/HL_Whitepaper_IntroductiontoHyperledger.pdf) [<https://perma.cc/HWV3-AKR8>].

<sup>94</sup> *Id.*

<sup>95</sup> *Id.* at 25.

<sup>96</sup> Owens & Razet, et al., *Inter-Family Communication in Hyperledger Sawtooth and Its Application to a General Token Functionality*, in *DISTRIBUTED COMPUTING AND INTERNET TECH.* 389-90 (2019).

<sup>97</sup> *Id.* at 390.

<sup>98</sup> *Id.*

<sup>99</sup> See Ian Allison, *Bank-Backed Hyperledger is Slowly Opening to ICOs*, COINDESK (Apr. 10, 2018), <https://www.coindesk.com/bank-backed-hyperledger-slowly-opening-icos> [<https://perma.cc/H9U9-8H3R>].

<sup>100</sup> Owens et al., *supra* note 96, at 400.

itself effectively assumes some of the functions of the central entity, permitting communication, value transfers, and ensuring trust between otherwise isolated applications.<sup>101</sup>

Another Hyperledger progeny titled “Project Indy” recently introduced a blockchain platform designed specifically for decentralized identity verification, aiming to solve the fundamental question of “who am I dealing with?” when doing business online.<sup>102</sup> The lead developer of Project Indy, an organization called the Sovrin Foundation, has begun to explore the possibility of introducing tokens to the Indy network as a means of payment for the network’s decentralized, identity verification services.<sup>103</sup> Eschewing traditional online payment systems that are often slow and tend to prioritize only high value verifications, banks or other institutions would instead pay for identity verification services using Project Indy’s tokens.<sup>104</sup> Purchased from the Indy network itself or from a secondary market, the amount of tokens required will vary according to the size and complexity of the verification requested.<sup>105</sup> Project Indy attempts to find a beneficial compromise between private and public ledgers.<sup>106</sup>

One theme emerging from the various Hyperledger projects is that digital value transfers and identity verifications often require a crypto-token even in the context of permissioned blockchains. Therefore, it would not be unusual for a private blockchain to hold an ICO as a means of distributing such tokens and raise necessary capital. For private, industry level blockchains, ICO token sales would likely be directed towards other industry participants with whom the network is likely to do business. This affords such entities a planning opportunity with respect to securities laws, namely, to secure a registration exemption as a “private placement.”

#### D. Blockchain Token Classifications

Similar to private/public blockchains, crypto-tokens can take many forms. Broadly speaking, crypto-tokens are simply digital substitutions for fiat currency that use cryptography, rather than a central bank or reserve, as its security measure.<sup>107</sup> A crypto-token is a single unit of the cryptocurrency.<sup>108</sup> The most significant difference is quite obviously the digital characteristics of crypto-tokens; they are intangible and ownership is determined according to cryptographic rules rather than physical possession.<sup>109</sup> The SEC has chosen not to classify cryptocurrencies but instead

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<sup>101</sup> See also Luke Owens, *Cryptoasset Framework on Intel’s Hyperledger Sawtooth*, FULLMETALHEALTH (Sept. 28, 2017), <https://fullmetalhealth.com/cryptoasset-framework-intels-hyperledger-sawtooth-part-one/> [<https://perma.cc/H8A8-GFGK>].

<sup>102</sup> Allison, *supra* note 99.

<sup>103</sup> *Id.*

<sup>104</sup> *Id.*

<sup>105</sup> *Id.* (noting, for example, college transcript requests would cost more to verify).

<sup>106</sup> Jonathan Keane, *Why Project Indy is Using Hybrid DLT to Rethink Digital Identity*, COINDESK (May 10, 2017, 1:15 PM), <https://www.coindesk.com/why-hyperledger-project-indy-is-using-hybrid-dlt-to-rethink-digital-identity> [<https://perma.cc/DC35-GF85>].

<sup>107</sup> Edmund Mokhtarian & Alexander Lindgren, *Rise of the Crypto Hedge Fund: Operational Issues and Best Practices for an Emergent Investment Industry*, 23 STAN. J.L. BUS. & FIN. 112, 119 (2018).

<sup>108</sup> *Id.*

<sup>109</sup> *Id.* at 119-20.



defines them according to their particular function within a blockchain, resulting in significant regulatory ambiguity.<sup>110</sup> For example, in its first significant discussion of cryptocurrencies/tokens as securities, the SEC stated:

Accordingly, the Commission deems it appropriate and in the public interest to issue this Report in order to stress 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.<sup>111</sup>

Because of this fact-specific analysis, the SEC has defined some crypto-tokens as “securities” under the traditional Howey Test while labeling others as “commodities.”<sup>112</sup> Thus, before applying any regulatory framework, it is first necessary to accurately describe a crypto-token’s purpose within a blockchain. For example, it is possible that a particular crypto-token is not a crypto-token at all but is better described as a “commodity,” a designation exempting that network’s blockchain from a host of laws and regulations.<sup>113</sup>

To begin, tokens are simply “representation[s] of digital asset[s].”<sup>114</sup> In the context of the Bitcoin and Ethereum blockchains, the networks’ tokens are synonymous with their underlying cryptocurrencies, Bitcoin and Ether respectively. Tokens do not have intrinsic value but may be used to represent anything of value such as currencies (digital or otherwise), commodities, or even identities as mentioned above.<sup>115</sup> Under the general umbrella of tokens, blockchain developers and industry proponents identify three types of tokens within a distributed ledger: user tokens, equity tokens, and debt tokens.<sup>116</sup> User tokens are “a form of digital currency needed to access the service provided by the distributed network.”<sup>117</sup> Conversely, equity tokens finance the network’s development and can be viewed as “cryptographic shares of a network.”<sup>118</sup> Finally, debt tokens are similar to “short term loans” with associated interest rates.<sup>119</sup>

One commentator identifies two categories of tokens: investment and utility.<sup>120</sup>

An investment token is analogous to a traditional security like corporate stock, LLC membership interests, or partnership interests. A utility token is intended to facilitate

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<sup>110</sup> *Id.* at 124.

<sup>111</sup> SEC. & EXCH. COMM’N, RELEASE NO. 81207, REPORT OF INVESTIGATION PURSUANT TO SECTION 21(A) OF THE SECURITIES EXCHANGE ACT OF 1934: THE DAO 10 (2017) [hereinafter *The DAO Report*].

<sup>112</sup> Mokhtarian & Lindgren, *supra* note 107, at 124.

<sup>113</sup> *Id.* at 112 (stating that popular cryptocurrencies such as Bitcoin and Ethereum qualify as commodities rather than securities and thus hedge funds that trade in these commodities are not subject to U.S. securities law).

<sup>114</sup> WORLD BANK, DISTRIBUTED LEDGER TECHNOLOGY (DLT) AND BLOCKCHAIN 13 (2017).

<sup>115</sup> *Id.* at 13, 44 n.22.

<sup>116</sup> Demian Brener, *On Tokens and Crowdsales: How Startups Are Using Blockchain to Raise Capital*, COINDESK (Aug. 20, 2016), <https://www.coindesk.com/tokens-crowdsales-startups> [<https://perma.cc/2K82-6HQL>].

<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> *Id.* Debt tokens have infrequent usage in blockchain platforms and will not be discussed in this Comment.

<sup>120</sup> Luvai, *supra* note 13, at 20.

access to a product or service on the digital platform or network thus deriving value primarily from consumptive use, meaning that it may be analogized to a gift card or software license.<sup>121</sup>

Utility tokens possess a “non-incidental” technical function within the blockchain and are best analogized as the fuel that powers the network’s applications, services, or contracts, whereas equity tokens may represent an ownership interest and/or the right to receive profits.<sup>122</sup> Most commentators and blockchain experts draw distinctions between utility and equity tokens.<sup>123</sup>

For purposes of this analysis, two general types of tokens will be defined and discussed: utility and equity tokens. Utility tokens are necessary for a user to engage with the services offered by a blockchain platform. Equity tokens, by contrast, are “stock” in the network, representing an ownership share and entitling the owner to “proceeds” from the network. Both types of tokens may increase in value as a blockchain increases in scale and efficiency. The nuanced distinctions between utility and equity tokens becomes dispositive when analyzing whether a particular ICO qualifies as a sale of securities under the Howey Test.

## II. THE STRUCTURE AND FUNCTION OF AN INITIAL COIN OFFERING

### A. *The Age of the Initial Coin Offering*

In many ways, an ICO is no different than a traditional IPO—both offerings have the goal of raising capital to fund a company’s future development by selling “shares” of the company to the public. One recent commentator defined ICOs as “a sale of digital assets (‘coins’ or ‘tokens’) to the public by an entity seeking to raise capital.”<sup>124</sup> The origins of the ICO date back to a 2013 Bitcoin conference in San Jose in which a young panelist by the name of J.R. Willett proposed that innovative protocols could be written on top of Bitcoin, containing new features which could be used as advertising to venture capitalists.<sup>125</sup> The developers would then offer a piece of equity in the new protocol to any investor willing to send Bitcoin to the developer’s address.<sup>126</sup> Developers would use the Bitcoin capital to fund the project itself.<sup>127</sup> It would be years before blockchain startups would realize the massive

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<sup>121</sup> *Id.*

<sup>122</sup> Joseph D. Moran, *The Impact of Reg. Measures Imposed on Initial Coin Offerings in the United States Market Economy*, 26 CATH. U. J.L. & TECH. 213, 240 (2018); see also *A SEC Law Framework for Blockchain Tokens*, COINBASE (Dec. 7, 2016), <https://www.coinbase.com/legal/securities-law-framework.pdf> [<https://perma.cc/P6GL-N3HB>].

<sup>123</sup> A recent article on the differences between permissioned and permissionless blockchains also noted two categories of tokens: monetary value and utility tokens. Kadiyala, *supra* note 87. Monetary value tokens are defined as instruments for exchanging value, i.e., they are used to exchange units of value that exist outside the network while utility tokens have no intrinsic value but are necessary for the blockchain’s operation. *Id.*

<sup>124</sup> Moran, *supra* note 122, at 215.

<sup>125</sup> Laura Shin, *Here’s the Man Who Created ICOs and This is the New Token He’s Backing*, FORBES (Sept. 21, 2017), <https://www.forbes.com/sites/laurashin/2017/09/21/heres-the-man-who-created-icos-and-this-is-the-new-token-hes-backing/#3db028531183> [<https://perma.cc/U6KD-WKMC>].

<sup>126</sup> *Id.*

<sup>127</sup> *Id.*

potential in Willett's idea but when they finally did, the momentum was electrifying.

While an IPO is a significant milestone for any company, most often occurring many years into a company's lifespan, ICOs, by contrast, are often the *first* step a blockchain-based company takes in its business growth and development. Indeed, with the rise of so many blockchain projects, companies are increasingly turning to ICOs to raise initial capital for the development of products.<sup>128</sup> For example, in 2017, roughly 350 ICOs were held across the world, raising almost \$6 billion in capital.<sup>129</sup> This figure was quickly surpassed in the first ten months of 2018: 450 ICOs raised almost \$14 billion in capital.<sup>130</sup> In terms of capital raised, the average ICO size is also rising rapidly: increasing from \$5.96 million in 2016 to \$25.72 million by the end of 2018.<sup>131</sup> This staggering increase in capital and the number of ICOs held is indicative of their potency and effect on the market. For example, the total market capitalization for cryptocurrencies rose from \$17.7 billion to over \$650 billion by the end of 2017, a 2700% increase over the year, a feat that took the S&P 500 several decades to achieve.<sup>132</sup>

The specific structure of an ICO depends on the nature and function of the token being offered. Most ICOs begin with the publication of a white paper describing the project and the token offered.<sup>133</sup> Tokens are generally offered as either utility tokens (granting the purchaser future access to the blockchain's services) or as equity tokens (representing a "share" in the company).<sup>134</sup> Coindesk, the leading informational and news site for blockchain technology,<sup>135</sup> recently detailed the differences between equity and utility token ICOs.<sup>136</sup> With respect to utility ICOs, after publishing a white paper, companies will typically release the network's source code to the general public before deploying the network itself.<sup>137</sup> Once the network is initially active, tokens can be acquired through mining or by purchasing them directly from a miner.<sup>138</sup> As demand for the network's services grows, so does the demand for its utility tokens, increasing their value within the network. Selling utility tokens at such an early stage allows developers to gauge demand for the network.<sup>139</sup> If a large number of users participate in the ICO, developers are gifted the capital needed to scale the network accordingly, but if demand does not reach a certain threshold, developers have the option of halting the project and refunding any capital.<sup>140</sup> Thus, developers are able to avoid wasting substantial capital on a project with little

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<sup>128</sup> *Spotlight on Initial Coin Offerings (ICOs)*, SEC. & EXCH. COMM'N., <https://www.sec.gov/ICO> [<https://perma.cc/5LUV-5YXE>] (last visited Aug. 30, 2019).

<sup>129</sup> *ICO Tracker*, *supra* note 12.

<sup>130</sup> *Id.*

<sup>131</sup> *Id.*

<sup>132</sup> Moran, *supra* note 122, at 223.

<sup>133</sup> *Id.* at 215.

<sup>134</sup> *Id.*

<sup>135</sup> See COINDESK, <https://www.coindesk.com/about> [<https://perma.cc/LBU6-25PA>] (last visited Apr. 22, 2019).

<sup>136</sup> Brener, *supra* note 116.

<sup>137</sup> *Id.*

<sup>138</sup> *Id.*

<sup>139</sup> Moran, *supra* note 123, at 241.

<sup>140</sup> *Id.*

potential or appeal.

Equity tokens, by comparison, bear a stronger resemblance to a traditional IPO. After publishing a white paper, the company will typically create a smart contract to be administered and deployed by the central developers.<sup>141</sup> The developers will then advertise the sale of equity tokens, representing an ownership interest in the project, using the capital received to grow the network's functionality.<sup>142</sup> As the efficacy of the network increases, so does the value of the token.<sup>143</sup> Equity ICOs are effectively selling an ownership stake in the blockchain project, representing a right to receive future profits as opposed to a mechanism needed to access the network's services. Thus, participants in an equity ICO are more likely to consider their tokens as an investment rather than as a tool or a commodity.

Besides publishing a white paper, there are other similarities between equity and utility ICOs. For one, both utility and equity tokens may be sold in secondary markets, leading to an often capricious fluctuation in value.<sup>144</sup> Additionally, almost all token purchases require the buyer to exchange either U.S. currency or other cryptocurrencies (typically Bitcoin or Ethereum) for the token offered in the ICO.<sup>145</sup> Finally, while equity tokens represent more of a traditional "share" in a company, both types of tokens have the potential to appreciate as the network's profitability grows. The difference is that a utility token's increase in value is more incidental to the broader success of the network rather than an end in and of itself.

### B. *Examples of Successful ICOs*

Before examining the flawed ICOs launched in the last several years, it is worth drawing attention to a few of the more successful ones that may exemplify a positive model for how ICOs should operate. In terms of sheer capital raised, the largest ICO to date occurred in 2018 by the Cayman-based EOS company.<sup>146</sup> EOS raised a staggering \$4.2 billion in capital<sup>147</sup> through an ICO in which purchasers exchanged Ether tokens from the Ethereum network for new EOS tokens.<sup>148</sup> Commentators were astounded by the amount raised, especially for a company that had not formally launched a product yet.<sup>149</sup> EOS is a platform for running decentralized applications such as smart contracts and has heavily marketed itself as a direct competitor to

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<sup>141</sup> Brener, *supra* note 116.

<sup>142</sup> *Id.*

<sup>143</sup> *Id.*

<sup>144</sup> Moran, *supra* note 122, at 215.

<sup>145</sup> *Id.* at 224; *Investor Bulletin: Initial Coin Offerings*, SEC. & EXCH. COMM'N (Jul. 25, 2017), [https://www.sec.gov/oiea/investor-alerts-and-bulletins/ib\\_coinofferings](https://www.sec.gov/oiea/investor-alerts-and-bulletins/ib_coinofferings) [<https://perma.cc/PRT5-XAQA>].

<sup>146</sup> *ICO Tracker*, *supra* note 12.

<sup>147</sup> *Id.*

<sup>148</sup> Kate Rooney, *A Blockchain Start-Up Just Raised \$4 Billion Without a Live Product*, CNBC (May 31, 2018), <https://www.cnbc.com/2018/05/31/a-blockchain-start-up-just-raised-4-billion-without-a-live-product.html> [<https://perma.cc/MR7L-426D>].

<sup>149</sup> *Id.* For example, on his popular late-night show "Last Week Tonight," John Oliver noted that "[i]t can be incredibly hard to tell which companies are for real." *Id.*

Ethereum.<sup>150</sup> With a novel consensus algorithm, a discrete group of dedicated miners (twenty-one, to be specific), and a different proof of work system, EOS promises a more expedited and scalable network interface that can process one million transactions per second with the potential for even more.<sup>151</sup> It remains to be seen if the EOS blockchain will emerge as a viable product. Over 100 applications are currently hosted on the EOS blockchain with the largest having 6000 daily active users.<sup>152</sup> However, the network faced criticism for its consensus mechanism which values speed over integrity while others noted how the centralized authority functions as a single point of failure.<sup>153</sup> The EOS token itself is best described as an equity token; it has no actual use within the network but any developer looking to launch its own application on the EOS blockchain must use the EOS tokens to generate its own application's tokens.<sup>154</sup> Thus, the token serves a gatekeeping function.

Setting aside the amount of capital raised, the 2014 Ethereum ICO represents one of the most effective and practical token offerings to date. The Ethereum offering was not an ICO in the modern sense of the term but is better described as a "crowd-sale" rather than a formal token offering. For its time, the Ethereum crowd-sale was a massive success raising \$18 million through the exchange of Bitcoin for Ethereum's Ether token.<sup>155</sup> The \$18 million, managed by the platform's governing non-profit,<sup>156</sup> was used to launch "Frontier," the network's first smart contract protocol which formally opened to developers eighteen months after the crowd-sale.<sup>157</sup> While not termed an ICO at the time, the Ethereum crowd-sale had many similarities to a typical ICO. For example, the sale was preceded by a white paper detailing the proposed technology.<sup>158</sup> Perhaps anticipating the problems associated with Ether tokens being labeled as investments or securities, the Ethereum developers included the following disclaimer on its website: "Ether is a product, NOT a security or investment offering. Ether is simply a token useful for paying transaction fees or building or purchasing decentralized application services on the

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<sup>150</sup> James Risberg, *What is EOS? Everything You Should Know*, COIN CENTRAL (Oct. 28, 2018), <https://coincentral.com/what-is-eos/> [<https://perma.cc/R6L9-RRN9>].

<sup>151</sup> *Id.*

<sup>152</sup> *Id.*

<sup>153</sup> Fredrik Vold, *Storm is Coming: "EOS is not a Blockchain,"* CRYPTONEWS (Nov. 2, 2018), <https://cryptonews.com/news/storm-is-coming-eos-is-not-a-blockchain-2862.htm> [<https://perma.cc/X783-HCKN>]; *see also* EOS (EOS), CRYPTONEWS, <https://cryptonews.com/coins/eos/> [<https://perma.cc/4ME3-HXAL>] (last visited Apr. 22, 2018) (noting that the value of EOS tokens has fallen from a high of over twenty dollars in May 2018 to a little less than three dollars in November 2018).

<sup>154</sup> Risberg, *supra* note 150. Any developer wishing to launch an EOS application must be approved through a vote in which only EOS token holders may participate. This "voting share" is certainly reminiscent of traditional shareholder powers. *Id.*

<sup>155</sup> Alyssa Hertig, *Who Created Ethereum?*, COINDESK, <https://www.coindesk.com/information/who-created-ethereum> [<https://perma.cc/YS4X-UG5E>] (last visited Apr. 22, 2019).

<sup>156</sup> *Id.* The Ethereum Foundation is based out of Switzerland.

<sup>157</sup> Grace Caffyn, *Ethereum Launches Long-Awaited Decentralized App Network*, COINDESK (Jul. 30, 2015), <https://www.coindesk.com/ethereum-decentralized-app-network-launch> [<https://perma.cc/7VZ4-W7LJ>]. It was at the time of Frontier's launch that participants were actually presented with the Ether purchased.

<sup>158</sup> Hertig, *supra* note 155.

Ethereum platform; it does not give you voting rights over anything, and we make no guarantees of its future value.”<sup>159</sup>

Despite this disclaimer, early purchasers of Ethereum were richly rewarded for their investment; the crypto-token launched in 2015 with a value of less than a dollar, rose to over \$1250 before settling at \$168.99 as of April 22, 2018 – currently the second most valuable cryptocurrency.<sup>160</sup> Writing for the Texas A&M Law Review, Tiffany L. Minks reasoned that Ether is best viewed as a stock or share in a company because of its frequent exchanges on secondary markets.<sup>161</sup> Despite this characterization, the SEC has brought no enforcement actions against Ethereum.

What has made Ethereum so successful is the prolific effect the platform has had on blockchain technology broadly. For one, Ethereum is credited with first reducing smart contracts to practice and its ERC-20 token is often the standard followed by blockchain platforms looking to adopt a crypto-token. Additionally, the ERC-20 token standard provides developers launching their own unique token with a common set of parameters, permitting seamless interactions with other smart contracts and decentralized applications.<sup>162</sup> The ERC-20 token has made substantial contributions to the development of blockchain technology; without the initial capital generated from the Ethereum crowd sale, blockchain technology would still be in its infancy.

### C. *The DAO report: A Failed ICO*

For many years, the SEC was largely silent on regulating ICOs—likely because of the substantial uncertainty regarding the proper characterization of cryptocurrencies. However, this hands-off approach changed in July 2017 with the SEC’s release of the DAO Report.<sup>163</sup> The DAO Report is an excellent case study in ICOs, their intersection with U.S. securities law, and how, despite claims of robust cyber security, permissioned blockchains remain vulnerable to cyber-attacks. DAO stands for Distributed Autonomous Organization and is effectively a virtual corporation whose structure and participation is dictated entirely by computer code.<sup>164</sup> Created by a German company known as Slock.it, the DAO functioned as a venture capital fund administered entirely through the blockchain. The DAO’s objective was to use the capital generated from the sale of equity tokens in an ICO to purchase a body of assets.<sup>165</sup> The equity tokens were purchased using Ether, the

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<sup>159</sup> Victoria van Eyk, *Ethereum Launches Own ‘Ether’ Coin, with Millions Already Sold*, COINDESK (Jul. 23, 2019), <https://www.coindesk.com/ethereum-launches-ether-coin-millions-already-sold> [<https://perma.cc/9LNT-EP7E>].

<sup>160</sup> See *Ethereumprice*, <https://ethereumprice.org/> [<https://perma.cc/P68S-5DEA>] (last visited Apr. 22, 2019).

<sup>161</sup> Tiffany Minks, *Ethereum and the SEC: Why Most Distributed Autonomous Organizations are Subject to the Registration Requirements of the Securities Act of 1933*, 5 Tex. A&M L. Rev. 405, 413 (2018).

<sup>162</sup> *What is an Ethereum Token: The Ultimate Beginner’s Guide*, BLOCKGEEKS (2017), [https://blockgeeks.com/guides/ethereum-token/#ERC20\\_Ethereum\\_Standard\\_For\\_Tokens](https://blockgeeks.com/guides/ethereum-token/#ERC20_Ethereum_Standard_For_Tokens) [<https://perma.cc/97FR-9H23>].

<sup>163</sup> Mokhtarian, *supra* note 107.

<sup>164</sup> The DAO Report, *supra* note 111, at 1.

<sup>165</sup> *Id.*

idea being token holders would vote on what assets the DAO would invest in and would then be entitled to any “dividends” resulting from that investment.<sup>166</sup> The DAO blockchain was a permissioned ledger that functioned according to the parameters of a smart contract written by the Slock.it creators.<sup>167</sup>

The DAO ICO was held over the course of a month (April 30, 2016 to May 28, 2016) and issued approximately 1.15 billion DAO tokens in exchange for \$150 million of Ether.<sup>168</sup> Like most ICOs, the DAO first published a whitepaper,<sup>169</sup> created a website, and heavily advertised its project while encouraging participation in its ICO.<sup>170</sup> Slock.it permitted the DAO’s code to be open source, delivering it to the Ethereum community for examination or possible reuse.<sup>171</sup> Concerns about the code’s integrity began to emerge near the end of the offering period and in response, Slock.it instituted a moratorium on project funding until the vulnerabilities could be fixed.<sup>172</sup> Despite these precautions, on June 17, 2016, an unknown attacker managed to exploit a vulnerability in the code and successfully diverted nearly a third of the network’s pooled Ether (\$3.6 million) to an address held by the attacker.<sup>173</sup>

What began as an admirable attempt to revolutionize the structure of corporate governance and investing, ultimately ended in disaster. It is no wonder the SEC chose this case as their first formal foray into ICOs. Indeed, in their application of the “securities” definition under the Howey Test, the SEC closely examined the true functionality of the DAO tokens.<sup>174</sup> The SEC noted that the voting rights among token holders were limited – voting was restricted to investment proposals that were approved by the Slock.it founders.<sup>175</sup> Additionally, because many of the network’s participants were anonymous to one another, it was difficult for the token holders to join together to exercise “meaningful control” over the network.<sup>176</sup> The SEC contended that the rights of the token holders were more akin to traditional corporate shareholders who were forced to rely on the managerial efforts of Slock.it as the founders of the network.<sup>177</sup> Thus, the SEC concluded the DAO tokens had many characteristics of securities and were best classified as such.

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<sup>166</sup> *Id.*

<sup>167</sup> *Id.* at 3.

<sup>168</sup> *Id.* at 2-3.

<sup>169</sup> See Christoph Jentzsch, *Decentralized Autonomous Organization to Automate Governance*, <https://download.slock.it/public/DAO/WhitePaper.pdf> [<https://perma.cc/L4KV-BGPQ>] (last visited Apr. 22, 2018). The DAO’s intended purpose was “[t]o blaze a new path in business for the betterment of its members, existing simultaneously nowhere and everywhere and operating solely with the steadfast iron will of unstoppable code.” The DAO Report, *supra* note 111, at 5.

<sup>170</sup> *Id.*

<sup>171</sup> *Id.*

<sup>172</sup> *Id.* at 9.

<sup>173</sup> *Id.* It is interesting to note that the DAO attack was mitigated by a “hard fork” undertaken by the Ethereum network. The Ethereum network changed its protocol and successfully diverted all of the Ether raised by the DAO to a recovery address where DAO token holders could make exchanges and recover their ETH.

<sup>174</sup> *Id.* at 13-15.

<sup>175</sup> *Id.* at 14.

<sup>176</sup> *Id.*

<sup>177</sup> *Id.* at 15.

## III. THE HOWEY TEST AND SEC ENFORCEMENT ACTIONS

## A. Defining “Securities” and “Investment Contracts”

While the DAO Report was the SEC’s first substantive inquiry into initial coin offerings, it was not long before the Commission turned its regulatory powers to other ICOs. Before detailing these regulatory actions, it is first necessary to explain the framework the SEC uses when evaluating ICOs, specifically the regulatory regimes of the Securities Act of 1933 (the “’33 Act”), the Exchange Act of 1934 (the “’34 Act”) and most importantly, the three prongs of the famous Howey Test. The ‘33 Act and the ‘34 Act require issuers and sellers of securities to undertake a number of affirmative actions before selling or trading in instruments classified as securities.

For example, the ‘33 Act requires any issuer of securities to complete a detailed registration statement with the SEC or otherwise file for a specific exemption.<sup>178</sup> The ‘33 Act also authorizes private actions against sellers of securities for misleading statements or material omissions contained in registration statements.<sup>179</sup> Compounding the powers of the ‘33 Act, the ‘34 Act imposes further anti-fraud liability against issuers and sellers of securities, as well as additional disclosure requirements.<sup>180</sup> For example, the ‘34 Act’s Rule 10b-5 authorizes private actions for “devices, schemes . . . to defraud” or for “any untrue statement of material fact.”<sup>181</sup> Taken together, commentators note that “many businesses regard the detailed and complex disclosures required in registration statements, and the large fees charged by securities lawyers, as burdensome.”<sup>182</sup>

Both the Acts impose substantial requirements for securities issuers and the consequences for violating such rules have the potential to be substantial. Thus, whether a particular financial instrument or investment falls under the purview of the SEC is a critical business determination not to be neglected. This determination most often turns on whether the particular instrument qualifies as a “security” or not.

Decided in 1946, the seminal Supreme Court case *S.E.C. v. W.J. Howey Co.* establishes the formal definition of “securities” for purposes of both the ‘33 Act and the ‘34 Act.<sup>183</sup> The defendant in *Howey* was a corporation that owned a citrus orchard, portions of which were offered to the public as a means to “finance additional development.”<sup>184</sup> Buyers were offered a sales contract for the land itself in conjunction with an exclusive service contract giving the corporation a leasehold interest and authority to cultivate and sell the citrus fruit produced by the land.<sup>185</sup> Buyers (most often out-of-state businessmen and professionals) were enticed by the

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<sup>178</sup> 15 U.S.C. §§ 77e-77f (2018). Pursuant to this registration requirement, many ICO violations are for the sale of unregistered securities.

<sup>179</sup> JAY B. SYKES, CONG. RESEARCH SERV., R45301, SECURITIES REGULATION AND INITIAL COIN OFFERINGS: A LEGAL PRIMER 4 (2018).

<sup>180</sup> *Id.* at 5.

<sup>181</sup> 17 C.F.R. § 240.10b-5 (2018).

<sup>182</sup> Sykes, *supra* note 179.

<sup>183</sup> *S.E.C. v. W.J. Howey Co.*, 328 U.S. 293, 298-99 (1946).

<sup>184</sup> *Id.* at 295.

<sup>185</sup> *Id.* at 295-96.



corporation with the promise of substantial profits from the sale of the citrus fruit.<sup>186</sup> In its action against the corporation, the SEC sought injunctive relief preventing the corporation from selling unregistered securities using the instrumentalities of interstate commerce.<sup>187</sup>

The Supreme Court evaluated the entirety of the corporation's offering (advertisements, land deed, service contract, etc.), concluding that the defendant's offering qualified as an unregistered investment contract under both the '33 and '34 Acts.<sup>188</sup> The Court defined an investment contract as: "a contract, transaction or scheme whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of the promotor or a third party."<sup>189</sup> This four-part test (the "Howey Test"), sets the standard for what qualifies as an investment contract for the sale of a security: (1) an investment of money, (2) in a common enterprise, (3) with an expectation of profit (4) to be derived solely from the efforts of others.<sup>190</sup> In its reasoning, the Court noted that such a broad and overly inclusive definition "embodies a flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits."<sup>191</sup> Applied liberally, the Howey Test has found investment contracts across all manner of unusual financial agreements.<sup>192</sup>

In a subsequent case involving the definition of "securities," the Supreme Court expounded upon the legislative purposes of the '33 and '34 Acts, reasoning that because the Acts took aim at the unregulated, profit-driven enterprises of capital markets, the application of those statutes must turn on the "economic realities underlying a transaction" and not on whether the seller actually termed his product a security, share, or stock.<sup>193</sup> The methodology for applying the Howey Test results in highly fact-specific analysis, with one author noting:

The intentional breadth and adaptability of the definition of investment contract necessarily leads to complex and fact-intensive judicial inquiries in the application thereof and allows for the possibility of inconsistent results between and among the various courts engaging in such inquiries, creating the possibility of similarly

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<sup>186</sup> *Id.* at 296.

<sup>187</sup> *Id.* at 294.

<sup>188</sup> *Id.* at 299-300.

<sup>189</sup> *Id.* at 298-99.

<sup>190</sup> Sykes, *supra* note 179, at 5.

<sup>191</sup> S.E.C. v. W.J. Howey Co., 328 U.S. 293, 299 (1946).

<sup>192</sup> See, e.g., Albanese v. Fla. Nat'l Bank of Orlando, 823 F.2d 408, 411 (11th Cir. 1987) (ice machine leases); Smith v. Gross, 604 F.2d 639, 642-43 (9th Cir. 1979) (earthworm farms); Miller v. Cent. Chinchilla Grp., Inc., 494 F.2d 414, 417 (8th Cir. 1974) (chinchilla ranches); S.E.C. v. Glenn W. Turner Enterprises, 474 F.2d 476, 480 (9th Cir. 1973) (pyramid schemes).

<sup>193</sup> United Hous. Found. v. Forman, 421 U.S. 837, 849 (1975). Interestingly, the Court in *United Housing* found that the low-income housing instruments purchased by the plaintiffs were not securities subject to the '33 and '34 Acts. *Id.* at 847; see also S.E.C. v. Edwards, 540 U.S. 389, 393 (2004) (noting that "[Congress] enacted a broad definition of security sufficient to encompass virtually any instrument that might be sold as an investment.") (internal quotations omitted).

situated litigants winding up with dissimilar outcomes.<sup>194</sup>

Litigation involving the Howey Test most often focuses narrowly on one of the test's four principle components rather than on the legitimacy of the test itself.<sup>195</sup> The first prong, an investment of money, is rarely at issue, as courts have routinely found an investment of money if a buyer provides consideration or gives something of value.<sup>196</sup> As applied generally to ICOs, commentators agree the exchange of fiat currency for tokens, or even the exchange of virtual currency, satisfies this first element.<sup>197</sup> Courts have analyzed the second prong, common enterprise, as requiring either horizontal commonality (sharing of risk between the investor and other investors) or vertical commonality (sharing of risk between the investor and the seller/promotor).<sup>198</sup> More plainly, commonality requires the success or failure of the investment or project be borne together by all involved.<sup>199</sup>

### B. *An Expectation of Profits from the Efforts of Others*

The third and fourth prongs of the Howey Test result in significant difficulties for ICOs. These difficulties are overshadowed by Bitcoin's capricious valuation and illicit uses—widely reported in the media—and further compounded by the average investor having little knowledge of blockchain technology. Finally, the ostentatious advertising often used by ICOs heavily promotes the profitability of crypto-tokens to eager and sometimes ill-informed consumers. In *United Housing Foundation v. Forman*, the Court elaborated upon the expectation of profits prong of the Howey Test. “In such cases the investor is ‘attracted solely by the prospects of a return’ on his investment. By contrast, when a purchaser is motivated by a desire to use or consume the item purchased—‘to occupy the land or to develop it themselves’ . . . the securities laws do not apply.”<sup>200</sup> At issue in *United Housing* was a large urban housing project administered by a non-profit co-op. To acquire an apartment, buyers purchased “shares” from the co-op, entitling them to an apartment within the complex.<sup>201</sup> Residents brought suit after their monthly rental charges increased substantially, alleging, *inter alia*, the illegal sale of securities in violation of the ‘33 Act. In holding that the housing shares were not securities, the Court rejected three arguments originally accepted by the lower court that “profits” were found in: the tax deductions available to tenants for their mortgage interest payments; the rent savings derived from renting an apartment at a lower cost; and the reduction in monthly rents derived from commercial leasing of other parts of the co-op.<sup>202</sup> What distinguished the commercial transaction at issue in *United Housing* from traditional

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<sup>194</sup> Miriam R. Albert, *The Howey Test Turns 64: Are The Courts Grading This Test on a Curve?*, 2 WM. & MARY BUS. L. REV. 1, 8 (2011).

<sup>195</sup> *Id.* at 15.

<sup>196</sup> *Id.* at 16.

<sup>197</sup> Sykes, *supra* note 179, at 9.

<sup>198</sup> Albert, *supra* note 194, at 16-17.

<sup>199</sup> *Id.*

<sup>200</sup> *United Hous. Found. v. Forman*, 421 U.S. 837, 852-53 (1975) (quoting *S.E.C. v. W.J. Howey Co.*, 328 U.S. 293, 300 (1946)).

<sup>201</sup> The shares were non-transferrable and came with no voting rights in the classical sense.

<sup>202</sup> *Id.* at 855-56.

securities transactions was that the co-op buyers were primarily motivated by the desire to obtain housing, i.e. to purchase a commodity for personal consumption.<sup>203</sup> While renters undoubtedly saved money in a variety of ways by purchasing co-op stock, those benefits were incidental to the transaction's true purpose.

In a recent law review article, author Nate Crosser argued that, to qualify as a security, the expectation of profits must be the *primary* motivation for the purchaser's investment and if a purchaser is instead motivated by a desire to consume the product, securities laws do not apply.<sup>204</sup> Crosser further noted that when construing buyers' expectations, the SEC pays particular attention to advertising efforts and any "third-party comments ratified by promoter."<sup>205</sup> More broadly, author Ori Oren, writing for the Columbia Business Law Review, suggested that whether investors *expect* the protection of securities laws is also a relevant factor for determining their applicability.<sup>206</sup> Support for this proposition comes from the Supreme Court case *Landreth Timber Company v. Landreth*, 471 U.S. 681 (1985), in which the Court held federal securities law applied to the purchase of all outstanding stock in a lumber business. In dicta, the *Landreth* Court reasoned that because the shares of the lumber company were referred to as "stock" and had the characteristics of traditional stocks, persons trading in those shares had a strong expectation that the transaction would be governed by the federal securities laws.<sup>207</sup> This is an interesting argument with respect to ICOs as utility tokens are rarely referred to as "stocks" or "shares" in the network but they occasionally come with rights similar to traditional shareholders. However, this argument runs counter to the Supreme Court's reasoning in *Howey* that federal securities laws embody a flexible approach that look to the economic realities of a transaction rather than any labels assigned to it. Similarly, the SEC has conclusively stated that labels are irrelevant for its enforcement actions.<sup>208</sup>

The final element of the *Howey* Test—profits derived from the managerial efforts of others—again presents significant hurdles for most ICOs. For example in the DAO Report, the SEC noted investors relied upon Slock.it (the company who created the DAO) to provide managerial services to the network and to introduce investments which would generate profits.<sup>209</sup> These services included writing the protocols that governed the network, producing the whitepaper and advertising materials, and providing cyber security in the form of ongoing monitoring.<sup>210</sup> One commentator, Ori Oren, disagreed with characterizing these services as "managerial efforts," noting that "[t]he economic reality of the scheme was that Slock.it and the Curators only contributed to the maintenance of the system, while the 'failure or

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<sup>203</sup> *Id.* at 858.

<sup>204</sup> Nate Crosser, *Initial Coin Offerings as Investment Contracts: Are Blockchain Utility Tokens Securities?*, 67 U. KAN. L. REV. 379, 400 (2018).

<sup>205</sup> *Id.* at 401. In particular, Crosser stated that advertising a secondary market for token re-sales is strong evidence that the buyer is purchasing a security rather than a commodity. *Id.*

<sup>206</sup> Ori Oren, *ICO'S, DAO'S, and the SEC: A Partnership Solution*, 2018 COLUM. BUS. L. REV. 617, 642 (2018).

<sup>207</sup> *Landreth Timber Co. v. Landreth*, 471 U.S. 681, 693 (1985).

<sup>208</sup> *Spotlight on Initial Coin Offerings*, *supra* note 128.

<sup>209</sup> The DAO Report, *supra* note 111, at 12.

<sup>210</sup> *Id.* at 12-13.

success of the enterprise’—returns on investments—depend long term upon the token-holding investors themselves.”<sup>211</sup> Oren argues “pre-purchase services” do not, by themselves, represent “ongoing” managerial services for purposes of the Howey Test.<sup>212</sup>

Oren’s argument would be more persuasive if the DAO survived its initial launch and had the opportunity to develop its network and protocols more fully. At the time of its ICO, the DAO was almost entirely the product of its founders’ efforts; the decentralized “reins” of the network had not yet passed to the users and thus it was difficult for the SEC to see the DAO as anything but the product of the efforts of Slock.it. Although DAO token holders were afforded voting rights akin to democratic control, the SEC viewed these rights as limited and insignificant.<sup>213</sup> In support of this point, the SEC cited to *S.E.C. v. Glenn W. Turner Enterprises*, in which the Ninth Circuit Court of Appeals held that efforts<sup>214</sup> expended by participants in a multi-level marketing scheme—while the *sine qua non* of the scheme’s ultimate profitability—did not make the scheme anything less of an investment contract.<sup>215</sup> This suggests that ICOs—even ones in which the entire success of the venture depends on the efforts of the investors/users—may still be investment contracts. However, the SEC’s analysis of the DAO infrastructure may be superficial as noted by Oren:

The reality was that the experimental and novel model needed ‘training wheels’ and safeguards to ensure this democratic and decentralized control would successfully function. These efforts were technical and governance-focused, not investment focused. Aside from the initial, exemplary investment concept said to be introduced by Slock.it, the future investment concepts were to be pitched, chosen, and executed by token holders and their code contributions.<sup>216</sup>

It may well be that if the DAO had come to fruition and the efforts of Slock.it were replaced by the decentralized control of its token holders, investors would no longer depend on the managerial services of a third party. The problem with this argument is that blockchain technology and DAOs are highly complicated and technical. To successfully shift managerial efforts from developers to users will require users to have the necessary skills and knowledge to operate the blockchain network. This will be a high hurdle for ICOs to overcome given the average investor/token holder likely has little knowledge of this highly technical field.

The SEC currently adopts a fact-based, qualitative approach to determine if an ICO qualifies as a security offering. For example, in its official FAQ for ICOs, the SEC declines to classify all ICOs as securities offerings, instead stating that based on specific facts and circumstances, ICOs *may* be securities offerings and *may* need to be registered.<sup>217</sup> This approach appears to reflect the Supreme Court’s reasoning

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<sup>211</sup> Oren, *supra* note 206, at 643.

<sup>212</sup> *Id.* at 644.

<sup>213</sup> The DAO Report, *supra* note 111, at 13.

<sup>214</sup> Soliciting new investors and generating support for the product.

<sup>215</sup> *SEC v. Glenn W. Turner Enterprises*, 474 F.2d 476, 482 (9th Cir. 1973); The DAO Report, *supra* note 111, at 13.

<sup>216</sup> Oren, *supra* note 206, at 648.

<sup>217</sup> *Spotlight on Initial Coin Offerings*, *supra* note 128.

in *United Housing*, noting that while tokens sold in ICOs can be called many things (utility, debt, equity, etc.) “merely calling a token a ‘utility’ token or structuring it to provide some utility does not prevent the token from being a security.”<sup>218</sup> Current SEC Chairman Jay Clayton offered the following example in a public statement issued in December 2017:

For example, a token that represents a participation interest in a book-of-the-month club may not implicate our securities laws and may well be an efficient way for the club’s operators to fund the future acquisition of books and facilitate the distribution of those books to token holders. In contrast, many token offerings appear to have gone beyond this construct and are more analogous to interests in a yet-to-be-built publishing house with the authors, books and distribution networks all to come.<sup>219</sup>

As of November 2017, Jay Clayton stated that he had yet to see an ICO that did not qualify as a security offering.<sup>220</sup>

### C. *Enforcement Actions Against ICOs*

Subsequent to the DAO Report and the explosion of capital raised by ICOs, the SEC began an enforcement crusade against various ICOs. The initial actions were directed at coin offerings the SEC deemed to constitute the unregistered sale of securities. These ICOs were often tainted by fraudulent business practices and deceptive marketing schemes that were the product of bad actors looking to capitalize off of crypto-mania rather than earnest blockchain developers hoping to fund their project.

For example, in September 2017, the SEC filed a complaint against Nevada-based ReCoin LLC for the unregistered sale of securities and fraudulent misstatements in connection with an ICO that raised \$300,000 from investors.<sup>221</sup> The ReCoin tokens were billed as a secure investment vehicle backed by actual commodities purchased using capital generated from the ICO.<sup>222</sup> The project’s whitepaper stated that the token’s value could be expected to grow as the underlying commodities increased in value or as demand for the tokens rose.<sup>223</sup> Contrary to their representations, ReCoin never purchased any real estate, diamonds, or other commodities to back the value of the coins and misled potential investors into believing that millions had been raised as a result of the venture.<sup>224</sup>

The SEC’s civil case against ReCoin was postponed after the Department of

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<sup>218</sup> *Id.*

<sup>219</sup> Jay Clayton, *Statement on Cryptocurrencies and Initial Coin Offerings*, SEC. & EXCH. COMM’N (Dec. 11, 2017), <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11> [<https://perma.cc/YJ8H-RUFX>].

<sup>220</sup> David Feldman, *SEC Chair Clayton Comments on Initial Coin Offerings (ICOs)*, DUANE MORRIS BLOGS (Nov. 10, 2017), <https://blogs.duanemorris.com/capitalmarkets/2017/11/10/sec-chair-clayton-comments-on-initial-coin-offerings-icos/> [<https://perma.cc/6JUT-HTJ2>].

<sup>221</sup> Complaint, S.E.C. v. ReCoin, No. 17-cv-05725 (E.D.N.Y. Sept. 29, 2017).

<sup>222</sup> *Id.* at 9.

<sup>223</sup> *Id.* at 10.

<sup>224</sup> *Id.* at 3.

Justice filed criminal charges alleging securities fraud against ReCoin's founder.<sup>225</sup> The defendant, Maksim Zaslavskiy, immediately filed a motion to dismiss, arguing the ReCoin tokens were not investment contracts and thus not subject to federal securities law.<sup>226</sup> Ruling on the motion, the court noted that the issue of the token's proper classification was a factual inquiry best resolved by a fact-finder.<sup>227</sup> At the motion to dismiss stage, the court framed the issue as "whether the 'elements of a profit-seeking business venture' are sufficiently alleged in the Indictment, such that, if proven at trial, a reasonable jury could conclude that 'investors provided the capital and shared in the earnings and profits; and the promoters managed, controlled and operated the enterprise.'"<sup>228</sup> Reasoning that the indictment sufficiently alleged all the elements of an investment contract under the Howey Test, the court drew attention to ReCoin's whitepaper which advertised the token sale as an "attractive investment opportunity," comparing the company's statements to similar speech found in the DAO whitepaper.<sup>229</sup> Additionally, the court found it significant that the success of ReCoin's venture was entirely dependent on the efforts of Zaslavskiy and the management team; investors had no control over their investment activity nor did the ReCoin tokens provide any functionality aside from a pro-rata stake in the company itself.<sup>230</sup>

In *S.E.C. v. AriseBank*, the SEC continued their crusade against fraudulent ICOs with a well-publicized complaint and asset seizure. Defendant AriseBank raised roughly \$4.25 million between June 2017 and January 2018 through private pre-sale sales of its proprietary token "AriseCoin,"<sup>231</sup> a figure contrary to the \$410 million AriseCoin claimed to have raised immediately prior to its public ICO.<sup>232</sup> In addition to the unregistered sale of securities, the SEC also alleged fraudulent misstatements by AriseBank including claims to have purchased an FDIC insured bank and the acquisition of a Visa backed, cryptocurrency credit card.<sup>233</sup> To combat these grossly exaggerated misstatements, the SEC sought immediate injunctive relief in the form of restraining orders and asset freezes.<sup>234</sup>

AriseBank attempted to be the world's first "decentralized banking platform." What is particularly interesting is how the company's whitepaper outlined the token's increase in value:

Our goal with AriseCoin is to drive overall circulation by incentivizing [AriseCoin] holders to spend their extra rewarded eACO bonus coins before they expire. This

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<sup>225</sup> *Case Alleging Cryptocurrencies Are Securities Can Proceed to Trial*, LEXOLOGY (Sept. 20, 2018), <https://www.lexology.com/library/detail.aspx?g=a3e00443-d32b-4914-b1fc-a3177cda0f96> [<https://perma.cc/Y6AH-UTMM>].

<sup>226</sup> *United States v. Zaslavskiy*, 2018 WL 4346339, at \*1 (E.D.N.Y., Sept. 11, 2018).

<sup>227</sup> *Id.* at \*4.

<sup>228</sup> *Id.*

<sup>229</sup> *Id.* at \*6.

<sup>230</sup> *Id.* at \*7.

<sup>231</sup> Nick Marinoff, *AriseBank CEO Charged in \$4 Million Alleged ICO Scam*, BITCOIN MAG. (Nov. 29, 2018), <https://bitcoinmagazine.com/articles/arisebank-ceo-charged-4-million-alleged-ico-scam/> [<https://perma.cc/S8DF-XLY2>].

<sup>232</sup> *SEC v. AriseBank*, 2018 WL 623772, ¶ 22 (N.D. Tex., Jan. 25, 2018).

<sup>233</sup> *Id.* at ¶ 35, 39.

<sup>234</sup> *Id.* at ¶ 7.

causes eACO currency to be used rather than just held in static accounts, which in turns [sic] drives and grows the market value of AriseCoin economy and thus increase [sic] the value of ACO holdings.<sup>235</sup>

This nebulous and vague description is indicative of the fraudulent nature of the AriseBank ICO. However, the description also suggests that the AriseCoin was to have an ostensible function within the AriseBank blockchain. Perhaps the AriseBank developers intended their coin to have some utility within their blockchain network as whole, but any such intention was quickly overshadowed by the fraudulent actions of its founders.

Additionally, bolstered by the SEC's classification of certain tokens as "securities," private plaintiffs have also begun filing claims against ICOs for the sale of unregistered securities. For example, in *Rensel v. Centra Tech, Inc.*, a recent class action brought in the Southern District of Florida, the plaintiffs alleged violations of Section 12(a)(1) and 15(a) of the Securities Act and sought injunctive relief for the unregistered sale of securities.<sup>236</sup> At first glance, the Centra Tech ICO presents as a typical blockchain project and ICO launch: Centra Tech attempted to design and launch a crypto-currency debit card that would allow users to spend cryptocurrencies using existing credit cards such as Visa and Mastercard.<sup>237</sup> This ambitious objective quickly grew out of control as the project's founders attempted to validate the project using spurious claims and deceptive advertising. For one, Centra Tech claimed to have a partnership with Mastercard and Visa that would allow Centra Tech's crypto-debit card to operate on top of the credit giants' existing debit networks.<sup>238</sup> In reality, these partnerships never existed and were entirely fabricated by the company's founders.<sup>239</sup> Perhaps in an attempt to mask these deficiencies, Centra Tech embarked on an aggressive advertising campaign that included a "Bounty Program" in which social media users were paid to publish favorable articles about Centra Tech technology.<sup>240</sup> The company even managed to hook social media icon Floyd Mayweather who was paid in cash to promote Centra Tech on various social media platforms.<sup>241</sup> All of these efforts helped to raise thirty-two million dollars for the company's founders.<sup>242</sup>

In response to the plaintiffs' motion for preliminary injunction, the magistrate

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<sup>235</sup> *Id.* ¶ 27.

<sup>236</sup> Class Action Complaint at 1, 6, *Rensel v. Centra Tech, Inc.*, 2017 WL 6367991 (S.D. Fla. Dec. 13, 2017) (No. 1:17-cv-24500-JLK).

<sup>237</sup> *Id.* ¶ 30.

<sup>238</sup> *Id.* ¶ 31.

<sup>239</sup> *Id.* Additionally, Centra Tech's listed CEO and CFO were found to be fictional persons complete with photographs and fake LinkedIn profiles. *Id.* ¶ 32.

<sup>240</sup> See *Centra Tech Bounty Program*, BITCOIN FORUM, (Aug. 1, 2017), <https://bitcointalk.org/index.php?topic=2057569.0> [<https://perma.cc/3ARK-BVSV>].

<sup>241</sup> Nathaniel Popper, *How Floyd Mayweather Helped Two Young Guys from Miami Get Rich*, N.Y. TIMES (Oct. 27, 2017), <https://www.nytimes.com/2017/10/27/technology/how-floyd-mayweather-helped-two-young-guys-from-miami-get-rich.html> [<https://perma.cc/6ZJS-NRXF>]. Mayweather eventually settled with the SEC regarding his Centra Tech promotions, paying back his commissions and a penalty. *Floyd Mayweather Settles with SEC over Digital Coin Promotions*, ESPN, (Nov. 29, 2018), [http://www.espn.com/boxing/story/\\_/id/25411605/sec-fines-floyd-mayweather-digital-coin-promotions](http://www.espn.com/boxing/story/_/id/25411605/sec-fines-floyd-mayweather-digital-coin-promotions) [<https://perma.cc/JG6S-F59G>].

<sup>242</sup> Complaint at 1, *SEC v. Sharma*, No. 1:18-cv-02909 (S.D.N.Y. Apr. 2, 2018).

judge analyzed the likelihood of the success on the merits of the plaintiffs' claims,<sup>243</sup> quickly concluding the Centra Tech tokens qualified as securities under the Howey Test and the ICO qualified as an investment contract.<sup>244</sup> However, the brevity of the magistrate's report leaves much to be desired, specifically with respect to how the "expectation of profit" prong might apply differently to a token having a strong utilitarian function. Indeed, as one commentator noted, the magistrate judge simply assumed that an expectation of profit existed without analyzing how and by whom that expectation was created.<sup>245</sup> This assumption seems justified considering how Centra focused extensively on the token's profitability in its advertising materials. However, the Centra Tech action did not resolve how a token whose increase in value is incidental or secondary to its primary function would perform under the Howey Test.<sup>246</sup>

Given how the Centra Tech ICO was steeped in fraudulent practices, it is no surprise that the project's young developers were recently indicted by the SEC.<sup>247</sup> The architects of the Centra Tech scheme never intended to produce a viable blockchain-based product—they were only interested in harnessing the zeal surrounding cryptocurrencies as a tool to defraud investors and make a quick buck. Moreover, the Centra Tech tokens had no semblance of functionality at the time of the ICO. As one commentator from the law firm DLA Piper noted: "[t]he courts that are currently evaluating whether tokens qualify as securities are focusing their attention on non-functional token sales tainted by fraud allegations. In the [Rensel case], the [Centra] tokens had no utility at the time of their sale and the promised technology had yet to be developed."<sup>248</sup>

In light of the securities fraud and crafty schemes perpetrated by the above-mentioned ICOs, it may seem as though the entire industry is comprised of swindlers and charlatans. While the most egregious actors grab headlines and draw the ire of the SEC, not all ICOs are tainted by fraud. For example, on December 11, 2017, the SEC published its administrative agreement with California-based blockchain startup Munchee, Inc.<sup>249</sup> Munchee spent several years developing a blockchain based restaurant review application for the iPhone.<sup>250</sup> Through the use of its app, Munchee hoped to compete with Yelp and Google by designing a solution to the

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<sup>243</sup> Rensel v. Centra Tech, Inc., No. 17-24500-CIV-KING/SIMONTON, 2018 U.S. Dist. LEXIS 106642, at \*12-20 (S.D. Fla. June 25, 2018).

<sup>244</sup> *Id.* at \*15.

<sup>245</sup> C. Neil Gray & Maxwell J. Eichenberger, *Applying Howey, Court Concludes That Centra Token Likely a Security*, FINTECH UPDATE (July 2, 2018), <https://www.fintechupdate.com/2018/07/applying-howey-court-concludes-that-centra-token-likely-a-security/> [<https://perma.cc/RF7G-ZAPQ>].

<sup>246</sup> See generally Class Action Complaint at 42, Rensel v. Centra Tech, Inc., (No. 1:17-cv-24500-JLK), 2017 WL 6367991 (S.D. Fla. Dec. 13, 2017) (In their pleadings, the plaintiffs allege that Centra Tech labeled its tokens as "utility tokens" in an attempt to circumvent a securities classification. This labeling issue was not addressed by the magistrate judge but will hopefully be analyzed by subsequent opinions on the case).

<sup>247</sup> Complaint *supra* note 242.

<sup>248</sup> Deborah R. Meshulam & Benjamin Klein, *First Judicial Finding that Digital Tokens Are Securities*, DLA PIPER (July 16, 2018), <https://www.dlapiper.com/en/us/insights/publications/2018/07/first-judicial-finding-that-digital-tokens-are-securities/> [<https://perma.cc/85ZH-2ASS>].

<sup>249</sup> Munchee, Inc., Securities Act Release No. 10445, 2017 WL 10605969 (Dec. 11, 2017).

<sup>250</sup> *Id.* at 2.



disproportionate number of negative and/or fraudulent reviews directed at restaurant owners.<sup>251</sup> The Munchee network incentivized end users to post pictures and review restaurants by rewarding them with a Munchee token; end users could then spend this token at participating restaurants while the restaurants themselves would be able to exchange tokens for advertising within the network.<sup>252</sup>

Most significantly (and in stark contrast to the above ICOs), the Munchee application was successfully launched in the second quarter of 2017, well in advance of its whitepaper and its ICO.<sup>253</sup> This is to say that the Munchee ICO was not a spontaneous cash grab; the company worked for several years to develop and launch its product but chose to hold an ICO in order to raise further capital and to improve their product—a fact acknowledged by the SEC in its administrative settlement.<sup>254</sup> The Munchee application itself was blockchain based but developed without tokens in mind—end users were directly incentivized by the restaurants themselves offering small items in exchange for reviews.<sup>255</sup> Andrew Chapin, a consultant on the Munchee ICO and writer for Medium, noted that:

When management learned of the ICO market, they saw an opportunity to improve their product through token integration. If a partner restaurant incentivized users with a token, they reasoned, it might encourage more activity. The end-user could review Restaurant A and Restaurant B, earn Munchee tokens by doing so, and redeem those tokens at Restaurant A, B, C, or even D.<sup>256</sup>

Thus, the Munchee ICO appeared to be a sincere and good faith attempt at expanding the application's functionality without using traditional methods of fundraising.<sup>257</sup>

What eventually sank the Munchee ICO is a combination of several factors. The company's whitepaper took its token integration too far by outlining an economic "ecosystem" highlighting the token's expected increase in value as well its acceptance in secondary markets.<sup>258</sup> This "expectation of future profits" was promoted to the public in articles such as *7 Reasons You Need to Join the Munchee Token Generation Event* and through podcasts by one of Munchee's founders.<sup>259</sup> In particular, the SEC remarked how Munchee's advertising was not directed to existing users of the network or to the restaurant industry itself. Instead, Munchee promoted its ICO on platforms aimed at cryptocurrency and digital asset investors,

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<sup>251</sup> Verma et al., *Munchee Token: A Decentralized Blockchain Based Food Review/Rating Social Media Platform*, 6-7 (last updated Oct. 16, 2017), <https://www.theventurealley.com/wp-content/uploads/sites/5/2017/12/Munchee-White-Paper.pdf> [<https://perma.cc/45P5-AHCE>].

<sup>252</sup> *Id.* at 8.

<sup>253</sup> Munchee, Inc., *supra* note 249, at 2-3.

<sup>254</sup> *Id.*

<sup>255</sup> Andrew Chapin, *What Went Wrong with the Munchee ICO*, MEDIUM (Apr. 11, 2018), <https://medium.com/swlh/what-went-wrong-at-munchee-ico-sec-subpoena-a468cba42e10> [<https://perma.cc/ABE6-HYR5>].

<sup>256</sup> *Id.*

<sup>257</sup> After consulting on the Munchee ICO for several months, Chapin noted further that the company had developed a good community and press around its product and seemed poised to successfully execute a small ICO. *Id.*

<sup>258</sup> Munchee, Inc., *supra* note 249, at 4-5.

<sup>259</sup> *Id.* at 5.

suggesting the sale was more of a cash grab than an attempt to introduce its product to relevant consumers.<sup>260</sup>

Another theory is that the SEC was upset with the hubris on display in the Munchee whitepaper. Foreseeing how their ICO could be classified a security, the company made a number of spurious statements regarding the application of the Howey Test—even going so far as to draw readers’ attention to the SEC’s DAO report.<sup>261</sup> For one, the whitepaper declares “[t]his White Paper does not constitute the offering of a security.”<sup>262</sup> More significantly, the whitepaper also states that “a Howey analysis had been conducted to determine that, as currently designed, the sale of [Munchee] utility tokens does not pose a significant risk of implicating federal securities laws.”<sup>263</sup> Obviously, this proved to be quite erroneous and in actuality the whitepaper contained no analysis of the Howey Test as it applied to the Munchee tokens—the company simply concluded that it was not offering securities without any proof. Additionally (and ironically), Munchee’s whitepaper contained a “Forward-Looking Statement Disclaimer” that expressly characterized its whitepaper as a “forward-looking statement” within the meaning of the Private Securities Litigation Reform Act of 1995.<sup>264</sup> The irony of this is that despite concluding the Munchee token was not a security within the meaning of the Howey Test, the Munchee developers nonetheless attempted to avail themselves of a legal defense available only to securities offerings, suggesting that Munchee wanted to have their cake and eat it too.

Ultimately, Munchee acquiesced to the SEC’s cease and desist order, immediately refunding the \$60,000 it had raised from forty investors.<sup>265</sup> In addition to the expectation of profits created by the “ecosystem” Munchee developed, the SEC further noted that such profits depended entirely on the managerial efforts of others, commenting that “[i]nvestors had little choice but to rely on Munchee and its expertise.”<sup>266</sup> Despite the practical utility of the Munchee token, the economic realities of the ICO transformed the Munchee token into a security.

One principle that emerges from the actions of CentraTech, RecoIn/Zaslavskiy, AriseBank, and Munchee is that simply labeling a token a “utility token” does not erase its status as a security in the presence of certain facts. However, it is unclear whether tokens that are not only labeled “utility” but also possess a clear functional purpose and history would also be classified as securities. The Munchee token came very close; its token had a functional purpose and was identified as a “utility” token by its whitepaper.<sup>267</sup> However, the utilitarian aspects of the Munchee token were overshadowed by the profit-seeking nature of its sale. Hopefully, clarification regarding legitimate utility tokens will come with time as regulations and ICO jurisprudence are still in their infancy; recent legal actions have targeted only the

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<sup>260</sup> *Id.* at 6.

<sup>261</sup> Verma et al., *supra* note 251, at 3.

<sup>262</sup> *Id.* at 2.

<sup>263</sup> *Id.* at 3.

<sup>264</sup> *Id.* at 2.

<sup>265</sup> Munchee, Inc., *supra* note 249, at 8. The SEC declined to bring civil penalties against Munchee, citing their cooperation and prompt remedial actions. *Id.* at 10.

<sup>266</sup> *Id.* at 8-9.

<sup>267</sup> Verma et al., *supra* note 251, at 3.

most egregious ICOs, i.e., those engaged in obviously fraudulent business practices.

#### IV. SOLUTIONS AND FORECASTING

##### A. SAFT Framework

In the divided regulatory regime of the United States, the private sector is often in the best position to address regulatory imbalances and uncertainties. In October 2017, a group of blockchain industry participants published a whitepaper entitled “The SAFT Project: Toward a Compliant Token Sale Framework.” The Simple Agreement for Future Tokens (“SAFT”) framework attempts to craft a regulatory framework for token sales within the boundaries of existing securities law.<sup>268</sup> The framework is based off of the Simple Agreement for Future Equity (“SAFE”), a securities tool that has recently become popular with tech startups. The SAFE is a type of alternative financial note somewhere in the middle between convertible debt and normal equity; an investor contributes capital to a start-up venture and in exchange, receives a contractual note entitling the investor to equity once the company is formally valued through priced investment or liquidation.<sup>269</sup> The ultimate value of the equity received is determined during the first round of financing with reference to the company’s total valuation.<sup>270</sup> Similarly, SAFT is an investment contract that obligates investors to fund early stage blockchain projects.<sup>271</sup> Developers use the contributed capital to build a “genuinely functional network, with genuinely function utility tokens” that are delivered to the investor once the network and tokens are deployed and functional.<sup>272</sup>

Interestingly, the SAFT framework does not eschew the label “security” but rather embraces it.<sup>273</sup> The authors assert that token sales—if structured properly under the SAFT framework—will initially be classified as securities but once the network is functional, the tokens will instead be classified as “consumptive products . . . demand[ing] compliance with state and federal consumer protection laws.”<sup>274</sup> The SAFT framework addresses utility tokens specifically, and draws a clear distinction between “pre-functional utility tokens—those issued before a platform is operational—and fully functional utility tokens—those issued after the platform is functional.”<sup>275</sup>

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<sup>268</sup> Juan Batiz-Benet et al., *The SAFT Project: Toward a Compliant Token Sale Framework*, SAFT PROJECT (Oct. 2, 2017), <https://saftproject.com/static/SAFT-Project-Whitepaper.pdf> [<https://perma.cc/CN2D-A6Y5>].

<sup>269</sup> Joseph Green & John Coyle, *The SAFE, The Kiss, and the Note: A Survey of Startup Seed Financing Contracts*, 103 MIN. L. REV. 42, 46 (2018); see also Stephanie Zeppa & Andrew Kreider, *SAFEs and KISSes Posted to Be the Next Generation of Startup Financing*, NAT. L. REV. (May 6, 2015), <https://www.natlawreview.com/article/safes-and-kisses-poised-to-be-next-generation-startup-financing> [<https://perma.cc/PJQ7-WEQR>].

<sup>270</sup> Green & Coyle, *supra* note 269, at 46.

<sup>271</sup> Juan Batiz-Benet et al., *supra* note 268, at 1.

<sup>272</sup> *Id.*

<sup>273</sup> *Id.*

<sup>274</sup> *Id.*

<sup>275</sup> Luvai, *supra* note 13, at 22.

As an investment contract, the SAFT must comply with securities laws.<sup>276</sup> However, once the functional tokens are delivered to investors, they are re-classified as commodities subject to consumer protection laws.<sup>277</sup> To support this shifting classification, the SAFT whitepaper argues that pre-functional tokens will always satisfy the Howey Test because their value is contingent upon the successful efforts of its promoters.<sup>278</sup> Conversely, the value of functional tokens is determined by myriad market factors that—according to the SAFT authors—will outweigh the “efforts of others” component of the Howey Test.<sup>279</sup>

The SAFT framework contains a legal analysis of the Howey Test that could be seen as impressive simply for the fact that—unlike virtually every other blockchain project—the SAFT authors actually took the time to establish some legal precedent for their arguments.<sup>280</sup> For instance, the SAFT whitepaper explains that direct token presales will always satisfy the “expectation of profits prong” of the Howey Test because, per the Supreme Court’s reasoning in *United Housing Foundation v. Forman*, purchasers of pre-functional tokens are predominately motivated by the expectation of profits, i.e., the tokens have no functional purpose other than a speculative increase in value.<sup>281</sup>

From this point, the SAFT whitepaper transitions into a discussion of the Howey Test’s fourth prong, “the efforts of others.”<sup>282</sup> Drawing upon the Ninth Circuit’s reasoning in *S.E.C v. Glenn Turner Enterprises*, the whitepaper argues that the correct approach to this element asks “whether the efforts made by those other than the investor are the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise.”<sup>283</sup> The authors argue that purchasers of already functional tokens are predominately motivated by a consumptive desire to utilize the tokens for their various functions: “as network fees, membership coupons, value staking mechanisms, currencies, etc.”<sup>284</sup> Similar to gold, silver, and other commodities—the value of functional utility tokens in this context is dependent upon traditional principles of supply and demand rather than the success or failure of the seller’s efforts.<sup>285</sup>

This distinction is critical because, according to the SAFT framework, developers/promoters have already expended their “essential efforts” into the enterprise, and while developers may continue to improve the network, the effect of those efforts upon the value of the token is dwarfed by market fluctuations beyond

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<sup>276</sup> The SAFT framework makes use of Rule 506 of Regulation D which provides significant registration exemptions to companies selling securities to “accredited investors” and who make little use of marketing materials. See Juan Batiz-Benet et al., *supra* note 268, at 16.

<sup>277</sup> *Id.* at 1.

<sup>278</sup> *Id.*

<sup>279</sup> *Id.* at 1-2.

<sup>280</sup> Interestingly, the SAFT whitepaper contains a fairly extensive legal analysis with well-crafted citations.

<sup>281</sup> *Id.* at 8.

<sup>282</sup> *Id.*

<sup>283</sup> *Id.* at 8.

<sup>284</sup> *Id.* at 9.

<sup>285</sup> *Id.*

the developer's control.<sup>286</sup> The existence of a secondary market/exchange platform, the authors claim, is a red herring for purposes of the Howey Test because such platforms are simply the venue for executing a token exchange and have no bearing on the token's price fluctuations.<sup>287</sup> Conversely, purchasers of pre-functional tokens must rely upon the efforts of developers for their tokens to have any utility or value in the future; at this stage, the success of the project is inextricably tied to the token's value.

Intuitively there is some legitimacy to these arguments, especially if tokens are thought of narrowly like traditional commodities such as gold and silver. However, several commentators have noted the potential pitfalls of the SAFT framework.<sup>288</sup> For example, the Cardozo Blockchain Project, an initiative from Cardozo Law School exploring the legal issues of blockchain technology, published a 2017 critique of the SAFT framework entitled "Not so Fast—Risks Related to the use of a 'SAFT' for Token Sales."<sup>289</sup> The Cardozo report raises a number of concerns regarding token sales under the SAFT framework. Broadly speaking, the authors are concerned the SAFT framework erroneously suggests that the application of the Howey Test turns only on the four bright-line rules established in the original action, *SEC v. W.J. Howey Co.*<sup>290</sup> What the SAFT framework ignores, the authors assert, is that the Howey Test is a highly fact-dependent inquiry that looks at the "substance" and "economic realities" of a transaction rather than its labels—an approach repeatedly affirmed by both the Supreme Court and the SEC.<sup>291</sup> Indeed, the SAFT framework is very dependent on the somewhat arbitrary distinction between functional and non-functional tokens. The SAFT authors speculate that once tokens have legitimate functionality, purchasers' predominate motivations will be consumptive rather than profit-driven. This could very well be true for certain tokens (again, the inquiry is always fact-dependent) but the presence of even genuine functionality does not entirely eliminate purchasers' expectation of profits.

Additionally, the Cardozo report takes aim at some of the legal analogies drawn by the SAFT authors, as well as the framework's unusual shift from selling an investment contract that is at first a "security" but eventually becomes a "commodity" by virtue of its functionality.<sup>292</sup> Curiously, the initial investment contract (pre-network development) is directed exclusively towards accredited investors who must contractually disclaim any intention to use the contract

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<sup>286</sup> *Id.* at 10.

<sup>287</sup> *Id.*

<sup>288</sup> The SEC criticized the SAFE framework for potentially misleading investors into believing their investments are both "safe" and "simple," when instead the economic realities are much more complicated. Joe Green, *SEC Rightly Concerned About 'so-called SAFE' Securities in Crowdfunding*, Reuters Commentary (June 1, 2017), <https://www.reuters.com/article/bc-finreg-crowdfunding-safe/commentary-sec-rightly-concerned-about-so-called-safe-securities-in-crowdfunding-idUSKBN18S63M> [<https://perma.cc/5TGR-MRJR>]. Furthermore, the SEC noted that few startups will actually reach the valuation stage and trigger share disbursements. *Id.* In this situation, the investors' contributions are little more than a futile gesture.

<sup>289</sup> CARDOZO BLOCKCHAIN PROJECT, NOT SO FAST—RISKS RELATED TO THE USE OF A "SAFT" FOR TOKEN SALES (2017).

<sup>290</sup> *Id.* at 3-4.

<sup>291</sup> *Id.* at 4.

<sup>292</sup> *Id.* at 4-5.

consumptively and affirm their intention to realize only profits from the investment contract.<sup>293</sup> Because of this disclaimer, tokens offered under the SAFT framework will presumably stress the profit-making potential in its marketing materials.

Touting the investment and profit potential of tokens during a SAFT sale process may well impact a federal securities law analysis of a token developed pursuant to a SAFT . . . in many cases, the SAFT sales process and related marketing materials could impact the ‘economic realities’ of purchasing or selling these tokens.<sup>294</sup>

To the Cardozo authors, “bifurcating the purchase of tokens through a SAFT” only alters the form of the transaction rather than its substance, and as noted in *Howey*, “form [should be] disregarded for substance.”<sup>295</sup> Moreover, targeting only accredited investors (often wealthy and powerful individuals and corporations) with the initial investment contract will result in tokens becoming concentrated in the hands of the few—the antithesis of the decentralized, democratic spirit at the heart of blockchain technology. Furthermore, this may cause investors to be concerned only with the profitability of the token’s eventual sale rather than with the network’s success generally, and because such investors will likely hold a significant share of the network’s tokens, they can exert a high degree of influence to achieve their goals.

Finally, the Cardozo report criticizes the SAFT framework’s comparisons to legal cases in which sales contracts for the purchase of to-be-delivered “natural resources” were held not to implicate federal securities laws.<sup>296</sup> Specifically, the Cardozo report argues that the SAFT framework paints with a broad brush when it asserts that crypto-tokens are analogous to homogenous commodities such as gold, silver, or sugar—noting that crypto-tokens often confer various “rights, features, and obligations” not present in physical commodities.<sup>297</sup> It is worth noting that the SAFT distinction between pre- and post-sale seller efforts finds some support in *S.E.C v. Life Partners, Inc.*, in which the D.C. Circuit held, “pre-purchase services cannot by themselves suffice to make the profits of an investment arise predominantly from the efforts of others, and that ministerial functions should receive a good deal less weight than entrepreneurial activities.”<sup>298</sup> At first, this statement appears to support the framework’s conclusion that a SAFT token does not derive profits solely from the “efforts of others” because such efforts are “pre-purchase services.” However, as noted by the Cardozo authors, the SAFT framework’s crucial timing distinction between the managerial efforts expended by developers prior to token functionality, and managerial efforts expended after token deployment, was expressly rejected by the Eleventh Circuit in *S.E.C v. Mutual Benefits Corporation*.<sup>299</sup> In that case, the court reasoned “investment schemes may often involve a combination of both pre-

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<sup>293</sup> *Id.* at 5; see also Juan Batiz-Benet et al., Exhibit 1, 4 (Oct. 2, 2017), <https://saftproject.com/static/SAFT-Project-Whitepaper.pdf> [<https://perma.cc/U44N-NDD4>].

<sup>294</sup> CARDOZO BLOCKCHAIN PROJECT, *supra* note 289, at 5.

<sup>295</sup> *Id.*; SEC v. W.J. Howey Co., 328 U.S. 293, 298 (1946).

<sup>296</sup> CARDOZO BLOCKCHAIN PROJECT, *supra* note 289, at 6-7; see also *Noa v. Key Futures*, 638 F.2d 77 (9th Cir. 1980); *SEC v. Belmont Reid*, 794 F.2d 1388 (9th Cir. 1986); *Sinva v. Merrill Lynch*, 253 F. Supp. 359 (S.D.N.Y. 1966).

<sup>297</sup> CARDOZO BLOCKCHAIN PROJECT, *supra* note 289, at 7.

<sup>298</sup> *S.E.C. v. Life Partners, Inc.*, 87 F.3d 536, 548 (D.C. Cir. 1996).

<sup>299</sup> *S.E.C. v. Mutual Benefits Corp.*, 408 F.3d 737 (11th Cir. 2005).

and post-purchase managerial activities, both of which should be taken into consideration in determining whether *Howey*'s test is satisfied."<sup>300</sup> Again, the SAFT framework simply states, without any justification, that efforts expended by developers to maintain or promote the token's post-token deployment will be *de minimus* and subordinate to the market effects of supply and demand.

It may be true that such post-deployment efforts are "ministerial efforts" that are "non-essential" and insufficient to satisfy the *Howey* Test. However, even with the court's reasoning in *Life Partners*, if those post-deployment efforts possess any semblance of an "entrepreneurial activity" then a court could easily make a finding that the token is a security. Under the SAFT framework, developers will be hard-pressed to ensure that any post-sale efforts are exclusively administrative and insignificant in nature. Otherwise, the token runs the risk of being classified as a security. While the SAFT framework is not without its pitfalls, it does present a novel approach that could be useful to developers looking to hold an ICO in compliance with securities laws.

### B. Partnership Law

The SAFT framework seems over-engineered at times and relies on arbitrary distinctions not fully supported by caselaw. A more simplified solution is presented in a recent article published in the *Columbia Business Law Review*.<sup>301</sup> The article, *ICO's, DAO's, and the SEC: A Partnership Solution*, proposes that ICOs organize themselves under what the author terms a "decentralized partnership."<sup>302</sup> The partnership agreement is offered to the public digitally in the form of a smart contract containing an ICO token.<sup>303</sup> The smart contract (*vis-a-vis* tokens) will outline and govern the key aspects of a partnership agreement including: the right to transfer interests, the sharing of profits and liabilities, and specific governing rights.<sup>304</sup> Most importantly, "[a] Decentralized Partnership has an essential quality differentiating the form from a corporation: there is no separation between ownership and control."<sup>305</sup> The decentralized partnership solution presents a prescient model for the future of collective, democratic investments. For one, any liabilities (legal or otherwise) would be borne across all token holders, creating joint and several liability across the network.<sup>306</sup> Additionally, avoiding securities registration creates more egalitarian investment opportunities. Current exemptions to SEC registration require companies to issue securities via private placements only to accredited investors, i.e., those with a net worth over one million dollars or substantial annual income. However, such rules exclude the general public and are inapposite to the decentralized, democratic nature of blockchains.<sup>307</sup>

The partnership solution consolidates ownership and control, distributing the

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<sup>300</sup> *Id.* at 743-44.

<sup>301</sup> Oren, *supra* note 206, at 651.

<sup>302</sup> *Id.* at 652.

<sup>303</sup> *Id.*

<sup>304</sup> *Id.* at 654.

<sup>305</sup> *Id.*

<sup>306</sup> *Id.* at 656-57.

<sup>307</sup> *Id.* at 657.

burden among all invested parties. This suggests ICOs created through partnership agreements will not satisfy the “efforts of others” prong of the Howey Test. As equal partners in the venture, the success of the ICO will depend upon all partners rather than the central promoter or developer. This approach is consistent with the spirit of blockchains, which prefer democratic control rather than a central authority. However, to avoid a security classification, the roles and rights of a partnership must be truly egalitarian at the time of investment. Similar to the issues present in the SAFT framework, if developers retain any semblance of managerial control over the network post-partnership formation, it will be difficult to characterize their efforts as “pre-purchase services.”

### C. Finding Room for Utility Tokens

The SEC has the choice of whether to include crypto-tokens within the definition of securities or to craft new regulations directly applicable to ICOs. In terms of avoiding securities registration, utility tokens are the only crypto-tokens with the potential to do so. Assuming utility tokens are not swept up in the definition of securities, developers should first ensure a stable blockchain platform exists that is independent of any crypto-token. Additionally, any whitepaper published by a developer should focus on explaining the token’s functionality within the network—any potential increase in value should be de-emphasized as a natural consequence of the token’s use. When creating new registration requirements specific to ICOs, the SEC should mandate that tokens have verifiable functionality. To that end, one commentator writing for the *Business, Entrepreneurship & Tax Law Review* suggests requiring a standardized whitepaper for all ICOs.<sup>308</sup> At a minimum, the author suggests that the standardized whitepaper should inform purchasers “(1) what problems the company’s blockchain project solves; (2) what rights a token holder will and will not receive; (3) when the blockchain project will be completed; and (4) why a token is necessary in the first place.”<sup>309</sup> Additional disclosure requirements could include information about the company’s founders, corporate structure, etc.<sup>310</sup>

A standardized whitepaper would impose no additional burdens on ICOs because, as referenced throughout this analysis, all reputable ICOs already publish whitepapers. Additionally, a standardized form has the added benefit of eliminating the “facts and circumstances” analysis currently used by the SEC. As the steward of our capital markets, the SEC has a duty to ensure emerging businesses are not operating in the dark. Moreover, heightened disclosure requirements will force out fraudulent ICOs who will be unable to accurately and truthfully describe their projects. ICOs are currently plagued by misinformation that unfairly casts legitimate operations in a bad light. It seems unlikely that legitimate ICOs would oppose disclosure requirements that would help separate the wheat from the chaff.

Title III of the JOBS Act granted a registration exemption under section 4(a)(6) of the ’33 Act for companies selling securities through crowdfunding mechanisms.<sup>311</sup>

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<sup>308</sup> Briggs, *supra* note 24, at 443-44.

<sup>309</sup> *Id.* at 444.

<sup>310</sup> *Id.*

<sup>311</sup> Press Release, Sec. & Exch. Comm’n, SEC Adopts Rules to Permit Crowdfunding, SEC.GOV (Oct. 30, 2015), <https://www.sec.gov/news/pressrelease/2015-249.html> [<https://perma.cc/75R6-NM77>].



Termed “Regulation Crowdfunding,” the exemption limits the total amount of securities sold to \$1,070,000 and caps each individual sale at the greater of \$2200 or five percent of the purchaser’s yearly income or net worth.<sup>312</sup> Additionally, transactions made under this exemption must be executed using intermediaries, in this case, SEC approved crowdfunding portals.<sup>313</sup> Crowdfunded securities are also subject to substantial alienation restrictions for one year following the sale.<sup>314</sup>

While some commentators have noted the problems of having such a low transaction ceiling,<sup>315</sup> start-up blockchain projects with little to no capital may find the sale cap insignificant—at least for the first round of investments. Moreover, the disclosure and reporting requirements under this exemption are much less burdensome than typical securities sales.<sup>316</sup> Finally, Regulation Crowdfunding abrogates the issuer’s ability to advertise the sale publicly by limiting advertisements to plain statements of sale price made only through the SEC’s approved portal.<sup>317</sup> This may seem unnecessarily restrictive, but given how poor and deceptive advertising practices have hurt ICOs in recent years, perhaps this limitation is warranted. However, it is more difficult to reconcile the SEC’s intermediary requirement because blockchain technology inherently rejects middlemen. Despite these restrictions, the well-tailored Regulation Crowdfunding evidences the SEC’s ability to craft regulations that are suitable to new methods of raising capital and with a bit of tinkering, similar carve-outs could be created for ICOs.

With respect to marketing and advertising, ICO promoters should be meticulous with token marketing and design. Any advertising of the ICO should be directed to potential users of the network and should avoid claims of profitability or ostentatious endorsements by celebrities. If blockchains are to find credibility in the marketplace, developers should work to distance their projects from these sentiments, especially if the SEC decides to include utility tokens within the definition of securities. This could be facilitated by extending Rule 10b-5 liability to include utility tokens.<sup>318</sup> However, this move also risks over-inclusivity—ICOs would have to defend against potentially hollow accusations of fraud, even in the face of heightened pleading requirements. To mitigate litigious threats, the SEC could expand the safe harbor for forward looking statements to apply to utility token sales.<sup>319</sup> A forward-looking statement is “[a statement] accompanied by meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in the forward-looking statement.”<sup>320</sup> Because blockchain technology is in its

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<sup>312</sup> 17 C.F.R. § 227.100(a) (2018).

<sup>313</sup> *Id.* § 227.100(a)(3); Michael Mendelson, *From Initial Coin Offerings to Security Tokens: A U.S. Federal Securities Law Analysis*, 22 STAN. TECH. L. REV. 52, 86 (2019).

<sup>314</sup> *See* 17 C.F.R. § 227.501(a) (2018).

<sup>315</sup> Mendelson, *supra* note 311; Jonathan Rohr & Aaron Wright, *Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets*, 70 HASTINGS L.J. 463, 511 (2019).

<sup>316</sup> Sec. & Exch. Comm’n, *Regulation Crowdfunding: A Small Entity Compliance Guide for Issuers*, SEC.GOV (May 13, 2016), <https://www.sec.gov/info/smallbus/secg/recomplianceguide-051316.htm> [<https://perma.cc/HMV9-HTZ8>].

<sup>317</sup> *Id.*

<sup>318</sup> Briggs, *supra* note 24, at 446.

<sup>319</sup> *See* 15 U.S.C. § 77z-2 (2018).

<sup>320</sup> *Id.*

infancy and prone to unforeseen failures, good faith statements about a project's future success that later turn out to be false, should not result in liability to the project's developers.

#### CONCLUSION

Above all, Congress and the SEC have a duty to protect investors without stifling economic growth.<sup>321</sup> It seems unlikely blockchains or ICOs will fall by the wayside and thus, the SEC should work towards eliminating fraudulent ICOs while supporting the inclusion of legitimate blockchain projects. In a best-case scenario, this would take the form of new regulations specifically tailored to ICOs. These regulations should include heightened disclosure requirements, lowered registration costs, and a moderate degree of liability. The United States court system is ill-equipped to analyze ICOs according to existing securities law. Additional jurisprudence, in the absence of new legislation, will only muddy the waters further and leave blockchain projects and their attendant ICOs uncertain of their legal status. Thus, the SEC should begin crafting new exemptions to accommodate ICOs and their unique structure.<sup>322</sup>

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<sup>321</sup> See Briggs, *supra* note 24, at 442.

<sup>322</sup> To its credit, the SEC recently launched the Strategic Hub for Innovation and Financial Technology ("FinHub"). See *Strategic Hub for Innovation and Financial Technology*, SEC (Oct. 31 2019), <https://www.sec.gov/finhub> [<https://perma.cc/KBL6-HREX>]. FinHub is an online portal designed to help the SEC engage with technology innovators and their new methods of capital formation. *Id.* It also includes a framework for "analyzing whether a digital asset is a security." *Id.* FinHub represents an important first step in the ongoing dialogue between the SEC and blockchains.