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Securities Treatment of Tokenized Offerings under U.S. Law

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Securities Treatment of Tokenized Offerings under U.S. Law

Carol Goforth*

Abstract

This Article considers how the SEC currently approaches the question of regulating cryptoassets and ICOs. It includes a brief overview and history of cryptotransactions (including problems of terminology), and then looks at the current crypto space to consider the kinds of interests being promoted today in comparison to Bitcoin and the original altcoins. It then examines the traditional approach taken by the SEC with regard to these interests and explains briefly the kinds of compliant offerings that are currently possible. It then covers the range of reasons why a specialized regulatory approach is called for, rather than simply relying on the conventional investment contract analysis currently being utilized.

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I. Introduction

The popular press is replete with stories about hundreds of millions of dollars being raised through "ICOs" (Initial Coin Offerings). This sounds like fantastic news for investors who want to participate in the next great thing, and for startup and early-stage companies in particular, often desperate to obtain financing to fully develop and market their great ideas. If you look a little closer, however, you find a number of cautionary statements suggesting that issuers and their counsel need to be very careful before rushing into this territory. At first, ICOs and other cryptotransactions might have taken place

^{1.} What Is an ICO?, BITCOIN MAGAZINE, https://bitcoinmagazine.com/guides/what-ico/ (last visited Jan. 29, 2019) ("An Initial Coin Offering . . . is a fundraising mechanism in which new projects sell their underlying crypto tokens in exchange for bitcoin and ether. It's somewhat similar to an Initial Public Offering (IPO) in which investors purchase shares of a company."); Kenneth Rapoza, Most Cryptocurrency Startups Still Alive and Kicking After 12 Months, FORBES (Feb. 26, 2018, 11:50 AM), https://www.forbes.com/sites/kenrapoza/2018/02/26/most-cryptocurrency-startups-icos-succeeding/#289c8f4e3b1a. The concept is discussed further infra Section II.C of this Article. It has been a very popular topic in the financial press because so much money is at stake. In 2017, ICOs raised approximately \$4 billion. Rapoza, supra.

^{2.} Coin and Crypto, *Early Investors are Making 50,000% Returns on ICOs*, HACKER NOON (Dec. 5, 2017), https://hackernoon.com/investors-are-making-50-000-returns-on-icos-32432bc741d1 (reporting that "savvy cryptocurrency investors are investing in ICOs and making ROIs [return on investment] as high as 50,000%").

^{3.} See Bernard Moon, Don't Be Dumb Money: How To Invest In ICOs and Blockchain Startups, FORBES (Dec. 5, 2017, 1:27 AM), https://www.forbes.com/sites/sparklabs/2017/12/05/dont-be-dumb-money-how-to-invest-in-icos-and-blockchain-startups/#2e8b1a337c74. Many startups that are unable to secure seed funding are launching ICOs to fill the void between startup and seed funds. Id.; see Jay Preston, Initial Coin Offerings: Innovation, Democratization and the SEC, 16 DUKE L. & TECH. REV. 318, 320–21 (2018) (noting that new companies have a strong incentive to conduct an ICO to raise capital and accumulate buyers).

^{4.} See Jay Clayton, Chairman, SEC, Statement on Cryptocurrencies and Initial Coin Offerings (Dec. 11, 2017), (available at https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11). The SEC has been one of the more active regulatory agencies to provide cautionary statements to securities lawyers, accountants and consultants. SEC, Statement Urging Caution Around Celebrity Backed ICOs (Nov. 1, 2017), available at https://www.sec.gov/news/public-statement/statement-potentially-unlawful-promotion-icos; Investor Alert: Public Companies Making ICO-Related Claims, SEC (Aug. 28, 2017), https://www.sec.gov/oiea/investor-alerts-and-bulletins/ia_icorelatedclaims; Investor Bulletin: Initial Coin Offerings, SEC (July 25, 2017), https://www.sec.gov/oiea/investor-alerts-and-bulletins/ib_coinofferings; Investor Alert: Bitcoin and Other Virtual Currency-Related Investments, SEC (May 7, 2014), https://www.investor.gov/additional-resources/news-alerts/alerts-bulletins/investor-alert-bitcoin-other-virtual-currency; Investor Alert: Ponzi Schemes Using Virtual Currencies, SEC (July 23, 2013), https://www.sec.gov/investor/alerts/ia_virtualcurrencies.pdf.

^{5.} See generally Nate Crosser, Initial Coin Offerings as Investment Contracts: Are Blockchain Utility Tokens Securities?, 67 U. KAN. L. REV. 379, 384–94 (2018) (drawing lines between different

in the wild, wild west, in unfamiliar but unregulated territory,⁶ but this is no longer the case.⁷

types of cryptocurrencies and their related transactions and distinguishing them with different terminology). There are some issues with limiting the discussion to "ICOs." Id. First, not all so-called "initial coin offerings" involve coins; many new transactions involve tokens. See Scott McGovern, 5 Types of Cryptocurrency Entrepreneurs Should Know About, Entrepreneur (Dec. 21, 2018), https://www.entrepreneur.com/article/324528 (noting the biggest distinction between coins and tokens are that coins have their own blockchain, while tokens do not). Second, "ICO" is still understood by some to mean an unregulated offering, and that is increasingly not the case. Nathan J. Hochman, Policing the Wild West of Cryptocurrency, 41 L.A. LAW. 14, 14 (2018) (stating that the Internal Revenue Service (IRS), Securities and Exchange Commission (SEC), Commodity Futures Trading Commission (CFTC), and the Department of Treasury's Financial Crimes Enforcement Network (FinCEN) have all defined cryptocurrency transactions under their regulation frameworks). See I.R.S. Notice 2014-21, 2014-16 I.R.B. 938, 2014 WL 1224474 (defining cryptocurrency as "property" potentially subject to capital gains regulations); Letter from Mary Jo White, SEC Chair, to Hon. Thomas P. Casper, Chairman, U.S. Senate Comm. on Homeland Sec. & Governmental Affairs (Aug. 30, 2013), https://online.wsj.com/public/resources/documents/VCurrenty111813.pdf (referring to certain virtual currency as a security subject to registration and reporting requirements); In re Coinflip, Inc., CFTC No. 15-29 (Sept. 17, 2015), https://www.cftc.gov/sites/default/files/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoinfliprorder09172015.pdf (defining Bitcoin and other currencies as "commodities" under their regulations); FIN. CRIMES ENF'T NETWORK, U.S. DEP'T OF THE TREASURY, APPLICATION OF FINCEN'S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES FIN-2013-G001 (March 18, 2013), https://www.fincen.gov/sites/default/files/shared/FIN-2013-G001.pdf [hereinafter APPLICATION OF FINCEN'S REGULATIONS] (discussing guidelines for "convertible virtual currency"). Third, an ICO originally involved a public sale, and that is also increasingly not the case. For these reasons, this article will speak of cryptotransactions or tokenized sales. Simon Seojoon Kim, The Biggest Problem for ICOs? In 2018, It Was Their Own Investors, COINDESK (Jan. 6, 2019, 9:40 AM), https://www.coindesk.com/the-biggest-problem-foricos-in-2018-it-was-their-own-investors ("[F]rom the second half of 2017, there has been a movement towards larger private [sales] instead of public sales and lower participation from individual investors.").

- 6. See Oscar Jofre, Wild, Wild West of ICOs Time is Over, BANKLESS TIMES (Jan. 23, 2018), https://www.banklesstimes.com/2018/01/24/column-wild-wild-west-icos%E2%80%8B-time/; Simon M. Lidén, Why ICOs are Today's Wild West, and Why They Have a Bright Future, ANGELR BLOG (Nov. 27, 2017), https://www.angelr.co/blog/why-icos-are-todays-wild-west-and-why-it-has-a-bright-future; MLG Blockchain, ICOs and the Digital Wild West, MEDIUM (Sept. 28, 2017), https://medium.com/mlg-blockchain-consulting/icos-and-the-digital-wild-west-eb0e961586f9. Some sources still see ICOs as under-regulated, like the wild west. See Maksymilian Ewendt, The Wild West of Initial Coin Offerings, N.C. J. L. & TECH. (Feb. 5, 2018), http://ncjolt.org/wild-west-initial-coin-offerings/; Initial Coin Offering (ICO)—The Wild West of Fundraising, FXEMPIRE, https://www.fxempire.com/education/article/initial-coin-offering-ico-the-wild-west-of-fundraising-452592 (last visited Feb. 1, 2019).
- 7. David Sacks & Josh Stein, *Introducing the Private ICO (PICO)*, MEDIUM (Feb. 27, 2018), https://medium.com/harborhq/introducing-the-private-ico-pico-3e8b782924c1. It is hard to assume that ICOs are still free to act outside the regulatory framework when the Chairman of the SEC, in testimony before the U.S. Senate, proclaimed that "I believe every ICO I've seen is a security. . . . ICOs that are securities offerings, we should regulate them like we regulate securities offerings. End

In the United States, the Securities Exchange Commission (SEC) has been particularly active in seeking to regulate ICOs and other cryptotransactions. In fact, the sheer volume and decisiveness of what has been said by or on behalf of the SEC has led some commentators to conclude that the SEC has, in essence, employed a presumption that all ICOs involve the sale of securities. While that may be something of an overstatement, the SEC has said

of story." Id.

8. See Hochman, supra note 5, at 14. By no means is the SEC the only regulatory agency expressing interest in cryptotransactions or asserting regulatory authority. For example, the Commodities Futures Trading Commission (CFTC) has been following cryptotransactions closely. See Joseph D. Moran, The Impact of Regulatory Measures Imposed on Initial Coin Offerings in the United States Market Economy, 26 CATH. U. J. L. & TECH. 1, 16-17 (2018), https://scholarship.law.edu/jlt/vol26/ iss2/7 (describing the CFTC's regulatory framework and recent enforcement actions it has taken in the cryptocurrency sector). The CFTC regulates the trading in commodities futures, but for the last fifty years this has included authority over a vast array of financial instruments, including foreign currencies, U.S. and foreign government securities, and U.S. and foreign stock indices. Dennis W. Carlton, Futures Markets: Their Purpose, Their History, Their Growth, Their Successes and Failures, 4 J. FUTURES MKTS. 237, 237-68 (1984). The CFTC classified Bitcoin as a commodity in 2015. Press Release, U.S. Commodity Futures Trading Comm'n, CFTC Orders Bitcoin Options Trading Platform Operator and its CEO to Cease Illegally Offering Bitcoin Options and to Cease Operating a Facility for Trading or Processing of Swaps Without Registering (Sept. 17, 2015), http://www.cftc.gov/Press-Room/PressReleases/pr7231-15. More recently, it announced an enforcement action against a company and two individuals for the fraudulent offering of a functional virtual currency despite the fact that no swap or forward contract was involved. Keith Miller, Andrew P. Cross & J. Dax Hansen, CFTC Flexes Its Regulatory Muscle in a Case Involving a Virtual Currency, VIRTUAL CURRENCY REPORT (Jan. 29, 2018), https://www.virtualcurrencyreport.com/2018/01/cftc-flexes-its-regulatorymuscle-in-a-case-involving-a-virtual-currency/.

The Financial Crimes Enforcement Network (FinCEN), a bureau within the US Department of the Treasury, has also been increasingly active in this space. For example, in 2015 FinCEN reached a settlement with Ripple pursuant to which Ripple paid a \$700,000 fine. Peter Van Valkenburgh, Securities Laws Aren't the Only Rules Token Sales Have to Consider, CoinDesk (May 20, 2017, 10:55 PM), https://www.coindesk.com/securities-laws-arent-rules-token-sales-consider/. In the course of that investigation, FinCEN suggested that when an issuer sells a token (XRP in the Ripple case), that involves a money transmission, which requires the issuer to register with FinCEN and comply with its regulations. Failure to comply with those requirements can result in monetary penalties and potentially jail time for management or other control persons. See also Jonas Borchgrevink, Money Transmitter Licenses: Do You Need One For Your Bitcoin Business?, CCN (Feb. 18, 2014), https://www.ccn.com/money-transmitter-licenses/.

9. See, e.g., Daniel C. Zinman, James Q. Walker, Margaret Winterkorn Meyers & Whitney O'Byrne, SEC Issues Warning to Lawyers on ICOs, BLOOMBERG LAW (Feb. 22, 2018), https://www.bna.com/sec-issues-warning-n57982089230/. This source looked at a number of recent pronouncements and actions taken by the SEC and concluded that "the SEC has essentially adopted a rebuttable presumption that ICO tokens are securities that must comply with the registration requirements of the securities laws." Id.

A former lawyer for the SEC predicted "assembly line enforcement" against ICOs back in 2017.

it intends to monitor token sales closely.¹⁰ The SEC Chairman has also publicly stated that he has never seen an ICO that did not involve a security.¹¹

This approach may be disheartening to entrepreneurs, their counsel, and members of the public interested in getting involved with cryptotransactions. Aggressive regulation of token sales may make compliance so expensive that legitimate startup enterprises will not be able to afford access to funding that might otherwise be available. Larger companies in search of capital may be forced out of the country. Extensive regulation may also limit options for members of the public, particularly unaccredited investors, eager to participate in the blockchain technology, which has widely been referred to as "transformative."

Brady Dale, Ex-SEC Lawyer Predicts 'Assembly Line' for ICO Enforcement, COINDESK (Nov. 26, 2017, 2:00 PM), https://www.coindesk.com/sec-icos-nicolas-morgan-paul-hastings/.

- 10. F. Dario de Martino et al., *Do You Want to Launch an ICO? Please, Listen to the SEC*, MORRISON FOERSTER (Feb. 8, 2018), https://www.mofo.com/resources/publications/180131-ico-sec.html. These attorneys specifically note the SEC's "plan to continue bringing enforcement actions against ICOs conducted in violation of the U.S. securities laws, and to monitor all ICO market participants (i.e., not only issuers, but also finders, promoters, broker-dealers, investment advisers, exchanges, lawyers, accountants, and others)." *Id.*
- 11. See Sacks, supra note 7. On February 6, 2018, the Senate heard testimony from SEC Chairman Jay Clayton that "every ICO token the SEC has seen so far is considered a security and explained that if a crypto-asset issued by a company increases in value over time depending on the performance of the company, it is considered a security." Joseph Young, SEC Hints at Tighter Regulation for ICOs, Smart Policies for "True Cryptocurrencies," COINTELEGRAPH (Feb. 9, 2018), https://cointelegraph.com/news/sec-hints-at-tighter-regulation-for-icos-smart-policies-for-true-cryptocurrencies.
- 12. See Douglas A. Tanner, Cost Effectiveness and Legal Compliance: An Analysis of Securities Law Compliance for the Start-Up Company, 2 SANTA CLARA HIGH TECH. L.J. 69, 69 (1986) (noting that "[c]ompanies attempting to comply with these regulations often face burdensome costs in relation to existing resources"). This concern is no less real today; for example, estimates for the costs of Reg. A+ compliance run into the hundreds of thousands of dollars. How Much Does A Regulation A+ Offering Cost?, MANHATTAN STREET CAPITAL, https://www.manhattanstreetcapital.com/faq/for-fundraisers/how-much-does-regulation-offering-cost (last visited Feb. 1, 2019). See infra Section V.C. (discussing Reg. A+). Even complying with Reg. CF (governing crowdfunding, which is limited to no more than \$1,070,000 per year), can cost over \$100,000 for a one-year campaign raising only \$1,000,000. See Lou Bevilacqua, How Much Does It Cost to Raise Money Through Equity Crowdfunding?, BEVILACQUA (Sept. 26, 2016), http://www.bevilacquapllc.com/much-cost-raise-money-equity-crowdfunding//.
- 13. See Tiana Laurence, ICOs: Looking Back on 2017 and Ahead to 2018, FORBES (Dec. 21, 2017, 11:00 AM), https://www.forbes.com/sites/yec/2017/12/21/icos-looking-back-on-2017-and-ahead-to-2018/#68e4e37e3faa (noting the bulk of ICO fundraising took place outside of the U.S. because of regulation by the SEC).
- 14. Marco Iansiti & Karim R. Lakhani, *The Truth About Blockchain*, HARVARD BUS. REV. Jan.—Feb. 2017, at 118–27, https://hbr.org/2017/01/the-truth-about-blockchain; Stuart R. Levine, *The Danger of Not Understanding Blockchain and Its Impact*, FORBES, (Feb. 6, 2018, 10:00 AM),

This article explores what the SEC is doing to regulate cryptotransactions, starting with a consideration of the phrase "tokenized offering." Part II also reviews what is meant by basic concepts such as cryptocoins and tokens, and what is involved in conducting an ICO.¹⁵ Part III considers the current range of functions that can be provided by tokens and some ways in which different kinds of tokens might be classified.¹⁶ Using this information as a backdrop, Part IV evaluates when tokens are likely to be classified as securities under the approach currently utilized by the SEC.¹⁷ Part V briefly considers various options for conducting a compliant tokenized offering in the United States, focusing only on federal securities laws. 18 The relative costs, advantages, and limitations of each of the common issuer exemptions are included.¹⁹ Part VI examines how this regulatory approach might be modified to provide a better balance between the government's legitimate desire to protect the public, and the interests of entrepreneurs and potential investors who would like to participate in market innovation in this area.²⁰ The conclusion explains some of the potential advantages of regulatory clarification.²¹

In order to make sense of most of this, it is of course essential that everyone is on the same page about what certain terms mean. What is the difference between a coin and a token? What is an ICO? What other concepts need clarification to communicate unambiguously about tokenized offerings?

https://www.forbes.com/sites/forbesinsights/2018/02/06/the-danger-of-not-understanding-block-chain-and-its-impact/#759c804f6e70; Frank Chaparro, *Crypto Insider: The CEO of \$20 Billion Data Company Thinks Blockchain 'Has Potential to be Transformative'*, BUSINESS INSIDER (Mar. 23, 2018, 2:19 PM), http://www.businessinsider.com/big-data-ceo-on-blockchain.

- 15. See infra Part II.
- 16. See infra Part III.
- 17. See infra Part IV.

- 19. See infra Part V.
- 20. See infra Part VI.
- 21. See infra Part VII.

^{18.} See infra Part V. There are a number of other regulations that will impact the legality of a token offering. In addition to federal securities laws, state securities regulations can be important, unless the offering is conducted in compliance with federal rules which preempt inconsistent state law. States are, in fact, beginning to act to shut down non-compliant offerings directed at their residents. See Nikhilesh De, Massachusetts Halts 5 ICOs for Selling Unregistered Securities, COINDESK (Mar. 27, 2018, 7:00 PM), https://www.coindesk.com/massachusetts-halts-5-icos-on-unregistered-securities-grounds/. In addition to regulation under securities laws, token sales may also be regulated by the CFTC as commodities and FinCEN as virtual currency. See supra note 8.

II. WHAT IS A "TOKENIZED OFFERING"?

Since the focus of this article is how tokens are and should be classified under the federal securities laws, a logical and probably necessary starting point is to make sure that there is a common understanding about the context in which cryptotransactions take place. As a preliminary matter, this article sometimes refers to cryptocoins and cryptotokens collectively as cryptoassets. The word "cryptotransactions" serves as a generic reference to transactions involving any cryptoasset, regardless of whether it is a coin or token.²² A tokenized offering is a sale of cryptoassets by the issuer conducted in order to raise funds needed to develop, expand, or operate the issuer's business, possibly including efforts to finalize development of the tokens being promoted.²³

A. Background Information

The cryptotransaction story started long ago, but the point at which cyptoassets began making waves was probably around 2008, when someone under the pseudonym of Satoshi Nakamoto posted a paper entitled "Bitcoin: A Peer to Peer Electronic Cash System," in an online discussion of cryptography.²⁴ The innovation announced in this paper was the development of consensus protocols in the form of proof-of-work, which provides a solution to the issue of how consensus can be reached as to the validity of transactions on a decentralized network absent the ability to trust the other parties who are involved.²⁵ While consensus protocols are generally outside the scope of this

^{22.} See Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System, BITCOIN.ORG 2, https://bitcoin.org/bitcoin.pdf (last visited Feb. 1, 2019) (discussing the meaning of transactions in relation to bitcoin).

^{23.} See Ryan Browne, Apple and Tesla Shares on the Blockchain Could Be the Next Big Thing in Crypto, CNBC (Jan. 8, 2019, 1:27 AM), https://www.cnbc.com/2019/01/07/bitcoin-security-token-and-sto-explained.html (stating "[n]ew security tokens can be issued and sold to investors, similar to how new digital tokens are sold through a crowdfunding method known as an initial coin offering (ICO). This is what's known as a security token offering (STO).").

^{24.} Nakamoto, *supra* note 22; Mark Hodge, *Who is Satoshi Nakamoto? Bitcoin Creator Whose Identity is Unknown But Could be One of the Richest People in the World*, THE SUN (Feb. 12, 2018, 7:30 PM), https://www.thesun.co.uk/news/5037060/satoshi-nakamoto-bitcoin-inventor-richest-world/ (describing the unsuccessful efforts at identifying him).

^{25.} See Carol R. Goforth, *The Lawyer's Cryptionary: A Resource for Talking to Clients About Crypto-Transactions*, 41 CAMPBELL L. REV. 47 (2019). For an even more detailed discussion of the problem of consensus for decentralized networks, see *Basic Primer: Blockchain Consensus Protocol*, BLOCKGEEKS, https://blockgeeks.com/guides/blockchain-consensus/ (last visited Feb. 1, 2019).

article, it was this innovation that led directly to the issuance of Bitcoin, a digital currency originally conceived as an alternative to traditional fiat currencies. As the first established cryptocurrency, Bitcoin has become the "de facto standard" for coins specifically designed to serve as a replacement for cash. 27

Bitcoin has no centralized bank, nation state, or regulatory authority backing it up.²⁸ "Bitcoins" have no tangible existence and instead are recorded only as balances in a digital decentralized ledger in which transactions are added in chronological order.²⁹ The information is compiled in chunks of data called "blocks," and when those blocks are confirmed and accepted they are added to the "blockchain."³⁰

To make sense of this, it is probably necessary to understand a little bit about blockchain technology and how it operates.³¹ In the context of blockchains, a "block" is a permanently recorded, time-stamped transaction aggregated with other transactions that occurred at about the same time.³² One of the simplest ways to think about this is as if a "block" is the equivalent of a

^{26.} Neale Godfrey, *A Few Words about Bitcoin* . . . *Because Fiat is Not Just a Car*, FORBES (Mar. 8, 2015, 8:40 AM), https://www.forbes.com/sites/nealegodfrey/2015/03/08/a-few-words-about-bitcoin-because-fiat-is-not-just-a-car/#4dfab06543f2. "Fiat" is Latin for "it shall be," and although technically it could refer to any medium of exchange not tied to something with tangible value, fiat currency had come to refer to "money" or "currency" that has value because a government has decreed that it does.

^{27.} Sajalali, *The Six Most Important Cryptocurrencies Other than Bitcoins*, STEEMIT, https://steemit.com/cryptocurrency/@sajalali/the-six-most-important-cryptocurrencies-other-than-bitcoins (last visited Feb. 1, 2019). While Bitcoin may be the most influential, it was not the first attempt to create digital currency with an encryption-secured ledger. Bernard Marr, *A Short History of Bitcoin and Crypto Currency Everyone Should Read*, FORBES (Dec. 6, 2017, 12:28 AM), https://www.forbes.com/sites/bernardmarr/2017/12/06/a-short-history-of-bitcoin-and-crypto-currency-everyone-should-read/#78cdee643f27 (offering both B-Money and Bit Gold as examples of formulations that were never fully developed).

^{28.} Julia Finch, From Silk Road to ATMs: The History of Bitcoin, THE GUARDIAN (Sept. 14, 2017, 2:21 AM), https://www.theguardian.com/technology/2017/sep/13/from-silk-road-to-atms-the-history-of-bitcoin.

^{29.} Paul Bryzek, *A Quick Glimpse of Blockchain and its Revolutionary Applications*, MEDIUM (Jul. 5, 2018), https://medium.com/coinmonks/a-quick-glimpse-of-blockchain-and-its-revolutionary-applications-3624d2455e69 ("Blockchain is an incorruptible ledger or record book; therefore, the technology can be used to securely store data in decentralized blocks.").

^{30.} See id. ("The Blockchain is an ever-growing chain of data, or 'blocks,' which allows for an established digital trail back to the original block that is heavily resilient to changes and tampering.").

^{31.} See Block (Bitcoin Block), INVESTOPEDIA, https://www.investopedia.com/terms/b/block-bitcoin-block.asp (last updated July 5, 2018).

^{32.} See Iansiti & Lakhani, supra note 14.

page in a ledger or record book.³³ A block will also contain a reference to the immediately preceding block (so that the system knows where it is to be placed in the chain), and a difficult to solve mathematical puzzle.³⁴ The puzzle in the block must then be solved before the next block can be added to the chain.³⁵ These puzzles are necessary so that the blocks are added to the chain (the "blockchain") in the same sequence by everyone in the network.³⁶ The first transaction in each new block is the genesis transaction, and it contains the record of which addresses or scripts are entitled to receive the reward for solving the mathematical puzzle.³⁷ Because each block begins with the reference to the prior block, and in turn contains a puzzle that must be solved in order for the next block to be added, the sequence of blocks forms a chain.

All of the information held on a blockchain is wholly distributed (making it both transparent and decentralized), and the chain is continually updated and reconciled (making it secure).³⁸ Because the information on the chain is shared in its entirety among so many computers, it cannot be controlled by any single entity, and the system therefore has no single point of access where a hacker or other outside force can interrupt or corrupt the information on the chain.³⁹ Blockchain technology therefore allows digital information to be widely distributed but not altered unilaterally.⁴⁰

^{33.} INVESTOPEDIA, *supra* note 31; *see also Block*, BITCOIN WIKI, https://en.bitcoin.it/wiki/Block (last visited Feb. 1, 2019).

^{34.} Cryptovest, *Bitcoin and Blockchain: What Math Puzzle Do Miners Actually Solve? Example With Real Transactions*, STEEMIT, https://steemit.com/bitcoin/@cryptovest/bitcoin-and-blockchain-what-math-puzzle-do-miners-actually-solve (last visited Feb. 1, 2019).

^{35.} See INVESTOPEDIA, supra note 31 (stating that "[a] mathematical problem is linked with each block. Miners are constantly processing and recording transactions as part of the process of competing in a type of race").

^{36.} See id. (stating that "a block is like a page of a ledger or record book. Each time a block is 'completed,' it gives way to the next block in the blockchain").

^{37.} See generally id. It is this reward that supports the practice of mining, acting as incentive that replaces transaction fees that might otherwise be associated with transactions compiled in the block.

^{38.} See What is Blockchain Technology? A Step-by-Step Guide for Beginners, BLOCKGEEKS (2017), https://blockgeeks.com/guides/what-is-blockchain-technology/ (stating that "[i]nformation held on a blockchain exists as a shared—and continually reconciled—database. This is a way of using the network that has obvious benefits."). The ledger is decentralized because it is distributed to a network of computers rather than being held in one central location.

^{39.} See Why Blockchain Cannot Be Hacked, BITCOIN OF AMERICA (Apr. 18, 2018), https://www.bitcoinofamerica.org/blog/blockchain-cannot-be-hacked/.

^{40.} See BLOCKGEEKS, supra note 38 ("The blockchain is an incorruptible digital ledger of eco-

Bitcoin has at least proven that the underlying technology is workable and reliable, ⁴¹ but the utility of blockchain technology does not end with creation of alternatives to traditional fiat currencies. ⁴² While the first uses of blockchain were indeed to create "coins" that operated as "cryptocurrencies," it would be a huge mistake to believe that is the only application of blockchain technology. ⁴³ Blockchain has clearly evolved into a platform for other innovations. ⁴⁴ It now allows for programmable transactions that are dependent on one or more conditions resulting in a range of new economic opportunities previously unavailable on the web, including such things as microtransactions, decentralized exchange, and smart contracts. ⁴⁵

Smart contracts are particularly important because they are so versatile.⁴⁶ A smart contract is: (1) pre-programmed logic written in computer code, (2) stored and replicated on a distributed platform or blockchain, (3) that is then executed or run by a network of computers (typically the same computers that host the blockchain), (4) which then results in ledger updates pursuant to the terms of the agreement as specified in the computer code.⁴⁷ Another way of looking at this particular kind of application for blockchain technology is to focus on the overall context: "a smart contract enforces a relationship with cryptographic code."⁴⁸

nomic transactions that can be programmed to record not just financial transactions but virtually everything of value." (quoting DON TAPSCOTT & ALEX TAPSCOTT, BLOCKCHAIN REVOLUTION (2016))).

^{41.} François R. Velde, *Bitcoin: A Primer*, 317 CHI. FED. LETTER 1, 3 (2013), https://www.chicagofed.org/publications/chicago-fed-letter/2013/december-317. When originally issued, Bitcoin was regarded with a great deal of skepticism. One noted source suggested that "the uses of bitcoin as a medium of exchange appear limited, particularly if one excludes illegal activities." *Id.* at 4. On the other hand, even this commentator acknowledged that it represented "a remarkable conceptual and technical achievement." *Id.*

^{42.} See Roman Alyoshkin, Blockchain 2.0. The Purpose of Blockchain, MEDIUM (Oct. 3, 2017), https://medium.com/polys-blog/blockchain-2-0-the-purpose-of-blockchain-e84e5a95cdd9.

^{43.} Martin von Haller Gronbaek, *Blockchain 2.0, Smart Contracts and Challenges*, BIRD & BIRD (June 2016), https://www.twobirds.com/en/news/articles/2016/uk/blockchain-2-0--smart-contracts-and-challenges.

^{44.} Alyoshkin, *supra* note 42. The expanded functionality is sometimes called "Blockchain 2.0." *Id.*

⁴⁵ Id

^{46.} antonylewis2015, *A gentle introduction to smart contracts*, BITS ON BLOCKS (Feb. 1, 2016), https://bitsonblocks.net/2016/02/01/a-gentle-introduction-to-smart-contracts//.

^{47.} See id.

^{48.} Alyssa Hertig, How Do Ethereum Smart Contracts Work?, COINDESK, https://www.coindesk

B. Coins and Tokens

When evaluating how the SEC is approaching and should approach cryptotransactions, there should at least be a common understanding about the definition of "coin" and "token." ⁴⁹ Unfortunately, even this is easier said than done. ⁵⁰ It would be simplest if "coin" was generally accepted as being something that was intended as a replacement for fiat currencies, and "token" was reserved for interests that were intended to have a different functionality. ⁵¹ This is, however, not the case. ⁵²

From a technical standpoint, the difference between coins and tokens depends on whether the interest in question operates independently of other platforms or whether it has been built on top of another platform.⁵³ From this perspective, a coin operates independently of other platforms.⁵⁴ For example, Bitcoin possesses its own blockchain, where transactions relating to Bitcoin are recorded.⁵⁵ Altcoins (cryptographic coins conceived as "alternatives" to Bitcoin) generally work the same way, with each altcoin having a unique blockchain on which it operates.⁵⁶ Tokens, on the other hand, are built on top

.com/information/ethereum-smart-contracts-work/ (last visited Feb. 2, 2019). A slightly more technical definition was provided by the programmer behind Ethereum, Vitalik Buterin, who explained the Smart Contract approach as starting when "an asset or currency is transferred into a program 'and the program runs this code and at some point it automatically validates a condition and it automatically determines whether the asset should go to one person or back to the other person, or whether it should be immediately refunded to the person who sent it or some combination thereof." Smart Contracts: The Blockchain Technology That Will Replace Lawyers, BLOCKGEEKS, https://blockgeeks.com/guides/smart-contracts/ (last visited Feb. 2, 2019).

- 49. See Difference Between Cryptocurrency Coins and Tokens, CRYPTONIAM (Dec. 5, 2017), https://www.cryptoniam.com/what-is-the-difference-between-cryptocurrency-coin-and-tokens/.
- 50. *Id.* ("The terms 'coins' and 'tokens' are confusing and are interpreted differently by different individuals."). This article adopts what appears to be the most widely accepted technical usage and understanding as of the date this material was written.
 - 51. *Id*.
 - 52. Id.
 - 53. Id.
 - 54. Id. Bitcoin, Dash and Litecoin are identified as examples of Coins. Id.
- 55. See How Do Bitcoin Transactions Work?, COINDESK, https://www.coindesk.com/information/how-do-bitcoin-transactions-work (last updated Jan. 29, 2018) (explaining, "[m]y bitcoin wallet doesn't actually hold my bitcoin. What is does is hold my bitcoin address, which keeps a record of all of my transactions, and therefore of my balance.").
- 56. See Altcoin, INVESTOPEDIA, https://www.investopedia.com/terms/a/altcoin.asp/ (last updated July 5, 2018) (discussing the definition and breakdown of altcoins).

of another platform in order to operate.⁵⁷ For the purposes of securities regulation, this is a distinction that is likely to be seen more as form rather than substance.⁵⁸ Regulators are likely to be concerned with the functional characteristics of the underlying interests, not with being able to identify how they are structured from a programming standpoint.⁵⁹

Unfortunately, this makes it much harder to talk about coins and tokens without risking misunderstanding. A number of sources use the two terms interchangeably or use the word "token" to encompass both coins and tokens. Even if "coin" meant interests intended to act solely as replacements for fiat currencies and "token" was reserved for interests designed to serve some other function, the concept of a "token" would still be incredibly broad. 19

Attempts to classify tokens have not been very successful because a token can fulfill a number of distinct functions, and a single token can have more than one such purpose. For example, it is certainly possible for a token to serve as a medium of exchange, like a currency or coin, so that it acts as a payment system between participants. It can act as a digital asset or, in other words, as a digital right; owning this kind of token could represent ownership of an interest in any kind of property. It can serve as a means of access or

^{57.} See CRYPTONIAM, supra note 49.

^{58.} Compare CRYPTONIAM, supra note 49 (explaining how tokens operate), with Altcoin, supra note 56 (explaining how altcoins operate).

^{59.} See Warfield Capital, An Observation of Crypto Security Tokens, Medium (Oct. 18, 2018), https://medium.com/altcoin-magazine/an-observation-of-crypto-security-tokens-6992283befc3.

^{60.} See Aziz, infra note 75 and accompanying text.

^{61.} See What Are Security Tokens?, BLOCKGEEKS, https://blockgeeks.com/guides/security-tokens/ (last visited Feb. 2, 2019) (stating that "[t]o give you a very wide, non-generalized definition, a token is a representation of something in its particular ecosystem. It could value, stake, voting right, or anything. A token is not limited to one particular role; it can fulfill a lot of roles in its native ecosystem.").

^{62.} See id. The table in the source demonstrates the multiple purposes of tokens.

^{63. @}basiccrypto, *Is your Crypto Digital Gold, Gas, or Something Else?*, STEEMIT, https://steemit.com/cryptocurrency/@basiccrypto/is-your-crypto-digital-gold-gas-or-something-else (last visited Feb. 2, 2019) ("The first generation of cryptocurrencies were designed as digital Stores of Value. Their purpose was to replace fiat currency as the medium for transactions. . . . Bitcoin is the classic example").

^{64.} James, *A Guide to Gold-backed Cryptocurrency*, GOLDSCAPE.NET (Jan. 5, 2019), http://www.goldscape.net/gold-blog/gold-backed-cryptocurrency/. Perhaps the most obvious examples of these kinds of tokens or coins would be gold-based cryptocurrencies. For these, "[a] token or coin is issued that represents a value of gold (for example 1 gram of gold equals 1 coin). The gram of

membership to a community or group.⁶⁵ It can function as a share of or stake in a business venture in much the same way that equity securities traditionally do.⁶⁶ It can be a means of rewarding those who contribute to the system.⁶⁷ It can, in fact, do more than one of these at the same time. Because there are so many options for functionality,⁶⁸ it is very hard to classify any particular token, especially because they are often a cross between shares, an internal currency, and accounting units.⁶⁹

Compounding the complexity is the fact that the perspectives of various constituents may differ. An entrepreneur or developer may see the underlying functionality (or utility) of the token as its primary value. A purchaser may be purchasing in order to exploit that functionality, or the purchase may be motived by a desire to speculate that the token value will increase. A promoter or investment adviser (whether or not affiliated with the original issuer)

gold is stored by a trusted custodian (preferably third party) and can be traded with other coin holders." *Id.*

- 65. Access tokens have been described like this: "Tokens can also play a role of being needed to access the network and pay transaction fees. It's not the sole means of payment—other currencies can be used—but small amounts are needed to use the platform at all. In some ways, Ethereum and all platform blockchains are like this: the native cryptocurrency is just needed to pay gas fees, but people can still transfer (and pay with) meta-tokens. Another example is Melon, which accepts multiple forms of tokens as payment across the network but which also requires that transaction fees be paid in Melon tokens." *Token Rights: Key Considerations in Crypto-Economic Design*, SMITH & CROWN (Mar. 30, 2017), https://www.smithandcrown.com/token-rights/. Meta-tokens are described as being like a share in the underlying project. *See* Tristan Winters, *Meta-Tokens, ICOs and the Ethereum Blockchain*, ETHNEWS (Sept. 10, 2016, 7:30 AM), https://www.ethnews.com/meta-tokens-icos-and-the-ethereum-blockchain.
- 66. Alex Lielacher, *ICO Tokens 101: Understanding Token Types*, BITCOIN MKT. J. (Nov. 21, 2017, 8:00 AM), https://www.bitcoinmarketjournal.com/ico-token/ (suggesting that new tokens from tZero, a portfolio company of Overstock, Inc., would fit the categorization of tokenized securities).
- 67. See How Bitcoin Mining Works, COINDESK, https://www.coindesk.com/information/how-bitcoin-mining-works/ (last updated Jan. 29, 2018). Bitcoin miners, for example, receive coins for successfully solving the puzzles that are necessary to authenticate blocks on the Blockchain.
- 68. See COINMARKETCAP, https://coinmarketcap.com (last visited Feb. 20, 2018). As of February 2, 2019, there were 2103 distinct Tokens traded on Coinmarket, and they had a total capitalization of about \$114,510,000,000.
- 69. Pavel Kravchenko, *Know Your Tokens: Not All Crypto Assets Are Created Equal*, COINDESK (Aug 14, 2017, 4:12 PM), https://www.coindesk.com/what-is-token-really-not-all-crypto-assets-created-equal/.
- 70. See Lawrence Wintermeyer, The Role of Cryptocurrencies in Future Society, FORBES (Oct. 26, 2018, 4:02 AM), https://www.forbes.com/sites/lawrencewintermeyer/2018/10/26/the-role-of-cryptocurrencies-in-future-society/#36a042fd787d.
- 71. Seth Fiegerman, *I Bought \$250 in Bitcoin. Here's What I Learned*, CNN BUSINESS (Dec. 8, 2017, 11:24 AM), https://money.cnn.com/2017/12/07/technology/bitcoin-explainer/index.html.

may wish to promote the potential returns on investment in order to earn commissions.⁷²

From the SEC's standpoint it is not likely to be particularly important whether a coin or token operates independently of other blockchains or requires another blockchain to serve as a platform. For that reason, both coins and tokens are likely to be assessed by the SEC in the same way, and this article will use the word "token" in the broadest sense to include both interests that might technically be "coins" as well as traditional "tokens." It will not try to differentiate between coins and tokens that are "cryptocurrencies," because that is also a term that has been so inconsistently applied that its use is more likely to be confusing rather than helpful.

C. ICOs

An ICO is a process in which issuers sell tokens that they have developed or are in the process of developing in order to raise funds for the business. The ICO has been compared to public offerings of securities in traditional Initial Public Offerings (IPOs). An IPO . . . offers [investors] a chance to

^{72.} See Ahiza Garcia, What You Need to Know Before Investing in Cryptocurrency, CNN BUSINESS (Oct. 5, 2018, 11:09 AM), https://www.cnn.com/2018/10/05/tech/cryptocurrency-bitcoin-explainer/index.html.

^{73.} See Lukas Schor, 8 Important Things to Know About Security Tokens/Token Regulation, MEDIUM (Nov. 22, 2017), https://medium.com/@argongroup/8-important-things-to-know-about-security-tokens-token-regulation-3d548a1a6367.

^{74.} See CoinBundle Team, What's The Difference Between Tokens & Coins?, MEDIUM (Sept. 11, 2018), https://medium.com/coinbundle/whats-the-difference-between-tokens-coins-9942fe42f275 (describing the difference between tokens and coins, but acknowledging that people often use them interchangeably within the world of cryptocurrency).

^{75.} See Aziz, Coins, Tokens & Altcoins: What's the Difference?, MASTER THE CRYPTO, https://masterthecrypto.com/differences-between-cryptocurrency-coins-and-tokens/ (last visited Feb. 2, 2019) ("[A]ll coins or tokens are regarded as cryptocurrencies, even if most of the coins do not function as a currency or medium of exchange."). "Cryptocurrency" is a term that is not always used to mean precisely the same thing. Sometimes it is used to speak about both tokens and digital currencies. One source, for example, says that "cryptocurrency" is generally understood as covering the realm of exchangeable value coins and tokens. This same source suggests that "cryptocurrency" is a misnomer, since many coins and tokens that followed Bitcoin do not possess the traditional characteristics of currency such as being "a unit of account, a store of value and a medium of exchange." Id.

^{76.} BITCOIN MAGAZINE, *supra* note 1; *see also What is An Initial Coin Offering? Raising Millions In Seconds*, BLOCKGEEKS, https://blockgeeks.com/guides/initial-coin-offering/ (last visited Feb. 2, 2019).

^{77.} BITCOIN MAGAZINE, supra note 1.

make big money quickly by getting in on the ground floor of the next new Google or Facebook. An ICO . . . [originally] offer[ed] a chance to make big money quickly by getting in on the next new money."⁷⁸ That phrasing suggests that ICOs only involve cryptocurrencies, which is not really the case. Today, ICOs often offer the chance to access new technology and support new ideas, but regardless of terminology, there are in fact a number of similarities between the two kinds of offerings.⁷⁹

Both IPOs and ICOs are used by business ventures to obtain funding for a variety of business activities;⁸⁰ both kinds of offerings can raise tremendous amounts of money;⁸¹ and both can attract a large number of investors.⁸² On the other hand, there are clearly major differences between the two.⁸³

One critical difference is the nature of the underlying stake being sold by the issuer and acquired by the purchaser.⁸⁴ In an IPO, the issuer is generally selling shares representing an ownership interest in the company that is raising funds, whereas in an ICO the tokens do not include direct ownership of the business.⁸⁵ Another difference highlighted by some commentators is that in an ICO, unlike IPOs, investors can often use other cryptocurrencies such as

^{78.} Julie Verhage et al., *What's an ICO? Like an IPO But With Digital Coins*, BLOOMBERG BUSINESSWEEK (Sept. 17, 2017, 9:00 PM), https://www.bloomberg.com/news/articles/2017-09-18/what-s-an-ico-like-an-ipo-but-with-digital-coins-quicktake-q-a.

^{79.} See generally, Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. FIN. ECON. 305 (1976).

^{80.} See generally id. IPOs have traditionally been used to raise capital for the firm, to diversify the portfolios of the founders who want to minimize risk of having all of their capital tied up in a single asset, and to obtain increased liquidity for early investors. An ICO does not necessarily offer founders increased liquidity, but it can certainly provide the firm with additional capital.

^{81.} Christine Hurt, *Moral Hazard and the Initial Public Offering*, 26 CARDOZO L. REV. 711, 712 (2005). For example, "[d]uring the 1999–2000 Boom, IPOs generated \$65 billion each year." *Id.* ICO funding in the second quarter of 2017 alone is reported to have exceeded \$800 million. Jon Russell, *ICO Funding Hit a Record \$800 Million in Q2 2017*, TECHCRUNCH (Sept. 7, 2017), https://techcrunch.com/2017/09/07/ico-report-q2-coindesk/.

^{82.} See Sacks & Stein, supra note 7. Neither IPOs nor ICOs have to be sold to a limited number of investors. IPOs are designed to be marketed to the "public," and ICOs were originally conceived as not involving securities at all, theoretically allowing anyone to buy the coins or tokens. *Id.* ("In the beginning of cryptotokens, no one thought to apply securities laws to these novel inventions."). Even now, most ICOs are conducted pursuant to Reg. D, which allows sales to an unlimited number of accredited investors. See infra Sections V.D–E.

^{83.} *ICO vs IPO: Key Differences*, COINTELEGRAPH, https://cointelegraph.com/ico-101/ico-vs-ipo-key-differences#ico-and-ipo--pros--cons-table (last visited Feb. 2, 2019).

^{84.} See id.

^{85.} *Id*.

Bitcoin or Ethereum rather than being limited to purchasing interests with fiat currency. In addition, the regulatory frameworks for the two options are radically different. The IPO is very well understood and stringently regulated. As a public offering of shares, an IPO requires filing of registration materials which are carefully reviewed by the SEC, and following an IPO in the United States, the issuer becomes a reporting company subject to the ongoing reporting requirements of the Securities Exchange Act of 1934. Until quite recently, ICOs were conducted in a "gray" area while regulators tried to develop and implement workable approaches to oversight. Only recently have there been many efforts to conduct "compliant" token offerings. Finally, many ICOs are conducted before the eventual token is functional; IPOs generally involve fully authorized shares ready to be issued in their final form.

^{86.} Abhishek Singh, Comment to *What is the difference between an IPO and an ICO?*, QUORA (Jan. 2, 2018), https://www.quora.com/What-is-the-difference-between-an-IPO-and-an-ICO.

^{87.} See, e.g., JOHN A. AIELLO ET AL., PREPARATION FOR THE INITIAL PUBLIC OFFERING 11 (2007), http://www.ghclaw.com/65C0C8/assets/files/News/PreparingForIPO_APR07.pdf; Eric Jensen, 25 Considerations in Preparing For An IPO, COOLEY LLP, https://www.cooleygo.com/25-considerations-preparing-ipo/ (last visited Feb. 2, 2019); EY'S GUIDE TO GOING PUBLIC 6–7, https://www.ey.com/Publication/vwLUAssets/ey-guide-to-going-public-2017/%24FILE/IPO_A4_Guide%20to%20Going%20Public_V2_LR.pdf (last visited Feb. 2, 2019);

Roadmap for an IPO: A Guide to Going Public, PWC, https://www.pwc.com/us/en/deals/publications/roadmap-for-an-ipo-a-guide-to-going-public.html (last visited Feb. 2, 2019).

^{88.} AIELLO ET AL., *supra* note 87, at 11 ("In connection with a company's IPO, the company will most likely file a registration statement on Form S-1 with the SEC. As discussed below, 'small business issuers' may also file a registration statement on Form SB-1 or Form SB-2 in connection with a public offering.").

^{89.} Securities Exchange Act of 1934, 15 U.S.C. § 78a (2018). The on-going reporting requirements appear throughout the Securities Exchange Act of 1934, and regulations promulgated thereunder.

^{90.} See Considering an IPO? The Costs of Going and Being Public May Surprise You, PwC 1 (2012), https://www.deschenaux.com/general-informations/E_pwc-cost-of-ipo.pdf. This source suggests that a company might expect an average of \$3.7 million of costs "directly attributable to their IPO," plus another \$2 million in one-time costs, and about \$1.5 million in recurring costs associated with being public. *Id.* at 1 figs.1, 10. This is not an option for the faint of heart.

^{91.} See generally Giulio Prisco, 2019: The Year of the Security Token Offering (STO)?, MEDIUM (Jan 3, 2019), https://medium.com/chainrift-research/2019-the-year-of-the-security-token-offering-sto-bb52a09d0701 (discussing the upcoming proposals for the SEC to start regulating and registering ICOs as securities).

^{92.} See infra Section II.E of this article (discussing the SAFT). While not all ICOs are conducted before the tokens are fully functional, a number of ICOs have in fact been designed to provide funding necessary to complete token programming. It was this fact that prompted the development of the SAFT project, and it is this kind of project "that run[s] a high risk of having their tokens labeled as

Some commentators have objected to calling the sales of tokens "ICOs," pointing out that the very terminology is likely to raise the level of the concern at the SEC. "It's like someone said: 'hey it's like an IPO, so let's change the public part to coin, and we're good. It's a coin, not a security offering.' . . . It's like painting a sign on your forehead that says: hey, please investigate me SEC." On the other hand, given the widespread acceptance of "ICO" as a label for such deals, and the fact that the SEC has already stepped into the crypto world, this ship has probably sailed. 94

In all probability, it would be safest to assume that in the short term at least, most ICOs are likely to be treated as involving the sale of securities. One source suggested that this means there are likely to be "very few 'true' utility token issuances in 2018,"95 but even this observation conflates the terminology. A token can have great utility and nonetheless be classified as a security because the SEC's test for determining if an interest is a security does not ask if the interest has utility. 97

Over time, this may well change. It is likely that the SEC, CFTC and FinCEN will collaborate on new definitions, standards, and guidelines, with the goal of increasing consistency and clarity for federal regulators. ⁹⁸ Ideally, such collaboration might resolve some of the ambiguities currently created by the premise that application of regulations depends on whether a transaction

securities—in this case, those that raise money selling coins well before they launch their network." Laura Shin, *Want to Hold An ICO? CoinList Makes It Easy—And Legal*, FORBES (May 18, 2017, 10:00 AM), https://www.forbes.com/sites/laurashin/2017/05/18/want-to-hold-an-ico-coinlist-makes-it-easy-and-legal/#2c30dc437ce5.

Compare this with the IPO model. "Historically, an initial public offering, or IPO, has referred to the first time a company offers its shares of capital stock to the general public." SEC OFFICE OF INV'R EDUC. AND ADVOCACY, INVESTOR BULLETIN, INVESTING IN AN IPO 1 (2013), https://www.sec.gov/investor/alerts/ipo-investorbulletin.pdf (last visited Feb. 2, 2019).

- 93. Collin Thompson, *How To Do an Initial Coin Offering (Part 1)*, MEDIUM (July 15, 2017), https://medium.com/blockchain-review/how-to-do-an-ico-d02c54a990c2.
- 94. Sacks & Stein, *supra* note 7. This source specifically suggests a move away from "ICOs" to Private ICOs or "PICOs," but whether this terminology will catch on is anyone's guess.
- 95. Christopher Pallotta & Vincent Molinari, *Goodbye ICOs, Hello TAOs? How Tokens Will Change in 2018*, COINDESK (Jan. 10, 2018, 1:00 PM), https://www.coindesk.com/goodbye-icos-hellotaos-tokens-will-change-2018/.
 - 96. See id.
- 97. See *infra* Part IV for a discussion of the SEC's reliance on the *Howey* test and consideration of when a token sale will be treated as involving a security.
 - 98. See Pallotta & Molinari, supra note 95.

involves a "utility token" or a "securities token," or perhaps a "virtual currency" or commodity. 99

D. Public vs Private Sales

Originally, ICOs were regarded as being beyond the purview of United States securities laws because no one thought of cryptoassets as securities. ¹⁰⁰ It was after cryptofunding exploded, particularly in 2017, that the SEC became very involved. ¹⁰¹ Even before the recent escalation of SEC scrutiny, many companies had begun limiting their offering of cryptoassets to sales that occurred outside of the United States, to non-U.S. investors because of the concern that the SEC would eventually act. ¹⁰²

Within the United States, ICOs appear to have transitioned from truly public to private or limited offerings. Clearly, the increasing regulatory attention has played a role in this change, with most ICOs in this country now being conducted under the auspices of Regulation D. As of the date this was written, only a single issuer has filed a registration statement for a proposed token within the United States, and given the costs and uncertainties associated with this option, few companies are likely to follow this approach.

^{99.} Id.

^{100.} Sacks & Stein, supra note 7.

^{101.} *Id.* As late as March of 2016, ICOs had raised only about \$56 million. A year later that amount was \$330 million, and six months after that, the total amount raised in so-called ICOs had ballooned to more than \$2 billion. During that period of explosive growth in funding, the SEC released an opinion that "digital assets could be securities, applying traditional securities law doctrine (the *Howey* test)."

^{102.} JP Buntinx, *Why Can't U.S. Citizens Participate in Cryptocurrency ICOs?*, THE MERKLE (June 29, 2017), https://themerkle.com/why-cant-us-citizens-participate-in-cryptocurrency-icos/. This source noted that the theoretical limitation on sales to non-U.S. investors was often easy to evade by the simple expedient of lying about citizenship.

^{103.} Blockchain Market Map: 115 Blockchain Startups That Have Raised Money Through ICOs, CBINSIGHTS, https://www.cbinsights.com/research/blockchain-ico-tokens-startup-market-map-expert-research/ (last updated April 13, 2018).

^{104.} Jaron Lukasiewicz, *The Basics on FACTS: A New Model for Compliant ICOs*, COINDESK (Oct. 29, 2017, 3:04 PM), https://www.coindesk.com/basics-facts-new-model-compliant-icos/ ("Most private token sales would fall under Rule 506(c) of Regulation D, which would restrict token sales to *verified* accredited investors and add transfer restrictions.").

^{105.} See infra note 240 and accompanying text.

^{106.} For a description of costs, see PWC, supra note 90, describing both the initial and ongoing costs

E. Direct Pre-Sales and SAFTs

There was one very notable attempt to create a procedure pursuant to which an issuer could sell pre-functional interests in an offering structure that complied with United States securities laws and then later convert those interests into functional utility tokens.¹⁰⁷ It was anticipated that the first step would involve the sale of a security, and the plan was to find and comply with one of the exemptions from registration for that phase of the distribution.¹⁰⁸ The goal, however, was to ensure that the subsequent conversion of those interests into functional utility tokens would not need to be registered or exempt by structuring the deal so that the secondary transaction did not involve the sale of a security.¹⁰⁹ This process is the model on which the SAFT, or "Simple Agreement for Future Tokens," was built.¹¹⁰

The SAFT was clearly a nod to the successful SAFE (Simple Agreement for Future Equity) startup documentation project pioneered by Y Combinator.¹¹¹ In fact, the former head of the fintech practice area at Cooley LLP¹¹² once stated that the first version of a SAFT he viewed was just "a cheap

of being public. In addition, this assumes that the issuer can get the token listed on a public stock exchange, a premise which itself has been question. Lukasiewicz, *supra* note 104.

^{107.} Juan Batiz-Benet et al., *The SAFT Project: Toward a Compliant Token Sale Framework*, SAFT PROJECT, 15–16 (Oct. 2, 2017), https://saftproject.com/static/SAFT-Project-Whitepaper.pdf (introducing the SAFT Project as a system of compliance for ICOs).

^{108.} Id. at 16.

^{109.} *Id.*; see also James J. Park, When Are Tokens Securities? Some Questions from the Perplexed 4–5 (2018) (UCLA Sch. Of Law, Law & Econ. Research Paper Series, Paper No. 18-13), https://papers.ssrn.com/sol3/papers/cfm?abstract_id=3298965 (explaining that a cryptocurrency could be sold as a security and then evolve into a currency, which is not regulated by the SEC).

^{110.} BATIZ-BENET ET AL., supra note 107, at 16.

^{111.} *Id.* The SAFE was developed after discussion with many top startup investors and is intended to replace convertible notes, preserving their flexibility while avoiding many of their perceived problems. Paul Graham, *Announcing the SAFE, A Replacement for Convertible Notes*, Y COMBINATOR (Dec. 6, 2013), https://blog.ycombinator.com/announcing-the-safe-a-replacement-for-convertible-notes/. The SAFE protocols were so popular in part because Y Combinator open sourced them in 2013. Carolynn Levy, *Safe Financing Documents*, Y COMBINATOR (Sept. 2018), https://www.ycombinator.com/documents/#safe.

^{112.} See About, COOLEY, LLP, https://www.cooley.com/about (last visited Feb. 4, 2019) (claiming that Cooley has worked on "300+ life sciences corporate partnering and licensing deals since 2010" with corporate transactions for an "aggregate value of \$440+ billion since 2012," and worked with more than 280 venture funds credited with raising more than \$27 billion in 2018). Until early 2018, Marco Santori was the head of the fintech practice at Cooley LLP, a national law firm with ties to 40% of the U.S. companies on the Wall Street Journal's Billion Dollar Startup Club list. Cooley has more than 1000 lawyers "across 14 offices in the United States, China and Europe."

knockoff" of Y Combinator's SAFE framework.¹¹³ The SAFE is an agreement pursuant to which investors purchase contractual rights that will convert to equity at a later date.¹¹⁴ The model allowed Y Combinator to fund a variety of seed-stage startup companies and has proven to be very successful.¹¹⁵

Protocol Labs, working in conjunction with Cooley LLP, as well as numerous other experts including network creators, lawyers, and investors, announced their own SAFT project in late 2017.¹¹⁶ The whitepaper on that project explained that its specific goal was to provide a framework that would allow companies to operate in compliance with existing U.S. law, particularly federal securities regulations.¹¹⁷ Investors would buy SAFT interests, and the proceeds from that sale would allow the issuer to develop "genuinely functional utility tokens" at which time the SAFT interests would be converted into the tokens.¹¹⁸ The paper readily conceded that the SAFT transaction itself would likely involve the sale of investment contracts under the U.S. securities laws,¹¹⁹ but the plan was that the resulting utility tokens should not be securities under the *Howey* test when they were finally issued.¹²⁰

While this may be relatively easy to state, it would be a profound mistake to believe that the scope and details of the SAFT project are easy to understand.¹²¹ One source took the idea that prefunded utility tokens might escape

^{113.} Pete Rizzo, SAFT Arrives: 'Simple' Investor Agreement Aims to Remove ICO Complexities, COINDESK (Oct. 2, 2017, 1:00 PM), https://www.coindesk.com/saft-arrives-simple-investor-agreement-aims-remove-ico-complexities/.

^{114.} See supra note 111 and accompanying text.

^{115.} See David M. Freedman, SAFE: Simple Agreement for Future Equity, FINANCIAL POISE (July 1, 2016), https://www.financialpoise.com/safe-simple-agreement-for-future-equity/ ("Since 2005, Y Combinator has funded over 1,000 startups, including Dropbox, Reddit, WePay, Airbnb and Instacart," using the SAFE for most of them).

^{116.} Announcing The SAFT Project, PROTOCOL LABS (Oct. 2, 2017), https://protocol.ai/blog/announcing-saft-project/.

^{117.} BATIZ-BENET, ET AL., supra note 107, at 19.

^{118.} Id. at 1.

^{119.} Id.

^{120.} SEC v. W.J. Howey Co., 328 U.S. 293, 298–99 (1946). The *Howey* test refers to the U.S. Supreme Court's test for what constitutes an investment contract subject to regulation under the Securities Act of 1933. The elements of this test and its potential application to both the SAFT transaction and any resulting functional utility tokens are described in greater detail in BATIZ-BENET ET AL., *supra* note 107, at 6–11.

^{121.} Aaron Kaplan, SEC Subpoenas Show the SAFT Approach to Token Sales is a Bad Idea, VENTURE BEAT (Mar. 3, 2018, 12:11 PM), https://venturebeat.com/2018/03/03/sec-subpoenas-show-

regulation as securities upon issuance as evidence that a company with a completed "utility token" probably need not worry about the project being a security. This is certainly inconsistent with the positions announced by the SEC, which seems to have adopted a presumption that even utility token sales generally involve the sale of securities. 123

Under the most optimistic of assessments, the SAFT process requires the issuer to treat the first phase of the offering as the sale of a security. 124 Moreover, the second phase is projected to be exempt only if the issue contemplates the eventual production of a functional "utility token." 125 A more realistic approach would require issuers and their counsel to treat the first stage as an offering of securities that requires an exemption. 126 The second stage would then have to be independently investigated to ascertain whether it would also involve the issuance of investment contracts under *Howey*, 127 regardless of whether a utility token is involved. 128 To date, the SEC has provided no assurance that the issuance of a utility token at the second stage of the SAFT

the-saft-approach-to-token-sales-is-a-bad-idea/ (arguing a rise in SEC subpoenas is proof that investors do not understand the complexities of the SAFT Project and may pay the consequences for misguided decisions).

- 124. BATIZ-BENET ET AL., supra note 107, at 16.
- 125. Id. at 17.
- 126. Id. at 16.

^{122.} David Gobaud, *ICOs and the SAFT—Why, What, and How*, MEDIUM (May 23, 2017), https://medium.com/cryptos-today/icos-and-the-saft-why-what-and-how-9dee58cc0059 ("If a company has completed development of a token and can distribute tokens at the time of the ICO, then the token is probably not a security and we don't need CoinList or the SAFT. The company can crowdfund via an ICO just like Golem and accept money from anyone. However, if a company is raising funds to develop the token with a promise to distribute tokens to investors in the future, then it is conducting a token presale and not an ICO.").

^{123.} Daniel C. Zinman et al., SEC Issues Warning to Lawyers on ICOs, BLOOMBERG LAW (Feb. 22, 2018), https://biglawbusiness.com/sec-issues-warning-to-lawyers-on-icos/. The most recent pronouncement from the SEC contained unusually strong warnings directed at attorneys advising clients about cryptotransactions, specifically warning lawyers that "the SEC is laser-focused on them when they advise clients on ICOs." Id.

^{127.} *Id.* As the SAFT whitepaper notes, "*Howey* is not a black-and-white metric for security status. It is a highly variable facts-and-circumstances test." *Id.* at 20 (citing Report of Investigation Pursuant to section 21(a) of the Securities Exchange Act of 1934: The DAO, Securities Exchange Act of 1934 Release No. 81207, at 10 (July 25, 2017), https://www.sec.gov/litigation/investreport/34-81207.pdf).

^{128.} Report of Investigation, *supra* note 127, at 10 ("[T]he 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.").

process will not be a security. 129

Not surprisingly, there has been some fairly significant pushback against the SAFT.¹³⁰ In early 2018, numerous sources reported that the SEC had issued a wave of subpoenas directed at ICO participants.¹³¹ This did not come as a surprise to everyone, because the SEC had been actively signaling for some time a growing concern about the possibility of fraud and non-compliance with ICOs.¹³² Some commentators placed part of the blame for the SEC's dissatisfaction with industry compliance on the SAFT itself, which they claim "attempts to propagate the misguided notion that utility tokens are not securities."¹³³

This discussion of the SAFT offers an excellent transition into Part III. The drafters of the SAFT whitepaper were very careful to indicate their opinion that the process it outlined would be applicable only to "utility tokens." That obviously raises the question of what are utility tokens, and what other kinds of tokens exist?

III. WHAT KINDS OF TOKENS ARE THERE?

A. True Virtual Currencies

As previously mentioned, the original use of blockchain technology was to support the Bitcoin. Bitcoin was specifically designed as a digital currency, intended to be used and distributed electronically as a medium of exchange and store of value. It operates on a "decentralised, peer-to-peer network," and it became popular at a time of significant global uncertainty about the stability of financial markets, along with concern about government

^{129.} See Initial Coin Offerings, Tokens Sold in ICOs Can be Called Many Things., SEC, https://www.sec.gov/ICO (last visited Feb. 4, 2019) ("[M]erely calling a token a 'utility' token or structuring it to provide some utility does not prevent the token from being a security.").

^{130.} Kaplan, supra note 121.

^{131.} See, e.g., Bloomberg, The SEC Is Sending Subpoenas in Expanded ICO Crackdown, FORTUNE (Mar. 1, 2018, 12:01 PM), http://fortune.com/2018/03/01/sec-ico-cryptocurrency-subpoenas/.

^{132.} Id. ("The Securities and Exchange Commission has been concerned for months[.]").

^{133.} Kaplan, supra note 121.

^{134.} BATIZ-BENET ET AL., supra note 107, at 20.

^{135.} What is Bitcoin? History, Characteristics, Pros and Cons, COINTELEGRAPH, https://cointelegraph.com/bitcoin-for-beginners/what-is-bitcoin#people-to-follow (last visited Feb. 4, 2019).

^{136.} Id.

intervention.¹³⁷ Its perceived advantages include global accessibility, decentralization, and autonomy independent of third-party intermediaries.¹³⁸ It is anonymous, transparent, and secure.¹³⁹

Given Bitcoin's phenomenal success,¹⁴⁰ it is not surprising that there are a number of coins that have been developed with the express goal of being alternatives to Bitcoin.¹⁴¹ These "altcoins," as they are often called, include cryptocurrencies like Litecoin, Dash, NEM, Monero, and Zcash, among many others.¹⁴²

What all of these have in common is that they are designed to serve as a medium of exchange and as an alternative to traditional or fiat currency. They all have specific attributes (such as speed, security, or privacy) designed to make them stand out in the marketplace, but in essence they are all electronic currencies, intended to serve as such.¹⁴³

^{137.} Jason Leibowitz, *Bitcoin: A 21st Century Currency Explained by a Wall Street Veteran*, COINDESK (Feb.7, 2016, 7:30 PM), https://www.coindesk.com/bitcoin-explained-global-currency-wall-street-veteran/ ("Banks that were deemed 'too big to fail' were on the verge of collapse, global stock markets were crashing, and wealth was being lost at a rapid pace. Bitcoin dealt with the combination of distrust and uncertainty in the financial landscape of the time, offering a solution to the question, 'Where can someone store value if the financial system fails?' The answer: the Internet.").

^{138.} What Is Bitcoin?, supra note 135 ("For a lot of people, the main advantage of Bitcoin is its independence from world governments, banks and corporations. Not one authority can interfere into BTC transactions, impose transaction fees or take people's money away. Moreover, the Bitcoin movement is extremely transparent—every single transaction is being stored in a massive distributed public ledger called the Blockchain.").

^{139.} Id.

^{140.} See COINMARKETCAP, supra note 68 and accompanying text.

^{141.} *Alt Coin*, BITTREAT, https://bittreat.com/category/altcoin/ (last visited Feb. 4, 2019) ("Since Bitcoin's release in 2009, many have noticed its crucial advantages over government money, while also giving recognition to the fact that some of its aspects can be improved upon. That has led to the appearance of hundreds of different altcoins, which are all ultimately based on the same technology of the Blockchain").

^{142.} Anthony Coggine, *Top 10 Altcoins: All You Wanted to Know About Bitcoin's Contenders*, CoinTelegraph (Apr. 28, 2017), https://cointelegraph.com/news/top-10-altcoins-all-you-wanted-to-know-about-bitcoins-contenders.

^{143.} Danny Bradbury, *Altcoins: A Basic Guide*, THE BALANCE, https://www.thebalance.com/altcoins-a-basic-guide-391206 (last updated Dec. 31, 2018).

B. Utility Tokens

A second widely used label is "utility token." As described in the SAFT whitepaper mentioned earlier,¹⁴⁴ a utility token "contains assets that do not purport to replace legacy financial services products. They are designed to offer intrinsic utility that powers a decentralized, distributed network that delivers to the users of the network a consumptive good or service." Among examples listed in that document are securities that "act as staking or betting mechanisms, membership rights, or loan collateral" or "as cryptographic 'coupons' redeemable for mundane goods and services." ¹⁴⁶

Another way of looking at so-called "utility tokens" is that they are designed to "provide users with future access to a product or service. Through utility token ICOs, startups can raise capital to fund the development of their blockchain projects, and users can purchase future access to that service, sometimes at a discount off the finished product's sticker price." The clear difference between utility tokens and Bitcoin and altcoins is that the intended purpose of the token is different. Coins designed as cryptocurrency have as their goal replacing fiat currency in at least some transactions, while utility tokens are designed with different functions in mind. Similarly, the difference between utility tokens and tokenized securities (which are sometimes called equity or securities tokens) is that utility tokens do not provide holders with an ownership stake in the issuing company. Securities tokens (at least as that term is used in this article) are specifically designed to replace traditional equity interests.

^{144.} See Batiz-Benet et al., supra note 107.

^{145.} Id. at 3.

^{146.} Id. at 3-4.

^{147.} Josiah Wilmoth, *The Difference Between Utility Tokens and Equity Tokens*, STRATEGIC COIN, http://strategiccoin.com/difference-utility-tokens-equity-tokens/ (last visited Jan. 11, 2019).

^{148.} See The Difference Between Utility Tokens and Equity Tokens, ALOAHA BLOCKCHAIN PROVIDER, https://www.chain-provider.com/the-difference-between-utility-tokens-and-equity-tokens/ (last visited Feb. 5, 2019) [hereinafter Difference] (describing the different purposes of utility tokens and equity tokens).

^{149.} See id. (stating that utility tokens are not designed as investments, but that some people may "contribute to utility token ICOs with the hope that the value of the tokens will increase as demand for the company's product or service increases").

^{150.} See id. (stating that the "key difference" between equity tokens and utility tokens is that equity tokens "entitle the holder to ownership rights").

^{151.} See infra Section III.C.

It is, however, important to note that while "utility tokens" might be designed with long term functionality in mind, "many people contribute to utility token ICOs with the hope that the value of the tokens will increase as demand for the company's product or service increases." And in addition, despite the presence of functionality, purchasers may intend to use the tokens as a medium of exchange or store of value in lieu of relying on fiat currencies. This is one way in which a single token may serve multiple functions, especially when looked at from the varying perspectives of issuers, investors, and regulators. 154

One final point deserves mention: a great many token offerings occur before the product being sold is fully functional. As one commentator noted, "[i]t's difficult to claim that a token currently has utility when it cannot be used for several months or more." Investors that buy a token before it has utility are particularly likely to be purchasing in the hopes that they will make a profit upon resale of their interest. This economic reality may mean that even tokens that eventually will have a significant utility may not be treated as such by investors, and this does increase the presumptive likelihood that such interests will be regulated as securities. 158

C. Security Tokens

In the wake of increasing scrutiny from the SEC, another label for tokens has become popular: "security tokens." It has, for example, been suggested that "[i]f a crypto token derives its value from an external, tradable asset, it is

^{152.} See Difference, supra note 148.

^{153.} See id. (describing how some utility token holders view utility tokens as "coupons").

^{154.} See Knowing the Difference Between Utility Tokens and Security Tokens, BITCOIN EXCHANGE GUIDE (Sept. 24, 2018), https://bitcoinexchangeguide.com/knowing-the-difference-between-utility-tokens-and-security-tokens/ (describing the different benefits of utility tokens for developers and regular users)

^{155.} See Lukasiewicz, supra note 104 (pointing out the incorrect assumption in the utility token argument that "the product is launched and currently usable.").

^{156.} Id.

^{157.} See id.

^{158.} *Id.* ("Most ICO tokens are being purchased by investors seeking profit, not users of the underlying platform. ICOs also seem to fundamentally be a capital-raising activity, which would likely be under the SEC's jurisdiction.").

^{159.} Margaret Rouse, Security Token (Authentication Token), TECHTARGET NETWORK, http://searchsecurity.techtarget.com/definition/security-token (last visited Feb. 5, 2019).

classified as a security token and becomes subject to federal securities regulations."¹⁶⁰ Another source simply divides tokens into two distinct classes of interests: utility tokens (which serve as access to a product or service) and security tokens (which constitute an investment contract). ¹⁶¹

With all due respect to the blockchain experts who have made these comments, this dichotomy between utility and securities tokens is neither helpful nor accurate.¹⁶² It is not useful to try and characterize some tokens based on their intended function and others based on how they will fare under a regulatory definition, and then to assume that will cover all tokens by placing each one into a single category.¹⁶³ In order to compare apples to apples, it would be important to use either the function of the tokens as a basis for classifying them, or to look at each token under the applicable regulatory definition.¹⁶⁴

Suppose, for example, that it is important when describing the tokens that they need to be described by their function.¹⁶⁵ In this context, there can be very legitimate reasons for classifying some tokens "securities tokens."¹⁶⁶ Some tokens do mimic the functioning of traditional equity or debt securities.¹⁶⁷ In fact, some observers have opined that at some point in the not-too-distant future, tokenized offerings of shares and debt will replace traditional

^{160.} Josiah Wilmoth, *ICO 101: Utility Tokens vs. Security Tokens*, STRATEGIC COIN, http://strategiccoin.com/ico-101-utility-tokens-vs-security-tokens/ (last visited Jan. 11, 2019).

^{161.} See Lukas Schor, 8 Important Things to Know About Security Tokens / Token Regulation, MEDIUM (Nov. 22, 2017), https://medium.com/@argongroup/8-important-things-to-know-about-security-tokens-token-regulation-3d548a1a6367 (explaining the differences between a utility token and a security token).

^{162.} See Thomas Euler, The Token Classification Framework: A Multi-Dimensional Tool for Understanding and Classifying Crypto Tokens, UNTITLED, INC. (Jan. 18, 2018), http://www.untitledinc.com/the-token-classification-framework-a-multi-dimensional-tool-for-understanding-and-classifying-crypto-tokens/ (discussing the importance of having clear terminology in order to have a helpful conversation on cryptocurrencies).

^{163.} See Darryn Pollock, Utility or Security Token: Choosing Between ICO Coins, COINTELEGRAPH (Mar. 14, 2018), https://cointelegraph.com/news/legitimising-the-ico-token-find-ing-utility-over-security (stating that "tokens are still a very new and unique idea, and while people try and pigeonhole them, they should really be defined individually").

^{164.} See Euler, supra note 162 (discussing other token qualities that can be used to characterize types of tokens).

^{165.} See Schor, *supra* note 161, for an example of how tokens can be characterized by their function

^{166.} See Eric Reed, Equity Tokens vs. Security Tokens: What's the Difference?, BITCOIN MKT. J. (Nov. 5, 2018, 12:00 AM), https://www.bitcoinmarketjournal.com/equity-token/ (giving examples of security tokens).

^{167.} See id. (defining security tokens as "tokens which function as a traditional security asset").

public offerings.¹⁶⁸ These might be equity or debt interests, and (perhaps to avoid confusion with the other ways in which "security token" is used) some commentators call these "equity" tokens to make it clear that the underlying function of the token is to serve as a traditional security.¹⁶⁹ Even here, however, the language is often imprecise.¹⁷⁰ For example, one source uses "equity token" to talk about these kinds of interests but then confuses matters by talking about debt as well as equity: "Equity tokens are a subcategory of security tokens that represent ownership of an asset, such as debt or company stock. By employing blockchain technology and smart contracts, a startup could forgo a traditional initial public offering (IPO) and instead issue shares and voting rights over the blockchain."¹⁷¹

To avoid ambiguity and confusion, this article suggests that the phrase "security token" be reserved for use when the underlying interest or function is that the token serves as a replacement for "actual financial securities, like shares or equity in traditional assets, startups, [or] venture funds." To minimize confusion, some sources talk about these kinds of interests as "tokenized securities," which is even more precise, and will be used in this article along with the more common phrase "security token." An example of a tokenized security can be found in the tokens described in the tZero's private placement memorandum, filed with the SEC, originally dated December 18, 2017. Under the process described in those offering documents, investors would invest in a Simple Agreement for Future Equity (SAFE), and investors would accept those interests as prepaid forward contracts. The tokens,

^{168.} Polymath, *What in the World is a Security Token?*, MEDIUM (Jan 31, 2018), https://blog.polymath.network/what-in-the-world-is-a-security-token-8f27b39e6b1b ("Many analysts predict that eventually the majority of financial products will be traded on the blockchain as security tokens.").

^{169.} See Reed, supra note 166 (defining equity tokens as "tokens which function as a traditional stock asset").

^{170.} See id. (defining five token classes, but emphasizing that the SEC has not codified them yet, as their identities are only just beginning to emerge).

^{171.} Wilmoth, supra note 160.

^{172.} Polymath, supra note 168.

^{173.} Alex Lielacher, *ICO Tokens 101: Understanding Token Types*, BITCOIN MKT. J. (Nov. 21, 2017, 8:00 AM), https://www.bitcoinmarketjournal.com/ico-token/.

^{174.} Confidential Private Placement Offering Memorandum from tZero to U.S. Sec. & Exch. Comm'n, Supplement, SEC F-11 (Dec. 18, 2017), https://www.sec.gov/Archives/edgar/data/1130713/000113071318000042/tzerosupplement.htm. The tZero offering memorandum has been amended several times, most recently on March 1, 2018, and was supplemented May 22, 2018.

^{175.} Id. at 16.

when issued, would entitle holders to dividends, when declared, but would not have voting rights.¹⁷⁶ The offering materials report that token holders will "not be entitled to any utility functionality."¹⁷⁷

This terminology makes sense both from a functionality approach and from the securities regulation approach, because this kind of "security token" will almost certainly be treated as a security under the regulatory definitions as well as under the functionality approach. Admittedly, the class is narrow because most tokens are not specifically designed to act as traditional securities. Most tokens are probably created either with the goal that they will act like true virtual currency or that they will have some underlying utility or function for the purchaser. Many tokens may have multiple uses, including the potential for different functionality for different investors. It is this overlap in functionality which makes token classification so challenging, and the lack of precise terminology in much existing literature does not help.

For purposes of evaluating how regulators are likely to classify token sales, the functionality approach is likely to be unsatisfactory. The SEC, for example, seems quite set on using the traditional *Howey* test to classify tokens as either securities or as something else. This is not to say that there is no such thing as a utility token or a security token, but it does mean that the question of when a token is a security for regulatory purposes will not depend on functionality. The application of the *Howey* test to tokenized offerings is

^{176.} *Id*.

^{177.} Id. at 18.

^{178.} See Lielacher, supra note 173. Although it is a longer label, to avoid confusion, when this article speaks of offerings of tokens that the SEC may regard as securities, this article will talk about "tokenized offerings." For this purpose, it does not matter how the token is designed, or whether it has functional utility. It does not even matter if, logically, the token should be a security. To the extent the concern is that the offering will or may be regarding as involving the sale of a security, it will be treated as a "tokenized offering" in this article.

^{179.} See Lukasiewicz, supra note 104 (defining "tokenized securities").

^{180.} See Schor, supra note 161 (listing multiple different functions that tokens can serve).

^{181.} See Euler, supra note 162 (stating that "clarity and a precise terminology" has become increasingly important as the blockchain space matures).

^{182.} See Pollock, supra note 163 (quoting SEC chairman Jay Clayton as taking a hardball approach to classifying ICO tokens as securities, saying that "[y]ou can call it a coin, but if it functions like a security, it's a security").

^{183.} See *supra* note 123 and accompanying text for a detailed description of the *Howey* test.

^{184.} See Pollock, supra note 163 (stating that the SEC has determined that most of the tokens coming out of ICOs are security tokens).

discussed in Part IV of this article. 185

D. Other Classification Schemes

Blockchain technology is so flexible that it can be adapted for a virtually unlimited range of applications. ¹⁸⁶ Tokens can be issued to accomplish a large number of things, and indeed, a single token can be designed to accomplish multiple things. ¹⁸⁷ This can make appropriate classification very complicated ¹⁸⁸

One commentator, for example, proposed looking at tokens along five specified dimensions: their technical layer, their purpose, the utility to which the token can be put, the legal status of the token, and their underlying value. This approach produced more than a dozen distinct categories of tokens and still recognized that "[t]he crypto space is moving at a rapid pace, so we expect to see new developments and innovative approaches to tokens quite frequently." Based on the purpose, utility, and underlying value of tokens, that paper suggested the following potential categories. One group of tokens would be "asset-backed," and these would essentially operate like an IOU tied to a real-world asset. Others would function as true cyptocurrencies designed as a medium of exchange and store of value. Investment tokens would offer a way to invest in an entity or asset. Network tokens would either enable a specific network and catalyze its growth, or they could

^{185.} See infra Part IV.

^{186.} See Schor, supra note 161 (listing multiple functions tokens can serve).

^{187.} See id. (stating that a token can serve one or multiple different functions).

^{188.} See Pollock, supra note 163 (Dejun Qian, the founder of Fusion, a cryptocurrency company that sits in the top twenty on Coinmarketcap, has stated that "tokens are neither security or utility [tokens]," and they merit a new framework).

^{189.} See Euler, supra note 162.

^{190.} Id.

^{191.} *Id*.

^{192.} *Id.* Asset-backed tokens allow for trading via IOUs without actually having to move the underlying asset. However, the issuer is responsible to hold the underlying asset introducing counterparty risk. Examples include USDT (Tether USD), GOLD (Goldmint), and Ripple IOUs.

^{193.} Id. Examples of "pure" cryptocurrencies include BTC (Bitcoin), ZEC (Zcash), and KIN.

^{194.} *Id.* Investment tokens promise owners a share of asset value in the potential future success of the issuing entity. However, there remains no or a negligible amount of functionality beyond the investment. In other words, they do not serve as a convenient medium of exchange. Examples include Nefund Equity Tokens and GDX (Digix Gold).

be tied to the value of the network.¹⁹⁵ Usage tokens would give access to network or service features, and work tokens would be designed to allow users to contribute to the system.¹⁹⁶ Hybrid tokens would combine the attributes of both usage and work tokens.¹⁹⁷ The author of this classification scheme also drew some conclusions and derived some archetypes based upon this paradigm.¹⁹⁸ One of the conclusions was that "an investment token will basically never be a network value token but either asset-backed or share-like."¹⁹⁹ The ultimate archetypes were cryptocurrencies (which this article would describe as true virtual currencies), tokenized assets, tokenized platform, and token-asa-share.²⁰⁰ These classifications may be very useful for thinking about how tokens function, and even in describing them to potential buyers, but as mentioned above in the discussion about utility tokens, these categories are not likely to help regulators.²⁰¹

Another source proposed looking at tokens to determine whether they are useful as a store of value, for network utilization, as the equivalent of an equity interest, or whether they are pegged to other assets.²⁰² This grouping of categories might be useful at some point, although from the standpoint of the SEC,

^{195.} *Id.* A typical network token has its primary function with the issuers system and is not intended as a general cryptocurrency. Examples include GNO (Gnosis) and STX (Stacks).

^{196.} Id. Examples include BTC and STX.

^{197.} *Id.* One of the nice things about Euler's classification scheme is that it offers a more comprehensive way of looking at tokens. A few existing tokens are mapped on the framework, including Auger and Steem.

^{198.} *Id.* The author's conclusions stem from a pattern that has emerged in the relationships between the types of tokens. The author uses the example that network tokens are often times also network-value tokens.

^{199.} *Id.* Of all the statements in Euler's framework, this is the one that seems the most questionable. It is clear that in the mind of the SEC, utility tokens (i.e., tokens that are not share-like or asset-based) can clearly qualify as securities if they are marketed as investments. *See* Stan Higgins, *SEC Halts Multimillion-Dollar 'Munchee' ICO for Securities Violations*, COINDESK (Dec. 11, 2017, 4:40 PM), https://www.coindesk.com/sec-halts-multimillion-dollar-munchee-ico-securities-violations/ (noting that the SEC ordered Munchee to cease and desist its offering of MUN tokens because they were a security "regardless of their 'utility' when the sale took place").

^{200.} See Euler, supra note 162. The usefulness of this last archetype is particularly questionable given that the author suggests that tokens as shares are not currently regulated, despite the fact that the SEC has taken a variety of steps to indicate that it intends to regulate such interests under the *Howey* investment contract test. See infra Part IV of this article for a further discussion of the SEC approach to token regulation.

^{201.} See Euler, supra note 162. Euler notes that while the token characteristics are important to considering cryptoassets, governance and technology are also important in a classification scheme. . 202. See @basiccrypto, supra note 63.

the labels do not really explain where these different kinds of tokens fit in the investment world. Yet another commentator has suggested that tokens include all of the following types: built-in tokens that are part of a blockchain; approins that are used in a single application; token-shares that work like digital equity interests; token-bonds that work like long-term debt; credit tokens that are debts the issuer intends to redeem; and hybrid tokens which combine the functions of other kinds of tokens. This list is also not likely to be of significant help to regulators, who will probably tend to focus on how particular interests fit into existing legal frameworks. Description

The reality is that from a regulatory standpoint, none of these classification schemes are particularly useful.²⁰⁶ It is likely to be essential that an issuer communicates functionality (as well as design) to potential buyers, but regulators will be more interested in ascertaining whether a particular interest fits within its approach to regulated transactions.²⁰⁷ For the SEC, that means looking not at whether an issuer plans on selling a utility or network or hybrid token, but whether it will be selling those tokens as investment contracts.²⁰⁸ The one caveat to that is that if an issuer plans on selling a truly tokenized security (i.e., an equity or debt interest in the issuer that would have been a security if the interest was not digitized), in all probability there is no need to

^{203.} *Id.* The author notes that tokens that fit within the equity interest mold (that is, their primary function is in the future value of the investment) pose some tricky hurdles that may subject them to regulation in the near future. Similarly, the author hints that governments may be inclined to complement their own pegged tokens such that they would function as an equivalent to a normal currency.

^{204.} Anti Danilevski, *What Are Tokens and What Types There Are?*, BITNEWS TODAY (Oct. 27, 2017, 12:00 AM), https://bitnewstoday.com/market/ico/what-are-tokens-and-what-types-there-are/.

^{205.} *Id.* Danilevski highlights that the classification of crypto currencies and tokens do not seem to help regulators because there are no legal agreements or permissions needed to issue them.

^{206.} *Id.* The author warns that a particular difficulty regulators may face is that there is a misconception that coins and tokens are one in the same. "A token may be a coin, however a coin may not always be a token." *Id.*

^{207.} Theodore Serdotetskiy, *USA*: Why an Undeveloped Digital Market Is Beneficial For Regulators, BITNEWS TODAY (Oct. 22, 2018, 4:01 PM), https://bitnewstoday.com/news/regulation/usa-why-an-undeveloped-digital-market-is-beneficial-for-regulators/ (the author comments on a U.S. district court ruling that tokens are under the control of the CFTC and notes the different definitions U.S. agencies have prescribed to digital assets).

^{208.} Ethan Pierse, *The Consequences of SEC Decisions: No More Utility Tokens?*, BITNEWS TODAY (Jan. 8, 2019, 12:15 PM), https://bitnewstoday.com/news/the-consequences-of-sec-decisions-no-more-utility-tokens/ (the author provides an example of the SEC focusing on the intent of the issuer by pursuing cases of unregistered securities regardless if there is any element of fraud).

inquire further.²⁰⁹ Those interests will likely be securities.²¹⁰ As for the other classes or types of tokens, the analysis is not nearly as clear.²¹¹

IV. WHEN WILL A TOKEN BE A SECURITY?

The Chairman of the SEC, Jay Clayton, has been widely quoted as saying "I have yet to see an ICO that doesn't have a sufficient number of hallmarks of a security." According to Mr. Clayton, "many ICOs resemble traditional stock offerings, with the only difference being the new fundraising tool involves tokens and distributed-ledger technology." In particular, he has expressed concerns that "investors often do not appreciate that ICO insiders and management have access to immediate liquidity, as do larger investors, who may purchase tokens at favorable prices." 214

While these remarks may have been unscripted, they are not that far from the official position of the SEC.²¹⁵ The sale of securities within the United States is generally within the purview of the SEC,²¹⁶ and the definition of a security under the federal securities laws is extremely broad.²¹⁷ It covers both defined categories of interests like familiar equity and debt instruments and also includes general descriptions intended to cover "securities" that creative

^{209.} Id. The author describes the SEC's view that ICOs are likely regarded as securities.

^{210.} Id.

^{211.} Peter Van Valkenburgh, *The SEC Today Has Said That Some Tokens Can Be Securities*, COIN CENTER (July 25, 2017), https://coincenter.org/link/the-sec-today-has-said-that-some-tokens-can-be-securities (another crypto commentator has suggested the SEC's determination that some coins and tokens are classified as securities may not apply to coins or tokens that have some sort of underlying utility beyond a means of investment).

^{212.} E.g., Yi Zu, ICO Deep Dive: Probing Utility vs. Security Clues From the SEC, MEDIUM (Dec. 18, 2017), https://medium.com/tokenreport/ico-deep-dive-probing-utility-vs-security-clues-from-the-sec-83d798e6a293.

^{213.} Dave Michaels & Paul Vigna, *SEC Chief Fires Warning Shot Against Coin Offerings*, WALL STREET J. (Nov. 9, 2017, 5:31 PM), https://www.wsj.com/amp/articles/sec-chief-fires-warning-shot-against-coin-offerings-1510247148.

^{214. @}TwoBitIdiot, *ICOs: Tick. Tock. Boom?*, MEDIUM (Nov. 14, 2017), https://medium.com/@twobitidiot/icos-tick-tock-boom-5682220ee6c5.

^{215.} Pierse, supra note 208.

^{216.} *Id.* It is illegal to offer or sell securities in the U.S. unless both the offer and sale are exempt or made pursuant to an effective registration statement. Securities Act of 1933, 15 U.S.C. §§ 77e(a), (c), 77d (2018).

^{217. 15} U.S.C. § 77b (2018).

issuers develop over time.²¹⁸ For example, when the Securities Act of 1933 was initially enacted, there were no limited liability companies (LLCs) in the U.S.²¹⁹ Nonetheless, there is now widespread acknowledgment that membership interests in LLCs can be securities under the investment contract analysis.²²⁰ Similarly, there were no such things as cryptocoins or tokens.²²¹ It is not surprising that they, too, are being examined to see if they are investment contracts.²²²

The SEC has indicated that it fully intends to exercise its jurisdictional powers when it comes to tokenized offerings that it classifies as involving securities, regardless of whether a particular token is characterized by issuers or their counsel as a "utility" token or otherwise.²²³ The SEC recently released a joint statement with the Commodities Futures Trading Commissions (CFTC) specifically warning that they intend to be active in overseeing tokenized offerings regardless of the labels affixed to the interests being offered:

^{218. 15} U.S.C. § 77b(a)(1) (2018). This section includes a long list of what constitutes a security. Among items with a commonly understood meaning are any "note," "stock," "bond," or "debenture." § 77b(a)(1). Among less-defined interests are "any evidence of indebtedness," "certificate of interest or participation in any profit-sharing agreement," "any investment contract," and any "instrument commonly known as a 'security.'" § 77b(a)(1). Complicating matters further, all of these definitions apply only if the context does not otherwise require. § 77b(a)(1).

^{219.} History of the Limited Liability Company (LLC), DELAWARE INC., https://www.delawareinc.com/llc/history-of-delaware-llc/ (last visited Feb. 6, 2019) (Wyoming was the first state to pass legislation creating the LLC business form).

^{220.} See generally Brian Sweigman, The Treatment of LLC Membership Interests Under Current Securities Regulations, 16 No. 3 PIABA Bus. J. 265 (2009). This is not to say that every membership interest in every LLC will be a security. *Id.* at 266. However, it is clear that at least some of those interests will be treated as such, generally under the same *Howey* test that is now being used in connection with cryptoassets.

^{221.} See Bernard Marr, A Short History of Bitcoin and Crypto Currency Everyone Should Read, FORBES (Dec. 6, 2017, 12:28 AM), https://www.forbes.com/sites/bernardmarr/2017/12/06/a-short-history-of-bitcoin-and-crypto-currency-everyone-should-read/#5a1b740f3f27. The first successful cryptocoin was Bitcoin, which was introduced in 2009. The technological foundation for Bitcoin was first publicized in 2008, in the form of a paper posted in an online discussion of cryptography by a person or persons using the pseudonym Satoshi Nakamoto. See Nakamoto, supra note 22.

^{222.} Mario Claudio Lattuga, *Yes, Bitcoin will be Regulated by the SEC. Here's Why:*, MEDIUM (Dec. 3, 2017), https://medium.com/@mlattugal/yes-bitcoin-is-probably-a-security-heres-why-4f6410d9787c (contemplating the investment contract qualities of Bitcoin, one of the most well-known examples of a cryptocurrency).

^{223.} Young, *supra* note 11 (stating that on February 6, 2018, the Senate heard testimony from SEC Chairman Jay Clayton that "every ICO token the SEC has seen so far is considered a security and explained that if a crypto-asset issued by a company increases in value over time depending on the performance of the company, it is considered a security").

When market participants engage in fraud under the guise of offering digital instruments—whether characterized as virtual currencies, coins, tokens, or the like—the SEC and the CFTC will look beyond form, examine the substance of the activity and prosecute violations of the federal securities and commodities laws. The Divisions of Enforcement for the SEC and CFTC will continue to address violations and bring actions to stop and prevent fraud in the offer and sale of digital instruments.²²⁴

Instead of relying on the parties to properly characterize their tokens, the SEC takes the view that the appropriate analysis is to inquire as to whether the underlying token is an investment contract, as such term has been defined by the courts.²²⁵

The term "investment contract" is analyzed under the general framework announced by the U.S. Supreme Court in its 1946 decision in *SEC v. W.J. Howey Co.*²²⁶ As explained in that opinion, an investment contract is a contract, transaction, or scheme "where individuals were led to invest money in a common enterprise with the expectation that they would earn a profit solely through the efforts of the promoter or of someone other than themselves."²²⁷ This test, now widely referred to simply as the *Howey* test, has been substantially expanded and clarified over the past decades, but it continues to provide the basis for determining whether a number of interests that are not specifically enumerated in the '33 Act are securities.²²⁸

Speaking very broadly, an interest will be classified as an investment contract if it satisfies all of the following elements: (i) there is an investment of

^{224.} JD Alois, SEC and CFTC Issue Joint Statement on Cryptocurrency Enforcement Actions, CROWDFUND INSIDER (Jan. 19, 2018, 9:09 AM), https://www.crowdfundinsider.com/2018/01/127307-sec-cftc-issue-joint-statement-cryptocurrency-enforcement-actions/.

^{225.} Report of Investigation, *supra* note 127. The was the approach taken by the SEC in its ground-breaking DAO report, issued July 25, 2017.

^{226. 328} U.S. 293 (1946).

^{227.} Id. at 298.

^{228.} Id. at 298-99.

money or something else of value;²²⁹ (ii) in a common enterprise;²³⁰ (iii) where the purchaser expects to receive profits;²³¹ and (iv) the expectation of profits is from the essential entrepreneurial efforts of others.²³² The SEC has specifically noted that "[t]his 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."²³³ It is also consistent with the U.S Supreme Court's admonition that, in the context of applying the securities laws, "form should be disregarded for substance,"²³⁴ and the emphasis should be on "economic realities underlying a transaction, and not on the name appended thereto."²³⁵

^{229.} *Id.* While the *Howey* test originally spoke only of "money," subsequent opinions have made it clear that "cash is not the only form of contribution or investment that will create an investment contract. Instead, the 'investment' may take the form of 'goods and services' or 'some other exchange of value." Uselton v. Commercial Lovelace Motor Freight, Inc., 940 F.2d 564, 574 (10th Cir. 1991) (internal citations omitted).

^{230.} Howey, 328 U.S. at 299. The requirement of a "common enterprise" is the element of the Howey test that appears to have received the most comment over the years, in part because there is a divergence among the federal circuits. Some courts appear to require "horizontal commonality," some will accept "strict vertical commonality," and some accept "broad vertical commonality." See Maura K. Monaghan, Note, An Uncommon State of Confusion: The Enterprise Element of Investment Contract Analysis, 63 FORDHAM L. REV. 2135, 2152–63 (1995) (discussing the various judicial applications of the Howey "common enterprise" element). Horizontal commonality requires that investors' contributions be pooled together so their fortunes rise and fall together; strict commonality requires the investor and promoter or investment manager to have interests that are tied together, and broad commonality looks to whether the investor is depending heavily on the promoter in deciding whether to invest. Id.; see also Benjamin Akins, Jennifer L. Chapman & Jason Gordon, The Case for the Regulation of Bitcoin Mining as a Security, 19 VA. J.L. & TECH. 669, 690 (2015).

^{231.} *Howey*, 328 U.S. at 299. The "expectation of profits" element has also been addressed numerous times. The U.S. Supreme Court held in *United Housing Foundation, Inc. v. Forman*, 421 U.S. 837 (1975), that in order for this element to be met, "the primary motivation for investing must be to achieve a return on the value invested." Akins, *supra* note 230, at 691.

^{232.} Howey, 328 U.S. at 299. Although the Court in Howey said the expectation of profits needed to be based "solely" on the efforts of others, the rule has also been changed. See SEC v. Glenn W. Turner Enterprises, 474 F.2d 476, 482 (9th Cir.), cert. denied, 414 U.S. 821 (1973) (finding that the appropriate inquiry was "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"). See also Hocking v. Dubois, 885 F.2d 1449, 1455 (9th Cir. 1989) (holding that the test should be whose efforts are "significant" and "essential").

^{233.} See Report of Investigation, supra note 127, at 10 (citing Howey, 328 U.S. at 299).

^{234.} Tcherepnin v. Knight, 389 U.S. 332, 336 (1967).

^{235.} United Hous. Found., Inc. v. Forman, 421 U.S. 837, 849 (1975).

With this guidance in mind, especially in light of the recent pronouncements from the SEC that it intends to be very active in the ICO space, the safest approach at this time is to treat most sales of tokens as if they involve the sale of securities. While there may be room for argument in some cases, the widespread speculation in cryptoassets and the risk of fraud makes this by far the safest assumption at this time. That, of course, immediately leads to the question of how any such sale can be conducted in a compliant manner.

V. HOW CAN A U.S. COMPANY CONDUCT A COMPLIANT TOKENIZED OFFERING?

Once it appears that a token is going to be sold in such a way that it is likely to be treated as a securities offering, the options for the issuer are limited. Section 5 of the Securities Act of 1933 (the "'33 Act") requires that all securities offered or sold by means of interstate commerce be registered with the SEC unless an exemption is available. The purpose behind the registration requirement is to ensure that members of the public have adequate information before making an investment decision about securities that are offered to them. Where the nature of the securities or the offering itself is such that formal registration has been deemed unnecessary to protect the public, the '33 Act is likely to provide multiple options for avoiding the burdens of registration.

Although registration of the tokens is an option, it has been used in only a single instance to date: on March 6, 2018, the Praetorian Group filed a form

^{236.} See Securities Act Rule 144, SEC, https://www.sec.gov/fast-answers/answersrule144htm.html (last updated Jan. 16, 2013).

^{237.} Securities Act of 1933 § 5, 15 U.S.C. § 77e (2018).

^{238.} See Brian F. McDonough, Victoria A. Manning & Martin B. Gandelman, Equity Crowdfunding and the Law (in New Jersey), N.J. LAW. 63, 63 (2015) (citing How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation, SEC, sec.gov/about/whatwedo.shtml (last updated June 10, 2013) [hereinafter SEC Protects] (stating that there are two primary purposed behind the '33 Act: "1) ensuring that investors receive the financial and other material information concerning securities being offered for public sale sufficient to enable them to make an informed investment decision; and 2) preventing deceit, misrepresentations, and other fraud in the sale of securities.")).

^{239.} SEC Protects, supra note 238 (noting that "[n]ot all offerings of securities must be registered with the Commission. . . . By exempting many small offerings from the registration process, the SEC seeks to foster capital formation by lowering the cost of offering these types of securities to the public.").

S-1 seeking to register 15 million PAX Coins in an effort to raise \$75 million.²⁴⁰ For reasons previously mentioned, this is very unlikely to be a popular choice for issuers.²⁴¹ That means issuers will be looking for an exemption from the registration requirement.²⁴²

While a detailed assessment of the different exemptions is far beyond the scope of this article, it is important to understand the general terms and conditions applicable to the most popular exemptions from registration that might be available for tokenized offerings.

A. Reg. S

Uncertainty about market regulation has limited most token sales in recent years, even those in reliance on presale agreements, to investors from outside the United States.²⁴³ The primary vehicle for conducting such sales in a compliant manner appears to be Regulation S ("Reg. S").²⁴⁴

Reg. S was adopted by the SEC in 1990,²⁴⁵ and it provides a "safe harbor" for certain offers and sales of securities that occur outside of the United States.²⁴⁶ In other words, if the terms and conditions of Reg. S are complied with, the sale need not be registered with the SEC.²⁴⁷ For issuers wishing to

^{240.} The Praetorian Group, Registration Statement Under The Securities Act of 1933 (Form S-1) 1 (March 6, 2018), EDGAR, https://www.sec.gov/Archives/edgar/data/1721980/0001376474180000 45/pr s1.htm.

^{241.} See supra notes 88–90 and accompanying text (considering some of the costs of "going public" via a registration statement).

^{242.} See Pierre Villenave, Understanding the Regulatory Framework of Security Tokens, MEDIUM (Aug. 1, 2018), https://medium.com/lgogroup/understanding-the-regulatory-framework-of-security-tokens-9b231118cab4.

^{243.} See Gobaud, supra note 122. As an example, consider the token presale recently conducted by DFINITY, a Swiss organization, which stated during its offering that "[d]ue to regulatory uncertainty, you must not be a US person by citizenship or residency" in order to participate. *Id*.

^{244.} See 17 C.F.R. §§ 230.901–05 (2018) [hereinafter Reg. S].

^{245.} Offshore Offers and Sales, Securities Act Release No. 33-6863, 17 C.F.R. §§ 230.901–.904 (1990) [hereinafter Release 6863].

^{246.} See Alan B. Shalleck, Going Public Using a Regulation S Stock Offering on the Dubai International Financial Exchange, 5 NANOTECH. L. & BUS. 75, 76 (2008). In this context, "safe harbor" simply means that the sales may be conducted without formal registration with the SEC pursuant to the usual requirements of § 5 of the '33 Act.

^{247.} See Reg. S, supra note 244, preliminary n.1 (stating that the antifraud provisions of U.S. securities laws will continue to apply). In addition, preliminary note 2 expressly specifies that the exemption "is not available with respect to any transaction or series of transactions that, although in technical compliance with these rules, is part of a plan or scheme to evade the registration provisions of the Act.

comply with the terms of this safe harbor, there are a number of important conditions and limitations.²⁴⁸

As a preliminary matter, there are two general conditions applicable to all Reg. S offerings: first, no U.S. citizen can be offered or purchase the security being offered in reliance on Reg. S;²⁴⁹ and second, no "directed selling efforts" may be made in the United States by the issuer, any distributor, or by any person or entity acting for either.²⁵⁰

With regard to specific rules applicable to non-reporting²⁵¹ issuers, distributors, and their affiliates, Reg. S divides securities into three general categories.²⁵² Because token sales will generally not fall into either Category 1 or 2, most often they will fall into Category 3,²⁵³ which is subject to the most stringent conditions.²⁵⁴ For example, the securities may be subject to what Reg. S calls a "distribution compliance period," which operates as a restriction on resales to most U.S. investors.²⁵⁵ Purchasers may have to provide a certification as to their non-U.S. status and must agree not to resell to a U.S. citizen

In such cases, registration under the Act is required." *Id.*, preliminary n.2; *Regulation S—Rules Governing Offers and Sales Made Outside the United States Without Registration Under the Securities Act of 1933*, COLUMBIA, http://www.columbia.edu/~hcs14/RegS.htm (last visited Feb 6, 2019).

- 248. See Laura Anthony, An Overview of Regulation S—The Offshore Offering Exclusion, LEGAL & COMPLIANCE LLC (Sept. 24, 2013), http://securities-law-blog.com/2013/09/24/overview-regulation-s-offshore-offering-exclusion/.
- 249. See 17 C.F.R. § 230.903(a)(1) (limiting Reg. S to "offshore transaction[s]."). The definitions section of Reg. S requires that, as to each offer or sale: (i) the seller reassonably believes that the offeree or buyer is offshore at the time of the offer or sale or (ii) the transaction occurs on certain "designated offshore securities market[s]," and the transaction is not pre-arranged with a buyer in the United States. 17 C.F.R. § 230.902(h). "Designated offshore securities market" include markets that are in Canada as well as overseas. 17 C.F.R. § 230.902(b)(1).
- 250. 17 C.F.R. § 230.903(a)(2). "Directed selling efforts" is defined to include "any activity undertaken for the purpose of, or that could reasonably be expected to have the effect of, conditioning the market in the United States for any of the securities being offered in reliance on this Regulation S." 17 C.F.R. § 230.902(c).
- 251. For this purpose, a non-reporting issuer would be a company that is not already subject to the ongoing reporting requirements of the Securities Exchange Act of 1934.
- 252. 17 C.F.R. § 230.903(b)(1)–(3).
- 253. § 230.903(b)(3). Subsection (1) of this provision is limited to securities of a foreign issuer in which there is "no substantial U.S. market interest." § 230.903(b)(1). Subsection (2) is limited to reporting issuers or if a non-reporting issuer is involved, it has to be a foreign issuer selling debt securities. § 230.903(b)(2).
- 254. See Matheau J. W. Stout, Securities Lawyers for Public Companies and Entrepreneurs Going Public, General Conditions of Regulation S, OTC LAWYERS (June 12, 2016), http://otclawyers.com/tag/general-conditions-of-regulation-s/.
- 255. See ZE'-EV D. EIGER & LLOYD S. HARMETZ, FREQUENTLY ASKED QUESTIONS ABOUT

except in accordance with U.S. requirements.²⁵⁶ The securities of a domestic issuer must bear a restrictive legend supported by stop transfer instructions.²⁵⁷ Some of these requirements apply only to "equity" securities, but there is no clear guidance on when tokens will be considered to be akin to "equity."²⁵⁸ Some of these requirements may be minimized if the issuer is a foreign entity, although the rules for that require more than simply being organized under the laws of a foreign nation.²⁵⁹

B. Regulation Crowdfunding

Following enactment of the Jumpstart Our Business Startups Act (also known as the JOBS Act) in 2012,²⁶⁰ the SEC expanded the number of options for issuers seeking an exemption from the registration requirement for the sale of securities under federal law, while simultaneously preempting inconsistent state law.²⁶¹ One such innovation was Regulation Crowdfunding ("Reg. CF"), which allows compliant issuers to raise up to \$1,070,000 in any 12-month period (although the amounts that individual investors who are not accredited may invest is sharply limited).²⁶²

One important aspect of Reg. CF is that compliance with its terms will remove the need to comply with state securities laws.²⁶³ Preemption of inconsistent state regulation for certain federal exemptions dates back to 1996,

REGULATION S 3–5 (Morrison & Foerster, LLP, 2017), https://media2.mofo.com/documents/faqs-regulation-s.pdf (addressing holding periods, among other topics).

^{256.} See Amendments to Regulation S Under the Securities Act of 1933, FINDLAW, http://corporate.findlaw.com/finance/amendments-to-regulation-s-under-the-securities-act-of-1933.html (last visited Feb. 9, 2019).

^{257.} *Id.* This requirement might be particularly tricky for cryptoassets, because they have no tangible form.

^{258.} Id.

^{259.} See Chris, Reg S: A Safe Harbor for Blockchain Securities, DECENTRALIZED LEGAL (Sept. 6, 2016), https://decentralizedlegal.com/reg-s/.

^{260.} Jumpstart Our Business Startups Act, Pub. L. No. 112-106, 126 Stat. 306 (2012).

^{261.} See Villenave, supra note 242 (discussing registration exemptions and when state law is preempted under the exemptions).

^{262.} See 17 C.F.R. pt. 227 (authorizing crowdfunding regulation); see also Regulation Crowdfunding: A Small Entity Compliance Guide for Issuers, SEC (May 13, 2016), https://www.sec.gov/info/smallbus/secg/rccomplianceguide-051316.htm [hereinafter Crowdfunding Guide] (explaining the terms and provisions of Reg. CF).

^{263.} See Frequently Asked Questions About Exempt Offerings, SEC, https://www.sec.gov/small-business/exemptofferings/faq (last updated Nov. 28, 2017).

when Congress enacted the National Securities and Markets Improvement Act of 1996 ("NSMIA").²⁶⁴ Among other things, NSMIA preempted state regulations of "covered securities," which was defined so as to include exemptions promulgated by the SEC pursuant to its authority under section 4(2) of the '33 Act.²⁶⁵ At the time, however, there were few such exemptions, the most notable being the then-current version of Rule 506 of Regulation D ("Reg. D").²⁶⁶ To give an idea of how important issuers and their counsel viewed the ability to avoid application of state securities laws, in short order "some 99% of the amounts of securities sold, approaching \$1 trillion annually," relied on that single exemption.²⁶⁷ The JOBS Act, however, amended the definition of "covered" security to specifically apply to shares issued in compliance with regulations designed to promote crowdfunding.²⁶⁸ As a result, not only do Rule 506 offerings preempt state law, ²⁶⁹ but so do offerings under Reg. CF.²⁷⁰

There are a number of rules applicable to crowdfunding offerings which may prove problematic for offerings of cryptoassets.²⁷¹ From a practical standpoint, the dollar limitation may make this exemption unappealing.²⁷² An issuer is permitted to raise a maximum aggregate amount of \$1,070,000 through crowdfunding offerings in a 12-month period.²⁷³ Secondly, the SEC

^{264.} National Securities and Markets Improvement Act of 1996, Pub. L. No. 104-290, 110 Stat. 3416. Among many other provisions, NSMIA amended the Securities Act of 1933 (codified at 15 U.S.C. § 77a) to pre-empt state registration and review of "covered securities" which include securities sold pursuant to Regulation A/A+ offerings, Rule 506 of Reg. D, or Regulation Crowdfunding. These provisions are now codified at 15 U.S.C. § 77r(b)(4).

^{265.} See Rutherford B. Campbell, Jr., The Role of Blue Sky Laws after NSMIA and the JOBS Act, 66 DUKE L.J. 605, 613–15 (2016).

^{266.} See, e.g., Jeffrey D. Chadwick, Comment, Proving Preemption by Proving Exemption: The Quandary of the National Securities Market Improvement Act, 43 U. RICH. L. REV. 765 (2009); Jennifer J. Johnson, Private Placements: A Regulatory Black Hole, 35 Del. J. Corp. L. 151 (2010) (commenting on the controversial practice of preemption).

^{267.} Manning Gilbert Warren III, The Role of the States in the Regulation of Private Placements, 102 Ky. L.J. 971, 982 (2013).

^{268.} See 15 U.S.C. § 77d(6).

^{269.} See infra Section V.D.

^{270.} See Reginald Young, Initial Coin Offering (ICO) Security Exemptions, MEDIUM (Feb. 24, 2018), https://medium.com/@reginaldyoung/initial-coin-offering-ico-security-exemptions-7925ea1 a1876.

^{271.} See Christopher Mirabile, 2016 Crowdfunding Rules: How the Restrictions Work and Why It Matters, INC. (Apr. 11, 2016), https://www.inc.com/christopher-mirabile/2016-crowdfunding-rules-how-the-restrictions-work-and-why-it-matters.html.

^{272.} See id.

^{273. 17} C.F.R. § 227.100(a)(1).

requires that all transactions under Reg. CF take place online through an SEC-registered intermediary—either a broker-dealer or a funding portal.²⁷⁴ Although this is changing,²⁷⁵ it may be very difficult for an issuer to find such a registered portal or broker-dealer interested in working with a given crypto-asset.²⁷⁶

In addition to those two significant hurdles, there are number of other considerations that may be relevant to issuers contemplating Reg. CF.²⁷⁷ For example, while the issuer may sell to anyone (investors need not be accredited), the amount individual investors can invest across all crowdfunding offerings in a 12-month period is strictly limited.²⁷⁸ The rules also require disclosure of information in filings with the SEC to investors and to the intermediary facilitating the offering.²⁷⁹ In addition, securities purchased in a crowdfunding transaction generally cannot be resold for one year to anyone other than the issuer or an accredited investor, which may be particularly problematic for smaller investors looking for or needing liquidity.²⁸⁰ Finally, it is worth mentioning that Reg. CF offerings are subject to "bad actor" disqualification provisions.²⁸¹

^{274. 17} C.F.R. § 227.100(a)(3).

^{275.} See David Levine, Indeco Launches First Token Pre-sale under SEC's Regulation Crowdfunding Rules, MEDIUM (Dec. 5, 2017), https://medium.com/indeco/indeco-launches-first-token-pre-sale-under-secs-regulation-crowdfunding-rules-e82dad79345 (stating that in December, 2017, Indeco launched what was heralded as the first "crypto-asset presale" designed to comply with Regulation Crowdfunding requirements). There have also been reports from other licensed platforms that they are interested in being involved in the crypto space. See JD Alois, Crowdfunding Platform StartEngine Will Enter Initial Coin Offering Space, CROWDFUND INSIDER (Aug. 24, 2017, 2:29 PM), https://www.crowdfundinsider.com/2017/08/121005-crowdfunding-platform-startengine-will-enter-initial-coin-offering-space/.

^{276.} See Levine, supra note 275.

^{277.} See Mirabile, supra note 271.

^{278. 17} C.F.R. § 227.100(a)(2). The SEC Crowdfunding Guide has a table setting out the maximum allowed investments. *See Crowdfunding Guide*, *supra* note 262. Some investors will be limited to a maximum investment of \$2,200 across all crowdfunding offerings in any 12-month period, and no investor may invest more than \$107,000 in that time period.

^{279. 17} C.F.R. §§ 227.202–227.203 (ongoing reporting requirements, filing requirements, and forms).

^{280. 17} C.F.R. § 227.501. The exception for resales to the issuer or an accredited investor appears in 17 C.F.R. § 227.501(a)(2), but for smaller crowdfunded sales it may be difficult to locate interested accredited investors.

^{281. 17} C.F.R. § 227.202. The SEC Compliance Guide lists who is covered by the so-called "bad actor" provisions and the kinds of disqualifying events that can render the exemption unavailable. *Crowdfunding Guide*, *supra* note 262.

The nice thing about crowdfunding is that anyone can buy in. This exemption is not limited to accredited investors, which is consistent with one of the most frequently articulated themes in the crypto world—promotion of the ideals of democratic access. Another potential advantage is that the SEC has made it clear that it does not anticipate that Reg. CF offerings will be "integrated" into other exempt offerings. That means that an issuer can conduct a side-by-side or concurrent Reg. CF offering with an offering under Reg. D or Reg. A. 285

282. See Howard Marks, What is Equity Crowdfunding?, FORBES (Dec. 19, 2018, 8:00 AM), https://www.forbes.com/sites/howardmarks/2018/12/19/what-is-equity-crowdfunding/#5ca7934c3b5d. Some of the literature has been rather strident on this point. See Nozomi Hayase, Cryptography as a Democratic Weapon Against Demagoguery, COINDESK (Aug. 6, 2016, 1:55 PM), https://www.coindesk.com/cryptography-democratic-weapon-demagoguery/ (attributing to Julian Assange the statement: "If there is a modern analogue to Orwell's 'simple' and 'democratic weapon,' which 'gives claws to the weak' it is cryptography, the basis for the mathematics behind bitcoin and the best secure communications programs."). Another observer calls the changes allowed by block-chain technology "liquid democracy." See Luke Duncan, Liquid Democracy, Ethereum, and the Slow Path to Revolution, MEDIUM (July 16, 2017), https://medium.com/hive-commons/liquid-democracy-ethereum-and-the-slow-path-to-revolution-9c1d5916e706.

283. Peter Thomson, *Regulation Crowdfunding Rules*, SEEDINVEST (Sept. 21, 2016), https://www.seedinvest.com/blog/crowdfunding/regulation-crowdfunding-rules. "Integration" means that sales of the same kind of security, undertaken at or about the same time, for the same general purposes, pursuant to a single plan of financing, are likely to be treated as part of a single offering. That would mean that every sale would have to comply with the terms of the exemption for the offering into which it is being integrated. However, although offers under Reg. CF will not be integrated with offers made under another exemption such as Reg. D, an issuer must take care that if the exemption prohibits general solicitation (as would be the case with Rule 506(b)), purchasers in that offering may not be solicited by the section 4(a)(6) offering. Similarly, if the other exemption allows for general solicitation (for example under Rule 506(c)), then those general solicitations may not include advertisements that would be prohibited under in a Reg. CF offering. One commentator has suggested that "[i]t seems likely that 'side-by-side' offerings, made to 'accredited' investors under Rule 506(b) or 506(c) alongside offerings to unaccredited friends and family in reliance on Section 4(a)(6), will become popular," although this does not yet appear to have happened in the crypto world. *Id*.

284. 17 C.F.R. pt. 227. While an issuer is required to aggregate amounts sold by the issuer or its affiliates in other Reg. CF offerings, an issuer should not include amounts sold in other exempt offerings during the preceding 12-month period. *See* Thomson, *supra* note 283. In addition, "an offering made in reliance on Section 4(a)(6) should not be integrated with another exempt offering made by the issuer, provided that each offering complies with the requirements of the applicable exemption that is being relied upon for the particular offering." *Id.* Under these principles, if the Reg. CF offering is followed by a Rule 506(b) or Rule 506(c) offering, the issuer will have to be careful about what is disclosed, and to whom. For a greater discussion of the limits on concurrent offerings, *see Concurrent Online Offerings*, CROWDCHECK (2016), https://crowdcheck.com/sites/default/files/Concurrent%20online%20offerings.pdf.

285. See 17 C.F.R. pt. 227.

The most obvious disadvantage to Reg. CF is the total dollar limitation on amount raised. As mentioned in the preceding paragraphs, a crowdfunding offering is capped at \$1,070,000. In addition, the fact that no purchaser can invest more than \$107,000 in any 12-month period, reduced by all other crowdfunding offerings in which that person participated in that time-frame, is also a drawback to Reg. CF from the issuer's point of view. The potential difficulty in finding an available licensed portal or broker through which to conduct the offering may also be a problem (although this should diminish over time). There are specific disclosure obligations that are considerably more burdensome than for the Reg. D offerings, but these are not as detailed as required under Reg. A. 292

Finally, while the other exemptions discussed here all have similar limitations, resales of securities issued pursuant to Reg. CF are restricted.²⁹³ This illiquidity may be particularly important to smaller, unaccredited investors who are likely to participate in a Reg. CF offering.²⁹⁴

^{286.} See id.

^{287.} See id.

^{288.} Lindsey Anderson Smith, *Crowdfunding and Using Net Worth to Determine Investment Limits*, 90 DENV. U. L. REV. ONLINE 127, 127 (2013). While the limitation is mentioned *supra* at note 278 and accompanying text, it is also worth noting that it may be hard to monitor how much an individual purchaser has bought in other sales. *See id.* ("Under the JOBS Act, Internet portals are required to monitor investments to ensure that investors do not exceed these limits. Nonetheless, there is no centralized system for organizing and maintaining accurate investment records among investors.").

^{289.} See Arthur McMahon, III, It Takes a Village to Fund a Start-Up: How an Electronic Community for Early-Stage Investments Can Bring Democracy Back to Equity Crowdfunding, 84 U. CIN. L. REV. 1269, 1317 (2016) ("Intermediaries are required to be either brokers, as defined in Exchange Act Section 3(a)(4), registered with the SEC under Exchange Act Section 15(b) or 'funding portals' registered under Rule 400 of Regulation Crowdfunding.").

^{290.} See Crowdfunding Guide, supra note 262. Even though these obligations may be less extensive than those required for registration of a Reg. A offering, they have still prompted negative comment. See McDonough, Manning, & Gandelman supra note 238, at 66 (noting the burdens imposed by the disclosure obligations: "Critics of Regulation CF have argued that certain other investor protection measures make equity crowdfunding unworkable in its current form.").

^{291.} See infra Section V.D.

^{292.} See infra Section V.C.

^{293. 17} C.F.R. § 227.501. There is a one-year holding period for securities purchased in a Reg. CF offering, although the original buyer may resell to the issuer, to accredited investors, to family members, or if the interests are later registered. § 227.501.

^{294.} See Scott Shane, Non-Accredited Equity Crowdfunding Investors Need a Path to Liquidity, SMALL BUS. TRENDS, https://smallbiztrends.com/2015/07/non-accredited-equity-crowdfunding-investors-need-path-liquidity.html (last updated Nov. 1, 2017).

C. Reg. A+

Regulation A ("Reg. A") is another potential option for tokenized offerings. Updated substantially in March of 2015 pursuant to mandates in the JOBS Act, the new version of Reg. A is sometimes called Reg. A+ because of the substantially increased breadth of the exemption. The amendments were intended to facilitate capital formation, allowing companies to raise capital in a more efficient, less burdensome process than would typically be involved with the registration of securities. The amendments significantly increased the potential of the "mini-registration" option, adding two tiers with slightly different requirements—one for offerings up to \$20 million²⁹⁹ and the other for offerings up to \$50 million in any 12-month period. 300

There are certain basic requirements applicable to both Tier 1 and Tier 2

^{295.} See 17 C.F.R. §§ 230.251-230.263.

^{296.} See Jumpstart Our Business Startups Act, Pub. L. No. 112-106, 126 Stat. 306 (2012).

^{297.} See ANZHELA KNYAZEVA, REGULATION A+: WHAT DO WE KNOW SO FAR? 1 (Nov. 2016), https://www.sec.gov/files/Knyazeva_RegulationA%20.pdf. The JOBS Act revitalized the exemption by greatly expanding its usefulness: "Regulation A, one such exemption from securities registration, has seen limited use in recent years. As part of implementing the JOBS Act, the Commission amended Regulation A. These amendments (Regulation A+) became effective on June 19, 2015." *Id.*

^{298.} Amendments for Small and Additional Issues Exemptions under the Securities Act (Regulation A), 80 Fed. Reg. 21,806, 21,807 (Apr. 20, 2015) (to be codified at 17 C.F.R. pts. 200, 230, 232, 239, 240, 249, 260).

^{299. 17} C.F.R. § 230.251(a)(1).

^{300. 17} C.F.R. § 230.251(a)(2); see also Regulation A, SEC, https://www.sec.gov/smallbusiness/exemptofferings/rega (last updated Feb. 5, 2019); see also A Primer on SEC Regulation A+, GUNSTER https://connect.societycorpgov.org/HigherLogic/System/DownloadDocumentFile.ashx? DocumentFileKey=d8f37c18-ab3a-4dcb-851e-d6c1626d5a1d&forceDialog=1 (last visited Feb. 9, 2019).

offerings under Reg. A: company eligibility requirements,³⁰¹ bad actor disqualification provisions,³⁰² certain disclosure obligations,³⁰³ and other matters.³⁰⁴ Additional requirements apply to Tier 2 offerings, including limitations on the amount of money a non-accredited investor may invest in a Tier 2 offering,³⁰⁵ requirements for audited financial statements, and the filing of ongoing reports.³⁰⁶ Issuers in Tier 2 Reg. A offerings are not, however, required to register or qualify their offerings with state securities regulators.³⁰⁷ Preemption of inconsistent state law is another advantage of Tier 2 offerings.³⁰⁸ On the other hand, there is one major sticking point with the Reg. A exemptions: the mandatory disclosure documents (including audited finan-

^{301.} See 17 C.F.R. § 230.251(b) (stating that, for example, the issuer cannot be a reporting company under the Securities Exchange Act of 1934).

^{302. 17} C.F.R. §§ 230.251(b)(6), 230.262.

^{303.} See 17 C.F.R. § 230.251(d)(1) (stating that both an offering statement and circular must be filed with the SEC). Moreover, the SEC must qualify the offering statement (i.e., agree that the document complies with the regulatory requirements) before sales can be made. See 17 C.F.R. § 230.251(d)(2); see also 17 C.F.R. §§ 230.252 (covering what must be in the offering statement), 230.253 (addressing the offering circular).

^{304.} See 17 C.F.R. § 230.251(a)(3). One of those "other matters" is the requirement that affiliates of the issuer are limited in the amount of securities they can include in the Reg. A offering. § 230.251(a)(3).

^{305.} Reg A+ Bombshell: \$50M Equity Crowdfunding Under Regulation A, SEEDINVEST (Sept. 7, 2016), https://www.seedinvest.com/blog/regulation-a-equity-crowdfunding-rules [hereinafter Bombshell] ("For Tier II, individual investors can invest a maximum of the greater of 10% of their net worth or 10% of their net income in a Reg. A+ offering (per offering). There are no investment limits under Tier 1.").

^{306.} See 17 C.F.R. § 230.257(b). "Issuers that conduct Tier 2 offerings must file annual reports on Form 1-K, semi-annual reports on Form 1-SA and current event reports on Form 1-U. In addition, Tier 2 issuers must provide notice to the SEC of the suspension of their reporting obligations." John A. Aiello & Philip D. Forlenza, Regulation A Plus: A New Tool to Raise Capital, 2015 N.J. LAW. 11, 14 (2015); See 17 C.F.R. § 230.257(b). "For Tier 2, together with the Offering Circular, the issuer will be required to provide two years of audited financial statements. Tier 1 offerings require only reviewed financials (not audited)." Bombshell, supra note 305. "In adopting the new rules, the SEC was concerned that uniform reporting requirements for all Regulation A issuers could disproportionately affect issuers in smaller offerings." Aiello & Forlenza, supra, at 14. Because of this concern, the rules do not impose "any ongoing reporting obligations for Tier 1 issuers, other than the disclosure of the results of the offering through filing of Form 1-Z." Id.

^{307.} *Bombshell*, *supra* note 305. This preemption of state law under Tier 2 offerings is a huge potential benefit because of the cost of compliance with the varying laws of 50 distinct state regulatory structures.

^{308.} See supra notes 264–69 and accompanying text (discussing preemption of state securities laws).

cials for Tier 2 offerings), must not only be filed with the SEC, but also approved (qualified) by it.³⁰⁹

The potential advantages of a Reg. A+ offering are fairly clear. Under Tier 1, an issuer can raise up to \$20 million.³¹⁰ That amount is bumped to \$50 million under Tier 2.³¹¹ In the relatively unlikely case that the issuer of tokens is contemplating "going public" and filing a full-scale registration statement, Reg. A allows the issuer to test the waters to determine if there is enough interest to justify the expense.³¹² For Tier 2 offerings, state law is preempted,³¹³ sales are not limited to accredited investors,³¹⁴ and public advertising is permitted.³¹⁵

On the downside, the first major obstacle to this exemption is the expense. One source estimates that "[f]rom start to finish a Regulation A+ offering will cost between \$250,000 and \$500,000 mostly depending on how big the marketing budget is."³¹⁶ Other concerns include lack of institutional investor acceptance for this kind of deal and lack of liquidity for purchasers.³¹⁷

Perhaps the biggest obstacle, however, is the SEC itself. In order to con-

^{309.} See 17 C.F.R. § 230.257. The SEC released the following statement explaining its position on qualification process along with the notice of adoption of the Reg. A+ Rules: "We are adopting, substantially as proposed, final rules that require Commission action before a Regulation A offering statement may be qualified. The final rules modify the proposed rules by permitting the offering statements to be declared qualified by a 'notice of qualification' issued by the Division of Corporation Finance, pursuant to delegated authority, rather than requiring the Commission itself to issue an order. The notice of qualification is analogous to a notice of effectiveness in registered offerings." Amendments for Small and Additional Issues Exemptions under the Securities Act (Regulation A), supra note 298.

^{310. 17} C.F.R. § 230.251(a)(1).

^{311. 17} C.F.R. § 230.251(a)(2).

^{312.} The concept of "testing the waters" is derived from 17 C.F.R. § 230.251(c)(2), which provides that the Reg. A offering will not be integrated with prior sales that are registered, except as provided in 17 C.F.R. § 230.255(e). Section 230.251(c)(2) provides a minimal 30-day cooling off period for abandoned Reg. A offerings, which makes it possible for an issuer to move from a Reg. A offering to a registered public sale without extensive delays.

^{313.} See supra notes 264–69 and accompanying text (discussing of state preemption).

^{314. 17} C.F.R. § 230.251(d)(2)(C) (limiting sales to non-accredited investors in a Tier 2 offering to no more than 10% of such person's annual income or net worth).

^{315.} See 17 C.F.R. § 230.255(a). Reg. A does not include a limitation on public advertising after the offering statement has been qualified, although before that point the issuer is only allowed to solicit expressions of interest. See § 230.255(a).

^{316.} Lou Bevilacqua, *So What's Wrong With Reg A+?*, BEVILACQUA PLLC (Jan. 20, 2017), https://www.bevilacquapllc.com/whats-wrong-reg/.

^{317.} *Id*.

duct a compliant Reg. A offering, an issuer must have their offering documents "qualified" by the SEC.³¹⁸ As one source noted, "[t]he rules indicate that the Offering Circular may receive the same level of scrutiny as a Form S-1 in an IPO. *This is the biggest potential drawback of using Reg. A+*."³¹⁹ Given the speed at which the crypto market moves, and the evolving regulatory framework, it is not surprising that there has not been much guidance from the SEC about what compliant documentation for a tokenized offering will look like.³²⁰

Despite the apparent advantages of a Reg. A+ offering, they do not yet appear to have taken off in the cryptotransaction space. Knowbella Tech announced its intention to conduct the first Tier 2 Reg. A+ offering in February of 2018, but as of mid-March there were no filings on the SEC's EDGAR (the Electronic Data Gathering, Analysis, and Retrieval system) database relating to such an offering. Some sources suggest that a "number of companies have filed for A+ regulation, seeking express approval to sell security tokens to the public," but as of the date this was written, none have materialized into offerings available to interested buyers.

D. Reg. D

Regulation D ("Reg. D") was also expanded in order to comply with the

^{318. 17} C.F.R. § 230.251(d)(1)(iii) ("Offers may be made after the offering statement has been qualified....").

^{319.} Bombshell, supra note 305.

^{320.} Gerald Fenech, *New Protocols and Super-Fast Transactions; What to Expect from Cryptocurrency in 2019*, FORBES (Dec. 6, 2018, 9:00 AM), https://www.forbes.com/sites/gerald-fenech/2018/12/06/new-protocols-and-super-fast-transactions-what-to-expect-from-cryptocurrency-in-2019/#ccac7723a9b1.

^{321.} Knowbella Tech Announces Intent to Conduct First Tier 2 Regulation A+ Initial Coin Offering (ICO), BUSINESS WIRE (Feb. 28, 2018, 9:37 AM), https://www.businesswire.com/news/home/20180228005859/en/Knowbella-Tech-Announces-Intent-Conduct-Tier-2. An EDGAR Company filing search can be conducted by typing in the company name at SEC, EDGAR Company Filings. Company Search, SEC, https://www.sec.gov/edgar/searchedgar/companysearch.html (last visited Feb. 9, 2019).

^{322.} Kai Sedgwick, SEC Subpoenas Shepherd ICOs Towards A+ Regulation, BITCOIN.COM (Mar. 1, 2018), https://news.bitcoin.com/sec-subpoenas-shepherd-icos-towards-regulation/. This article cites the Knowbella Tech project, a potential project by Sovereign, and claims from attorneys at Pepper Hamilton LLP that "[s]ince the beginning of 2018, four companies have filed Form 1-As with the SEC seeking to utilize Regulation A+ to raise funding and go public." Id.

JOBS Act requirements. ³²³ Prior to these amendments, Reg. D was broken into three distinct exemptions (Rules 504, 505, and 506), and only Rule 506 was available if an issuer wanted to raise more than \$5 million. ³²⁴ As amended, Rule 505 disappeared, ³²⁵ and Rule 506 was expanded to include two distinct alternatives: Rule 506(b) and 506(c). ³²⁶ Rule 506(b) allows an issuer to raise an unlimited amount from sales to accredited investors and a limited number of others who meet sophistication requirements, but does not allow general solicitation or public advertising. ³²⁷ Rule 506(c) also allows an issuer to raise unlimited amounts and permits general solicitation of offers. ³²⁸ Rule 506(c) does have a potentially significant drawback in that it restricts sales to carefully "verified" accredited investors. ³²⁹ Both 506(b) and (c) involve "covered securities," and, as mandated by NSMIA, inconsistent state regulation is prohibited, although a state can require a notice filing and may collect a fee.

As is the case with the other exemptions outlined here, Reg. D has its advantages and disadvantages. 506(b) and (c) both allow an issuer to raise unlimited funds from an unlimited number of qualified investors.³³⁰ The two rules differ on other matters, however.³³¹

Rule 506(b) has the comparative advantage of allowing an issuer to sell the securities to up to 35 unaccredited investors, so long as certain sophistication requirements are met³³² and certain information is provided to those investors "a reasonable time prior to sale."³³³ However, the major disadvantage

^{323.} Regulation D appears at 17 C.F.R. §§ 230.501 to .508.

^{324. 17} C.F.R. §§ 230.504–230.506. Rule 504 exemptions were available for offerings up to \$1 million, Rule 505 provided terms on which offerings up to \$5 million would be exempt, and only Rule 506 allowed exemptions for sales in excess of that amount. §§ 230.504–230.506.

^{325.} Wendy Gerwick Couture, *Rest in Peace*, *Rule 505*, 45 SEC. REG. L.J. 133, 133 (2017) ("After 37 years in existence, the Rule 505 exemption from registration has been repealed, effective May 22, 2017.").

^{326.} See 17 C.F.R. § 230.506.

^{327.} See generally Rule 506 of Regulation D, SEC, https://www.sec.gov/fast-answers/answers-rule506htm.html (last visited Feb. 9, 2019).

^{328.} Id.

^{329.} *Id.* This does mean that Rule 506(c) has no sophistication requirement, since all investors have to be accredited. *See* 17 C.F.R. § 230.506(c).

^{330.} See 17 C.F.R. § 230.506(a). There is no dollar limitation on the amount that may be raised under this section. § 230.506(a).

^{331.} See 17 C.F.R. § 230.506(b)-(c).

^{332. 17} C.F.R. § 230.506(b)(2).

^{333.} See 17 C.F.R. § 230.502(b) (requiring specific information to be prepared and disclosed if the

to a Rule 506(b) offering is the strict prohibition on general solicitation or advertising.³³⁴

A Rule 506(c) offering must be strictly limited to accredited investors, ³³⁵ and the issuer must take reasonable steps to verify that the purchasers are accredited investors. ³³⁶

E. Some Important Caveats

The preceding discussion of potential exemptions for tokenized offerings has obviously been extremely truncated—there are a myriad of potential obstacles and problems that will need to be overcome before any individual issuer should feel comfortable in proceeding with an offering of tokens under the assumption that it is fully compliant with U.S. law. For example, the preceding discussion does not really go into depth about which issuers may be disqualified from relying on any of these exemptions.³³⁷ It does not discuss the potential problems of selling restricted securities, either in terms of initial holding periods or on the implications for affiliates of the issuer.³³⁸ To the

offering includes any non-accredited investors). The specific information required varies depending on the amounts to be raised, but can be extensive (and expensive). § 230.502(b)

- 334. 17 C.F.R § 230.502(c).
- 335. 17 C.F.R § 230.506(c)(2)(i).

336. 17 C.F.R. § 230.506(c)(2)(ii). The verification of accredited investor status is far more complex than the simple one or two page "investor qualification survey" that used to be prevalent as a means of qualifying investors. *See Accredited Investor Offeree Questionnaire*, SEC, https://www.sec.gov/Archives/edgar/data/872699/000105652012000205/kgaccreditedinvestorq.htm (last visited Feb. 9, 2019). For example, while the current regulations do not specify the exclusive manner in which accredited status may be confirmed, Rule 506(c) suggests that if an accreditor is claiming that status on the basis of income the issuer might want to review "any Internal Revenue Service form that reports the purchaser's income for the two most recent years (including, but not limited to, Form W-2, Form 1099, Schedule K-1 to Form 1065, and Form 1040) and obtaining a written representation from the purchaser that he or she has a reasonable expectation of reaching the income level necessary to qualify as an accredited investor during the current year." 17 C.F.R § 506(c)(2)(ii)(A).

337. See supra Sections V.A–D. Reg. CF, Reg. A, and Reg. D all have bad-actor disqualifiers. See 17 C.F.R. §§ 227.503 (disqualification provisions for Reg. CF), 230.262 (disqualification provisions for Reg. A), 230.507 (disqualifying provisions for Reg. D).

338. See supra Sections V.A–D. Rule 144 has a number of limitations on the ability of persons affiliated with the issue to resell restricted shares. See 17 C.F.R. § 230.144. Included in the definition of "restricted securities" are those acquired from the issuer or any affiliate in a chain of transactions not involving a public (registered) offering (17 C.F.R. § 230.144(a)(3)(i)), any securities that are acquired pursuant to Reg. D (§ 230.144(a)(3)(ii)), and equity securities acquired under Reg. S (§ 230.144(a)(3)(v)). That means virtually all securities sold as described in this article would be

extent that there are restrictions on resale, how is the issuer supposed to handle this? The suggestion of a restrictive legend is clearly not practical for tokens that have no tangible existence.³³⁹ If an issuer is relying on Reg. S in particular, how should the issuer proceed in ascertaining where offerees or buyers live or their citizenship status?³⁴⁰ Under Reg. D, Rule 506(c), how are issuers supposed to be sure that someone who subscribes to an offering actually has the status as a verified accredited investor at the time of the purchase if those two events do not happen simultaneously?³⁴¹

restricted and subject to limitations of resale. § 230.144.

339. See, e.g., 17 C.F.R § 230.502(d). Reg. D has, as one of its general conditions, the following statement: "The issuer shall exercise reasonable care to assure that the purchasers of the securities are not underwriters . . . which . . . may be demonstrated by the following: (1) Reasonable inquiry to determine if the purchaser is acquiring the securities for himself or for other persons; (2) Written disclosure to each purchaser prior to sale that the securities have not been registered under the Act and, therefore, cannot be resold unless they are registered under the Act or unless an exemption from registration is available; and (3) Placement of a legend on the certificate or other document that evidences the securities stating that the securities have not been registered under the Act and setting forth or referring to the restrictions on transferability and sale of the securities." *Id.* While the legend is not the only means of demonstrating "reasonable care," the emphasis on written disclosure plus some notation on the securities themselves is something that is hard to translate to a completely digital interest.

340. See Valerie Ford Jacob, Paul Tropp & Michael Levitt, SEC Issues Interpretations Relating to Rule 144A and Regulation S, FRESHFIELDS BRUCKHAUS DERINGER (Jan. 5, 2017), http://knowledge.freshfields.com/h/Global/r/1767/sec_issues_interpretations_relating_to_rule_144a_and. The Reg. S exemption is limited to transactions where every offer and every sale is made to a non-U.S. person. Recent clarifications by the SEC indicate that "while a person who has permanent resident status in the United States (a green card holder) is presumed to be a US resident, individuals without permanent resident status may also be US residents for purposes of the above definition, based on such factors as (i) tax residency, (ii) nationality, (iii) mailing address, (iv) physical presence, (v) the location of a significant portion of their financial and legal relationships, or (vi) immigration status. Issuers will need to decide what criteria they will use to determine residency and apply them consistently without changing the criteria to achieve a desired result." See id. While it is possible to obtain from persons an after-the-fact representation that they are not in the U.S. and are not a U.S. citizen, that may not prevent a U.S. person from pretending to be a foreigner. As even I.P. addresses can be spoofed, making compliance with these rules difficult to prove, an even more difficult challenge may occur in keeping resales in foreign exchanges from being made to U.S. residents.

341. See Robert B. Robbins, Pillsbury Winthrop Shaw Pittman LLP, Avoiding Liability in Best Efforts Offerings and Closings Under Rule 10b-9, at 1 (2015), https://www.pillsburylaw.com/images/content/1/0/1058.pdf. Experts in private placements have reported that such deals "usually are structured as best efforts, contingency offerings, meaning (l) that the underwriter or placement agent does not commit contractually to purchase or place any securities, and (2) that the actual closing, or sales of securities pursuant to the offering, is contingent on the occurrence of a particular event, most often the receipt of orders for a minimum aggregate amount of the securities by a certain offering expiration date." *Id.* at 2. What happens in a best efforts, all-or-none, or even "part-or-none" offering that lasts more than 90 days before closing? The three-month verification of accreditation which may

These considerations are all as important for attorneys as they are for issuers. The round of SEC subpoenas mentioned earlier³⁴² was not just directed at issuers.³⁴³ One source indicated that as of the end of February, 2018, "subpoenas had gone out to as many as 80 companies and individuals."³⁴⁴ In particular, SEC Chairman Jay Clayton has specifically announced his intention to have the SEC "go after both the companies that sold virtual currencies and the 'gatekeepers' that helped them."³⁴⁵ Although the subpoenas are not public, they have been reported to be extremely detailed.³⁴⁶

It is therefore critical that lawyers seeking to provide competent and accurate advice be aware of the complexities that these kinds of transactions involve. While the generalities outlined in this article might be enough to help clients interested in pursuing tokenized offerings narrow down the exemptions under which they might fall, that cannot be the end of the discussion. Any compliant offering will need to be very carefully structured, both for the sake of the client and the attorney.

VI. WHAT REGULATORY CHANGES SHOULD BE CONSIDERED?

When it comes to cryptotransactions, legal regulation is only now beginning to catch up with the technology. Part of the problem is terminology. The first cryptoasset was designed as a cryptocurrency, and regulators trying to get

have been fine at the start of the offering will have expired prior to closing. Reg. D. requires the issuer to take reasonable steps "to verify that purchasers of securities sold in any offering under . . . [506(c)] are accredited investors." 17 C.F.R. § 230.506(c)(2)(ii). An issuer may well have taken reasonable steps at the outset of an offering, but by the time there are sufficient subscriptions for it to close, the verification may have expired, since confirmations of status are good only for three months. 17 C.F.R. § 230.506(c)(2)(ii)(C).

^{342.} See Kaplan, supra note 121.

^{343.} See Nathaniel Popper, Subpoenas Signal S.E.C. Crackdown on Initial Coin Offerings, N.Y. TIMES (Feb. 28, 2018), https://www.nytimes.com/2018/02/28/technology/initial-coin-offerings-sec.html ("Over the last few months, the commission has asked for information from companies that have sold new virtual currencies to raise money for their projects, as well as advisory firms and lawyers who have helped with these sales, according to four people who have seen some of the subpoenas.").

^{344.} Id. (quoting Nick Morgan, a former lawyer in the SEC's enforcement division).

^{345.} Id.

^{346.} See Ian Wren, SEC Investigates Cryptocurrency Offerings, NPR (Mar. 1, 2018, 7:09 PM), https://www.npr.org/sections/thetwo-way/2018/03/01/590076973/sec-investigates-cryptocurrency-offerings ("[O]ne industry lawyer who has seen the subpoenas called them 'a nasty piece of business.' According to the lawyer, the SEC may be using the 'hyper-detailed' 25-page long subpoenas to convince ICO backers to cooperate in the investigation.").

up to speed seem to be having a hard time accepting that is no longer the only kind of cryptoasset being developed or sold. Regulators see the speculation³⁴⁷ and the volatility,³⁴⁸ and they have a very legitimate concern about the potential for abuse by issuers and promoters. They see the con-artists who have moved into the space,³⁴⁹ and they are well aware of speculators who are pushing the gullible into investing in these cryptoassets—not because they particularly understand or believe in the value of the asset or because it is a "good" investment for a particular individual, but because of the lure of so much wealth.³⁵⁰ These kinds of developments make this an area where regulation is clearly needed.

At the same time, much of the cryptoworld is being driven by technologybased entrepreneurs who seem genuinely committed to the benefits of the

^{347.} See, e.g., Naeem Aslam, \$100 Invested In Ripple Would Have Made You \$35K, What About The Rest?, FORBES (Jan. 2, 2018, 8:35 AM), https://www.forbes.com/sites/naeemaslam/2018/01/02/100-dollar-invested-in-ripple-would-have-made-you-35k-what-about-rest/#4dc3f94510b2 (pointing out Bitcoin's 1,369% gain in 2017). It is not hard to find headlines that tout returns in excess of 1000%, or those that tell of \$100 investments growing to have a worth in the tens of thousands of dollars. See id. See also Coin and Crypto, Early Investors Are Making 50,000% Returns on ICOs, HACKERNOON (Dec. 5, 2017), https://hackernoon.com/investors-are-making-50-000-returns-on-icos-32432bc741d1; Will Hatton, How I Made \$350,000 in One Year Riding the Crypto-Wave: How to Trade Cryptocurrency Like a Pro, The Broke Backpacker, https://www.thebrokebackpacker.com/investing-in-cryptocurrency-trading/ (last updated Dec. 14, 2018).

^{348.} See Arthur Iinuma, Why Is the Cryptocurrency Market So Volatile: Expert Take, COINTELEGRAPH (Feb. 27, 2018), https://cointelegraph.com/news/why-is-the-cryptocurrency-market-so-volatile-expert-take (noting an interesting comparison: "four years of volatility in the stock market can be covered in a month of pricing movements in the cryptocurrency markets").

^{349.} See Louise Matsakis, Cryptocurrency Scams Are Just Straight-Up Trolling at This Point, WIRED (Jan. 30, 2018, 6:05 PM), https://www.wired.com/story/cryptocurrency-scams-ico-trolling/. OneCoin, for example, was a Mumbai-based blockchain startup that was discovered to be a Ponzi scheme (after funneling at least \$350 million through Germany). Confido disappeared from sight after collecting \$370,000 from investors. BitConnect (an early and unregulated cryptocurrency exchange) was shut down after multiple allegations that it was operating as a Ponzi scheme.

^{350.} See David Goodboy, This \$0.20 Cryptocurrency Is Set to Soar by December 2018, NASDAQ (Sept. 29, 2017, 3:30 PM), https://www.nasdaq.com/article/this-020-cryptocurrency-is-set-to-soar-by-december-2018-cm853317 (suggesting that Ripple "could explode in value by late 2018," and that "[i]nvestors have earned near-unbelievable returns from the leading cryptocurrency names over the last 24 months"). This article, while noting that Ripple is different from Bitcoin, failed to explain that treating it like any other cryptocurrency "fundamentally misunderstands why Ripple was created and how it should be used." Brian Schuster, Ripple—Why You Shouldn't Invest (and Not Because It's a Scam), HIVERGENT, http://hivergent.com/you-shouldnt-invest-in-ripple-and-not-because-its-a-scam/ (last visited Feb. 9, 2019) (noting that even the founders of Ripple recommend not investing in their company).

technology and often the ideology behind it.³⁵¹ They are not con artists, and they are not the short-sighted pump-and-dump schemers looking to make a quick buck and move on.³⁵² They believe in the "transformative" nature of blockchain technology,³⁵³ and they want to make this technology more widely available.³⁵⁴ They believe in the aspirational ideals of accessibility and democracy,³⁵⁵ independence and incorruptibility,³⁵⁶ and transparency.³⁵⁷ Ironically, many of them look forward to thoughtful regulation: they want to have "compliant" offerings.³⁵⁸ What they do not want is compliance that is so expensive that it precludes the very benefits the underlying technology could

^{351.} See, e.g., Gunther Sonnenfeld, How We Are Using the Blockchain in the Buildout of an Independent & Regenerative Media Ecosystem, MEDIUM (Dec. 16, 2017), https://medium.com/@goonth/how-we-are-using-the-blockchain-in-the-buildout-of-an-independent-regenerative-media-ecosystem-4fc2c5a94aba (noting the importance of "demonstrating our seriousness, and humility, in building an information infrastructure that benefits legions of people around the world"). 352. See id.

^{353.} See, e.g., AJ Agrawal, Why the Blockchain Revolution Will Accelerate in 2018, THENEXTWEB (2017), https://thenextweb.com/contributors/2017/12/13/blockchain-revolution-will-accelerate-2018/ ("We are likely to see a number of entrepreneurs and investors alike investing their time and resources in this space. The next generation of startups will use inherent stability and security benefits of the blockchain to power a new wave of innovation. While this shift will take time and capital, it is an inevitable solution to the foundational obstacles that have plagued society for decades. With scale, we can eliminate the need for intermediary parties and centralized authorities, effectively giving the power back to the people.").

^{354.} See id.

^{355.} See Jack Filiba, Why Democracy and Blockchain Need Each Other, COINSQUARE (Dec. 2, 2017), https://discover.coinsquare.io/blockchain/blockchain-democracy-work-together/ ("What makes blockchain democratic is cases where blockchain technology is implemented with the goal of remaining decentralized.... These projects make the relationship between democracy and blockchain apparent for the simple reason that everyone has an equal voice.").

^{356.} See Guillaume Meyer, Blockchain: On the Verge of Revolutionising Society, TECHNOLOGIST (Apr. 1, 2016), https://technologist.eu/blockchain-on-the-verge-of-revolutionising-society/ ("Online payments diverted into the wrong pockets. Election results disputed by a political party. Idea ownership claimed by two authors. What do these systemic malfunctions have in common? They could all be prevented with a revolutionary technology called blockchain.").

^{357.} See Ryo Takahashi, How Can Creative Industries Benefit from Blockchain?, MCKINSEY & Co. (Aug., 2017), https://www.mckinsey.com/industries/media-and-entertainment/our-insights/how-can-creative-industries-benefit-from-blockchain ("One of the biggest appeals of blockchain is its public nature. All of the transactions for a creative work could be seen and validated, including who accessed the work and how much revenue the work is generating at any point in time."); see also Larry Myler, Transparent Transactions: How Blockchain Payments Can Make Life Easier for B2B Companies, FORBES (Nov. 9, 2017, 4:08 PM), https://www.forbes.com/sites/larrymyler/2017/11/09/transparent-transactions-how-blockchain-payments-can-make-life-easier-for-b2b-companies/#9715e2170b52 (discussing the benefits of and move to increased transparency through blockchain).

^{358.} See Unlocking the Real Benefits Of Blockchain Through Its 'Sweet Spot', ACI WORLDWIDE,

offer.

On the other hand, the SEC generally regulates to protect the investor.³⁵⁹ Investors "need" access to information, and in particular, the smaller less sophisticated investor does deserve to be protected from scam artists and "fraudulent" misrepresentations.³⁶⁰ It is therefore not at all surprising that the SEC chooses to regulate based on how purchasers perceive the interests that they are buying. Are they buying something in order to use it? Will it have "utility" to them? Or have they been convinced to buy into something because of the speculation that there will be a dramatic increase in value in what they are buying? In other words, how is this interest marketed, and how is it perceived?

The SEC's current investment contract approach essentially focuses on these aspects of tokenized offerings, looking at the investor's position and

INC. 3 (2017), https://www.aciworldwide.com/-/media/files/collateral/trends/unlocking-benefits-ofblockchain-tl-us.pdf (last visited Feb. 9, 2019). Various participants in the crypto world noted have that the space is not yet "appropriately regulated." Id. The Ethereum community has been calling for increased standards for some time. See K.B. Martin, Ethereum Sees Need for ICO Standards to Prevent Fraud, INVEST IN BLOCKCHAIN (Nov. 14, 2017), https://www.investinblockchain.com/ethereumico-standards/. Other major players agree about the risk of fraud. See Arjun Kharpal, Cryptocurrency Start-Up Confido Disappears with \$375,000 from an ICO, and Nobody Can Find the Founders, CNBC (Nov. 21, 2017, 7:40 AM), https://www.cnbc.com/2017/11/21/confido-ico-exit-scam-founders-runaway-with-375k.html ("Brad Garlinghouse, CEO of Ripple, the fourth-largest cryptocurrency by value, told CNBC in a recent interview that a lot of what's happening in the ICO market is actually fraud."). Ethereum co-founder Joseph Lubin told CNBC that there is "irrational exuberance" in the ICO market, although he believes the technology will mature and is here to stay. *Id.* "Bradley Tusk, a political strategist known for helping companies navigate the regulatory waters," has been quoted as saying that regulation is overdue: "[N]ot only would rules provide consumers some basic protections ... but they might also ensure that the 'bad actors and fly-by-nights' don't blow it for everyone else." Connie Loizos, Hope Grows That a Larger SEC Crackdown on ICOs is Coming-and Soon, TECHCRUNCH (Dec. 5, 2017), https://techcrunch.com/2017/12/05/hope-grows-that-a-larger-seccrackdown-on-icos-is-coming-and-soon/.

359. See The Role of the SEC, SEC, https://www.investor.gov/introduction-investing/basics/role-sec (last visited Feb. 9, 2019). The SEC claims a three-part mission, and protection of investors is listed first. The other two parts of the mission are to maintain fair, orderly, and efficient markets, and to facilitate capital formation.

360. See Matt Robinson, SEC Issues Subpoenas in Hunt for Fraudulent ICOs, BLOOMBERG (Feb. 28, 2018, 4:03 PM), https://www.bloomberg.com/news/articles/2018-03-01/sec-is-said-to-issue-subpoenas-in-hunt-for-fraudulent-icos. The recent spate of subpoenas from the SEC were issued in an apparent effort to crack down on fraudulent ICOs. See Kaplan, supra note 121 and accompanying text.

motivation under the very traditional investment contract test.³⁶¹ Moving forward, the SEC should probably consider specialized regulations governing the issuance and sale of cryptoassets such as tokens, for a number of reasons.

First, there are multiple kinds of cryptoassets, and it does not seem to make sense to treat them alike. A token that is being issued as a digital alternative to a traditional equity or debt interest probably should be treated in a manner equivalent to equity or debt.³⁶² If the token is designed as a virtual currency, it ought to be regulated in the same way as currencies.³⁶³ If it is intended to represent an interest in an underlying asset (such as gold), it ought to be treated as a commodity.³⁶⁴ And if it is a different kind of token, where

^{361.} See BATIZ-BENET ET AL., supra note 107, at 6-7.

^{362.} See 15 U.S.C. § 77b. Unless the context otherwise requires, section 2 of the '33 Act defines "security" to mean (among other things) "any note, stock, treasury stock, . . . bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, . . . or, in general, any interest or instrument commonly known as a 'security." 15 U.S.C. § 77(a)(1). A tokenized debt instrument, pursuant to which an issuer raises money for business development, is likely to be viewed as "evidence of indebtedness" without the need for further discussion. § 77(a)(1). As for a tokenized equity interest, either it is likely to be classified as an electronic or digitized "certificate of interest or participation in any profit-sharing agreement," or it should fit within the category of being an "interest or instrument commonly known as a 'security." § 77(a)(1). Even if that is not the case for equity tokens, it is hard to see how they would be anything other than an investment contract. See supra notes 226–35 and accompanying text (discussing how investment contract analysis is applied under the federal securities laws).

^{363.} See Foreign Exchange Currency Fraud, CFTC, http://www.cftc.gov/ConsumerProtection/FraudAwarenessPrevention/ForeignCurrencyTrading/cftcnasaaforexalert.html (last visited Feb. 9, 2019). As it stands currently, the CFTC should probably be regulating true "currencies" whether they are foreign fiat currencies or cryptocurrencies. See id. ("The CFTC is the Federal agency with the primary responsibility for overseeing the commodities markets, including foreign currency trading."). The CFTC has affirmatively stated that virtual currencies "have been determined to be commodities," and that it intends to maintain "general anti-fraud and manipulation enforcement authority over virtual currency cash markets as a commodity in interstate commerce." CFTC, RELEASE No. 7665-17, CFTC LAUNCHES VIRTUAL CURRENCY RESOURCE WEB PAGE (Dec. 15, 2017), http://www.cftc.gov/PressRoom/PressReleases/pr7665-17.

^{364.} See Mission & Responsibilities, COMMODITY FUTURES TRADING COMMISSION, http://www.cftc.gov/About/MissionResponsibilities/index.htm (last visited Feb. 9, 2019) [hereinafter Mission & Responsibilities]. Given the current allocation of authority between federal regulatory agencies, the CFTC would also seem to be in the best place to regulate cryptoassets that are tied to ownership in specific bulk assets, such as gold or other metals, grains, etc. The SEC, in speaking to oversight of futures trading, has indicated that it "administers and enforces the federal laws that govern the sale and trading of securities, such as stocks, bonds, and mutual funds, but we do not regulate futures trading. We refer questions and complaints about futures to the Commodity Futures Trading Commission (CFTC)—the federal agency that does regulate futures trading." Commodity Futures Trading Commission, Fast Answers, SEC, https://www.sec.gov/fast-answers/answers-cftchtm.html (last updated May 26, 2010).

there is a genuine utility associated with purchasing and owning the interest as opposed to becoming an owner in or creditor of the underlying business, that ought to factor into the analysis and even more importantly into the scope of regulation.³⁶⁵

A second reason for the SEC to develop a new regulatory approach is that at the current time, most tokens resemble neither debt nor equity.³⁶⁶ Under the investment-contract analysis, however, if a cryptoasset meets the elements of the *Howey* test,³⁶⁷ it is simply treated as a "security" and forced into a set of requirements and exemptions that were designed for interests more akin to traditional debt and equity.³⁶⁸

^{365.} See supra Section III.B (discussing utility tokens).

^{366.} See Amendments to Regulation S Under the Securities Act of 1933, FINDLAW, https://corporate.findlaw.com/finance/amendments-to-regulation-s-under-the-securities-act-of-1933.html (last visited Feb. 11, 2019). Consider, for example, Reg. S and its approach to debt and equity securities. Reg. S has significantly different requirements for offerings that involve equity as opposed to those that involve debt. For example, equity securities of domestic issuers under Category 3 offerings must be held for a full year before they can be resold, 17 C.F.R. § 230.903(b)(3)(iii)(A), while debt can be resold after a 40-day distribution compliance period, 17 C.F.R. § 230.903(b)(3)(ii)(A). Unfortunately, the distinction between equity and debt in the definitions for that regulation are hard to translate to non-traditional token sales. A debt security is defined in Reg. S "to mean any security other than an equity security as defined in § 230.405, as well as . . . (1) Non-participatory preferred stock, which is defined as non-convertible capital stock, the holders of which are entitled to a preference in payment of dividends and in distribution of assets on liquidation, dissolution, or winding up of the issuer, but are not entitled to participate in residual earnings or assets of the issuer; and (2) Asset-backed securities" 17 C.F.R. § 230.902(a). Section 230.405, cross-referenced in the above excerpt, in turn defines equity as "any stock or similar security, certificate of interest or participation in any profit sharing agreement, preorganization certificate or subscription, transferable share, voting trust certificate or certificate of deposit for an equity security, limited partnership interest, interest in a joint venture, or certificate of interest in a business trust; . . ." 17 C.F.R. § 230.405. So, is a tokenized interest that includes a profit-sharing feature debt or equity? What if the interest calls for a payout that looks like debt, but if not fully paid out before the company is sold, there is the possibility of sharing in the purchase price for more than the face amount of the "debt" plus interest? Again, the problem is trying to force tokens to fit into a series of tests that were not designed with these kinds of interests in mind.

^{367.} See supra notes 226–35 and accompanying text (discussing the Howey test).

^{368.} See Steven J. Gray, Cryptocurrencies and Digital Tokens as Securities, LEXOLOGY (May. 4, 2018), https://www.lexology.com/library/detail.aspx?g=24025525-fd1c-4930-b696-2e3862213f0a. Consider, for example, the terms of Reg. A: there are numerous references to debt and equity in the rules that compromise this exemption. See generally, 17 C.F.R. §§ 230.251(a), 230.261(c). For example, 17 C.F.R. § 230.251(a) begins with a reference to eligible securities, which is then defined in § 230.261(c) to mean "[e]quity securities, debt securities, and securities convertible or exchangeable to equity" Id. This raises at least the possibility that tokens that are not technically equity or debt could not rely on Reg. A. Nor is § 230.251(a) the only instance in which Reg. A refers to debt and equity as if those are the only two kinds of securities. See, e.g., 17 C.F.R. § 230.253(b)(4) (allowing

The third reason for encouraging specialized regulation is derived from the third mission of the SEC: to facilitate capital formation. Since the greatest impact of regulation is often on the issuer, it makes sense to look not only at the potential needs of the investors, but also to consider what is within the power of the issuer. In considering whether a particular kind of tokenized offering needs to be heavily regulated or shut down, it makes sense to at least consider what the issuer is doing. Obviously, where an issuer promises virtually unprecedented and unrealistic rates of return for people who buy its tokens, the SEC (or another agency) should be ready to step in.³⁷⁰ At the very least this sounds like something that is too good to be true, and it absolutely seems to be marketed towards those who are unsophisticated, gullible, and/or desperate.³⁷¹ But what if the issuer is marketing something with a particular function and clearly states the lack of liquidity, or even builds a lack of liquidity into the token? What if the marketing is premised not on a presumptive increase in trading value of the token, but in the eventual value that might become available when the token is used? This is not simply an issuer claiming that it is marketing a utility token and therefore not a security, but is a suggestion that the way in which the token is actually designed and marketed might take the offering outside the scope of securities regulation.³⁷² To the

the number of equity securities or amount of debt securities to be omitted from the filed offering circular).

Reg. CF also seems poorly designed for tokenized offerings. This exemption includes disclosure obligations that focus on the ownership and capital structure of the issuer, including the terms of the securities being offered and each other class of security with voting rights, a summary of differences between the classes of securities and how rights of the offered securities can by diluted or qualified by rights of other classes of securities. 17 C.F.R. § 227.201(m). Since a tokenized offering is not a traditional class of debt or equity, and particularly where the token has not yet been developed into full functionality, much of this does not make a great deal of sense.

^{369.} What We Do, SEC, https://www.sec.gov/Article/whatwedo.html (last visited Feb. 11, 2019).

^{370.} SEC Emergency Action Halts ICO Scam, SEC (Dec. 4, 2017), https://www.sec.gov/news/press-release/2017-219 (announcing that the SEC has halted a "fast-moving" and fraudulent ICO "that raised up to \$15 million from thousands of investors since August by falsely promising a 13-fold profit in less than a month").

^{371.} See generally Naveen Saraswat, The Simpleton's Guide to Understanding Security Tokens, HACKERNOON (July 17, 2018), https://hackernoon.com/the-simpletons-guide-to-understanding-security-tokens-d9d5023b810e.

^{372.} See Audrey Nesbitt, Security Tokens, Utility Tokens and the Evolution of Cryptocurrency, MEDIUM (Nov. 2, 2018), https://medium.com/datadriveninvestor/security-tokens-utility-tokens-and-the-evolution-of-cryptocurrency-5f1bdcde1845.

extent that the SEC is interested in legitimate business development, it is important not to over-regulate or poorly regulate, and to offer options with which an entrepreneur acting in good faith can comply.³⁷³

Fourth, the market problems are often not with the issuer, but with some advisers and promoters, the least ethical of whom appear to actively exploit the public's lack of familiarity with this new kind of investment.³⁷⁴ Many financial advisers are very careful to steer clients away from cryptocurrencies or ICOs, warning of volatility and uncertainty in the markets, and often concluding that "the significant risk of loss is incompatible with prudent investing for long-term goals."³⁷⁵ But that observation does not apply to everyone—there are advisors and promoters whose websites include prominent statements like "Biggest Mistake? Not Starting Now."³⁷⁶ Other sources fuel the fire with headlines like "Bitcoin Headed to \$100,000 in 2018."³⁷⁷ If the push for investment to make a profit on speculation is not coming from the issuer, then the issuer should not be taking all of the hit in having to deal with restrictive, cumbersome, and expensive regulations.³⁷⁸

Another reason to create special regulation governing tokenized offerings and resales is that, if done correctly, there is genuine potential for the block-chain technology to advance some of the underlying goals of the SEC. Block-chain arrangements are fully distributed, which means that the transactions which take place on them are transparent and at least theoretically accessible

^{373.} See Daniel Araya, The Future of Cryptocurrency Regulation, BROOKINGS (Oct. 10, 2018), https://www.brookings.edu/blog/techtank/2018/10/10/the-future-of-cryptocurrency-regulation/.

^{374.} See What We Do, supra note 369.

^{375.} Daisy Maxey, *What Financial Advisers Say about Investing in Bitcoin*, MARKETWATCH (Oct. 30, 2017, 10:48 AM), https://www.marketwatch.com/story/what-financial-advisers-say-about-investing-in-bitcoin-2017-10-30 (quoting Julie Ford, founder of Ford Financial Solutions in New York).

^{376.} Nathan Reiff, *Invest in Bitcoin With Your Roth IRA*, ROTHIRA.COM, https://www.rothira.com/invest-bitcoin-roth-ira (last visited Feb. 11, 2019) (describing Bitcoin as the "longest-running crypto-currency" and emphasizing how it has "surged in popularity in recent months, nearly tripling in price and setting record after record as it climbs to new highs").

^{377.} See Arjun Kharpal, Bitcoin Headed to \$100,000 in 2018, Says Analyst Who Predicted Last Year's Price Rise, CNBC (Jan. 16, 2018, 6:27 AM), https://www.cnbc.com/2018/01/16/bitcoin-headed-to-100000-in-2018-analyst-who-forecast-2017-price-move.html ("Kay Van-Petersen, an analyst at Saxo Bank, . . . forecast in December 2016 that bitcoin would reach \$2,000 in 2017. . . . Van-Petersen said Tuesday that Bitcoin could hit between \$50,000 and \$100,000 in 2018.").

^{378.} See Joseph Young, Tokens Continue to Take a Hit: Is SEC Preparing to Target Crypto Projects?, CCN (Nov. 14, 2018), https://www.ccn.com/tokens-continue-to-take-a-hit-is-sec-preparing-to-target-crypto-projects/.

(so long as the data is made available in a form that most people can understand).³⁷⁹ Because it is distributed, it is not subject to manipulation, and because of the way in which it operates, data about trades and transactions is updated in real time rather than being dependent on annual or biannual reports prepared by others. A regulatory system specifically geared toward encouraging the potential for beneficial uses of blockchain in the capital-formation world could actually offer better protection for investors (in terms of the lack of manipulation and access to information) without cutting them off from the potential for financial rewards. This is probably not possible in a world where cryptotransactions are pigeon-holed into a regulatory system that was not designed with blockchain capabilities in mind.³⁸⁰

A sixth advantage of appropriate regulation is that this would allow the SEC to focus available resources on actual fraud. As mentioned above, fraudulent promotions are a genuine concern, for regulators, the public, and the legitimate blockchain businesses as well.³⁸¹ If the SEC's resources are focused on trying to interpret, apply, and enforce regulations that do not fit well with the underlying interests being offered or purchased, this necessarily means that there are fewer efforts that can be focused on anti-fraud initiatives.

Finally, there are significant reasons why federal regulation should aim

^{379.} See Thijs Maas, Why ICO's Need to Be Regulated, HACKERNOON (Oct. 17, 2017), https://hackernoon.com/why-cryptocurrencies-and-tokens-should-be-regulated-349b920b62c8.

^{380.} See Iansiti & Lakhani, supra note 14. Some regulators are well aware of the risks of stifling innovation in this dynamic field. For example, the CFTC has been particularly concerned with the potential problem of over-regulation. In March of 2016, J. Christopher Giancarlo, a CFTC Commissioner, spoke at a Blockchain symposium and specifically warned that the development of blockchain technology was "at risk of being stymied by disparate and uncertain regulation." J. Christopher Giancarlo, Comm'r, CFTC, Before the Depository Trust & Clearing Corporation 2016 Blockchain Symposium, (Mar. 29, 2016), https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo-13. This concern from the CFTC has continued: "Jim Newsome, the former Commodity Futures Trading Commission (CFTC) chairman cautions U.S. regulators to be careful in regulating, or risk leaving the U.S behind the rest of the world for digital currency innovation." Melanie Clay, CFTC Chair Warns That Over-Regulation May Stifle Fintech and Digital Currency Innovation, COINSQUARE (Mar. 9, 2018), https://discover.coinsquare.io/government/regulation-may-stifle-digital-currency-innovation/. This is also the approach that some foreign governments have advocated. "Andrea Enria, chairperson of the European Banking Authority (EBA), is 'yet to be convinced' that digital currency should come under the full scope of regulation. He is calling for a more 'nuanced' approach." Id.

^{381.} See supra notes 358-60 and accompanying text.

for consistency. Right now, there are multiple agencies with overlapping areas of interest.³⁸² That is not necessarily a bad thing because it can allow for greater specialization. However, it is problematic if each agency treats the same interest differently, without a sufficient justification for doing so.³⁸³ For example, both the CFTC and the SEC have roles which they have been assigned.³⁸⁴ The CFTC, among other things, regulates certain trading involving commodities,³⁸⁵ and the SEC regulates securities.³⁸⁶ Presumably, a particular interest should be either one or the other: a single token should not be classified as both so that it is forced into compliance with two competing regulatory regimes.³⁸⁷ When you add FinCEN and the IRS³⁸⁸ as federal agencies with potential jurisdiction over crypto-transactions, the need for consistent definitions and approaches becomes even greater.³⁸⁹

If there is a value to the underlying technology, and there seems to be widespread acknowledgement of the potential of blockchain technologies,³⁹⁰ then it becomes important not to over-regulate in such a way that innovation

^{382.} See Molly Jane Zuckerman, US: CFTC Seeks to 'Provide Regulatory Clarity' for Listing Virtual Currency Derivatives, COINTELEGRAPH (May 22, 2018), https://cointelegraph.com/news/us-cftc-seeks-to-provide-regulatory-clarity-for-listing-virtual-currency-derivatives

^{383.} See Rachel Wolfson, U.S. State of Wyoming Defines Cryptocurrency 'Utility Tokens' as New Asset Class, FORBES (Mar. 13, 2018, 11:24 AM), https://www.forbes.com/sites/rachel-wolfson/2018/03/13/u-s-state-of-wyoming-defines-cryptocurrency-utility-tokens-as-new-asset-class/#17aa94544816.

^{384.} See Mission & Responsibilities, supra note 264; What We Do, supra note 369.

^{385.} *Mission & Responsibilities, supra* note 364. For example, in addition to regulating certain trading in commodities, the CFTC oversees futures involving securities indexes and certain trading exchanges.

^{386.} What We Do, supra note 369.

^{387.} See Carol Goforth, U.S. Law: Crypto is Money, Property, a Commodity, and a Security, All at the Same Time, 49 J. OF FIN. TRANSFORMATION ____ (2019, forthcoming), At the present time, The SEC, the CFTC, FinCEN and the IRS each have their own approach to classifying and regulating cryptoassets.

^{388.} See Keith A. Aqui, Notice 2014-21, IRS, https://www.irs.gov/pub/irs-drop/n-14-21.pdf (last visited Feb. 11, 2018). The IRS treats cryptoassets as "property": IRS Notice 2014-21 adopted this approach, and the agency continues to treat "virtual currency" as property for tax purposes. See id. This rule could apply to tokens that are not designed to serve as currencies, because the notice defines "virtual currency" to include any "digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value." Id.

^{389.} See U.S. Regulatory Bodies and Cryptocurrencies: SEC, CFTC, IRS, FINCEN Outlook, BITCOIN EXCHANGE GUIDE (May 30, 2018), https://bitcoinexchangeguide.com/u-s-regulatory-bodies-and-cryptocurrencies-sec-cftc-irs-fincen-outlook/.

^{390.} See supra notes 14, 351-57 and accompanying text.

is stifled. If the technology is subject to multiple layers of such regulation, even careful efforts at avoiding over-regulation may be for naught. Multiple levels of regulation (even if none of them would be excessive on their own) can be crushing.

VII. CONCLUSION

On January 30, 2018, Facebook announced that it was banning ads for cryptoassets, claiming that it had "created a new policy that prohibits ads that promote financial products and services that are frequently associated with misleading or deceptive promotional practices, such as binary options, initial coin offerings and cryptocurrency." Subsequent reports indicate that the real reason for the change in policy was pressure from the F.B.I., 392 and that Google might be taking similar steps in the near future.

Those kinds of initiatives, designed to avoid or minimize exploitative behavior geared at tricking the unwary and unsophisticated, are welcomed by many legitimate players in the crypto communities. What is less welcomed is the signaling that suggests all deals are being lumped together and branded as questionable because there are bad actors in the space along with legitimate entrepreneurs. This is feeding concern that the United States is falling behind in this developing technology in a way that can only harm our economy, given that we are all players on the world stage. ³⁹⁴

^{391.} Rob Leathern, *New Ads Policy: Improving Integrity and Security of Financial Product and Services Ads*, FACEBOOK BUSINESS (Jan. 30, 2018), https://www.facebook.com/business/news/new-ads-policy-improving-integrity-and-security-of-financial-product-and-services-ads.

^{392.} Jordan Daniell, Canadian Regulator: FBI Encouraged Facebook to Remove Crypto Ads, Google Should Follow Suit, ETHNEWS (Mar. 9, 2018, 12:30 PM), https://www.ethnews.com/canadian-regulator-fbi-encouraged-facebook-to-remove-crypto-ads-google-should-fo.

^{393.} *Id.* Google did, in fact, ban crypto ads, at least for a while. Hannah Murphy & Alice Woodhouse, *Google Bans Cryptocurrency Advertising*, FIN. TIMES (Mar. 14, 2018), https://www.ft.com/content/45f49684-2776-11e8-b27e-cc62a39d57a0 (last accessed Mar. 12, 2019). However, Google subsequently reversed its total ban later in the year. Jillian D'Onfro, *Google Ends Cryptocurrency Ad Ban—But Only for Certain Kinds of Ads*, CNBC (Sept. 25, 2018), https://www.cnbc.com/2018/09/25/google-reverses-ban-on-cryptocurrency-exchange-advertising-in-us-japan.html [archived at https://perma.cc/L45M-FLFB].

^{394.} See When It Comes to Blockchain and Crypto, the U.S. is Falling Behind, BEINCRYPTO (Jan. 17, 2019, 4:39 AM), https://beincrypto.com/blockchain-crypto-united-states-falling-behind/.

Obviously, not all nations are in agreement about the merits of cryptotransactions. China and South Korea have attempted to ban ICOs.³⁹⁵ The Venezuelan government has attempted to co-opt the technology for its own use to build reserves of foreign currencies.³⁹⁶ Some countries appear to be adopting a wait-and-see attitude.³⁹⁷ Some are venturing into the world of regulation in a variety of ways.³⁹⁸ In fact, the only consistent theme in the international approach to crypto-transactions is that every nation seems to be at least a little bit different.³⁹⁹

395. How Will the China and South Korea ICO Bans Impact Cryptocurrencies?, FORBES (Dec. 11, 2017, 8:45 AM), https://www.forbes.com/sites/forbestechcouncil/2017/12/11/how-will-the-china-and-south-korea-ico-bans-impact-cryptocurrencies/#4dd9fe325124 [hereinafter ICO Bans]. The same story notes that China's position on cryptocurrencies has been extremely inconsistent, and that the ban is unlikely to persist. On the other hand, there are also other very restrictive regimes. Cryptocurrencies by Country, Thomson Reuters (Oct. 25, 2017), https://blogs.thomsonreuters.com/answerson/world-cryptocurrencies-country/ ("Bangladesh passed a law in 2014 stating that anybody caught using the virtual currency could be jailed under the country's strict anti-money-laundering laws.").

396. Adam James, *Venezuela's Petro Now Purchasable with Foreign Fiat*, BITCOINIST (Mar. 25, 2018, 4:45 AM), http://bitcoinist.com/venezuelan-cryptocurrency-petro-now-purchasable-foreign-fiat/ (noting that "[I]ast month, Venezuela became the first country to issue its own cryptocurrency with the launch of the purportedly oil-backed Petro"). Americans, however, cannot buy the Petro, as President Trump acted in mid-March of 2018 to ban such purchases. Aaron Wood, *US President Trump Bans US Citizens from Buying Petro*, COINTELEGRAPH (Mar. 20, 2018), https://cointelegraph.com/news/us-president-trump-bans-us-citizens-from-buying-petro. Ironically, one other group cannot buy the Petro—Venezuelans. Camila Russo, *Venezuelans Can't Buy Maduro's Cryptocurrency With Bolivars*, BLOOMBERG (Feb. 22, 2018, 10:18 AM), https://www.bloomberg.com/news/articles/2018-02-22/venezuelans-unable-to-buy-maduro-s-cryptocurrency-with-bolivars (noting that Venezuela forbids its citizens from buying foreign currency, which "effectively shuts out residents in the country" from investing in the Petro).

397. See ICO Bans, supra note 395 (noting that some experts predict that the bans in Asia and increasing regulatory scrutiny in the U.S. will cause the crypto bubble to "burst," but that other countries will not follow suit). However, after Japan's Financial Services Agency indicated support for cryptocurrencies by endorsing eleven cryptocurrency exchanges, the long-term prospects for cryptotransactions in the international sphere seem very good. Id.

398. See Cryptocurrencies by Country, supra note 395 (discussing some of the varying laws and approaches by country). Interestingly, one country (the Marshall Islands) has already accepted a cryptocurrency as its official currency. Hilary Hosia & Nick Perry, This Is the First Country to Adopt a Cryptocurrency as Its Official Currency, MONEY (Mar. 5, 2018), http://time.com/money/5186316/this-is-the-first-country-to-adopt-a-cryptocurrency-as-its-official-currency/.

399. Charles Bovaird, Cryptocurrency Markets Gripped By Wait-And-See Mentality, FORBES (Feb. 12, 2018, 2:23 PM), https://www.forbes.com/sites/cbovaird/2018/02/12/cryptocurrency-markets-gripped-by-wait-and-see-mentality/#2937513f3712 ("Market participants are currently looking at a global regulatory environment that is both uncertain and complex, as countries take different approaches to supervising cryptocurrencies and their use."). International regulation of crypto-transactions in general is incredibly complicated. See Karsten Wöckener, Carsten Lösing, Thilo Diehl &

Here in the United States, we have a somewhat similar dynamic, with individual states taking a variety of approaches to cryptotransactions. Even on the federal level, regulatory agencies seem unsure about the extent to which we need to encourage the new technology as opposed to heavily regulating it. And when they do decide to regulate it, they are not in agreement in how to regulate particular transactions, or even how to classify the underlying cryptoassets. 402

Annekatrin Kutzbach, *Regulation of Initial Coin Offerings*, WHITE & CASE 3–6 (2017), https://www.whitecase.com/publications/alert/regulation-initial-coin-offerings (providing an overview of some of the varied international regulatory approaches); *see also* Francine McKenna, *Here's How the U.S. and the World Regulate Bitcoin and Other Cryptocurrencies*, MARKETWATCH (Dec. 28, 2017, 11:19 AM), https://www.marketwatch.com/story/heres-how-the-us-and-the-world-are-regulating-bitcoin-and-cryptocurrency-2017-12-18 (providing a longer list of international reactions).

400. See Rakesh Sharma, More US States May Roll Out Cryptocurrency Regulations, INVESTOPEDIA (Mar. 7, 2018), https://www.investopedia.com/news/majority-us-states-are-still-acknowledge-cryptocurrencies/. One of the reasons for such variety is that states are relying on a "patchwork of old and new regulations" to address a variety of legal issues posed by cryptocurrencies. See id. States have been struggling with how to address the use of cryptocurrencies as a medium of exchange in transactions (including tax issues), regulating exchanges as money transmitters, and the status of and law applicable to smart contracts. California and New York are among the states with the most sophisticated and detailed regulations. Wyoming and Arizona are seen as being progressive and supportive of the new technologies, while a number of states have yet to take any action at all. Wyoming's approach in particular deserves comment: Wyoming has recently enacted five separate pro-blockchain bills, but one in particular stands out because it defines certain utility tokens as "a new type of asset class different from a security or commodity." Wolfson, supra note 383. Wyoming House Bill 70 exempts developers and sellers of tokens that are sold "for consumptive purposes" and are not sold as financial investments from state securities and money transmitter requirements. Wyo. H.B. 70 (2018), https://legiscan.com/WY/text/HB0070/2018.

401. Compare Young, supra note 11 ("[E]very ICO token the SEC has seen so far is considered a security"), with Giancarlo, supra note 380 (warning that blockchain technology is "at risk of being stymied by disparate and uncertain regulation").

402. See Wolfson, supra note 383 ("As the cryptocurrency ecosystem continues to evolve into an entire new economy, the U.S. government has been busy firing shots in multiple directions to enforce regulations."). As this article notes, the scattershot approach has led to conflicting approaches to cryptoassets on the federal level, with different federal regulatory agencies taking different approaches. Goforth, supra note 387 (noting specifically the conflict between the approaches taken by the SEC, the CFTC, FinCEN, and the IRS). For one example of how the difference in approach by these the SEC and the CFTC manifests, consider the reaction of each to the possibility of approving exchanges on which cryptoassets might be resold. See generally Zuckerman, supra note 382. The SEC has simply announced that online trading platforms which allow resales of cryptoassets must generally register as exchanges, and that the agency has been "underwhelmed" by industry adherence to this requirement. William Suberg, SEC: US Crypto Exchanges Not 'Enthusiastic' Enough About Regulatory Compliance, CoinTelegraph (June 7, 2018), https://cointelegraph.com/news/sec-us-crypto-exchanges-not-enthusiastic-enough-about-regulatory-compliance.

Meanwhile, our neighbor to the north is taking affirmative steps to explore the potential advantages of blockchain and crypto-transactions. As far back as 2016, before the SEC first found the DAO's sale of utility tokens to involve the illegal sale of securities, Canadian banks were "experimenting with blockchain technology and a possible digital dollar as the growing demand for digital fintech payment systems puts the squeeze on the traditional banking sector." Canada was neither unaware of the kinds of money-laundering concerns and issues with financing of illegal activities such as terrorism, having specifically acted to regulate Bitcoin to take care of such concerns back in 2013. Even so, Canada has taken a reasonably cautious, but still pro-ICO, approach.

Comments from the Ontario Securities Commission, the largest securities regulator in Canada charged with administering both Ontario Securities Act and the Commodity Futures Act, confirm that this agency is at least supportive:

Cryptocurrency offerings have the potential to change the way financial services are offered to Canadians, and we're keen to support innovation in this area . . . we aim to be flexible in our approach and believe it's important to work together with businesses and investors to find the right balance for those vested in this space. 407

^{403.} See Report of Investigation, supra note 127, at 10.

^{404.} Jessie Willms, Canadian Banks Experiment with Blockchain Technology; Fintech Sector Calls for Regulatory Certainty, BITCOIN MAGAZINE (July 28, 2016, 2:41 PM), https://bitcoinmagazine.com/articles/canadian-banks-experiment-with-blockchain-technology-fintech-sector-calls-for-regulatory-certainty-1469731299/.

^{405.} Cryptocurrencies by Country, supra note 395 ("In November 2013, the Canada Revenue Agency declared that Bitcoin payments should be treated as barter transactions. The Canadian federal government also announced its intention to regulate Bitcoin through its anti-money laundering and counter-terrorist financing legislation.").

^{406.} See Emmanuel Darko, Canadian Authorities to Officially Recognize ICOs?, ICO WATCH LIST (Sept. 10, 2017), https://icowatchlist.com/blog/canadian-authorities-officially-recognize-icos/ ("In times when some regulators in jurisdictions such as China have signified a clampdown on cryptocurrency-based fundraising, authorities in Canada seem to be towing a different direction.").

^{407.} Kevin Helms, *Canadian Securities Commission Keen to Support Cryptocurrencies and ICOs*, BITCOIN.COM (Oct. 14, 2017), https://news.bitcoin.com/canadian-securities-commission-cryptocurrencies-icos/ (quoting a tweet from the Ontario Securities Commission).

Quebec appears similarly supportive. The Quebec regulatory authorities are specifically trying to see how cryptotransactions best fit in the overall regulatory picture, and recently decided that at least one token should be a security with special regulatory allowances. Patrick Theoret, a director of the AMF, has explained the agency's theoretical approach which is "to alleviate some of the requirements on, sort of, a test case basis. It's a test run to see whether there are investor protection issues with the relief that we grant." Canada is also working through a consortium of provincial regulators to "jumpstart fintech projects that do not easily fit into the currently legacy framework." They appear to recognize that "[c]ryptocurrencies are here to stay, and the governments that adapt first will reap the benefits later."

As a nation, we might have something to learn from the approach that is being taken in Canada. Admittedly, it has only ten provincial governments to work with rather than fifty states, but its approach appears more supportive and ready to accept that the new technology might need to be treated in a way different from traditional interests. Canada has rules in place which provide that once a token is accepted in one province, other provinces will concur, ⁴¹² and it has a regulatory framework that appears to encourage agencies to act together, rather than taking an "every agency for itself" approach.

The United States must make substantial progress before the environment here becomes one that is reasonably easy to navigate, even for entrepreneurs and promoters who fully want to comply with legal requirements. Hopefully, this article makes a case for simplifying and streamlining the securities laws that govern crypto-transactions, preferably by carving out specific regulations that are geared towards good faith tokenized offerings.

^{408.} See Darko, supra note 406. Instead of imposing sanctions on ICOs and others in the crypto space, Quebec's regulatory agency in charge of financial institutions (the Autorite des Marches Financiers, or "AMF") "is seeking to better understand the blockchain use case and possibly encourage it all together.... They believe it is more prudent to first understand the space properly before enacting regulations instead of just a blanket policy without a proper grasp of the technology and processes." Id. In connection with these activities, the AMF specifically determined that the Impak Finance token would be a security.

^{409.} Id.

^{410.} Id.

^{411.} ICO Bans, supra note 395 (attributing the remark to Thomas Griffin of OptinMonster).

^{412.} See Darko, supra note 406. For example, Quebec's AMF is taking the lead with regard to a pending token sale by Impak Finance (a platform designed to help investors find and fund socially responsible enterprises): because it has taken this action, it "will be serving as the principal regulator to the token and all Canadian provinces and territories will honor this decision via the Canadian securities passport system." *Id.*