Tangled Up in Blue: Adapting Securities Laws to Initial Coin Offerings

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Issuers of blockchain-based projects have increasingly turned to Initial Coin Offerings to raise capital. Many of these offerings have similar characteristics to securities offerings, yet are often not registered or exempt from securities laws. Initial Coin Offerings present numerous risks to investors, including fraud, inadequate disclosures, and a lack of remedies. The Securities & Exchange Commission must step in to protect investors and limit losses. One way to do so is through regulation. The Securities & Exchange Commission should use existing regulations for Initial Public Offerings and securities offerings as a guideline. However, blockchain-based offerings present unique issues never before observed in securities offerings. As a result, the Securities & Exchange Commission must adapt existing regulations and consider these unique issues when devising regulation. In doing so, the United States will position itself as a global leader in cryptocurrency regulation, providing safety to investors and clarity to issuers.

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1. BOB DYLAN, Tangled Up in Blue, on BLOOD ON THE TRACKS (Columbia Records 1975).

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How does a company raise $1.2 billion through a public offering outside the purview of SEC regulation? Through a new, unregulated fundraising method based in the world of virtual and cryptocurrencies. Firms utilized this process, known as Initial Coin Offerings (“ICOs”), to raise over $10 billion in 2018, a sharp increase from the $4 billion raised in 2017.

In theory, ICOs are simple: A promoter sells digital tokens to raise capital for a project or startup company. While many compare ICOs to Initial Public Offerings (“IPOs”), the two diverge in important respects. An ICO may happen overnight, while an IPO is usually the result of a time-intensive fourteen to sixteen-week process. Unlike IPOs, there is little regulatory or independent oversight of ICOs. Promoters in IPOs must comply with federal securities laws promulgated by the Securities and Exchange Commission (“SEC”). Issuers must be cognizant of a host of additional regulations. Audited financial information, listing the security on an approved exchange, and

6. See id. (requiring registration of non-exempted securities offerings); id. at § 77(g) (information required in a registration statement); id. at § 77(j) (information required in a prospectus).
advertising limitations are just a few of the various requirements for launching an IPO.\textsuperscript{8} Promoters in ICOs, on the other hand, avoid such requirements, presenting a multitude of risks for investors and users of digital tokens. Intelligence and law enforcement officials and agencies are still compiling a complete picture of the uses of virtual currencies and ICOs, some of which are criminal or otherwise illicit.\textsuperscript{9} The prospect that criminal and terrorist organizations could adopt virtual currency on a large scale is a significant concern.\textsuperscript{10} An equally pressing concern is the rapidly increasing use of virtual currency in illicit online marketplaces such as the Silk Road.\textsuperscript{11}

Despite the endorsement of celebrities like Floyd Mayweather, Jamie Foxx, and Paris Hilton, in addition to Premier League giant Arsenal Football Club,\textsuperscript{12} ICOs pose a number of dangers to the public.\textsuperscript{13} Promoters of many ICOs actively attempt to circumvent or evade regulation.\textsuperscript{14} The absence of

\begin{itemize}
\item[8.] For more information on the timetable, requirements, and overall process of launching an IPO, see generally NYSE, supra note 5.
\item[10.] CARLISLE, supra note 9, at 5.
\item[11.] Id.
\item[12.] Press Release, CashBet Coin, Arsenal Football Club Signs World-first Cryptocurrency Partnership with CashBet Coin (Jan. 24, 2018).
\item[13.] Eugene Kim, Cryptocurrency investors worry about a bubble as Jamie Foxx and other celebrities jump on board, CNBC (Sept. 19, 2017, 9:31 AM), https://www.cnbc.com/2017/09/19/jamie-foxx-ico-investors-worried.html [https://perma.cc/JPA6-M5RH]. The SEC has cautioned investors that “[a]ny celebrity or other individual who promotes a virtual token that is a security must disclose the nature, scope, and amount of compensation received in exchange for the promotion.” In addition, failure to disclose this information is a violation of the anti-touting provisions of the federal securities laws, and potentially the anti-fraud provisions. Press Release, SEC Div. of Enf’t & SEC Office of Compliance Inspections & Examinations, Statement on Potentially Unlawful Promotion of Initial Coin Offerings and Other Investments by Celebrities and Others (Nov. 1, 2017), https://www.sec.gov/news/public-statement/statement-potentially-unlawful-promotion-icos [https://perma.cc/R5VZ-PDZJ].
\end{itemize}
regulatory oversight leads to numerous issues, including inadequate disclosures, fraudulent and criminal activity, and investors losing sizeable sums of money.¹⁵ Upset investors of ICOs have already filed several lawsuits, with more anticipated to be filed in the future.¹⁶

The SEC should devise a regulatory scheme for ICOs deemed to be securities, using existing IPO and general securities laws principles as a model. The SEC has the opportunity to construct a regulatory framework to build off of as virtual currency markets and ICOs evolve over time. Rather than attempt to regulate ICOs in one comprehensive statute or regulation, a piece-meal and incremental approach is more practical. Such an approach enables the SEC to effectively protect consumers until ICOs and virtual currency markets are sufficiently mature to justify more sweeping regulation.¹⁷

This Article proceeds in six Parts. Part II explains the logistics of ICOs, including how the underlying blockchain technology involved in virtual currency and ICOs operates in the investment world.¹⁸ Next, Part III discusses why regulation is necessary, focusing on issues such as inadequate disclosures and the lack of consumer protections and remedies.¹⁹ Then, Part IV outlines how other jurisdictions around the world regulate ICOs.²⁰ Part V highlights important regulatory concerns the SEC must address in developing an ICO regulation scheme.²¹ Finally, Part VI concludes by detailing the next steps the SEC should take in order to begin instituting such a regulatory scheme.²²

¹⁷ Many issues with respect to ICOs involve the secondary market. The scope of this Article, however, is limited to the initial sale of digital tokens. In addition, there is a vibrant discussion with respect to whether digital tokens issued through ICOs are securities, commodities, or currencies. This important classification determines whether certain digital tokens are under the jurisdiction of the SEC, the Commodity Futures Trading Commission ("CFTC"), or the Office of the Comptroller of the Currency. In summation, the specific facts and circumstances surrounding an offering likely determine this classification. This Article applies only to tokens deemed to be securities, thus under the jurisdiction of the SEC.
¹⁸ See infra Part II.
¹⁹ See infra Part III.
²⁰ See infra Part IV.
²¹ See infra Part V.
²² See infra Part VI.
II. VIRTUAL CURRENCIES, BLOCKCHAIN TECHNOLOGY, AND INITIAL COIN OFFERINGS

A. VIRTUAL CURRENCIES AND BLOCKCHAIN TECHNOLOGY

There are numerous definitions for virtual currencies. The European Banking Authority defines a virtual currency as “a digital representation of value, not issued by a central bank, credit institution or e-money institution, which, in some circumstances, can be used as an alternative to money.” Virtual currencies are created and disseminated using distributed ledger or blockchain technology. A blockchain is an electronic list of entries—similar to a stock ledger—maintained by various participants in a network of computers. Each computer represents a node on the blockchain network, and each node keeps a copy of the ledger. When a node receives a transaction request, it updates its own copy of the ledger and relays that updated copy to other nodes throughout the blockchain. Transaction data is permanently recorded in files called blocks, which are organized into, and ultimately constitute, the blockchain itself. The first blockchain was Bitcoin, in which users may send and receive the native currency, bitcoin (“BTC”).

23. European Cent. Bank, Virtual Currency Scheme—A Further Analysis 25 (Feb. 2015), https://www.ecb.europa.eu/pub/pdf/other/virtualcurrency_schemes.pdf [https://perma.cc/EHR5-RXWG]. There are three critical characteristics of virtual currency. First, most cryptocurrency schemes allow for the issuance of a finite number of tokens or units. Second, cryptocurrencies are “pseudo-anonymous” in that transactions are recorded in the distributed ledger available to all participants, but the users behind these transactions are known only by their public addresses and not by their real identity. Finally, while fiat currencies are backed by central banks and governments, virtual currency is not backed by any source and their value is determined entirely by the willingness of users to accept them. Ross Leckow et al., Virtual Currencies and Beyond: Initial Considerations, IMF Staff Discussion Note 16/03, 9 (January 2016), https://www.imf.org/external/pubs/ft/sdn/2016/sdn1603.pdf [https://perma.cc/9DMK-ZCCN].

24. SEC. & EXCH. COMM’N, supra note 15. One particularly unique and appealing feature of blockchain technology involves smart contracts. A smart contract is a collection of computer code intended to facilitate, verify, or enforce agreements between parties. When certain conditions are met or events occur, a smart contract will self-execute according to the terms written in the code. When parties use virtual currency in transactions utilizing smart contracts, parties can eliminate the need for third party intermediaries, simplifying transactions and reducing transaction costs. One of the major benefits of smart contracts lies in its efficiency; by transacting through smart contracts—and therefore blockchain–transactions are consummated on a peer-to-peer basis.

25. Id.


27. Id.

28. Blockchain technology possesses a number of benefits not found in other systems. First, blockchains utilize cryptography to process and verify transactions on the ledger,
A user must have a digital wallet to store his or her tokens. Digital wallets perform two principal functions. First, the digital wallet assigns a unique address to each user. Second, the digital wallet facilitates transactions by enabling users to send and receive tokens and publishes the transaction to the blockchain network. Two important components of digital wallets are public addresses and private keys. Each public address is secured by a private key, a password containing a random sequence of letters and numbers used to verify ownership. A private key communicates with a user’s public address, a corresponding sequence of letters and numbers visible to all participants on the blockchain. A public address can be likened to an email address, while the private key is the password.

B. ICOS AND THEIR UNDERLYING DIGITAL TOKENS

An ICO is a capital-raising tool to fund projects leveraging technologies such as blockchain. A cross between crowdfunding and a securities offering, ICOs have become a way for startups to bypass traditional venture-capital funding [and agency regulation] and raise millions, virtually providing an added element of security. Second, in contrast to the traditional financial system—where intermediaries like banks maintain the ledgers and accounts and verify the validity of transactions—the ledgers in a virtual currency scheme are distributed through the blockchain to each participant on a peer-to-peer basis. The ledgers are updated periodically with the recording of new transactions on the ledger as transactions are executed and verified by participants. As a result, the blockchain provides a complete and immutable record of all transactions that have ever taken place within the system. Third, blockchain technology could “greatly shrink the costs” of conducting business in a wide range of industries by allowing for direct peer-to-peer transactions. The application of blockchain technology is a prerequisite to using virtual currency. Reggie O’Shields, Smart Contracts: Legal Agreements for the Blockchain, 21 N.C. BANKING INST. 177, 177–185 (2017).


31. See id.
32. See id.
34. Vigna, supra note 3.
An overly simplistic explanation is that issuers raise capital by selling digital tokens, which represent an investment on a possible future payoff. These tokens are digital representations of value that can be traded electronically, while also functioning as a medium of exchange, unit of account, or store of value.

There are two primary types of digital tokens issued in an ICO: utility tokens and profit-sharing tokens, also known as securities or equity tokens. Utility tokens, like Ether (“ETH”), are tokens required to use a service. Ownership of utility tokens does not confer upon the holder any special rights within the network. It gives the holder access to the service, which, in the case of ETH, is the Ethereum network.

Profit sharing tokens give its holders a claim on an organization’s profits. Many promoters attempt to couch their tokens as utility tokens to avoid the application of securities laws, but “[m]erely calling a token a ‘utility’ token or structuring it to provide some utility does not prevent the token from being a security.” The holders of digital tokens possess a wide range of rights and entitlements which vary based on the issuer’s terms.

An ICO begins with an announcement and the preparation of a white paper detailing whatever information the promoters deem necessary to disseminate to investors. There are no requirements as to what must be included in a white paper. White papers typically include the project details, amount of capital required, logistics of the offering, a description of the

37. SEC. & EXCH. COMM’N, supra note 18.
38. Throughout this Note, BTC and ETH refer to the virtual currencies, while Bitcoin and Ethereum refer to the two blockchains.
41. Wilmoth, supra note 39.
tokens to be sold, a valuation of the tokens, and how the company will use the offering proceeds.\footnote{Id.}

The fundraising specifics of ICOs vary. Some attempt to raise as much funding as possible in a given amount of time. Others set a cap on the total amount to be raised.\footnote{See Chance Barnett, Inside the Meteoric Rise of ICOs, FORBES (Sept. 23, 2017), https://www.forbes.com/sites/chancebarnett/2017/09/23/inside-the-meteoric-rise-of-icos/#210559155670 [https://perma.cc/WVM5-4J4U] (highlighting examples of different ICOs).} Promoters and issuers exercise nearly unlimited flexibility in designing and executing an ICO.

The intent is for tokens sold in ICOs to eventually be listed on international, unregulated exchanges.\footnote{CLEARING HOUSE & INDEP. CMTY. BANKERS OF AM., supra note 29, at 20. Though there are a number of different exchanges ICOs take place on, some of the more popular exchanges include BitTrex, Kraken, Binance, and Cryptopia.} The most basic exchanges provide a platform for advertising the digital tokens and bringing buyers and sellers together to consummate direct transactions.\footnote{Id. at 10–11.} More advanced exchanges permit users to establish accounts and place standing buy and sell orders, similar to a traditional brokerage account.\footnote{Id.} Exchanges may also perform functions traditional exchanges do not. For example:

the exchange may [] offer wallet functionality and store private keys. . . . [I]n some investment-oriented exchanges, the exchange remains the record owner of the purchased virtual currency. As a result, the failure of an exchange or the bad acts of an exchange’s employees (or even third parties) can result in the loss of fiat currency held by the exchange and the loss of access to virtual currency purchased through the exchange.\footnote{Id. at 23.}

Post ICO token price swings are unpredictable. Some investors become millionaires. Others lose everything. For example, within a three-month period, gambling-dice company Etheroll started at $0.06 per digital token, only to climb to as high as $165 and eventually crash to $4.15.\footnote{Paul Vigna, China Bans Digital Coin Offers as Celebrities Like Paris Hilton Tout Them, WALL ST. J. (Sept. 4, 2017), https://www.wsj.com/articles/some-digital-coins-are-up-2-800-what-could-go-wrong-1504522801.} Even BTC is not immune to price swings. It peaked in the middle of December 2017, at around $20,000, only to fall to approximately $3,000 months later.
III. THE NEED FOR REGULATION

A. INADEQUATE DISCLOSURES

Perhaps the biggest risk for investors of ICOs is the absence of mandatory disclosures, representing a significant deviation from IPO and general securities laws principles. Public companies have initial and periodic reporting requirements, while private companies typically utilize private placement memorandums or offering circulars. Companies and organizations issuing digital tokens, however, have no such impositions. There are “no disclosure requirements for minimum standards on [the] type, structure and quality of information provided” leading up to an ICO.

Promoters in ICOs usually distribute white papers in advance of an ICO, but are free to, and often do, “write anything” in them. White papers frequently omit, whether intentionally or otherwise, information critical for investors in judging an ICO’s legitimacy and probability of success. Alarmingly, there is little to no third-party verification of claims made in white papers. Investors are left to perform their own due diligence. Many lack the skill and knowledge necessary to make informed and intelligent investing decisions. A significant number of entities blindly invest in ICOs, with an assemblage of promoters eager to take advantage of this informational gap.

B. POTENTIAL FOR FRAUD

ICOs are often laden with fraudulent activity and unethical conduct. A number of ICOs have turned out to be “outright scams.” Promoters

52. See 17 C.F.R. § 230.500 (2016) (relating to “transactions exempted from the registration requirements” of the Securities Act of 1933).
55. Id.
56. Id.
57. Id.
58. Id.
59. Kevin Helms, Scammy Waters: The Differences Between and IPO and an ICO, BITCOIN.COM (Jan. 9, 2017), https://news.bitcoin.com/scammy-waters-the-differences-between-an-ipo-and-an-ico/ [https://perma.cc/7VEZ-GYC6]. The ICO market is laden with shady characters. For example, one ICO attempting to raise $300 million to finance the construction of a floating casino hotel involves an individual by the name of Wan “Broken Tooth” Kuok-koi, who spent 14 years in a Macau prison for attempted murder, loan sharking, and money laundering. Farah Master, Macau Company in Tie-up with Thai Firm on $300 Mln
sometimes guarantee high investment returns, even though the SEC has cau-
tioned no such thing exists.\textsuperscript{60} Promoters may create a false sense of urgency, 
pressuring potential investors to purchase tokens immediately.\textsuperscript{61} Many ICOs 
involve unlicensed individuals or unregistered firms.\textsuperscript{62} Promoters frequently 
solicit investments without discussing or inquiring about investors’ net 
worth, income, or general financial knowledge and expertise.\textsuperscript{63}

There are a wide range of scams promoters utilize to prey on investors. 
One involves tricking investors into sending money to internet addresses pre-
tending to be funding sites for ICOs.\textsuperscript{64} Fraudulent actors dupe investors into 
providing their credentials to fake websites through targeted email cam-
paigns and twitter posts.\textsuperscript{65} For example, Enigma, a cryptocurrency invest-
ment platform, was compromised by an attacker who wrongfully acquired 
roughly $500,000 in cryptocurrency from investors by sending “very con-
vincing” emails concerning a pre-sale of tokens before the official ICO.\textsuperscript{66}

The SEC expressed concern over fraud in the cryptocurrency markets 
when it declined to approve the BTC investment vehicle proposed by Tyler 
and Cameron Winklevoss.\textsuperscript{67} The SEC did “not find the proposal to be con-
sistent with Section 6(b)(5) of the Securities Exchange Act [of 1934], which 
requires, among other things, that the rules of a national securities exchange

\textit{Initial Coin Offering, }\textsc{ Reuters} (Sept. 27, 2017, 6:52 AM), https://www.reuters.com/arti-
cle/macau-casino-ico/macau-company-in-tie-up-with-thai-firm-on-300-mln-initial-coin-of-
fering-idUSL4N1M81W3 [https://perma.cc/V8T6-8DHB].

\textsuperscript{60.} \textsc{Sec. & Exch. Comm’n, supra} note 18.

\textsuperscript{61.} \textit{id.}

\textsuperscript{62.} \textit{id.}

\textsuperscript{63.} \textit{id.}

\textsuperscript{64.} Lulu Yilun Chen & Yuji Nakamura, \textit{Cryptocurrency Cyber Crime Has Cost Vic-
tims Millions This Year,} \textsc{Bloomberg: Technology} (Aug. 24, 2017, 8:36 AM), 
https://www.bloomberg.com/news/articles/2017-08-24/cyber-criminals-extracting-a-heavy-
toll-from-ethereum-advocates [https://perma.cc/K8P8-65TM]

\textsuperscript{65.} \textit{id.}

\textsuperscript{66.} Charlie Osborne, \textit{Enigma ethereum marketplace hijacked, investors duped by 
phishing scam,} \textsc{ZDNet} (Aug. 22, 2017), http://www.zdnet.com/article/enigma-ethereum-mar-
ketplace-hijacked-by-attackers/ [https://perma.cc/TP7J-EWCQ].

\textsuperscript{67.} On March 10, 2017, the SEC disapproved a proposal to list and trade shares of 
the Winklevoss BTC Trust (the “Trust”) as Commodity-Based Trust Shares under BZX Rule 
14.11(e)(4). The Trust would hold only BTC as an asset, which would be in the custody of 
and secured by the Trust’s custodian. The Trust would issue and redeem the shares only in 
“Baskets” of 100,000 shares and only to authorized participants, and these transactions would be 
conducted “in-kind” for BTC. The investment objective of the trust would be for the shares 
to track the price of BTC on the Gemini Exchange, a digital-asset exchange owned and operated 
by the custodian. The Net Asset Value of the Trust would be calculated each business 
day based on the clearing price of that day’s 4:00 p.m. Gemini Exchange Auction, a two-sided 
auction open to all Gemini Exchange customers. Order Disapproving a Proposed Rule Change 
to List and Trade Shares Issued by the Winklevoss Bitcoin Trust, Exchange Act Release NO. 
[https://perma.cc/WX63-T4WE].
be designed to prevent fraudulent and manipulative acts and practices and to protect investors and the public interest.\textsuperscript{68} The SEC found the significant markets for BTC are unregulated, and therefore, it would be unable to engage in the type of surveillance-sharing agreements that help address concerns about the potential for fraudulent or manipulative acts and practices" in the BTC markets.\textsuperscript{69}

C. LACK OF INVESTOR AND CONSUMER REMEDIES

The path to recovery for aggrieved ICO investors is at best uncertain.\textsuperscript{70} Investors may possess rights under the federal securities laws, but the ability to recover may be "significantly limited."\textsuperscript{71} Unique obstacles to recovery exist. For example, third-party wallet services, payment processors, and virtual currency exchanges may be located overseas or operating unlawfully, creating jurisdiction issues.\textsuperscript{72} Given the decentralized nature of virtual currency, it is unknown which specific actor, if any, a governmental agency could pursue. Adena Friedman, Chief Executive Officer of Nasdaq, Inc., went so far as to say "[t]here are no protections for investors."\textsuperscript{73}

The lack of insurance for virtual currency exchanges is problematic. There is no insurance fund, "[u]nlike bank deposit insurance provided by the [Federal Deposit Insurance Corporation ("FDIC")] in case of bank failure\textsuperscript{74} or insurance provided by the Securities Investor Protection Corporation (SIPC)\textsuperscript{75} in case of the collapse of a brokerage firm . . .\textsuperscript{76} In the event of an exchange failure or other incident resulting in consumer losses, no mechanism other than litigation currently exists to make exchange customers whole again.\textsuperscript{77} Reliance on litigation is a dubious proposition, as attorneys are shying away from ICO cases over fear of not being able to collect from foreign

\begin{itemize}
  \item[68.] Id.
  \item[69.] Id.
  \item[70.] See SEC. & EXCH. COMM’N, supra note 18 (discussing how recovery may be limited in the event of fraud or theft for individuals investing in ICOs).
  \item[71.] Id.
  \item[72.] Id.
  \item[74.] 31 C.F.R. § 1020.100 et al. (2015). Each depositor at a bank, as defined by the Federal Deposit Insurance Act, is insured to at least $250,000 at each insured bank.
  \item[75.] 17 C.F.R. § 300.600 et al. (2015). If an investor’s brokerage firm is a member of SIPC and goes out of business, the investor’s cash and securities held by the brokerage firm may be protected up to $500,000, including a $250,000 limit for cash.
  \item[76.] CLEARING HOUSE & INDEP. CMTY. BANKERS OF AM., supra note 35, at 23.
  \item[77.] Id.
\end{itemize}
actors. While exchanges may voluntarily compensate users, such efforts are “irregular” at best.

Investors possess a limited ability to effect change and file grievances amid improprieties in the virtual currency sphere. Investors lack the protections built in for shareholders of traditional corporations. In the virtual currency sphere, such protections may not exist, and litigation may be the only remedy in the event investors are displeased with management. Take, for example, Tezos. “[O]ne of the largest [ICOs], Tezos, dropped more than 30% in the pre-launch market, even though the token backed by the offering haven’t started trading yet.” The result of such a precipitous decline was a fight between investors and those in charge of allocating the $232 million raised. Shockingly, it was unclear who was actually managing the company. Following the ICO, disgruntled investors filed two class action lawsuits in which they alleged fraud and deceptive marketing practices. Such situations could be more effectively resolved through regulating ICOs, as a governmental entity could intervene and enforce applicable laws and regulations.

Law enforcement officials face a number of obstacles when investigating ICOs. Tracing the flow of money can be difficult given virtual currency markets span the globe. Regulators face difficulties acquiring information from international actors. There is often no central authority in charge of a given blockchain-based project. Regulatory bodies rely on other sources for certain data, which may be delayed or ultimately prove unreliable.

Law enforcement officials may be unable to freeze or secure investor funds held in

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79. CLEARING HOUSE & INDEP. CNTY. BANKERS OF AM., supra note 35, at 23.

80. Many states’ corporate statutes closely track those of Delaware. For Delaware’s corporate statutes, see 8 Del. C. §§ 101–398 (2017).


82. Id. While the offering documents delineated that a nonprofit called the Tezos Foundation would control the new tokens, other interested entities also possessed a claim of control. Id.; see also TEZOS, THE SELF-AMENDING CRYPTOGRAPHIC LEDGER § 5, https://tezos.com/static/position_paper-841a0a66b573af6b28da16f6650152fb4.pdf [https://perma.cc/AWA4-X9F7].

83. Id.


85. SEC. & EXCH. COMM’N, supra note 18.

86. Id.

87. Id.
virtual currency. Tokens are unlikely to be held by a third-party custodian, unlike money held in a bank deposit or brokerage account. Regulatory bodies are often at the whim of promoters and virtual currency exchanges.

D. HACKERS AND OTHER TECHNOLOGY RELATED ISSUES

Virtual currency hackings serve as a chilling reminder computer code “can be just as vulnerable to human greed and mistakes as paper bills.” Hackers that compromise a user’s digital wallet may liquidate the wallet and funds in any linked deposit accounts.

Hacking incidents underscore the complicated governance structure employed by those in the blockchain and virtual currency industry. One prominent hack occurred in June 2016, where a hacker extracted over $50 million of digital currency from a project called Decentralized Autonomous Organization (“The DAO”). Taking advantage of a weakness in the code, this incident marked “one of the nightmare scenarios” investors were worried about. By the time the dust settled, the hacker acquired control of 3,600,000 ETH, over one-third of the 11,500,000 million ETH that were invested in The DAO at the beginning of the day.

The most infamous hacking incident occurred in February 2014. Mt. Gox—at one point the world’s largest BTC exchange—reported 850,000 BTC, worth approximately $450 million at the time, had either disappeared or been stolen by hackers. In January 2018, an unknown attacker stole 523 million units of tokens on the NEM blockchain, worth around $530 million at the time. In January 2019, Cryptopia was hacked, resulting in significant

88. Id.
89. Id.
91. CONSUMER FIN. PROT. BUREAU, supra note 33, at 4.
92. Popper, supra note 90.
93. Id.
94. Id.
consumer losses. By devising ICO regulation, the SEC can take an important first step to combating hackers.

E. DECENTRALIZED NATURE OF THE VIRTUAL CURRENCY MARKET

As a peer-to-peer network, a blockchain may lack a centralized entity or authority. A vital aspect of regulation involves the “ability to impose compliance requirements upon a centralized entity and in turn, the centralized entity’s implementation of those requirements.” Decentralization creates unique issues for regulators. There may not be a particular individual or governing body responsible for implementing a given set of regulations. There may not be a company to subpoena, headquarters to raid, or even a central server to shut down. The SEC may be strained for resources if it decides to pursue large numbers of individual actors, as opposed to a single company or exchange. By regulating ICOs, the SEC can at least bring promoters and investors under the same umbrella during the initial offering period.

IV. HOW OTHER JURISDICTIONS REGULATE ICOs

International regulatory authorities have taken a wide range of approaches in overseeing ICOs. Many countries have declined to regulate them

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98 Kevin V. Tu & Michael W. Meredith, Rethinking Virtual Currency Regulation in the Bitcoin Age, 90 WASH. L. REV. 271, 297 (2015).
99 Id. at 297. Generally, “decentralized organizations” are behind ICOs. Though difficult to define, decentralized organizations are generally those that rely on blockchain technology and smart contracts as their primary form of governance. Such organizations strive to enable entities to effect transactions on a peer-to-peer basis, eliminating the need for any centralized authority or intermediary. The “rules” of operation are maintained on the underlying blockchain, ensuring participants’ compliance. Vitalik Buterin, DAOs, DACs, DAs, and More: An Incomplete Terminology Guide (May 6, 2014), https://blog.ethereum.org/2014/05/06/daos-dacs-das-and-more-an-incomplete-terminology-guide/ [https://perma.cc/VIH9-TN5G].
100 Tu & Meredith, supra note 98, at 297.
altogether. Some have declared ICOs illegal indefinitely. Others are more receptive.

Russia’s Finance Ministry, on January 25, 2018, introduced a draft of proposed ICO regulation. Under the proposal, investors who are licensed professionals under Russian securities laws may invest an unlimited amount of funds in ICOs, but non-licensed investors are capped for each ICO. The proposal requires various disclosures, including “the full name of the token issuer, the project’s website and network provider, as well as permanent operating bodies of the organizer.”

101. Australia, for example, is unlikely to regulate ICOs anytime soon. Mr. Greg Medcraft, chairman of the Australian Securities and Investments Commission, expressed concerns over jurisdictional limitations and whether digital tokens constitute securities in the first place. In addition, Mr. Medcraft stated that “[t]he important thing is that you don’t rush in and pre-bake stuff until you really have a clear view as to why the market needs to be regulated. Aaron Stanley, ASIC on Blockchain: Australia’s Securities Watchdog “Unlikely” to Regulate ICOs, COINDESK (June 27, 2017), https://www.coindesk.com/asic-on-blockchain-australias-securities-watchdog-unlikely-to-regulate-icos/ [https://perma.cc/HMA8-GS5Z].

102. Vigna, supra note 63. The People’s Bank of China (PBoC) will likely develop ICO regulation in the near future. Yao Qian, the head of Digital Currency Research Institute at PBoC, has discussed global regulatory actions to “impose reasonable supervision to ICO as soon as possible.” Mr. Qian, however, has cautioned against preemptive and excessive government intervention, arguing that it would damage the market overall. Despite Mr. Qian’s comments, PBoC is also weighing possible limitations on ICOs in China, including controlling the size of ICOs and mandating enhanced disclosure requirements. Giulio Priscoe, ICO and Token Sale Regulation: A View from China, CRYPTO INSIDER (July 14, 2017), https://cryptoinsider.com/ico-token-sale-regulation-view-china/ [https://perma.cc/T6X4-Q8RG].


105. Id.

106. Id.
announcing the offering are prohibited, analogous to SEC restrictions on communication during the period leading up to an offering.107

One idea gaining traction is the “regulatory sandbox.” Under this approach, companies participating in the sandbox are given a trial run for ICOs. Regulatory bodies will refrain from taking disciplinary action so long as companies deal openly and in good faith with regulators.108 Regulators get involved early in the process and protect consumers along the way.109 Regulators can intervene to prevent fraudulent activity or general harm and losses to investors.110 The appeal of the regulatory sandbox lies in the balance it achieves: organizations obtain regulatory certainty and financial authorities can monitor ICO activity.111

Given the absence of widely used or accepted international regulations and the unwillingness of a number of countries to develop them, the U.S. could position itself as the global leader in ICO regulation. The window for the U.S. to do so may soon close, as several countries, including Russia, are aiming to design and impose regulations governing ICOs.112

V. ADAPTING EXISTING IPO AND SECURITIES PRINCIPLES IN THE ICO CONTEXT

No currently existing regulatory scheme adequately addresses the risks and features of ICOs. The SEC should create a separate regulatory scheme

107. Id.; 15 U.S.C. § 77e(c) (2012) (“It shall be unlawful for any person . . . to offer to sell or offer to buy through the use of a medium of any prospectus or otherwise any security, unless a registration statement has been filed as to such security . . . .”).


110. Id.

111. Despite the rising popularity of the regulatory sandbox, the SEC is unlikely to use this approach or allow any regulatory safe harbors under which issuers in ICOs may experiment. According to Ryan VanGrack, head of the SEC Fintech Working Group, the SEC and other regulators in the U.S. possess certain authorities, such as exemptive authority and no-action letters. They have certain tools they can utilize to provide firms and companies with regulatory relief where appropriate. Michael J. Bologna, Existing Tools Foster Fintech, SEC Attorney Says, BLOOMBERG (Oct. 11, 2017), https://www.bna.com/regulatory-sandboxes-unlikely-n73014470754/ [https://perma.cc/3UVZ-VKUG].

tailored specifically to ICOs. Existing securities principles provide a foundation from which the SEC may derive regulation. The SEC should alter certain aspects to better fit ICOs.\textsuperscript{113}

A. SEC REGULATED EXCHANGES AND PORTALS

The SEC should, at a minimum, require ICOs to be conducted through an approved exchange.\textsuperscript{114} A cryptocurrency exchange registration system brings increased stability and enhanced consumer protections. It also provides an effective response to the decentralized nature of blockchain technology and enhances the ability of the SEC to assert jurisdiction over and pursue claims against promoters, issuers, and other bad actors.\textsuperscript{115}

The registration of virtual currency exchanges “furthers the protection of investors and the public interest because it will enable the exchanges to conduct prompt investigations into possible trading violations and other regulatory improprieties.”\textsuperscript{116} In addition, registration of virtual currency exchanges better provides for the detection and deterrence of market manipulation and other trading abuses, facilitating the availability of information needed to fully investigate.\textsuperscript{117}

\textsuperscript{113} While the SEC has not yet outlined an ICO regulation scheme, groups of entities are banding together to fill the void. On September 18, 2017, the Chamber of Digital Commerce announced the formation of the Token Alliance. Comprised of a number of companies, large law firms, and former CFTC and SEC officials, the Token Alliance will provide policy recommendations and resources for companies issuing tokens. Current plans call for the Token Alliance to work with over seventy players in the industry to recommend a legal framework balancing the promotion of the blockchain industry and investor protection. Laura Shin, \textit{Token Alliance Launches to Promote Best Practices for ICOs}, \textit{FORBES} (Sept. 18, 2017), https://www.forbes.com/sites/laurashin/2017/09/18/token-alliance-launches-to-promote-best-practices-for-icos/#79950c1947c8 [https://perma.cc/LRB7-6H5B].


Registration better allows the SEC to monitor and eventually limit the use of tokens in illicit activity. The regulation of exchanges and custodial wallets enables partial oversight of activity occurring within those contained environments.\textsuperscript{118} This enables the SEC to assist other law enforcement authorities in the distribution and tracking of virtual currency transactions. The SEC will be able to recognize what entities are purchasing digital tokens through ICOs, and potentially to whom purchasers in ICOs are later selling.

Neutral and disinterested exchanges are important in maintaining the integrity of ICOs. Exchanges hosting ICOs should be prohibited from providing access to their platforms to companies they reasonably believe have the potential for fraud. Exchanges should not be able to possess or later acquire a financial interest in a company issuing an ICO.\textsuperscript{119} Exchanges should be prohibited from compensating any person for providing the intermediary with personally identifiable information of any investor or potential investor.\textsuperscript{120} Finally, exchanges should not: offer investment advice or make recommendations; solicit purchases, sales, or offers to buy tokens; compensate promoters and other persons for solicitations or based on the sale of tokens; and holding, possessing, or handling investor funds or tokens.\textsuperscript{121}

SEC approved exchanges enable the suspension or halting of ICOs.\textsuperscript{122} There are several circumstances under which suspending an ICO may be

\textsuperscript{118} CARLISLE, supra note 9, at 23–24. The first fully SEC compliant ICO portal is currently under development. On November 2, 2017, Prometheum, Inc. announced an initiative to create the Premotheum Network, an ICO blockchain securities infrastructure in which issuances, trading, settling, and clearing of digital token-based securities may take place. Premotheum’s platform will allow for “all aspects of the creation, distribution, trading and processing of ICO tokens as securities, compliantly under the Federal Securities Laws.” If the Prometheum Network obtains regulatory approval, the Prometheum Foundation will be formed as an independent organization responsible for oversight and day-to-day management of the ecosystem. The ecosystem will allow qualified broker-dealers to access the tokenized securities marketplace, and newly created Ember Tokens will be used to make payments. Prometheum is the first such ecosystem to complete a filing for registration of ICOs under Regulation A+, and industry participants will be closely monitoring how this project develops. Prometheum Announces Initiative to Create Initial Coin Offering Ecosystem Designed for U.S. Regulatory Compliance, BUS. WIRE (Nov. 2, 2017), http://www.businesswire.com/news/home/20171102006026/en/Prometheum-Announces-Initiative-Create-Initial-Coin-Offering [https://perma.cc/95JD-9U5L].

\textsuperscript{119} See 17 C.F.R. § 227.300 (2016) (prohibiting any director, officer, or partner of an intermediary from holding a financial interest in an issuer that is offering or selling securities on its platform in certain situations).

\textsuperscript{120} Id.

\textsuperscript{121} Id.

\textsuperscript{122} The power to suspend or halt a securities offering stems from Section 12(k) of the Exchange Act, which grants the SEC the authority to issue summarily orders to alter, supplement, suspend, or impose requirements on securities, including IPOs. For an example of the SEC exercising its authority under Section 12(k), see The Crypto Company, Exchange Act
appropriate. These include: a lack of current, accurate, or adequate information about the issuer; questions about the accuracy of publicly available information; and questions about market manipulation and insider trading. The SEC will likely need additional power in suspending the trading of digital tokens with respect to the secondary market, but the ability to prevent widespread damage by stopping a dubious ICO in its tracks is an important first step.

Registration of exchanges addresses several risks of ICOs. Exchanges are required to "take certain measures to reduce the risk of fraud, including having a reasonable basis for believing that . . . the company has established means to keep accurate records." Exchanges must provide investors with educational materials that explain, among other items, the process for investing on the platform, any resale restrictions, and other investment limitations. Other requirements include: having a reasonable basis for believing an investor complies with the investment limitations; complying with maintenance and transmission of funds requirements; complying with completion, cancellation and reconfirmation of offerings requirements; providing communication channels to permit discussions about IPOs on the portal; accepting an investment commitment from an investor only after that investor has opened an account on the portal; and providing investors with notices once they have made investment commitments and a confirmation at or before completion of the transaction.
B. DISCLOSURES

Adequate disclosures are critical to any effective ICO regulation scheme. Mandatory disclosures address two significant problems surrounding ICOs: fraudulent activity and the lack of quality, readily available information. Utilizing existing disclosure requirements in securities law allows for a more seamless and less costly transition. Since promoters and issuers involved in ICOs are likely to oppose costly and overly prescriptive regulations, the SEC should strive to develop ICO regulation in line with existing IPO and securities regulations to the extent appropriate and possible.

1. The Concept of “Materiality”

An important concept with respect to disclosures is that of “materiality.” The SEC should adopt the standard of materiality currently in place. The Supreme Court has opined a fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in how to vote. Put another way, there must be a substantial likelihood the fact would have been viewed by the reasonable investor as having significantly altered the “total mix” of information made available.127

Applying the definition and concept of materiality to the ICO context has several important benefits to promoters and investors. It reduces confusion and uncertainty. Promoters can rely on a widely used and accepted standard for what to disclose. There is a rich history of case law and regulatory guidance discussing “materiality.” Promoters can model their disclosures using existing disclosures of public companies. This reduces the costs of an ICO, savings which may be passed on to investors. Auditors, experts, and other professionals working on ICOs can draw upon their experiences with IPOs and other reporting requirements. Investors will have realistic expectations of what to look for in disclosures and can rely on any experience they have in reviewing past disclosures. Although the underlying concept of materiality should remain in place for ICOs, the exact disclosures for ICOs will differ from those observed in more traditional disclosures.

2. Risk Factors

Disclosures must include detailed information on the risks present. IPOs often involve more established companies, while ICOs frequently involve companies with no business history or sales record. At a minimum, risk factors include: recent adverse developments or operating losses; the need for

additional financing; the dilution to public investors; industry trends or business seasonality; the existence of significant competition; the company’s dependence on a few customers, suppliers, or key members of management; information regarding significant contracts or licenses; the impact of current or proposed legislation; and technology changes. 128

ICOs possess a number of unique technological risks that must be disclosed. One such risk is the prospect of losing access to one’s tokens due to the loss of private keys, custodial error, or purchaser error. Second, any malfunction, breakdown, or abandonment of the blockchain will likely have an adverse effect on the tokens issued. In addition, risks of hacking and mining attacks abound. Finally, if the value of the virtual currency operating on the blockchain—like BTC or ETH—fluctuates unfavorably during the ICO or immediately thereafter, the entire operation may dissolve. The risks discussed here do not constitute an exhaustive list, but serve to highlight the notion that what is considered material may differ in the ICO context.

3. Logistics of the Offering and Use of Proceeds

The logistics surrounding an ICO are a new concept not found in traditional securities offerings. Investors must be given details on procedures for buying and receiving tokens. This includes information on the proper exchange, digital wallet requirements, when the offering will commence, and the duration of the offering. Disclosures detailing how the issuer plans to use the proceeds of an ICO should closely track traditional reporting documents. 129 A promoter should state “the principal purposes for which the net proceeds . . . are intended to be used and the approximate amount intended to be used for each such purpose.” 130

The issuer must disclose information surrounding the actual tokens to be issued. An issuer must disclose how many and at what valuation the tokens will be issued. Promoters must disclose how the tokens will function in the real world. Other relevant disclosures include whether the promoters or management have the authority to issue additional tokens at a later time and whether any entities maintain any options contracts on the tokens.

4. Business Generally

Issuers must make extensive disclosures about their businesses generally. 131 Disclosures that any company seeking to raise millions of dollars

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130. Id.
131. Id.; 17 C.F.R. § 229.101.
should be able to produce include: a business plan; description of principal segments, products services, and markets for the company’s products and services; description of its properties; information relating to any foreign operations; ongoing research and development opportunities; regulations affecting the industry and company; pending or threatened legal proceedings; and revenues, profits, assets, products and services, product development, major customers, inventory, patents, suppliers, and the competitive position of each major industry and geographic segment of the company. Analogous to existing disclosure requirements, information about the general business of the issuer should be in narrative form and in plain English, especially in light of the complex terminology and technology in the virtual currency landscape.

5. Management Team

An issuer must disclose information about its officers, directors, promoters, and principal shareholders or control persons. Such disclosures are arguably more important in the ICO context than in traditional securities offerings. Public companies are constantly tracked by large numbers of individuals. Shareholders and investors of public companies have certain rights and protections with respect to governance and how the company is managed. Public companies maintain a system of checks and balances to hold management accountable.

Investors in ICOs lack similar protections. Thus, information about management carries greater importance. Disclosures relating to management must include, but are not limited to, information on: business experience and specific qualifications, attributes, and skills; security holdings; transactions with an indebtedness; whether any individuals in management are involved or have been involved in any legal proceedings; and the identity of transactions with, and compensation paid to, its promoters. Management is a fiduciary for and accountable to investors, who deserve access to basic information on who controls their investments.

132. Id.; see also PRICEWATERHOUSECOOPERS, supra note 128, at 41.1.

133. Plain English involves: presenting information in clear, concise sections, paragraphs, and sentences; using short sentences; using definite, concrete everyday words; using active voice; avoiding multiple negatives; using descriptive headings and subheadings; using a tabular presentation or bullet lists for complex material, whenever possible; avoiding legal jargon and highly technical business and other terminology; and avoiding frequent reliance on glossaries or defined terms as the primary means of explaining information. 17 C.F.R. § 240.13(a)-20(a)(1)-(10).

134. Id.; 17 C.F.R. § 229.401; see also PRICEWATERHOUSECOOPERS, supra note 128, at 43.
6. Financial Data

Issuers must disclose key financial and other data, assuming such data exists.135 Young companies may face difficulty in producing this information, especially if an ICO involves more of an idea than an already existing good or service. To the extent possible, these disclosures should include, at a minimum: consolidated balance sheets, income statements, and any changes in financial positions; changes in stockholders’ equity and noncontrolling interests; and financial statements of subsidiaries.136 This financial data should be audited. Although the SEC does not require “smaller reporting companies”—those expected to have less than $75 million in publicly held common stock following an IPO—to produce certain financial data,137 the SEC should require all companies in ICOs, regardless of size, to produce this data. Such a requirement combats the potential for fraudulent activity and instills a higher degree of consumer confidence.

7. Management Discussion & Analysis

A management discussion and analysis (“MD&A”) section is critical in providing investors and consumers with an accurate, complete picture of the issuer.138 MD&A provides management the opportunity to discuss in narrative form management’s perspective on the company’s financial condition, any changes in its financial condition, and the results of operations.139 MD&A carries greater importance in the ICO context. There is probably less historical information with which to analyze issuers. Many ICOs involve funding for novel ideas, as opposed to established companies with proven track records. Given the increased uncertainty surrounding ICOs, MD&A is vital to the ability of investors to gauge the quality of and probability of success for an ICO. The technology used in ICOs is unprecedented, warranting additional discussion directly from management. After reading through the MD&A section, investors should be left with a clear picture on what the issuer does and how the underlying tokens operate in the real world.

8. Liability for Misleading Registration Statements

Failure to make proper disclosures in ICOs must lead to liability. Again, the SEC would be wise to use an already existing framework, specifically

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136. Id. at § 210.2–3.
137. Id.; 17 C.F.R. § 229.10(f) (2018).
139. Id. For more information on MD&A, see Thomas Lee Hazen, SECURITIES REGULATION: CASES AND MATERIALS, 223–31 (9th ed. 2016).
Section 11 of the Securities Act.\textsuperscript{140} Section 11(a) makes specified persons liable for any untrue statement of material fact in a registration statement or any omission of any material fact necessary to make statements therein not misleading, to any person acquiring the security unless that person knew of such untruth or omission at the time of the acquisition.\textsuperscript{141} Potentially liable parties under Section 11(a) include: the issuer; directors of the issuer; persons named, by their consent, in the registration statement as about to become directors of the issuer; every person who signs the registration statement; every expert who is named by consent as having certified or prepared any part of the registration statement; and every underwriter of the security.\textsuperscript{142}

One salient feature of Section 11 should be altered in the ICO context. A Section 11 plaintiff need not establish a defendant’s scienter, or even negligence, to prove its case.\textsuperscript{143} Given the increased uncertainty surrounding ICOs and the virtual currency market, a standard of strict liability may be too harsh and subject issuers and promoters to an undue degree of liability. Rather than face an increased risk of being held liable, promoters may simply prohibit U.S. citizens from participating in ICOs.\textsuperscript{144} Plaintiffs alleging disclosure defects in ICO disclosures should be required to make a showing of negligence. Requiring plaintiffs to make a showing of scienter—a difficult standard to meet—may prove too great of a hurdle and allow promoters to unfairly escape Section 11 liability. Employing a standard of negligence, as opposed to strict liability, achieves a better balance by protecting investors from bad actors while still enabling the ICO market to flourish.

Section 11 provides for an affirmative defense of “due diligence,” available to all defendants except the issuer. Understood as a “negligence standard,” this defense provides a defendant will not be liable upon a showing that:

\begin{quote}
he had, after reasonable investigation, reasonable ground to believe and did believe, at the time such part of the registration statement became effective, that the statements therein were true and that there was no omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading.\textsuperscript{145}
\end{quote}

\begin{footnotes}
\begin{enumerate}
\item \textit{Id.} at § 77k(a).
\item \textit{Id.} at § 77k(a)(1)–(5).
\item \textit{Id.} at § 77k; Herman & MacLean v. Huddleston, 459 U.S. 375, 382 (1983) (stating that Section 11’s liability provisions create “virtually absolute” liability).
\item Christian Reeves, \textit{ICO\textquotesingle}s are abandoning US investors} (Mar. 28, 2018), http://premieroffshore.com/icos-are-abandoning-us-investors/[https://perma.cc/M22G-32A6].
\item 15 U.S.C. § 77k(b)(3); \textit{see also In re WorldCom}, Inc. Sec. Litig., 346 F. Supp. 2d 628, 663 (S.D.N.Y. 2004).
\end{enumerate}
\end{footnotes}
Again, the SEC would be wise to apply already existing securities regulation to ICOs. Using the same standard yields consistency across securities principles, increased predictability to promoters and investors, and decreased costs to the issuer.

C. POTENTIAL POOL OF INVESTORS

1. Sophisticated Investors

A major concern surrounding ICOs is promoters taking advantage of unsophisticated and vulnerable retail investors. The SEC should devise a regulation scheme accounting for the sophistication of those investing. Under existing securities laws, an “accredited investor” is any person who falls within or who the issuer reasonably believes falls within a certain category of investors enumerated in the Act. These categories include certain businesses, high wealth individuals, and those likely to have investing and financial expertise, such as certain banks and savings and loan associations, brokers and dealers, ERISA plans with assets in excess of $5,000,000, and individuals with a net worth of at least $1,000,000, in addition to a number of other enumerated entities and individuals.

The definition of accredited investor is incompatible with ICOs. Limiting ICOs to accredited investors eradicates a significant pool of potential investors, restricting the ability of promoters to raise funds for their ventures. A number of individuals with a net worth below $1,000,000 would like to and often do participate in ICOs. Eliminating their access to investment opportunities is unduly restrictive.

The SEC should create a new standard specifically for ICOs, dubbed the “sophisticated investor.” Under this new standard, the SEC would permit only “sophisticated investors,” as used narrowly in this context, to participate in ICOs. There is, however, an important competing balance at play. Requiring a promoter to verify each individual investor is “sophisticated” will increase the cost of an ICO. On the other hand, the SEC needs to curb promoters taking advantage of uninformed investors. To find a middle ground, the definition of “sophisticated investor” could include a list of entities to be conclusively deemed sophisticated, as well as a smaller pool of potential investors who must make a showing of sophistication. Entities deemed to be

sophisticated should include accredited investors\textsuperscript{149} and other entities that traditionally have the financial expertise and capabilities to make informed and intelligent investing decisions. The major change with respect to individuals, however, should involve the net worth requirement.

The net worth requirement for an individual to be deemed sophisticated in the ICO context should be significantly lower than the $1,000,000 benchmark in the definition of "accredited investor."\textsuperscript{150} A lower net worth requirement widens the pool of potential investors to participate in ICOs, increasing promoters’ access to capital while still maintaining a certain degree of protection against promoters taking advantage of the most vulnerable investors. While there is probably not a perfect net worth requirement that accurately partitions sophisticated from unsophisticated investors, an individual or couple with a net worth of around $100,000 could be sufficient to constitute a basic level of sophistication.

If an individual falls below a certain benchmark to constitute sophistication as determined by the SEC, it would be unfair to say that such an individual is per se unsophisticated, and therefore unable to participate in ICOs. These investors should be permitted to participate in ICOs so long as they pass a totality of the circumstances type of test. In essence, the promoter should, at a minimum, reasonably believe an investor has the knowledge and capacity to make informed investing decisions. The promoter may take account of numerous factors, including: line of work the individual participates in; annual income; and investing history and experience.\textsuperscript{151} The burden would be on the investor to show the promoter by a preponderance of the evidence that he or she meets the required standard. Promoters and issuers would be safe from liability so long as they had a reasonable and good faith belief that the petitioning investor was sophisticated. The proposed definition of "sophisticated investor" should apply equally to all investors, whether domestic or abroad.

D. FRAUD CONTROLS

Any regulation scheme must address and hold liable bad actors. One of the more well-known securities regulations governing fraudulent activity is Rule 10b-5, which provides:

\begin{itemize}
\item \textsuperscript{149} 17 C.F.R. § 230.501(a) (2017).
\item \textsuperscript{150} 17 C.F.R. § 230.501(a)(5).
\item \textsuperscript{151} For cases discussing whether investors were sophisticated, see LeBlanc v. Cahill, 153 F.3d 134, 148–49 (4th Cir. 1998) (pension fund was a sophisticated investor because it had "considerable experience in evaluating investment opportunities"); Terra Sec. ASA Konkursbo v. Citigroup, Inc., 820 F. Supp. 2d 541 (S.D.N.Y. 2011); San Diego City Emp. Ret. Ass’n v. Maounis, 749 F. Supp. 2d 104 (S.D.N.Y. 2010); Granite Partners, L.P. v. Bear, Steams & Co., 17 F. Supp. 2d 275 (S.D.N.Y. 1998).
\end{itemize}
It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce or of the mails, or of any facility of any national securities exchange . . . [t]o use or employ, in connection with the purchase or sale of any security registered on a national securities exchange or any security not so registered, any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors.\textsuperscript{152}

Rule 10b-5 provides a private right of action by a purchaser of a security against one who makes an untrue statement or omits a material fact. To establish a claim under Rule 10b-5, a plaintiff must prove six elements: (1) a material misrepresentation or omission; (2) scienter; (3) in connection with the purchase or sale of a security; (4) reliance on the misrepresentation or omission; (5) economic loss; and (6) loss causation.\textsuperscript{153}

The concept of Rule 10b-5 should be applied to the ICO context, with two alterations. First, the SEC should remove the requirement of showing loss causation. In proving loss causation, a plaintiff must show the loss would not have occurred but for the defendant’s conduct.\textsuperscript{154} Promoters in ICOs could theoretically pin investor losses on a host of other reasons, such as regulatory guidance issued from another country, the decline in the virtual currency market as a whole, or a hacking incident unrelated to the ICO at issue. Second, the SEC should remove—or at least reduce the threshold for—scienter. Many consumers lack a basic understanding of the virtual currency market and how blockchain-based projects function. Consumers are particularly vulnerable to how promoters represent themselves and their projects. A standard of scienter may enable bad actors to escape to escape liability. Given the unique risks and informational gap in the virtual currency markets, it should be easier for Plaintiffs to pursue Rule 10b-5 claims relative to traditional non-virtual currency Rule 10b-5 actions.

\section*{VI. CONCLUSION}

The SEC, in devising a regulatory scheme for ICOs, should take into account certain general principles to ensure the highest probability of effective and efficient regulation. First, the SEC should strive for a legal and

\begin{footnotesize}
\begin{enumerate}
\item[152.] 15 U.S.C. § 78j(b) (2010).
\item[154.] Erica P. John Fund, Inc., 563 U.S. at 804.
\end{enumerate}
\end{footnotesize}
regulatory framework that is clear in intent, scope and wording, without being overly prescriptive. In addition, the SEC should pursue adaptive, not reactive, regulation, keeping note of how technological innovation in ICOs can reshape traditional securities law notions and practices. Finally, the SEC must engage with international regulators, as effective regulation is “only achievable through the greatest possible international cooperation,” as individual countries possess limited regulatory power.

By developing ICO regulation in a timely manner and in accordance with the principles enumerated in this Article, the SEC would likely become the world’s leading ICO regulator. But the U.S., and more specifically the SEC, must keep in mind that it is not alone, and acting in concert with foreign jurisdictions is necessary to achieve a harmonious balance of protecting investors and allowing innovative blockchain based technologies to flourish. Should the SEC’s ICO regulation prove successful, other countries will likely follow suit, resulting in a global standard of ICO regulation closely aligned with U.S. securities laws and principles.

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155. CARLISLE, supra note 9, at 36.
156. Id.