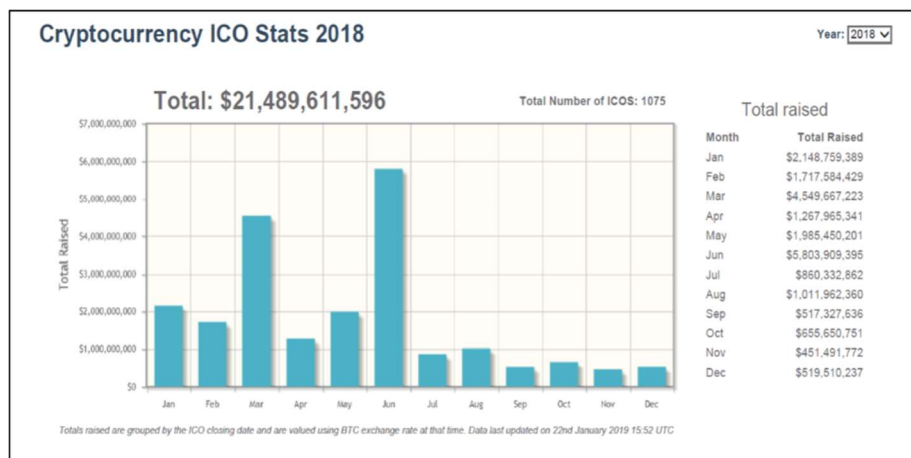


CRYPTO-CONCERNS: INITIAL COIN OFFERINGS AND THE U.S. SECURITIES LAWS IN THE WAKE OF AGGRESSIVE SEC ENFORCEMENT ACTIONS

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I. INTRODUCTION

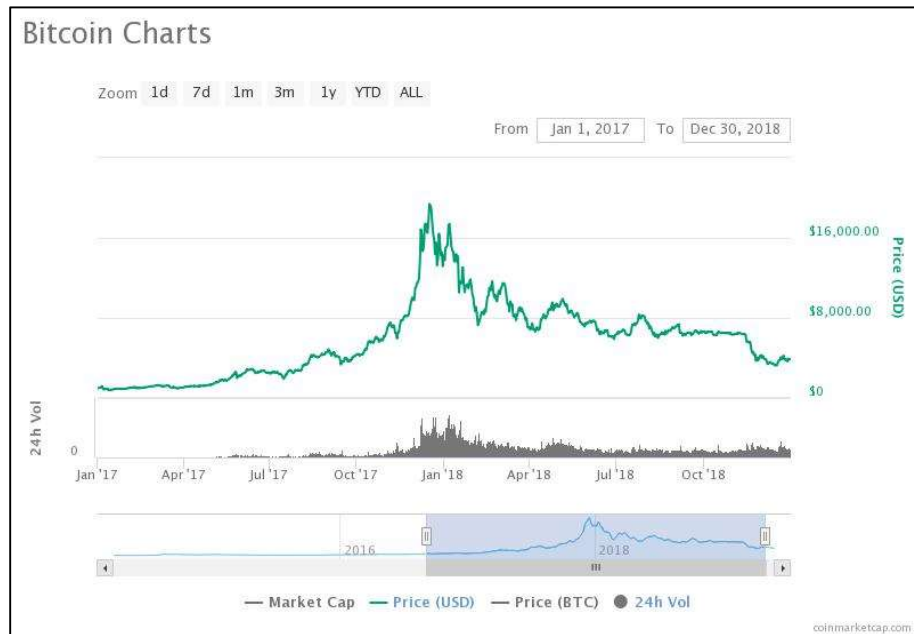
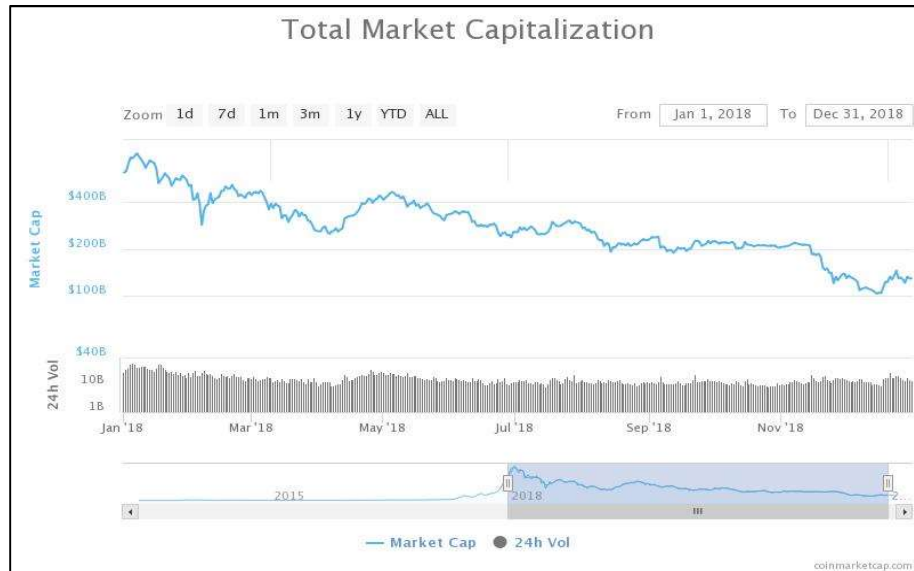
In recent years, the rise of cryptocurrencies such as bitcoin have made it possible for companies to raise staggering amounts of capital by conducting what is known as an “initial coin offering” or “ICO”. The coins or tokens sold in these ICOs can then be sold on various cryptocurrency secondary trading markets. What was once considered a shady world inhabited only by the ultra tech-savvy, ICOs and cryptocurrency trading have become a multi-billion dollar industry with reputable firms such as Fidelity Investments and Nasdaq Ventures vying for a piece of the pie.¹ In 2018 alone, an estimated 1075 ICOs were conducted, raising approximately \$21.5 billion USD!² Furthermore, the average daily trading volume on cryptocurrency exchanges in 2018 regularly eclipsed \$15 billion³. See below for graphic depictions of these figures.



1. Reuters, *Fidelity, Nasdaq Ventures invest in cryptocurrency exchange ErisX*, (Dec. 4, 2018) <https://www.reuters.com/article/us-crypto-currencies-erisx/fidelity-nasdaq-ventures-invest-in-cryptocurrency-exchange-erisx-idUSKBN1O31KY>.

2. CoinSchedule, *Cryptocurrency ICO Stats 2018*, <https://www.coinschedule.com/stats.html> (last visited Dec. 20, 2018).

3. CoinMarketCap, *Total Market Capitalization, Global Charts*, <https://coinmarketcap.com/charts/> (last visited Jan. 22, 2019).



As you can see, the market value of cryptocurrencies can be volatile. In the graph directly above you can see the price of bitcoin (in U.S. Dollars) hovered around \$1,000 per coin from January to April of 2017 before

rocketing up to \$19,390 per coin in mid-December 2017.⁴ After hitting its peak, the price of bitcoin sunk to \$7,227 per coin on February 5, 2018 and has since fallen to \$3,423 as of February 7, 2019.⁵ Like any other widely traded asset, cryptocurrencies are subject to a variety of market factors including the basic principles of supply and demand, government regulation, unfavorable news stories, and advertising bans just to name a few.⁶ However, the fact that cryptocurrencies continue to grow in popularity and usage despite this volatility (which would likely cause mass hysteria in most other markets) suggests that cryptocurrencies are here to stay.⁷

At one time, the world of ICOs and cryptocurrency trading was widely considered outside the scope of the U.S. securities laws, but the modern-day cyber-gold rush shown above seems to have drawn the attention of securities regulators. Since mid-2017 the SEC has become increasingly assertive in applying the U.S. securities laws to ICOs and cryptocurrency exchanges. As a result, many companies and investors have been left scratching their heads as to the legality and viability of cryptocurrency offerings and exchanges as an alternative to traditional IPOs and established trading markets.⁸

To better understand the legal and financial implications of this new financial wild-west, this article will provide a brief overview of cryptocurrency and its underlying blockchain technology. We will then explore recent enforcement actions by the SEC and provide guidance on how an ICO issuer can avoid implicating U.S. securities laws, as well as how to conduct ICOs and trading activities in compliance with U.S. law.

II. BACKGROUND: CRYPTOCURRENCY AND BLOCKCHAIN TECHNOLOGY

A. Overview

Contrary to popular belief, the concept of virtual currencies is not new.⁹ What is new, however, is the underlying blockchain (or “distributed ledger”) technology on which all cryptocurrencies operate. On a

4. CoinMarketCap, *Bitcoin Charts*, <https://coinmarketcap.com/currencies/bitcoin/> (last visited Feb. 7, 2019).

5. *Id.*

6. BankEx, *Cryptocurrencies: The Good, the Bad, and the Volatile* (Sept. 25, 2018), <https://blog.bankex.org/cryptocurrencies-the-good-the-bad-and-the-volatile-ac0c8cb01db1>. Facebook, Google and Twitter have banned advertisements showing cryptocurrencies and related products from their search engines. The price of Bitcoin fell 12% after Facebook announced it would ban all advertisements promoting cryptocurrencies.

7. *Id.*

8. Tom Zanki, *ICO Mania Cools Amid Regulatory Crackdown, Crypto Plunge*, 1 LAW 360 (Nov. 29, 2018).

9. The first attempts to create a viable digital currency can be traced back to the 1980s: 1983 – David Chaum creates “Blind Signatures”; 1990 David Chaum creates “DigiCash”; 1997 Adam Back creates “Hashcash”; 1998 – Wai Dei creates “B-money”; and 1998 - Nick Szabo creates “Bit Gold.” None achieved widespread acceptance and all are not defunct. American Bar Association, *SciTech Focus on Blockchain: Cryptocurrencies, Initial Coin Offerings, and Financial Regulations*, 5 (Dec. 18, 2018).

fundamental level, a blockchain is a digital database (called a “ledger”) that records a running list of digital transactions.¹⁰ The ledger is duplicated and synchronized across a number of computers (called “nodes”), which creates a network.¹¹ For a transaction to take place within the network and be recorded on the ledger, the nodes must come to a consensus and validate the transaction.¹² This validation process works differently for “mined” cryptocurrencies and “non-mined” cryptocurrencies.¹³

Mined cryptocurrencies use what is known as the “proof of work” model to validate transactions on the blockchain ledger.¹⁴ Cryptocurrency “mining” in the proof of work model ordinarily requires the use of high-powered computers to solve complex mathematical equations in an effort to validate a block of transactions as quickly as possible.¹⁵ Bitcoin is a good example of a cryptocurrency that uses mining. In the Bitcoin network a new block of transactions is mined and added to the Bitcoin ledger roughly every ten (10) minutes.¹⁶ Mining is crucial to the Bitcoin system because every time a block of transactions is mined and added to the ledger, the miners who verified the transaction and created the new block are awarded a certain amount of bitcoin called a “block reward.”¹⁷

The actual process of mining a block of transactions is extremely computing resource intensive and consumes a jaw-dropping amount of electrical energy.¹⁸ In fact, one study estimates that in 2017 alone, mining on the Bitcoin network consumed as much as 2.6 gigawatts of electrical power, which is roughly the amount of power consumed by Ireland in a year!¹⁹ According to the same study, this figure may have reached as high as 7.7 gigawatts by the end of 2018—a figure that amounts to almost half a percent of the world’s electrical consumption.²⁰ Although mining is costly, it serves an essential function in the Bitcoin system because it

10. Pierson Grider, *Advancing and Implementing Blockchain in the Legal Industry*, COLORADO LAWYER, 6 (Dec. 2018).

11. *Id.*

12. NewsBTC, *Altcoins – Alternative Cryptocurrencies*, <https://www.newsbtc.com/altcoins/> (last visited Jan. 23, 2019); Sean Williams, *The Basics of Mined vs. Non-Mined Cryptocurrency, Explained in Plain English*, THE MOTLEY FOOL (Mar. 26, 2018), <https://www.fool.com/investing/2018/03/26/the-basics-of-mined-vs-non-mined-cryptocurrency-ex.aspx>.

13. Williams, *supra* note 12.

14. *Id.*

15. *Id.*

16. NewsBTC, *supra* note 12.

17. *Id.*; Williams, *supra* note 12.

18. Timothy B. Lee, *New Study Quantifies Bitcoin’s Ludicrous Energy Consumption*, ARS TECHNICA, <https://arstechnica.com/tech-policy/2018/05/new-study-quantifies-bitcoins-ludicrous-energy-consumption/> (May 17, 2018) (citing Alex de Vries, *Bitcoin’s Growing Energy Problem*, JOULE, Vol. 2, Issue 5, P801-805 (May 16, 2018), [https://www.cell.com/joule/fulltext/S2542-4351\(18\)30177-6](https://www.cell.com/joule/fulltext/S2542-4351(18)30177-6)).

19. *Id.*

20. *Id.*

serves both as a means to verify transactions and as a method for distributing new bitcoins.²¹

“Non-mined” cryptocurrencies, such as Dash,²² Qtum,²³ and NEO²⁴ can validate transactions on the blockchain ledger in a process known as “proof of stake.”²⁵ There are no high-powered computers or computational competitions to be the first to validate a block of transactions in the proof of stake model.²⁶ Instead, certain cryptocurrency owners are chosen to validate blockchain transactions based on how much of the cryptocurrency they have set aside for the purpose of confirming transactions (i.e. their “stake”).²⁷ Unlike mined cryptocurrencies where miners are rewarded with new coins or tokens, stakeholders who validate transactions of non-mined cryptocurrencies are rewarded with the aggregate transactions fees associated with creating a block of transactions.²⁸ These fees may not equal as much as a block reward of new coins or tokens, but the cost of validating a non-mined cryptocurrency transaction is significantly lower because it doesn’t require immense amounts of electrical energy or specialized computer rigs.²⁹

Both the proof of work and proof of stake models have advantages and disadvantages.³⁰ These two models are used as illustrations of how consensus-based verification models contribute to trustless-trust transactions.³¹ There are other consensus mechanisms outside of the scope of this article which perform the same duty.³² The larger point is because all transactions in consensus-based models are verified, encrypted, digitally signed, and cannot be altered,³³ the distributed nature of blockchain

21. NewsBTC, *supra* note 12.

22. Daniel Diaz & Evan Duffield, *Dash: A Payments-Focused Cryptocurrency* (Aug. 2018), <https://github.com/dashpay/dash/wiki/Whitepaper>.

23. Patrick Dai et al., *Smart Contract Value-Transfer Protocols on a Distributed Mobile Application Platform* 3, 5–12 (Mar. 2017), https://qtum.org/user/pages/01.home/Qtum%20whitepaper_en%20v0.7.pdf.

24. NEO, *Consensus*, <https://docs.neo.org/en-us/basic/consensus/consensus.html> (last visited Feb. 25, 2019).

25. Williams, *supra* note 12.

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.*

30. *Id.*

31. Randolph Robinson, *The New Digital Wild West: Regulating the Explosion of Initial Coin Offerings*, 18–21 TENN. L. REV., Forthcoming, <https://ssrn.com/abstract=3087541>.

32. *Id.* at 19 n. 96.

33. There are several different methods that can be implemented to alter a confirmed block after it has been added to the chain. *Id.* at 15 n. 66. These types of attacks were initially theoretical but moved into the practical realm in recent months. In January 2019, a 51% attack was leveraged against the Ethereum Classic network to create a double spend attack where around \$1.1 million in currency was involved in rollback transactions. In plain terms, attackers altered the chain despite Ethereum Classic’s immutable design. Yogita Khatri, *Exchange Says 51% Attacker Returned \$100k-Worth of Ethereum Classic*, COINDESK (Jan. 14, 2019), <https://www.coindesk.com/exchange-says-51-attacker-returns-100k-worth-of-ethereum-classic>; SlowMist, *The analysis of ETC 51% attack from SlowMist Team*, MEDIUM (Jan. 9, 2019), <https://medium.com/@slowmist/the-analysis-of-etc-51-attack-from->

technology creates intrinsic trust in the network and removes the need for trust in intermediaries and central authorities.³⁴

B. Types of Cryptocurrency

Cryptocurrencies are simply a digital representation of value that can be digitally traded and function as a medium of exchange, unit of account, or store of value³⁵ on a blockchain ledger.³⁶ Today there are over 1,600 different cryptocurrencies in existence supported by blockchain technology.³⁷ Many of these cryptocurrencies are traded daily on one of the 200 cryptocurrency exchanges currently operating worldwide.³⁸ These exchanges allow consumers to buy, sell, and trade all types of cryptocurrencies in exchange for fiat currency like U.S. dollars, Euros or other popular cryptocurrencies like bitcoin.³⁹

As a threshold issue it is important to understand that not all cryptocurrencies function the same way, nor do they all have the same value. For example, bitcoin's value is derived from the fact that the algorithm which created it set the maximum number of bitcoins that will ever exist at 21 million bitcoins.⁴⁰ Like gold or any other commodity we value, there is a finite amount of bitcoin that can be extracted (through the mining process) and circulated in the market, and this scarcity along with the principles of supply and demand drive its worth.⁴¹ Other cryptocurrencies derive their value in different ways as discussed below.

There are three main types of cryptocurrency: Bitcoin, Altcoins, and Tokens.⁴² Bitcoin was the first commercially successful cryptocurrency and it remains the most widely used. Bitcoin was created in 2009 by a mysterious person or persons using the pseudonym Shatoshi Nakamoto.⁴³ By creating Bitcoin, Nakamoto was seeking to create a secure, decentralized, peer-to-peer electronic payment system.⁴⁴ One of the catalysts behind Nakamoto's creation of Bitcoin was a desire to create a system of payment

slowmist-team-728596d76ead (a detailed explanation of the specifics of the ETC 51% attack by the company that originally spotted the attack).

34. Grider, *supra* note 10.

35. SEC, *Investor Bulletin: Initial Coin Offerings*, https://www.sec.gov/oiea/investor-alerts-and-bulletins/ib_coinofferings (last visited Jan. 22, 2019).

36. Blockchain.wtf, *What's the Difference Between Blockchain and Cryptocurrency?*, <https://blockchain.wtf/what-the-faq/blockchain-cryptocurrency-difference/> (last visited Jan. 22, 2019).

37. Eric Kinter, *The Blockchain Movement*, 10 COLORADO LAWYER (Oct. 2018).

38. Sarah Hansen, *Guide to Top Cryptocurrency Exchanges*, FORBES (Jun. 20., 2018), <https://www.forbes.com/sites/sarahhansen/2018/06/20/forbes-guide-to-cryptocurrency-exchanges/#4b08a0072572>.

39. *Id.*

40. Ray King, *Understanding the Different Types of Cryptocurrency*, BITDEGREE.ORG (Jan. 2, 2019), <https://www.bitdegree.org/tutorials/types-of-cryptocurrency/>.

41. There are currently around 17 million Bitcoins in existence, with roughly 4 million still to be dispersed into the market. *Id.*

42. *Id.*

43. Bitcoin.org, *General*, <https://bitcoin.org/en/faq#what-is-bitcoin> (last visited Jan. 22, 2019).

44. *Id.*

that did not require a central authority such as a bank or other financial intermediary to effectuate transactions.⁴⁵ Although some believe that the anonymous nature of Bitcoin makes it a perfect tool to facilitate illicit transactions (such as those conducted on the online black market *Silk Road*),⁴⁶ other studies report that less than one percent of Bitcoin transactions are used for illegal purposes.⁴⁷ Regardless of the various public perceptions of Bitcoin, Nakamoto was successful in creating the first viable cryptocurrency, and numerous spinoff coins have been created since its inception in 2009.

This leads us to the second main type of cryptocurrency, Altcoins (which stands for “alternative cryptocurrencies”).⁴⁸ Altcoin is the general term used to refer to any cryptocurrency that was developed after Bitcoin and created for the purpose of transferring value.⁴⁹ Altcoins are alternative versions of Bitcoin with changes to augment a certain failing of the original product, whether that failing is transaction speed,⁵⁰ scalability,⁵¹ privacy,⁵² or some other issue, and they make up the vast majority of the available cryptocurrencies.⁵³ Altcoins are flexible and can derive value in any number of ways including limiting the coin supply (similar to Bitcoin), associating the coin with a real-world equivalent asset (“Asset-Backed Coins”), or linking the value of the coin to the value of a fiat currency like the U.S. dollar or the Japanese yen (“Stable Coins”).⁵⁴

The third main type of cryptocurrency is called a “token.” Tokens are unique in the sense that they are built on top of existing blockchain

45. Nicholas Dimitriou, Mark W. Rasmussen & Matt Henshon, *SciTech Focus on Blockchain: Cryptocurrencies, Initial Coin Offerings, and Financial Regulations*, AMERICAN BAR ASSN. CLE (Dec. 18, 2018) (on file with author).

46. Marco Santori, *Bitcoin Milestones*, COINDESK (May 16, 2017), <https://www.coindesk.com/bitcoin-milestones-silk-road-goes-dark-bitcoin-survives-its-biggest-markets-demise>.

47. Ricardo Esteves, *Report: Less Than 1% of Bitcoin Used for Illegal Purposes*, NEWSBTC (Apr. 17, 2018), <https://www.newsbtc.com/2018/04/17/report-less-1-bitcoin-used-illegal-purposes/>. (citing Yaya J Fanusie & Tom Robinson, *Bitcoin Laundering: An Analysis of Illicit Flows Into Digital Currency Services*, CNTR. ON SANCTIONS & ILLICIT FINANCE (Jan. 12, 2018) https://s3.us-east-2.amazonaws.com/defenddemocracy/uploads/documents/MEMO_Bitcoin_Laundering.pdf).

48. King, *supra* note 41.

49. Sebfor, *Ethereum is Not an “Altcoin”*, <http://sebfor.com/ethereum-not-altcoin/> (last visited Jan. 23, 2019); Ray King, *supra* note 41.

50. Coindesk, *What is the Difference Between Litecoin and Bitcoin?*, <https://www.coindesk.com/information/comparing-litecoin-bitcoin/> (last visited Feb. 25, 2019).

51. David Mazieres, *The Stellar Consensus Protocol: A Federated Model for Internet-level Consensus*, STELLAR DEVELOPMENT FOUNDATION (Feb. 25, 2016), <https://www.stellar.org/papers/stellar-consensus-protocol.pdf>.

52. Alessandro Chiesa et al., *Zerocash: Decentralized Anonymous Payments from Bitcoin*, ZEROCASH PROJECT (May 18, 2014), <http://zerocash-project.org/media/pdf/zerocash-extended-20140518.pdf>; Nicolas van Saberhagen, *CryptoNote v 2.0*, CRYPTONOTE TECHNOLOGY (Oct. 17, 2013), <https://cryptonote.org/whitepaper.pdf>.

53. King, *supra* note 41.

54. Dimitriou, *supra* note 46, at 10.

platforms⁵⁵ and have functions other than just the direct transfer of value.⁵⁶ Tokens are also unique because although they can be traded on exchanges, they can also be used to facilitate various “smart contract” transactions (discussed below) on decentralized applications (dApps), which are built on top of blockchain platforms like Ethereum.⁵⁷

Ethereum is a digital blockchain platform that uses a native currency called Ether.⁵⁸ Ethereum itself is not a cryptocurrency at all, but rather a blockchain platform that can facilitate the secure exchange of almost anything through the use of Ether tokens and smart contracts.⁵⁹ A smart contract is essentially a digital tool that automatically executes transactions when certain conditions or protocols are met.⁶⁰ The conditions necessary to initiate the transaction are written into the smart contract when it is created.⁶¹ To illustrate how this works, imagine the conditions for executing a sale of goods transaction were set as follows: when Buyer sends 100 Ether into the smart contract, then Seller’s goods will automatically be sent to Buyer’s address.⁶² Of course, we cannot actually put the goods themselves into the smart contract, so instead the Ether tokens are used to represent legal rights to the goods and record the transaction on the blockchain.⁶³

To understand what dApps are and why they are relevant to our discussion of ICOs, we will continue to use Ethereum as an example because more than 82% of ICOs issue their tokens on the Ethereum platform.⁶⁴ In essence, Ethereum provides developers with a foundation that anyone can use to create dApps on top of the Ethereum platform to accomplish some defined purpose.⁶⁵ These dApps can be programmed to have their own rules, formats, and functions to suit the developer’s needs.⁶⁶ For purposes of this article, it is sufficient to think of dApps as blockchain-enabled websites where smart contracts are used to connect the dApp to the blockchain ledger.⁶⁷ dApps can be created for numerous purposes, and the tokens they

55. King, *supra* note 41.

56. Toshendra Kumar Sharma, *Coins, Tokens & Altcoins: What’s the Difference?*, BLOCKCHAIN COUNCIL (Feb. 16, 2018) <https://www.blockchain-council.org/blockchain/coins-to-kens-altcoins-whats-the-difference/>.

57. King, *supra* note 41.

58. Ethereum, *What is Ether?*, <https://www.ethereum.org/ether> (last visited Jan. 23, 2019).

59. King, *supra* note 41.

60. *Id.*

61. *Id.*

62. *See generally id.*

63. *Id.*

64. Cointelegraph, *Where to Issue ICO Tokens: Platforms Review*, <https://cointelegraph.com/ico-101/where-to-issue-ico-tokens-platforms-review#how-to-choose-a-blockchain-platform-for-ico> (last visited Jan. 22, 2019).

65. BlockchainHub, *Example: Ethereum dApps*, <https://blockchainhub.net/decentralized-applications-dapps/> (last visited Jan. 22, 2019).

66. *Id.*

67. *Id.*

use are ultimately what is issued to raise capital in any given ICO as explained below.

III. INITIAL COIN OFFERINGS

Every ICO begins with a startup company proposing an idea for a blockchain related project.⁶⁸ If the startup can generate sufficient interest and support for its project, the startup will draft and publish a “white paper” that describes the details of the project and other information such as the team working on it, the technical aspects, and the startup’s plans for the future.⁶⁹ After the white paper is distributed, the startup will create a dApp and the coins or tokens that will be issued to fund the project.⁷⁰ Then, the startup will often conduct marketing campaigns to drum up support and momentum before offering the tokens in their ICO.⁷¹

ICOs can be viewed as a mix between an initial public offering and a crowdfunding effort. At its core, an ICO is the event where the tokens created for a given project are sold to the public to fund the project’s development.⁷² Typically, the startup conducting the ICO will set a minimum fundraising goal based on the amount necessary to create a viable product. If the goal is not met the money is supposed to be returned, and the ICO is considered unsuccessful.⁷³ One study found that nearly 80% of ICOs are scams, and only 8% of ICOs manage to reach the trading stage on various cryptocurrency exchanges.⁷⁴ However, if an ICO’s fundraising goal is met within a specified timeframe, the capital raised is used to develop the underlying project and the ICO is considered a success.⁷⁵

Investors may use fiat currency (such as U.S. dollars) or virtual currencies (such as Ether) to purchase the virtual coins or tokens issued in an ICO.⁷⁶ These tokens can then be used to access the dApp or otherwise participate in the underlying project the ICO is meant to fund.⁷⁷ Unlike investors in IPOs, investors in ICOs typically do not receive shares of ownership in the underlying project.⁷⁸ Instead, ICO investors hope that the

68. Crowdwiz, *ICO for Beginners – Learn how ICOs Work and What They’re About*, (Sept. 24, 2017) <https://medium.com/@Crowdwiz.io/ico-for-beginners-learn-how-icos-work-and-what-theyre-about-dc01b5bf3c30>.

69. *Id.*

70. *Id.*

71. *Id.*

72. SEC, *Investor Bulletin: Initial Coin Offerings*, https://www.sec.gov/oiea/investor-alerts-and-bulletins/ib_coinofferings (last visited Jan. 22, 2019).

73. Investopedia, *Initial Coin Offerings*, <https://www.investopedia.com/terms/i/initial-coin-offering-ico.asp> (last visited Jan. 22, 2019).

74. Shobhit Seth, *80% of ICOs Are Scams: Report*, INVESTOPEDIA (April 2, 2018) <https://www.investopedia.com/news/80-icos-are-scams-report/>.

75. Investopedia, *Initial Coin Offerings*, <https://www.investopedia.com/terms/i/initial-coin-offering-ico.asp> (last visited Jan. 22, 2019).

76. *Id.*

77. *Id.*

78. *Id.*

project will become successful and widely adopted after it launches.⁷⁹ If this happens, the value of the tokens purchased in the ICO will increase, and the token can then be sold at a profit on a secondary cryptocurrency exchange.⁸⁰

The key to understanding the value of the tokens purchased in an ICO lies in the nature of the projects for which ICOs are used. Many ICOs deal with the creation of new cryptocurrencies, while others deal with technological projects that issue tokens carrying certain rights or voting power within the project. For example, the Ethereum platform itself was created using funds obtained in a 2014 ICO that raised \$18,000,000 in the span of 42 days.⁸¹ Today, Ethereum is the platform used to conduct most ICOs, and as a result the value of the Ether tokens purchased in Ethereum's ICO have skyrocketed in value. When Ethereum's ICO opened in 2014, Ether was valued at \$0.30 per token but by July of 2018 Ether was trading at \$474.62 (roughly a 1,600x gain).⁸²

On the other hand, as noted above, most ICOs are failures. One of the most famous (or notorious) ICOs was sponsored by an organization called The DAO (which stands for Decentralized Autonomous Organization) in the spring of 2016.⁸³ The DAO was presented as a decentralized venture capital fund created for the purpose of funding future projects on the Ethereum platform with the proceeds raised from the ICO.⁸⁴ Investors who purchased tokens in its ICO paid in Ether and received DAO tokens in return.⁸⁵ These DAO tokens granted the holders the right to vote on which projects The DAO would fund and gave investors the ability to share in the profits if the funded project was successful.⁸⁶ In addition, holders of the DAO tokens could monetize their investments by selling the DAO tokens on secondary cryptocurrency exchanges.⁸⁷ The DAO ICO is one of the largest in history as it raised approximately \$150,000,000 in U.S. dollars.⁸⁸ Unfortunately, The DAO's early success was followed by a devastating security breach in June of 2016 which resulted in the disappearance of \$50,000,000 of The DAO's funds overnight.⁸⁹ This hack would

79. *Id.*

80. *Id.*

81. *Id.*

82. *Id.*

83. SEC, *Release No. 81207 Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO*, 2 (July 25, 2017).

84. Blockgeeks.com, *ICO Basics, To Invest or Not? Cutting Through The Bullshit*, <https://blockgeeks.com/guides/ico-basics/> (last visited Jan. 22, 2019).

85. *Id.*

86. SEC, *Release No. 81207 Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO* (July 25, 2017) (hereinafter, "SEC Report").

87. *Id.*

88. *Id.*

89. Clint Finley, *A \$50 Million Hack Just Showed That The DAO Was All Too Human*, WIRED, <https://www.wired.com/2016/06/50-million-hack-just-showed-dao-human/> (last visited Jan. 22, 2019).

eventually draw the attention of the SEC and usher in an era of intense regulatory scrutiny in the cryptocurrency world.

IV. THE SEC TAKES NOTICE: REGULATORY OVERSIGHT BEGINS

The SEC is the foremost authority responsible for regulating and enforcing the securities laws of the United States.⁹⁰ The SEC's mission is to protect investors, maintain fair, orderly, and efficient markets and facilitate capital formation.⁹¹ In accomplishing this mission the SEC is guided by the securities laws of the United States. For our purposes, we will focus on the Securities Act of 1933 (the "Securities Act") and the Securities Exchange Act of 1934 (the "Exchange Act").⁹²

Under the Securities Act, unless an issuer (a company selling securities) complies with an applicable exemption, the issuer must register all securities offered and sold in the United States with the SEC (by filing a Form S-1 or other registration form) and provide a prospectus containing detailed information about the company, the securities being offered, the planned use of proceeds and the offering as a whole.⁹³ This registration process is notoriously costly and time-consuming. In addition, the Exchange Act requires any entity or person engaging in the activities of an "exchange" to register as a national securities exchange or operate pursuant to an applicable exemption.⁹⁴ The Exchange Act defines an "exchange" as any organization, association, or group of persons . . . which constitutes, maintains, or provides a marketplace or facilities for bringing together purchasers and sellers of securities or for otherwise performing the functions commonly performed by a stock exchange.⁹⁵ Failure to comply with these laws and regulations can result in severe financial and even criminal penalties for securities issuers and exchanges in the U.S.

There are two fundamental questions that determine whether these regulations apply to the coins and tokens that are issued in ICOs and traded on cryptocurrency exchanges. First, are the coins or tokens actually securities? And second, does the SEC have jurisdiction to apply U.S. securities laws to the coins and tokens given the international scope of cryptocurrency offerings and exchanges? Until recently, the answers to these

90. There are several other agencies that regulate securities in the United States including the Internal Revenue Service, the Financial Crimes Enforcement Network ("FinCEN") and the Commodity Futures Trading Commission ("CFTC"). For purposes of this article, we focus on the SEC because regulation and enforcement of the U.S. securities laws are its primary function and it has been on the forefront of the recent enforcement actions taken against cryptocurrency companies.

91. SEC, *About The SEC, What We Do*, <https://www.sec.gov/Article/whatwedo.html> (last visited Jan. 22, 2019).

92. SEC, *The Laws that Govern the Securities Industry*, <https://www.investor.gov/introduction-investing/basics/role-sec/laws-govern-securities-industry> (last visited Jan. 22, 2019).

93. SEC, *Federal Securities Laws, Securities Act*, <https://www.sec.gov/page/federal-securities-laws?auHash=B8gdTzu6DrpJNvsGIS1-JY1LnXDZQqS-JgJAgaSXimg> (last visited Dec. 21, 2018); 15 U.S.C. § 77e(a), (c) (2018).

94. SEC Report, *supra* note 87, at 16.

95. *Id.*

questions were murky. However, a slew of recent enforcement actions against various cryptocurrency companies and exchanges have clarified the SEC's position on these questions and raised the stakes for all those involved in the offer, sale, and exchange of cryptocurrencies.

A. The Cryptocurrency World on Notice

The definition of a “security” in the Securities Act includes an “investment contract.”⁹⁶ The Supreme Court has defined an investment contract as an investment of money in a common enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others (the “Howey Test”).⁹⁷

In July of 2017, the SEC sent a shot across the bow of the cryptocurrency world when it issued the DAO Report.⁹⁸ In this report, the SEC emphatically stated that the tokens issued by The DAO (a German corporation) were securities for purposes of the Securities Act because they met the Howey Test.⁹⁹ The SEC also found that even though The DAO was based in Germany, its tokens were subject to U.S. securities laws because the tokens were offered and sold to investors in the United States through The DAO's website.¹⁰⁰ In applying U.S. securities laws to the Germany-based DAO tokens, the SEC reinforced the fact that any securities offer, solicitation, or other communication targeted to U.S. persons or investors within the United States can trigger the application of U.S. securities laws if proper precautions are not taken.¹⁰¹

In the DAO Report the SEC also advised all those who would use blockchain technology for the purpose of raising capital in the future that they must either comply with the registration requirements of Section 5(a)¹⁰² of the Securities Act or risk enforcement action.¹⁰³ The message was clear—any party conducting an ICO with tokens that met the definition of a security must either register the tokens or offer them pursuant to an applicable exemption from registration if U.S. persons or investors located in the U.S. are involved.

Following the DAO Report, some ICO issuers attempted to differentiate their tokens from securities by giving the tokens various functions

96. Securities Act Sec. 2(a)(1); see 15 U.S.C. § 77b–77c.

97. SEC v. W.J. Howey Co., 328 U.S. 293, 301 (1946).

98. SEC Report, *supra* note 87.

99. *Id.*

100. *Id.* at 2.

101. SEC, *Use of Internet Web Sites to Offer Securities, Solicit Securities Transactions, or Advertise Investment Services Offshore*, International Series Release No. 1125 (Mar. 23, 1998).

102. Section 5(a) of the Securities Act provides that all securities offered or sold in the United States must be registered with the SEC and accompanied by certain disclosure information unless an exemption from registration applies.

103. SEC Report, *supra* note 87, at 2.

outside of just raising capital and referring to them as “utility tokens.”¹⁰⁴ This approach did little to change the mindset of the SEC as Chairman Jay Clayton made clear in December of 2017 when he outlined the SEC’s view that “merely calling a token a ‘utility’ token or structuring it to provide some utility does not prevent the token from being a security.”¹⁰⁵ The SEC’s actions and statements indicate that most tokens issued in ICOs will be held to the same standards as any other security.¹⁰⁶

But ICOs were not the only target of The DAO Report. The SEC went a step further by implicating cryptocurrency exchanges when it declared that any entity or person engaging in the activities of an exchange must register as a national securities exchange or operate pursuant to an applicable exemption in accordance with Sections 5 and 6 of the Exchange Act.¹⁰⁷ The impact of this statement was far reaching, considering that many cryptocurrency trading platforms where tokens are exchanged likely meet the definition of an “exchange” despite not having registered as such with the SEC.¹⁰⁸

B. The Aftermath of the DAO Report

Since the release of the DAO Report on July 25, 2017, the SEC has significantly increased the enforcement of U.S. securities laws against cryptocurrency companies. On November 8, 2018 the SEC revealed that it had settled charges against Zachary Coburn, the founder of a digital token exchange called EtherDelta in the SEC’s first enforcement action against a cryptocurrency exchange for failing to register as a national securities exchange.¹⁰⁹ EtherDelta is an online trading platform used to trade Ether and other Ethereum-based tokens commonly issued in ICOs.¹¹⁰ Over an 18-month period, EtherDelta’s users executed more than 3.6 million orders for tokens, and the SEC specifically noted that most of these trades occurred after the issuance of The DAO Report.¹¹¹ The SEC fined Coburn \$300,000 in unlawful profits and required him to pay \$13,000 in prejudgment interest and an additional \$75,000 penalty.¹¹² These penalties, the

104. Chairman Jay Clayton, *Statement on Cryptocurrencies and Initial Coin Offerings*, SEC (Dec. 11, 2017) <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11>.

105. *Id.*

106. Anna Irrera & Michelle Price, *Cryptocurrency Issuers Clean Up, Shun U.S. Investors as SEC Gets Tough*, REUTERS (Mar. 21, 2018), <https://www.reuters.com/article/us-crypto-currencies-usa/cryptocurrency-issuers-clean-up-shun-u-s-investors-as-sec-gets-tough-idUSKBN1GX2OX>.

107. SEC Report, *supra* note 87, at 16.).

108. The Exchange Act defines an “exchange” as any organization, association, or group of persons . . . which constitutes, maintains, or provides a marketplace or facilities for bringing together purchasers and sellers of securities or for otherwise performing the functions commonly performed by a stock exchange.”

109. SEC, *SEC Charges EtherDelta Founder With Operating an Unregistered Exchange*, 2018-258 Press Release (Nov. 8, 2018).

110. *Id.*

111. *Id.*

112. Ana Berman, *US SEC Charges, Fines EtherDelta Founder with Operating Unregistered Securities Exchange* COINTELEGRAPH (Nov. 8, 2018) <https://cointelegraph.com/news/us-sec-charges-fines-etherdelta-founder-with-operating-unregistered-securities-exchange>.

SEC stated, would have been more severe had Coburn not cooperated with its investigation.¹¹³

Then, on November 16, 2018, the SEC charged two cryptocurrency companies, CarrierEQ Inc. (d/b/a/ “Airfox”) and Paragon Coin Inc. (“Paragon”)¹¹⁴ with violations of the registration requirements of the Securities Act for failing to register tokens issued to U.S. investors through ICOs in 2017.¹¹⁵ Despite the fact that neither company’s tokens conferred equity or voting rights in the company (as the DAO Tokens did), the SEC found the tokens to be securities under the Howey Test.¹¹⁶

In its ICO, Airfox sold 1.06 billion AirTokens to more than 2,500 total investors and raised \$15,000,000 for the stated purpose of creating an ecosystem where prepaid mobile phone users earn free or discounted data by interacting with ads.¹¹⁷ Airfox advertised that the AirTokens could be used to buy and sell goods and services beyond mobile data and that Airfox would work to provide investors with the ability to trade the AirTokens on secondary markets.¹¹⁸ Similarly, Paragon sold its PRG tokens to over 8,000 total investors and raised approximately \$12,000,000 for the stated purpose of developing and implementing a plan to add blockchain technology to the cannabis industry.¹¹⁹ In its ICO, Paragon described how the PRG tokens would increase in value as a result of Paragon’s efforts and that the tokens would be traded on secondary markets.¹²⁰

In support of the charges, the SEC stated that the AirTokens and PRG tokens were securities because token purchasers in the offerings would have had a reasonable expectation of obtaining future profit based on the companies’ efforts.¹²¹ As a result, each company agreed to settle and pay \$250,000 in penalties, register the tokens as securities under Section 12(g) of the Exchange Act and file periodic reports with the SEC for at least one year.¹²² “In addition, the SEC permitted both companies to conduct an unregistered claims recovery process in lieu of registered rescission offerings.”¹²³

These penalties represent the first time the SEC has imposed non-fraud related civil penalties for failure to register securities in connection

113. *Id.*

114. Both Airfox and Paragon are examples of dApps created on Ethereum’s blockchain platform.

115. Micah S. Green et. al., *A Thanksgiving Feast: SEC Sets The Table for More Crypto Enforcement Servings to Come*, STEPTOE (Nov. 20, 2018), <https://www.steptoeblockchain-blog.com/2018/11/sec-orders-airfox-paragon/>.

116. *Id.*

117. *Id.*

118. *Id.*

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

with an ICO.¹²⁴ It should be noted, however, that the SEC did not completely shut down the offerings and allowed both companies the opportunity to provide investors with the disclosure information they would have received had the tokens been registered with the SEC.¹²⁵ This leniency, together with the relatively modest monetary penalties, suggests that the SEC wants to encourage the registration of tokens offered in ICOs rather than stamp out ICOs altogether.¹²⁶

On April 3, 2019, the SEC also published a “Framework for ‘Investment Contract’ Analysis of Digital Assets” (the “Framework”) to provide additional guidance to companies in determining whether a digital asset, such as a token issued in an ICO, meets the definition of a security under U.S. federal securities laws as determined by the Howey Test.¹²⁷ The Framework indicates that in certain narrow circumstances tokens may not be considered “securities” because they are either not purchased with “a reasonable expectation of profits” or because the profits are not “derived from the efforts of others.”¹²⁸ On the same day it released the Framework, the SEC applied its analysis by finding that ICO issuer TurnKey Jet, Inc. (“TKJ”) did not need to register its tokens with the SEC because the tokens (which were used to purchase air charter services) did not meet the definition of a security under the Howey Test.¹²⁹ The SEC reached this conclusion in part because the TKJ tokens were not used to fund the development of TKJ’s underlying platform, the tokens were immediately usable for their intended functionality, they had a set price of one U.S. Dollar per token and because the marketing of the tokens emphasized their functionality rather than their potential for an increase in value.¹³⁰

Overall, the Framework, as exemplified by the SEC’s stance on the TKJ tokens, offers important guidance for companies as to how they might avoid having their ICO tokens characterized as securities. However, the circumstances in which a token may fall outside the definition of a security are very narrow, and companies subject to the jurisdiction of U.S. securities laws should always seek counsel before undertaking an ICO.¹³¹

124. Tim Fries, *SEC Imposes First-Ever Penalties for ICO Securities Registration Violations*, THE TOKENIST (Nov. 18, 2018), <https://thetokenist.io/sec-imposes-first-ever-penalties-for-ico-securities-registration-violations/>.

125. Green et. al., *supra* note 116.

126. *Id.*

127. SEC, *Framework for ‘Investment Contract’ Analysis of Digital Assets*, (April 3, 2019) (presenting the views of the SEC’s Strategic Hub for Innovation and Financial technology).

128. *Id.*

129. SEC Div. of Corp. Finance, *No Action Letter Re: TurnKey Jet, Inc.*, (April 3, 2019) (<https://www.sec.gov/divisions/corpfin/cf-noaction/2019/turnkey-jet-040219-2a1.htm>).

130. *Id.*

131. Ken Witt et. al, *Digital Assets as “Securities” Under Federal Law: A New Framework and an ICO No-Action Letter from the SEC* (April 5, 2019).

V. NAVIGATING THE U.S. SECURITIES LAWS

In light of intensified SEC scrutiny, crypto promoters been leaving the United States and setting up shop overseas to avoid implicating U.S. securities laws.¹³² In addition, some domestic and overseas crypto operations have taken steps to shut out U.S. investors altogether in an effort to avoid triggering U.S. securities laws through offers or solicitations targeting the United States.¹³³ Excluding U.S. investors is a difficult choice to make for ICO issuers because it denies access to an entire pool of potential investors living in one of the wealthiest nations on earth.¹³⁴ However, many ICO issuers find this alternative more attractive than compliance with U.S. securities laws.¹³⁵

A. Avoiding U.S. Securities Laws by Blocking U.S. Investors

Generally, any offer, solicitation, or other communication regarding the sale of securities targeted to U.S. persons or investors within the United States can trigger the application of U.S. securities laws.¹³⁶ However, if an ICO issuer takes adequate precautions to prevent U.S. persons from participating in an ICO, the SEC will likely not view the ICO as one targeting U.S. investors even if a U.S. investor finds a way to participate (absent clear indications sufficient to put the issuer on notice).¹³⁷ Determining whether the precautions implemented are “adequate” depends on the facts and circumstances of a given ICO, and measures that are adequate for foreign issuers may not be sufficient for U.S. based issuers.¹³⁸ At the end of the day there is no one-size-fits-all approach to screening precautions that can guarantee that an ICO would not be viewed by the SEC as targeting U.S. investors¹³⁹. But we can look to examples of precautions taken in the past as a means of determining which measures may be most effective to block U.S. investors from participating moving forward.

To avoid targeting U.S investors some ICO issuers include prominent disclaimers on their websites which make it clear that the ICO is directed only to countries other than the United States, although in reality this approach does little to actually prevent a determined purchaser from participating.¹⁴⁰ Other ICO issuers may require visitors to the ICO’s website to

132. Christian Reeves, *ICOs are Abandoning US Investors*, PREMIEROFFSHORE (Mar. 28, 2018) <http://premieroffshore.com/icos-are-abandoning-us-investors/>.

133. Irrera & Price, *supra* note 107; SEC, *Use of Internet Web Sites to Offer Securities, Solicit Securities Transactions, or Advertise Investment Services Offshore*, International Series Release No. 1125 (Mar. 23, 1998).

134. Yura Sherman, *Why Some ICOs Block Investors From USA*, CRYPTOPOTATO (Apr. 16, 2018) <https://cryptopotato.com/icos-block-investors-usa/>.

135. *Id.*

136. SEC, *Use of Internet Web Sites to Offer Securities, Solicit Securities Transactions, or Advertise Investment Services Offshore*, International Series Release No. 1125 (Mar. 23, 1998).

137. *Id.*

138. *Id.*

139. *Id.*

140. *Id.*

verify that they are not U.S. citizens.¹⁴¹ While this method may indicate a good faith effort on the part of the ICO issuer, it is largely ineffective as it provides no means of verification.¹⁴² Technological advances also make it possible to digitally screen investors, and ICO issuers may use “geo-blocking” to prevent U.S. investors from accessing information about their ICOs and investing.¹⁴³ This process involves blacklisting all IP addresses that come from the United States. However, this precaution can be easily bypassed by using a software tool called a VPN (virtual private network) that allows the user to change his or her IP address and thus appear to be in a different country.¹⁴⁴

On the other hand, an ICO conducted by decentralized wealth management platform SwissBorg in December of 2017 utilized more effective precautions.¹⁴⁵ To participate in SwissBorg’s ICO, investors were required to provide personal information such as their name, address and birthdate.¹⁴⁶ To verify the information, investors were asked to show or upload official identification and proof of residency documents.¹⁴⁷ This personal information and proof of identification were then compared to databases to ensure the validity of the information and documents provided.¹⁴⁸ As a practical matter all ICO issuers should be aware that collecting personal information from potential investors will implicate the privacy regulatory regimes of the jurisdictions wherever the investors reside, including the General Data Protection Regulation in the European Union.¹⁴⁹ As an additional safeguard, ICO issuers should consider using password protected logins if they wish to ensure that only non-U.S. persons are able to access ICO information and tokens.¹⁵⁰

Ultimately it may be impossible to prevent U.S. investors from participating in ICOs even if substantial precautions are taken.¹⁵¹ Nevertheless, ICO issuers seeking to avoid implicating U.S. securities laws should consult with U.S. securities counsel to evaluate the measures they put in place in order to avoid offering or selling their coins or tokens to investors in the United States.

141. JP Buntinx, *Why Can't US Citizens Participate in Cryptocurrency ICOs?*, THEMERKLE.COM (June 29, 2017), <https://themerkle.com/why-cant-us-citizens-participate-in-cryptocurrency-icos/>.

142. *Id.*

143. Sherman, *supra* note 130.

144. *Id.*

145. Guest Writer, *Five Reasons Why KYC is Crucial for Your ICO Investment*, CCN (Feb. 2, 2017) <https://www.ccn.com/five-reasons-kyc-crucial-ico-investment>.

146. *Id.*

147. *Id.*

148. *Id.*

149. Eugdpr.org, *GDPR Key Changes*, <https://eugdpr.org/the-regulation/> (last visited Feb. 12, 2019).

150. SEC, *Use of Internet Web Sites to Offer Securities, Solicit Securities Transactions, or Advise Investment Services Offshore*, International Series Release No. 1125 (Mar. 23, 1998).

151. Buntinx, *supra* note 137.

B. Conducting ICOs and Operating Cryptocurrency Exchanges in Compliance with U.S. Securities Laws

If an ICO issuer or cryptocurrency exchange wants access to U.S. investors, it must either register with the SEC or identify and comply with an applicable exemption from registration. As we have seen with Airfox, Paragon and EtherDelta, failure to register or comply with an applicable exemption exposes the issuer or exchange to securities violations and potential penalties.

Below we will provide a brief overview of the exemptions from registration available to ICO issuers and cryptocurrency exchanges. This discussion is not intended to be a comprehensive guide on how to comply with every aspect of each exemption. Instead, the following sections will provide a general outline of several of the most widely used exemptions and highlight certain important aspects of each. It is assumed that the coins or tokens offered or exchanged by cryptocurrency companies are securities for purposes of U.S. securities laws.

i. Regulation A

Regulation A (“*Reg A*”) is an exemption from registration under the Securities Act that would allow an ICO issuer to offer tokens in one of two tiers.¹⁵² For Tier 1 offerings, up to \$20 million of tokens may be offered over a 12-month period, and for Tier 2 offerings up to \$50 million over a 12-month period.¹⁵³ There are certain basic requirements applicable to both Tier 1 and Tier 2 offerings, including company eligibility requirements, bad-actor disqualification provisions and disclosure requirements.¹⁵⁴ The Reg A exemption is only available to companies that are organized in and have their principal place of business in the United States or Canada.¹⁵⁵ Sales of Tier 1 securities may be made to both accredited¹⁵⁶ and non-accredited investors without any restrictions, while sales of Tier 2 securities can be made to accredited investors and non-accredited investors so long as the non-accredited investors do not purchase tokens costing more than 10% of their annual income or net worth.¹⁵⁷ When using the Reg A exemption, ICO issuers would file a limited offering statement on

152. SEC, *Amendments to Regulation A: A Small Entity Compliance Guide*, (Feb. 4, 2019) <https://www.sec.gov/info/smallbus/secg/regulation-a-amendments-secg.shtml>.

153. *Id.*

154. SEC, *Regulation A*, <https://www.sec.gov/smallbusiness/exemptofferings/rega> (last visited Feb. 6, 2019).

155. SEC, *Amendments to Regulation A: A Small Entity Compliance Guide*, (Feb. 4, 2019) <https://www.sec.gov/info/smallbus/secg/regulation-a-amendments-secg.shtml>.

156. For natural persons, an “accredited investor” includes any person who has: i) earned income that exceeded \$200,000 (or \$300,000 together with a spouse) in each of the prior two years, and reasonably expects the same for the current year; or ii) has a net worth over \$1 million, either alone or together with a spouse (excluding the value of the person’s primary residence).

157. Bonnie J. Roe, *Insight: Regulation A: A Pathway for the ICO?*, BLOOMBERG (July 26, 2018) <https://www.bna.com/insight-regulation-pathway-n73014481149/>.

Form A-1 with the SEC.¹⁵⁸ In addition, ICO issuers conducting a Tier 2 offering must also provide audited financial statements and periodic reports similar to those filed by a publicly-held company but in slightly less detail.¹⁵⁹ Tokens that would be issued under Reg A generally may be freely traded without restriction.¹⁶⁰ Tier 1 offerings are not exempt from state (“Blue Sky”) securities laws which may pose additional restrictions, while Tier 2 offerings are generally exempt from such laws.¹⁶¹

ii. Regulation D: Rule 506(b) and Rule 506(c)

Section 4(a)(2) of the Securities Act provides an exemption from registration under Section 5 of the Securities Act for transactions by an issuer not involving any public offering.¹⁶² Rules 506(b) and 506(c) of Regulation D of the Securities Act are safe harbors under Section 4(a)(2) that provide objective guidelines that an ICO issuer can rely on to meet the requirements of the 4(a)(2) exemption.¹⁶³

Rule 506(b) would allow ICO issuers to raise an unlimited amount of capital from a theoretically unlimited number of accredited investors and up to 35 non-accredited investors, so long as the non-accredited investors are “sophisticated”.¹⁶⁴ Accredited investors in Rule 506(b) offerings can “self-verify” their accredited status, which reduces the administrative burden on issuers.¹⁶⁵ Each non-accredited investors must qualify as a “sophisticated investor:” an investor who has sufficient knowledge and experience in financial and business matters such that the investor is capable of evaluating the risks and merits of a prospective investment.¹⁶⁶ An ICO issuer using Rule 506(b) cannot use “general solicitation,”¹⁶⁷ such as advertising, to market its tokens.¹⁶⁸ This prohibition on general solicitation may rule out Rule 506(b) for ICO issuers because it limits the ability to market the ICO via the Internet to a large number of potential investors.

158. *Id.*

159. *Id.*

160. *Id.*

161. *Id.*

162. 15 U.S.C. § 77(d)(a)(2) (2018).

163. 17 C.F.R. § 230.506 (2018).

164. Corbin Bridge, *How Initial Coin Offerings May Utilize Regulation D Exemptions*, INVESTMENTBANK.COM, <https://investmentbank.com/reg-d-ico/> (last visited Feb. 2, 2019).

165. Lucas Huizar, *A Comparison of Rule 506(b) and 506(c) Offerings*, CIRCLEUP (Dec. 9, 2014), <https://circleup.com/blog/2014/12/09/a-comparison-of-rule-506b-and-506c-offerings/>.

166. Corbin Bridge, *How Initial Coin Offerings May Utilize Regulation D Exemptions*, INVESTMENTBANK.COM, <https://investmentbank.com/reg-d-ico/> (last visited Feb. 2, 2019).

167. “General solicitation” includes advertisements published in newspapers and magazines, public websites, communications broadcasted over television and radio, and seminars where attendees have been invited by general solicitation or general advertising. In addition, the use of an unrestricted, and therefore publicly available, website constitutes general solicitation. The solicitation must be an “offer” of securities, but solicitations that condition the market for an offering of securities may be considered to be offers. See SEC, *Advertising in Rule 506 and Rule 144A*, <https://www.sec.gov/info/smallbus/secg/general-solicitation-small-entity-compliance-guide.htm> (last visited Feb. 6, 2019).

168. SEC, *Private Placements – Rule 506(b)*, <https://www.sec.gov/smallbusiness/exemptofferings/rule506b> (last visited Feb. 2, 2019).

Furthermore, if non-accredited investors are participating in the offering, the ICO issuer must provide them with disclosure similar to the type of information provided in registered public offerings, an unheard-of level of disclosure for an ICO.¹⁶⁹ Tokens purchased pursuant to Rule 506(b) would be exempt from state registration requirements, and investors who purchase tokens in a Rule 506(b) offering would receive restricted securities, meaning they are not freely tradable unless they are either registered or comply with a valid resale exemption such as Rule 144.¹⁷⁰

The fairly new Rule 506(c) of Regulation D complements Rule 506(b). Unlike Rule 506(b), Rule 506(c) would allow ICO issuers to use general solicitation, including advertising, to market the ICO in the U.S.¹⁷¹ However, all *purchasers* in the offering must be accredited investors, and the ICO issuer using Rule 506(c) must take reasonable steps to verify the accredited status of the investors purchasing the tokens¹⁷² or risk enforcement action by the SEC.¹⁷³ These steps are generally viewed as requiring prospective investors to deliver supporting documentation such as bank or brokerage statements and/or tax returns.¹⁷⁴ Not only would this process be burdensome for ICO issuers in light of the large number of investors that typically participate in a given ICO, but also most investors would balk at providing such sensitive documentation to a crypto issuer. Finally, similar to Rule 506(b), tokens purchased in a Rule 506(c) offering are restricted tokens and are not freely tradable unless they are formally registered or comply with a valid resale exemption such as Rule 144.¹⁷⁵

iii. Regulation S

Regulation S (“*Reg S*”) of the Securities Act is an exemption that would allow both foreign and domestic ICO issuers to raise an unlimited

169. *Id.*

170. *Id.*

171. SEC, *General Solicitation – Rule 506(c)*, <https://www.sec.gov/smallbusiness/exemptofferings/rule506c> (last visited Feb. 6, 2019).

172. SEC, *Advertising in Rule 506 and Rule 144A*, <https://www.sec.gov/info/smallbus/secg/general-solicitation-small-entity-compliance-guide.htm> (last visited Feb. 6, 2019); Prospectus.com, *Private Placement Offering: Distinction Between Reg S and Reg D*, <https://www.prospectus.com/2017/08/private-placement-offering-reg-s-vs-reg-d/> (last visited Feb. 25, 2019).

173. SEC, *In the Matter of CoinAlpha Advisors LLC*, Release No. 10582 (Dec. 7, 2018) (finding that CoinAlpha Advisors LLC’s ICO violated Section 5(a) of the Securities Act because CoinAlpha Advisors LLC failed to register the tokens or comply with either of the Rule 506 exemptions from registration. CoinAlpha Advisors LLC advertised its tokens on its website, in blog posts and in interviews and blockchain conferences in a manner that constituted a “general solicitation” under Rule 506 but failed to take reasonable steps to verify that investors were accredited. CoinAlpha Advisors LLC was forced to halt its offering, reimburse all fees collected through its offering, and pay a \$50,000 penalty to the SEC.

174. SEC, *Advertising in Rule 506 and Rule 144A*, <https://www.sec.gov/info/smallbus/secg/general-solicitation-small-entity-compliance-guide.htm> (last visited Feb. 6, 2019); Prospectus.com, *supra* note 168.

175. SEC, *Private Placements – Rule 506(b)*, <https://www.sec.gov/smallbusiness/exemptofferings/rule506b> (last visited Feb. 2, 2019).

amount of capital through the off-shore offer and sale of tokens.¹⁷⁶ The basic premise of Reg S is that offers and sales of securities are not subject to U.S. securities laws if they occur outside the United States (whether the purchasers are U.S. or foreign investors).¹⁷⁷ There are two basic requirements of Reg S offerings: *i*) the offer and sale of the tokens must be made in an offshore transaction; and *ii*) there can be no directed selling efforts in or into the United States of the tokens offered.¹⁷⁸ An “offshore transaction” means a transaction that is not made to a person in the United States and the purchaser is either not physically located in the United States or the transaction is executed in an offshore market.¹⁷⁹ A “directed selling effort” includes any activity that could reasonably be expected to condition the U.S. capital markets for the tokens being offered offshore.¹⁸⁰ Examples of directed selling efforts include advertisements, articles, notices or other publication in any U.S. newspapers, magazines or other similar venues, as well as the Internet.¹⁸¹ Generally, tokens purchased pursuant to Reg S are restricted securities under Rule 144 of the Securities Act and carry a one-year holding period before they can be resold in the U.S. or to a U.S. person.¹⁸²

iv. The Problem with the Securities Exchange Act of 1934

Regardless of whether or not an ICO issuer offers its tokens pursuant to one of the applicable exemptions from registration discussed above, the Exchange Act presents an additional hurdle for potential ICO issuers. Section 12(g) of the Exchange Act establishes certain parameters that can require a private ICO issuer to register its tokens with the SEC even if the issuer’s ICO complies with an exemption from registration under the Securities Act.¹⁸³ Under Section 12(g), an ICO issuer would be required to register its tokens under the Exchange Act if: *i*) it has more than \$10 million in total assets; and *ii*) the tokens are held of record by either 2,000 or more persons *or* by only 500 or more persons who are non-accredited investors.¹⁸⁴ This requirement could significantly impact ICO issuers because any ICO issuer that raises more than \$10 million in a given ICO or sells tokens to more than 2,000 investors or 500 non-accredited investors could be required to register the tokens with the SEC under the Exchange Act and file ongoing reports as a public company. Note as well that transfers after the ICO could result in the ICO issuer’s tripping over either or

176. Westlaw, *Regulation S Transactions*, 2 Practical Law Practice Note 5-383-1182 (2018) (on file with author).

177. *Id.*

178. *Id.*

179. *Id.*

180. *Id.*

181. *Id.*

182. Morrison & Foerster LLP, *Frequently Asked Questions About Regulation S*, 6 <https://media2.mofo.com/documents/faqs-regulation-s.pdf> (2017).

183. SEC, *Changes to Exchange Act Registration Requirements to Implement Title V and Title VI of the JOBS Act*, (May 24, 2016) <https://www.sec.gov/info/smallbus/secg/jobs-act-section-12g-small-business-compliance-guide.htm>.

184. *Id.*

both of these limits. As a practical matter, a token issuer should consider limiting transfers of tokens to accredited investors, but such a step would greatly limit the liquidity of the tokens.

As of February 6, 2019, the authors are not aware of any actions taken by the SEC against ICO issuers for failing to register under Section 12(g), yet the SEC's stance that most tokens meet the definition of a security makes future enforcement a real possibility. Note as well that the SEC required AirFox and Paragon to register under Section 12(g) of the Exchange Act.

v. Exemptions from Registration for Cryptocurrency Exchanges

As discussed above in Section IV(A), Section 5 of the Exchange Act makes it unlawful for any broker, dealer or exchange, either directly or indirectly, to effect any transaction in a security or to report any such transaction in interstate commerce unless the exchange is registered as a national securities exchange under Section 6 of the Exchange Act or is otherwise exempt from registration.¹⁸⁵ This requirement is intended to protect U.S. investors and prevent fraudulent and manipulative trading practices, and the obligations that come with registration can be burdensome.¹⁸⁶ A registered national securities exchange must implement rules designed to prevent fraudulent and manipulative acts and practices.¹⁸⁷ In addition, a registered national securities exchange must create rules and procedures governing the discipline of its members and persons associated with its members, and it must enforce those rules in order to maintain its status as a registered national securities exchange.¹⁸⁸ Furthermore, a national securities exchange must also comply with the federal securities laws and must file its rules with the SEC.¹⁸⁹

Any platform that offers cryptocurrency trading and operates as an "exchange" under U.S. securities laws¹⁹⁰ must comply with an applicable exemption if it wants to avoid the burdens of registration.¹⁹¹ Section 3(a)(1) of the Exchange Act defines an exchange as any organization or group of persons that constitutes, maintains or provides a marketplace for bringing together purchasers and sellers of securities or otherwise

185. SEC Report, *supra* note 87.

186. SEC, *Statement on Potentially Unlawful Platforms for Trading Digital Assets*, (Mar. 7, 2018) <https://www.sec.gov/news/public-statement/enforcement-tm-statement-potentially-unlawful-online-platforms-trading>.

187. *Id.*

188. *Id.*

189. *Id.*

190. There is a dearth of precedent as to when exactly the SEC would assert its jurisdiction to apply U.S. securities laws to overseas cryptocurrency exchanges. For purposes of this article we have assumed that the SEC's guidance on the use of internet websites to offer or solicit securities transactions over the web applies to exchanges which target or are open to U.S. investors; *see generally* SEC, *Use of Internet Web Sites to Offer Securities, Solicit Securities Transactions, or Advertise Investment Services Offshore*, International Series Release No. 1125 (Mar. 23, 1998).

191. SEC Report, *supra* note 87.

performs functions commonly performed by a stock exchange.¹⁹² A cryptocurrency exchange (or in some cases even an ICO issuer¹⁹³) can be considered a marketplace under the above definition if it: *i*) brings together the orders for tokens of multiple buyers and sellers; and *ii*) uses established non-discretionary methods under which such orders interact with each other and the buyers and sellers entering such orders agree to the terms of the trade.¹⁹⁴ Many cryptocurrency exchanges likely meet the definition of an exchange because they bring buyers and sellers together in one place and offer investors access to automated systems that display priced orders, execute trades and provide transaction data.¹⁹⁵

A cryptocurrency exchange can avoid registration as a national securities exchange by complying with the provisions of SEC Regulation ATS.¹⁹⁶ “ATS” stands for “alternative trading system,” and any cryptocurrency seeking to operate as an ATS must still comply with certain requirements including registering with the SEC as a broker-dealer and becoming a member of an self-regulating organization (“SRO”).¹⁹⁷ Registration as a broker-dealer comes with further burdensome ongoing requirements, including the implementation of reasonable policies and procedures to prevent the misuse of material non-public information, the maintenance of books and records, and compliance with financial responsibility rules concerning the safekeeping of customer funds and securities.¹⁹⁸ SRO membership imposes further regulatory requirements and oversight, and an ATS must comply with the federal securities laws and its SRO’s rules as well as file a Form ATS with the SEC.¹⁹⁹ A cryptocurrency exchange that operates in compliance with Regulation ATS is exempt from registering as a national securities exchange with the SEC and can conduct its business without suffering the same fate as the EtherDelta exchange discussed in Section IV(B) above.²⁰⁰

VI. CONCLUSION

The rise of cryptocurrencies, blockchain technology, ICOs and cryptocurrency exchanges have made it possible for companies to raise and transfer of staggering amounts of wealth in ways never before thought possible. Once considered to be on the fringes of the financial world, these technologies have created a multi-billion dollar industry that spans the

192. *Id.*

193. The aforementioned DAO organization was found to be operating as an unregistered exchange in the SEC’s DAO Report because The DAO offered and sold DAO tokens in exchange for Ether tokens on its website in a manner that met the definition of an “exchange”.

194. SEC Report, *supra* note 87; Exchange Act Rule 3b-16(a).

195. SEC, *Statement on Potentially Unlawful Platforms for Trading Digital Assets*, (Mar. 7, 2018) <https://www.sec.gov/news/public-statement/enforcement-tm-statement-potentially-unlawful-online-platforms-trading>.

196. *Id.*

197. *Id.*

198. *Id.*

199. *Id.*

200. SEC Report, *supra* note 87.

globe and impacts numerous areas of our daily lives from environmental concerns to government regulation.

In its efforts to protect investors and facilitate efficient financial markets in the digital age, the U.S. securities laws and the SEC's regulatory regime and enforcement initiatives will continue to evolve and adapt to technological and financial innovations. In the meantime, ICO issuers and cryptocurrency exchanges can either choose to avoid the requirements imposed by U.S. securities laws, comply with them, or risk incurring substantial penalties at the hands of the SEC.