SECURITIES LIABILITY AND THE ROLE OF D&O INSURANCE IN REGULATING INITIAL COIN OFFERINGS

ADRIAN PARLOW†

INTRODUCTION .............................................................................................................. 212
I. THE TRADITIONAL CORPORATE ANALOG: LIABILITY AND INSURANCE FOR IPO COMPANIES ...................................................... 217
II. MAPPING ONTO THE ICO CONTEXT ................................................................. 220
   A. Do Digital Coins/Tokens Qualify as Securities? ........................................... 220
   B. What Potential Liability Does a Company Conducting an ICO Face? ................. 224
   C. Which Parties May Face Liability Following an ICO? ...................................... 225
III. THE CASE FOR D&O INSURANCE FOR ICO COMPANIES ... 229
   A. Underwriting Criteria ..................................................................................... 232
   B. Risk-Based Pricing ......................................................................................... 233
   C. Contract Design ................................................................................................ 235
   D. Education and Risk Management ................................................................. 236
CONCLUSION .................................................................................................................. 237

† Senior Editor, Volume 167, University of Pennsylvania Law Review; J.D. Candidate, 2019, University of Pennsylvania Law School; B.A., 2015, Queen’s University. I owe my sincerest gratitude to my Comment supervisor, Professor Cynthia Dahl, for her diligent and thoughtful review of this Comment; to Professors Tom Baker and David Skeel and to Center for Technology, Innovation and Competition Fellow David Wishnick, for helping me think through, respectively, the insurance, corporate/securities, and crypto-related topics presented in this paper; to Kevin LaCroix, author of The D&O Diary blog, for critiquing my arguments from an expert’s perspective; and to Comments Editor, Volume 166, Max Linder and my Law Review editing team for their support throughout the process.
INTRODUCTION

We are in the midst of a revolution in financial markets, as cryptocurrencies based on blockchain technology promise a smart, decentralized, secure, and flexible means of conducting transactions. Since Bitcoin was introduced in 2009, cryptocurrencies have been steadily gaining in prominence and economic significance, shifting from fringe instruments linked to illicit drug marketplaces and money laundering\(^1\) to mainstream financial products used across the globe to store wealth, facilitate marketplaces, and provide platforms that support the development of new technologies. Bitcoin can now be readily converted to cash through a growing network of “Bitcoin ATMs,”\(^2\) can be hedged against using Bitcoin Futures that trade on derivatives markets,\(^3\) and is forcing major banks to adapt through direct investments in blockchain technologies\(^4\) and policies regarding the use of their funds in consumer cryptocurrency investments.\(^5\)

The year 2016 brought major changes to the cryptocurrency market, including the rise to prominence of utility-focused blockchain applications that offer greater functionality such as the operation of smart contracts.\(^6\) The most prominent of these, Ethereum (and its currency “Ether”), has become the second most widely traded cryptocurrency, with a market capitalization of approximately $53 billion (as compared to Bitcoin’s $117 billion) as of June 2018.\(^7\)

---


6. For a recent overview of smart contracts, see generally Jeremy M. Sklaroff, Comment, Smart Contracts and the Cost of Inflexibility, 166 U. Pa. L. Rev. 265 (2007).

Around this time the industry also saw the rise of Initial Coin Offerings (ICOs), funding mechanisms that resemble a hybrid of crowdfunding and venture capital (VC) financing, in which a set number of “coins” or “tokens” in a new crypto venture are offered for sale to the public. Individuals can then buy in using fiat currency or other cryptocurrencies such as Bitcoin and Ether. While in 2015 an exceptionally successful ICO might have raised only a few million dollars, in 2016 ICO raises of $150 million or more began appearing, conducted by what were essentially seed-stage companies that would have been unlikely to raise more than a few million dollars from venture capital firms or angel investors (the typical fundraising sources for such companies). In 2017, total ICO funding topped $3 billion, exceeding the total amount of VC investment in early stage Internet companies for the year.

However, despite the meteoric rise of ICOS as the funding method of choice for cryptocompanies, ICOs have been afflicted by a number of problems, including regulatory hurdles, fraudulent activity, and negative public perception. While reliable estimates are lacking, informed observers have repeatedly warned that many ICOs are fraudulent; with nothing but “a swanky website and an official-looking whitepaper,” dozens of ICOs have

---

8 See Chance Barnett, Inside the Meteoric Rise of ICOs, FORBES (Sept. 23, 2017, 1:21 AM), http://www.forbes.com/sites/chancebarnett/2017/09/23/inside-the-meteoric-rise-of-icos/#6c12de0e45670 [https://perma.cc/R2BJ-B49B] (reporting on the increase in capital raised via ICOs between 2015 and 2017). The first raise of this size was conducted by The DAO, which raised $150 million in a few days but was later plagued with legal issues when the SEC ruled its coin to be a security. See infra Section II.A.

9 Barnett, supra note 8. To further exemplify the magnitude of ICO fundraising, the fifty largest ICOs of all time have raised an average of $59 million. Id. Yet this is typically the first major fundraising event for these companies; for example, none of the three largest ICOs (FileCoin, Tezos, and EOS) had raised more than a seed round prior to their ICOs, which raised over $220 million on average. Block.one, CRUNCHBASE, http://www.crunchbase.com/organization/block-one [https://perma.cc/G48G-MMGR] (last visited Aug. 5, 2018); Filecoin, CRUNCHBASE, http://www.crunchbase.com/organization/filecoin [https://perma.cc/YC5X-SG2F] (last visited Aug. 5, 2018); Tezos, CRUNCHBASE, http://www.crunchbase.com/organization/tezos [https://perma.cc/2APT-YYQG] (last visited Aug. 5, 2018).

10 See Jillian Harris, Andrew M. Ray & Elizabeth H. Baird, SEC Steps on the Gas To Deter Fraudulent ICOs, LEXOLOGY (Feb. 15, 2018), http://www.lexology.com/library/detail.aspx?g=1460236-57b4-4056-944a-993da089fc2 [https://perma.cc/7QWL-KKGB] (stating that funding via ICOs has surpassed this more traditional fundraising method, while warning that this emerging asset is encountering increased attention from the SEC).


12 Matsakis, supra note 11. Whitepapers are instruments used to describe crypto projects to the public and typically discuss the technology and product to be developed, the founders’ goals and projected milestones, and the structure of the organization. Crypto Tips, Learning Crypto: Understanding White Papers, MEDIUM (Nov. 17, 2017), http://medium.com/@blockchainchick/learning-crypto-understanding-white-papers-3c2c3cd3be91 [https://perma.cc/4BL-L6UB4].
raised money for what have later turned out to be Ponzi schemes or fake companies whose owners steal the money and disappear.\textsuperscript{13} There are a number of factors that have contributed to these concerning circumstances. The decentralized nature of the technology means that large amounts of money can flow through ventures without a central financial institution present to act as a guarantor.\textsuperscript{14} The targeting of ordinary people, rather than sophisticated VC firms or wealthy individuals,\textsuperscript{15} means that few investors have the expertise or the financial incentive to engage in costly due diligence to ensure the veracity of a firm’s claims. The absence—until very recently—of significant regulatory oversight has meant that the ICO process is largely nonstandardized, giving firms significant latitude to include false or misleading information in their investment solicitation materials or to omit important information. Finally, the frothiness of the cryptomarket has meant that investors have at times been willing to accept significant risk of being defrauded in return for the potential for astronomical returns.\textsuperscript{16}

\textsuperscript{13} See Matsakis, supra note 11 (reporting that companies like Prodeum, OneCoin, and Confido were based in fraud). Cryptocurrency companies are also frequent targets of hackers; according to a recent analysis by Ernst & Young, ten percent of the money raised through ICOs so far has been stolen or has disappeared. \textit{Id}.\textsuperscript{14} See Michael J. Casey & Paul Vigna, In Blockchain We Trust, MIT TECH. REV. (April 9, 2018), http://www.technologyreview.com/s/610781/in-blockchain-we-trust [https://perma.cc/EUM4-D4YP] (“What makes a blockchain a special kind of ledger is that instead of being managed by a single centralized institution, such as a bank or government agency, it is stored in multiple copies on multiple independent computers within a decentralized network.”). While blockchain technology’s self-verification mechanisms are one of its central characteristics, reducing fraudulent behavior in the system and supposedly obviating the need for centralized institutions, they do little to address the potential for fraud in the ICO process itself. For example, blockchain technology is not capable of assessing the veracity of a company’s claims regarding its technology or the soundness of its financial and governance structures. In other words, while blockchain technology does a good job of ensuring that coins sent from point A will safely arrive at point B, it does not ensure that once the company receives its ICO funds, it will follow through with the claims in its marketing materials or will not simply take the money and disappear.\textsuperscript{15} Regulatory scrutiny of ICOs has recently intensified. See \textit{infra} notes 17–18 and accompanying text. In response, some law firms have begun to recommend that companies offer tokens only to accredited and non-U.S. investors in order to take advantage of safe harbors within the federal securities laws, such as Rule 506 of Regulation D of the Securities Act of 1933. \textit{How Private Placement ICOs Are Beginning To Explode}, IBC GRP. (Sept. 6, 2018), http://ibcgroup.io/how-private-placement-icos-are-beginning-to-explode [https://perma.cc/968Z-E94W]. While this significantly changes the nature of the ICO transaction, making it look more like a typical syndicated VC financing, it does not prevent uninformed “mom and pop” investors from later purchasing these tokens through a secondary market.\textsuperscript{16} See Wolf Richter, 3 Charts Show the Crazy Gains of Cryptocurrencies, BUS. INSIDER (May 15, 2017, 8:39 PM), http://www.businessinsider.com/bitcoin-price-compared-to-other-cryptocurrencies [https://perma.cc/JEJ-JRNJR] (discussing the rapid growth in the value of cryptocurrencies since 2015); Steve Stecklow, Alexandra Harney, Anna Irrera & Jemima Kelly, Chaos and Hackers Stalk Investors on Cryptocurrency Exchanges, REUTERS (Sept. 29, 2017, 10:00 AM GMT), http://www.reuters.com/investigates/special-report/bitcoin-exchanges-risks [https://perma.cc/ANQ-QX3G] (“These exchanges, which match buyers and sellers and sometimes hold traders’ funds, have become magnets for fraud and mires of technological dysfunction, . . . posing an underappreciated risk to anyone who trades digital coins.”).
Since mid-2017, the SEC has adopted an increasingly aggressive stance in regulating ICO activity, including announcing a new Cyber Unit—whose roles include combating “[v]iolations involving distributed ledger technology and initial coin offerings”—and bringing a number of enforcement actions against companies for securities fraud and unregistered offerings of securities. There has been significant uncertainty as to whether cryptoassets like coins and tokens actually qualify as securities and are therefore subject to SEC oversight. In a July 2017 enforcement against an organization called The DAO, the SEC articulated its view that tokens with strong equity-like characteristics are in fact securities, but did not extend its analysis to more borderline cases such as utility-based coins. SEC Chairman Jay Clayton has taken a broad view of what qualifies as a security, opining that “[b]y and large, the structures of initial coin offerings that I have seen promoted involve the offer and sale of securities and directly implicate the securities registration requirements . . . of our federal securities laws.” However, it remains to be seen exactly what types of coins or tokens will be caught in the SEC’s dragnet.

Given the current state of the ICO market—fraught with fraudulent activity, lacking in industry norms and best practices, and regulated by an
incomplete and highly uncertain regulatory framework—there is significant latitude for alternative regulatory influence from what I term “pseudoregulators”—nongovernmental bodies who exert regulatory influence over an industry by nature of their relationship with that industry rather than by any statutorily granted authority. For example, stock exchanges such as the NYSE promote industry best practices through rules and listing requirements, which were particularly important prior to the creation of the SEC in 1933.\(^\text{23}\)

An entity with one of the greatest potentials for exerting pseudoregulatory influence on the ICO market is the directors’ and officers’ (D&O) insurer. D&O insurance aimed specifically at cryptocompanies only became available beginning in early 2018, and the available coverage options are extremely limited.\(^\text{24}\) The development of a more robust and accessible market for this insurance could play an important role in altering the characteristics of ICO companies.\(^\text{25}\) D&O insurers have played a well-documented role in regulating the risky activities of their insureds and of their target markets more generally through measures like underwriting criteria, risk-based pricing, intelligent contract design, and engagement with education and public regulation.\(^\text{26}\) In the ICO context, the availability of D&O insurance—an important risk-reducing measure for a company’s managers and shareholders—could prompt firms to comply with insurers’ underwriting and pricing criteria, thereby moving towards more standardized and legitimate corporate activities that would promote the long-term success of the financial technology industry.

\(^{23}\) The NYSE’s higher level of scrutiny could perhaps also help to explain why NYSE companies are the subject of fewer securities class action lawsuits than NASDAQ companies. CORNERSTONE RESEARCH, SECURITIES CLASS ACTION FILINGS—2017 YEAR IN REVIEW 33 (2018), http://www.cornerstone.com/Publications/Reports/Securities-Class-Action-Filings-2017-YIR [https://perma.cc/W8TC-M3ME]. It is worth noting that the effectiveness of the NYSE at self-regulation has appropriately been questioned in recent years. See, e.g., Nan S. Ellis et. al., The NYSE Response to Specialist Misconduct: An Example of the Failure of Self-Regulation, 7 BERKELEY BUS. L.J. 102, 145-48 (2010) (emphasizing that self-regulation leads to players acting in their own self-interest and having conflicting goals in arguing that self-regulation is ineffective).

\(^{24}\) See ICO Seeking D&O? Here’s What You Need To Know!, GB&A INS., http://www.gbainsurance.com/ICO_DandO_Need_To_Know_218 [https://perma.cc/BM2G-88YW] [hereinafter ICO Seeking D&O?] (characterizing the D&O insurance landscape for ICOs as elusive and stating that five or fewer insurers will offer coverage); see also Garrett Koehn, D&O for ICO?, LINKEDIN (Aug. 31, 2017), http://www.linkedin.com/pulse/do-ico-garrett-koehn [https://perma.cc/D7MZ-S5LX] (noting the difficulties in offering D&O insurance for ICOs, particularly the risky nature of ICOs).

\(^{25}\) I use this term loosely to denote companies that are planning an ICO in the near future or who have recently undergone one.

\(^{26}\) See Tom Baker & Rick Swedloff, Regulation by Liability Insurance: From Auto to Lawyers Professional Liability, 60 UCLA L. REV. 1412, 1419-20 (2013) (noting that insurers encourage the insured to operate in a less risky manner by factoring riskiness into price; underwrite, collecting information to assess risk and decide whether or not to insure an entity; and add limits, deductibles, coinsurance terms, and carveouts to contracts to limit the transfer of liability from the insured to the insurer); see generally TOM BAKER & SEAN J. GRIFFITH, ENSURING CORPORATE MISCONDUCT: HOW LIABILITY INSURANCE UNDERMINES SHAREHOLDER LITIGATION (2010) (reporting the results of an empirical analysis of D&O insurers’ role in shareholder class action securities lawsuits).
This Comment will proceed as follows. In Part I, I begin by discussing securities liability and the D&O insurance that covers it in the context of traditional public corporations that have recently completed an initial public offering (IPO).

In Part II, I apply these concepts to cryptocompanies that are considering doing or have recently undergone an initial coin offering (ICO). I first examine whether cryptoassets like coins and tokens are even subject to securities regulations, then proceed by discussing what types of liability a post-ICO company might be subject to and which individuals affiliated with such a company could be targeted for such liability.

Finally, in Part III, I apply concepts from traditional D&O insurance as well as cyber insurance to the ICO context, examining how D&O insurance for post-ICO companies might function. Specifically, I examine four ways that insurers could have a positive impact on the structure and governance of the ICO industry.

I. THE TRADITIONAL CORPORATE ANALOG: LIABILITY AND INSURANCE FOR IPO COMPANIES

Because an ICO is the initial offering of a security-like instrument to the public, an IPO is the most analogous transaction for which there is sufficient information on the attendant legal risks. Therefore, despite marked differences in the mechanisms by which ICOs operate as compared to previously available funding methods, it is useful to first examine the IPO to gain a baseline understanding of the liability and insurance issues attendant to this type of transaction.

Shareholder litigation represents the most significant source of D&O risk to public corporations.\(^{27}\) In 2017, 8.4% of public companies listed on the NASDAQ and NYSE were the subject of securities class action lawsuits,\(^{28}\) with average market capitalization losses of $667 million from such suits.\(^{29}\) The most prevalent liability provisions in these suits are Rule 10b-5 of the Securities Exchange Act of 1934 (“Rule 10b-5”), and sections 11 and 12(2) of the Securities Act of 1933 (“section 11” and “section 12”); roughly half of the 2017 filings contained allegations related to these provisions.\(^{30}\) Collectively, these provisions provide private rights of action that can be asserted against a seller of securities for false or misleading representations or material omissions related to the purchase or sale of securities. More specifically, sections 11 and 12 impose strict


\(^{28}\) CORNERSTONE RESEARCH, supra note 23, at 10.

\(^{29}\) Id. at 39. This represents a landmark year for total number of filings, with a 52% increase over 2016 and “more than double the 1997–2016 average.” Id. at 1.

\(^{30}\) Id. at 9-10.
liability on an issuer of securities for misrepresentations or omissions made in securities registrations, prospectuses, and oral statements related to the sale, while Rule 10b-5 is a catchall antifraud provision that is more broadly applicable but is also more difficult to prove. Furthermore, section 12(1) provides a cause of action for the solicitation or sale of unregistered securities in violation of section 5 of the Securities Act (“section 5”), which prohibits the sale of any security “unless a registration statement has been filed as to such security.” A variety of parties can be held liable under section 11, including not only the issuer but also the directors of the issuer, every person who signs the registration statement, experts who certify or help prepare the registration statement (for their relevant portions), and the security’s underwriters. Under section 12, any person who offers or sells a security in violation of the section can be held liable, including both issuers and underwriters. Furthermore, section 15 of the Securities Act and section 20 of the Exchange Act (“section 15” and “section 20”) impose secondary liability on persons who “control” the acts of those found liable under sections 11 and 12 and any provision of the Exchange Act (including Rule 10b-5), respectively. This means liability can in some cases be extended to a variety of people, such as controlling shareholders, directors, and creditors.

While firms and their directors and officers always face some risk of securities-related liability, this risk is greatly magnified following major

---

32 Id. § 77l(a)(2).
34 See id. at 63 (“In general, to prevail on a Rule 10b-5 claim, a plaintiff must prove that the defendant (1) made a false statement or an omission of material fact, (2) with scienter, (3) in connection with the purchase or sale of a security, (4) upon which the plaintiff justifiably relied, and (5) which proximately caused (6) the plaintiff’s economic loss.”).
36 Id. § 77e(c); see also Vizcarrondo, supra note 33, at 42 (noting that, under section 12(1), offering or selling an unregistered security creates liability).
37 Vizcarrondo, supra note 33, at 27-28.
38 Id. at 44-45.
39 “Control” means “the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise.” 17 C.F.R. § 230.405 (2017).
40 Vizcarrondo, supra note 33, at 140.
41 See id. at 141 (stating that the unclear breadth of the term “control” means the potential reach of liability can include these groups if they have sufficient power of influence).
transactions such as mergers and IPOs. This is especially true when the transaction at issue did not initially produce a favorable result, or where an initially promising result led to poor financial performance in the following months. Due to this peak in risk so early in a new public company’s life, many companies first purchase a D&O policy around the time of their IPO while others shift from a private company policy to a public company policy, bringing significant differences in the scope of coverage. It is the new public company policy that is responsible for covering the liability risk associated with the IPO itself.

D&O insurance policies typically contain three types of coverage: coverage for directors and officers of the corporation for losses arising from shareholder litigation (“Side A” coverage); coverage for the corporation in the event that it is required to indemnify its directors or officers for such losses (“Side B” coverage); and coverage for the corporation for losses related to the corporation itself being named as a party in shareholder litigation (“Side C” coverage). Companies typically purchase all three types of insurance together in a package; it is rare that they would purchase only one type of coverage. D&O insurance typically covers damages awards, settlement amounts, and attorneys’ fees related to the litigation. There are three main

43 See CORNERSTONE RESEARCH, supra note 23, at 22 (“[N]ewer public companies are subject to securities class actions more frequently than their larger, more established counterparts in the S&P 500 Index.”).

44 For example, Snap and Blue Apron were both recently named in securities class action suits following the release of disappointing first-quarter financials. See Jon Hill, Snap Hit with Investor Suit Claiming Misleading Metrics, LAW360 (May 17, 2017, 1:49 PM EDT), http://www.law360.com/articles/925088/snap-hit-with-investor-suit-claiming-misleading-metrics [https://perma.cc/WVV8-XKQ6] (reporting that Snap Inc. was sued by investors claiming its registration statement contained misleading information meant to inflate the company’s valuation); Sophia Morris, Blue Apron Hit with Stock Drop Suit After IPO, LAW360 (Aug. 21, 2017, 3:39 PM EDT), http://www.law360.com/articles/95728 [https://perma.cc/SKy9-WTJDK] (reporting on suit brought against Blue Apron two months after its IPO based on claim that the company was aware its financial performance would not match the statements in its registration statement and prospectus).


46 See Joseph D. Jean & Janine M. Stanisz, Insurance 101: Private Companies Need Directors’ and Officers’ Insurance Too, 27 INS. COVERAGE LITIG., May 2, 2017, at ii (stating that D&O insurance bought by private companies is often more comprehensive than the coverage public companies have).

47 See Baker & Griffith, supra note 27, at 499 (defining these three categories of coverage). Note that “D&O insurance” refers to all three types of coverage, despite the fact that Side B and Side C coverage reimburse the corporation directly rather than its directors and officers.

48 See Griffith, supra note 45, at 1168 (noting that “corporations buy insurance packages” rather than a single type of coverage).

49 See Baker & Griffith, supra note 27, at 500 (listing losses typically covered by D&O insurance).
exclusions from coverage, the most significant being claims involving fraud or personal enrichment by the insureds.30

II. MAPPING ONTO THE ICO CONTEXT

While considering a company’s liability risk following an IPO is helpful in developing concepts that can be applied in the ICO context, there are still significant gaps that need to be addressed. To date there have been only a handful of ICO-related class action lawsuits, which began to arise in late 2017;51 almost all of these are still pending.52 While these suits will no doubt be illuminating should they go to trial, it may be some time before there is any substantive clarity on how these cases will be handled.

This Part will address several open questions that are important in determining the nature of shareholder litigation for ICOs. First, I will examine which types of cryptoassets actually qualify as securities, and are therefore subject to SEC oversight. Second, I will apply concepts from the IPO realm to examine what types of liability companies are likely to face following an ICO. Third, I will explore the parties that could potentially face liability, which varies based on the governance structure of a given company.

A. Do Digital Coins/Tokens Qualify as Securities?

In order for an ICO to be subject to the federal securities laws, it must qualify as a sale or offer of securities. To date, almost every ICO-related class action lawsuit has alleged a violation of section 5,53 which prohibits the offer and sale of unregistered securities. Section 11, also alleged in ICO lawsuits,

50 The excluded conduct is “often defined as a ‘dishonest or fraudulent act or omission or any criminal act or omission or any willful violation of any statute, rule or law.’” Id. (quoting EXECUTIVE RISK INDEMNITY, INC., BROAD FORM DIRECTORS AND OFFICERS LIABILITY INSURANCE § III(A)(3) (1996)). Other typical exclusions include claims that existed prior to the start of the policy and litigation among two or more insureds. Id. at 500-01.

51 See CORNERSTONE RESEARCH, supra note 23, at 6 (“In the second half of the year, a new phenomenon emerged. There were five class actions related to initial coin offerings, or ICOs, of cryptocurrencies.”).


54 Section 12(a)(1), 15 U.S.C. § 77e(a)(1), provides a private cause of action to anyone who purchases a security that was sold in violation of section 5.
prohibits false or misleading statements made in securities registration statements. Therefore, a company can effectively circumvent the federal securities regulation if it is able to successfully claim that its coins or tokens are not securities. This topic has already been described in a number of publications; my goal here is to summarize what information currently exists and to introduce a new heuristic for evaluating a given coin or token.

A security is defined as “any note, stock, treasury stock, security future, security-based swap, bond . . . [or] investment contract.” Cryptocurrencies that embody aspects of securities run the risk of being classified as investment contracts, which are (1) investment(s) of money (2) in a common enterprise (3) with a reasonable expectation of profits (4) to be derived from the entrepreneurial or managerial efforts of others (the “Howey test”). In July 2017, the SEC provided us with its first detailed guidance regarding the application of this definition to cryptocurrencies in its Report of Investigation of The DAO. The DAO had issued “DAO Tokens” in an ICO that raised $150 million worth of Ether to create what was essentially a decentralized venture capital fund. The DAO Tokens allowed the holders to “earn profits by funding projects that would provide [them] a return on investment,” and to vote on which projects the fund should undertake. The cofounder of the company backing the ICO compared the tokens to “buying shares in a company and getting . . . dividends.” Following the four prongs of the Howey test, the SEC concluded that the DAO Tokens were in fact securities. First, purchasers of the tokens had invested money through their exchanges of Bitcoin and Ether; “money” can include other sources of value beyond cash. Second, the investors had a reasonable expectation of profits, as the project was

55 VIZCARRONDO, supra note 33, at 27.
56 See, e.g., Clements, supra note 20 (discussing the ambiguity of the SEC’s DAO decision, particularly that it is unclear exactly what will make a coin qualify as a security and how a company can avoid its coin being subject to federal securities law); John Reed Stark, The SEC and ICOs: Winter is Coming, D&O DIARY (Nov. 14, 2017), http://www.dandodiary.com/2017/11/articles/securities-laws/guest-post-sec-icos-winter-coming [https://perma.cc/WHT5-DQFW] (noting that some ICO companies admit their tokens are securities while others attempt to distinguish their tokens from securities).
58 See DAO, supra note 20, at 11 (citing SEC v. W.J. Howey Co., 328 U.S. 293, 301 (1946)). This definition is also known as the Howey test.
60 See DAO, supra note 20, at 3-6 (describing the structure of The DAO as “allow[ing] for voting by investors holding DAO Tokens” on the “funding of projects that would provide DAO Token holders a return on investment”).
61 Id. at 5-6.
62 Id. at 4.
63 Id. at 11.
constructed to generate returns that would be distributed to its token holders periodically.\textsuperscript{64} Third, these profits were to be derived from the managerial efforts of others, because token holders “had little choice but to rely on” the expertise of The DAO’s Curators—the central personnel responsible for “monitoring the operation of The DAO, safeguarding investor funds, and determining whether proposed contracts should be put for a vote.”\textsuperscript{65}

While the SEC’s findings were illuminating in some respects, the fact that the DAO Tokens closely emulated the characteristics of traditional corporate stock made this case rather clear cut. It remains much less clear whether coins that lack these equity-like characteristics are in fact securities. I would like to introduce a framework for considering the issue that categorizes cryptoassets into four types:\textsuperscript{66} coins that operate as digital stores of value, much like a traditional fiat currency (StoVaCoins);\textsuperscript{67} coins whose value is tied to the value of another asset such as gold or the U.S. dollar (StableCoins);\textsuperscript{68} coins that function like securities by providing ownership interest in some common enterprise (EquiCoins);\textsuperscript{69} and coins that provide additional network utility either by acting as digital “gas,” which can

\textsuperscript{64} See id. at 11-12 (“[T]he various promotional materials . . . informed investors that The DAO was a for-profit entity whose objective was to fund projects in exchange for a return on investment.”). SEC chairman Jay Clayton commented:

It is especially troubling when the promoters of these offerings emphasize the secondary market trading potential of these tokens. Prospective purchasers are being sold on the potential for tokens to increase in value – with the ability to lock in those increases by reselling the tokens on a secondary market – or to otherwise profit from the tokens based on the efforts of others. These are key hallmarks of a security and a securities offering.

Clayton, \textit{supra} note 22.

\textsuperscript{65} DAO, \textit{supra} note 20, at 12-13. “The central issue is ‘whether the efforts made by those other than the investor are the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise.’” Id. (quoting SEC v. Glenn W. Turner Enters., Inc., 474 F.2d 476, 482 (9th Cir. 1973)).

\textsuperscript{66} This framework is borrowed from an excellent Steemit article: Basiccrypto, \textit{Is Your Crypto Digital Gold, Gas, or Something Else?}, STEEMIT (Aug. 2017), http://steemit.com/cryptocurrency/@basiccrypto/is-your-crypto-digital-gold-gas-or-something-else [https://perma.cc/S4SL-8SZ7].

\textsuperscript{67} Examples of StoVaCoins are Bitcoin and Litecoin. These coins only have value to the extent that the market agrees they do and are willing to accept them as payment for goods and services or in exchange for other assets. They do not provide any additional utility beyond the storage and transfer of wealth.

\textsuperscript{68} For example, Tether is a currency pegged to the U.S. dollar, the euro, or the yen. TETHER, http://tether.to [https://perma.cc/MRzL-KPQg] (last visited June 27, 2018).

\textsuperscript{69} The DAO Token is one example. See \textit{supra} notes 58–65 and accompanying text. Another example is Protostarr, a company that issues coins allowing investors to sponsor online content creators and receive a portion of the profits creators receive from that content. This company voluntarily shut down after a call from the SEC shortly after The DAO report was released. See Laura Shin, \textit{After Contact By SEC, Protostarr Token Shuts Down Post-ICO, Will Refund Investors}, FORBES (Sept. 1, 2017, 2:19 AM), http://www.forbes.com/sites/laurashin/2017/09/01/after-contact-by-sec-protostarr-token-shuts-down-post-ico-will-refund-investors/#3b66612c192e [https://perma.cc/D3SN-YZER] (reporting that Protostarr refunded the money it had collected in its ICO after the SEC began investigating the company).
be used to build new blockchain-based applications or execute tasks such as
smart contracts,70 or by providing access to a distributed resource such as
remote computing power71 or file storage72 (UtiliCoins).

It is apparent that StoVaCoins and StableCoins are highly unlikely to be
classified as securities given their strong currency-like characteristics, and it is
equally apparent (especially after The DAO ruling) that EquiCoins are
securities; the major open question is the classification of UtiliCoins. SEC
Chairman Jay Clayton has expressed his view that simply adding utility to an
otherwise equity-like coin should not safeguard it from regulation.73 That being
said, it remains to be seen how broadly courts will interpret the Howey
test’s “reasonable expectation of profits derived from the . . . efforts of others.”74

It will be difficult to determine on a case-by-case basis whether the investors
in a UtiliCoin ICO expected profits via an appreciation in the coins’ value,
whether they merely purchased the coins for their utilitarian characteristics, or
whether their motive was a combination of the two. The SEC has indicated
that the type of marketing and publicity statements made by companies in
describing their tokens is likely to have a material impact on whether investors
in a subsequent ICO have a reasonable expectation of profits.75 UtiliCoins are
a rather unique asset class in that their nature is dual purpose (both utility and
speculation), and unlike investments in other dual-purpose assets such as real

---

70 The typical example of a “gas” UtiliCoin is Ether, which allows users to execute smart
contracts and create new applications and cryptocurrencies based on the Ethereum blockchain
by paying a fraction of one Ether for each transaction. See Basicrypto, supra note 66 (calling Ether
“the prototypical UtiliCoin”).

71 For example, Golem. GOLEM, http://golem.network [https://perma.cc/t7K7-K5M9] (last

72 For example, Storj and SiaCoin. DECENTRALIZED CLOUD STORAGE—STORJ, http://storj.io

73 See Clayton, supra note 22 (“[C]ertain market professionals have attempted to highlight
utility characteristics of their proposed initial coin offerings in an effort to claim that their proposed
tokens or coins are not securities. Many of these assertions appear to elevate form over
substance. Merely calling a token a ‘utility’ token or structuring it to provide some utility does not
prevent the token from being a security.”).


75 See Clayton, supra note 22 (“Tokens and offerings that incorporate features and marketing efforts
that emphasize the potential for profits based on the entrepreneurial or managerial efforts of others
continue to contain the hallmarks of a security under U.S. law.”); see also Press Release, U.S. Sec. &
Exch. Com’n, Company Halts ICO After SEC Raises Registration Concerns (Dec. 11, 2017),
fact that Munchee Inc. “emphasized that investors could expect that efforts by the company and others
would lead to an increase in value of the tokens” and that “it would take steps to create and support a
secondary market for the tokens” indicated that investors had a reasonable expectation of profit).
estate, the distributed and easily divisible nature of UtiliCoins allows holders to readily realize either the coins’ utility or their profit-generating ability.76

Furthermore, it is uncertain, in the context of decentralized organizations like The DAO, what constitutes profit that is generated “from the entrepreneurial or managerial efforts of others.”77 In its section 21(a) Report of Investigation, the SEC opined that conducting a variety of activities such as marketing, maintaining a website and forums, and proposing profit-generating investment opportunities for the pooled funds was sufficient to satisfy the last prong of the Howey test.78

B. What Potential Liability Does a Company Conducting an ICO Face?

The SEC has indicated that ICOs for coins with strong securities-like characteristics will be regulated in much the same way as IPOs, meaning an offeror will need to either register as a public offering of securities or seek a valid exemption such as Regulation D.79 If the offering is made to the general public and is unregistered, a section 5 claim is the easiest target for potential plaintiffs, as section 12(1) provides that those who issue securities in violation

76 To expand upon the real estate analogy, consider an agreement between a number of investors to purchase several houses. Based on the form of the contract, it will be easy to infer whether the purpose of buying these houses is speculation, or whether the investors intend to live in the houses. With digital assets like UtiliCoins, however, it is impossible to discern each user's intent in purchasing the coins, because a user may at his whim expend the coins for his utilitarian value or sell the coins to generate profit.

77 DAO, supra note 20, at 11. A DAO, or Decentralized Autonomous Organization (which The DAO made itself out to be), is "a business or organization whose decisions are made electronically by a written computer code or through the vote of its members. In essence it is a system of hard coded rules that define which actions an organization will take." Universa, Decentralized Autonomous Organization—What Is a DAO Company?, MEDIUM (Nov. 28, 2017), http://medium.com/universablockchain/decentralized-autonomous-organization-what-is-a-dao-company-e6b9e472f23e [https://perma.cc/VLJ4-544C]; see also Laura Shin, ICOs: Why People Are Investing In This $380 Million Phenomenon, FORBES (May 16, 2017, 8:00 AM), http://www.forbes.com/sites/laurashin/2017/05/16/icos-why-people-are-investing-in-this-380-million-phenomenon/#5a6bb1c111a1 [https://perma.cc/5R8V-LFRE].

78 DAO, supra note 20, at 12. Interestingly, The DAO did not succeed in becoming truly decentralized—a German corporation and a network of hand-picked curators were ultimately responsible for most of the business decisions. Theoretically, if an organization were to become truly decentralized by resting ultimate authority with its token holders and giving them full information rights, any profits generated might no longer be considered "derived from" the efforts of the centralized managers. It is also unclear, however, whether investors would be able to exercise a meaningful amount of control, even with adequate voting rights, when their ownership interests are widely dispersed.

79 Many companies are now using Rule 506(c), 17 C.F.R. § 230.506(c) (2017), to conduct their ICO, which exempts the offering from most registration requirements so long as it is only made to accredited investors (as defined by 17 C.F.R. § 230.501), who receive securities that cannot be sold for at least six months without SEC registration. Fast Answers: Rule 506 of Regulation D, U.S. SEC. & EXCH. COMM’N, http://www.sec.gov/fast-answers/answers-rule506htm.html [https://perma.cc/NC6E-J62D] (last updated Nov. 27, 2017).
of section 5 are strictly liable, meaning the plaintiff need only show that the coin was a security and that he purchased it. The remedy in this case is generally rescission: the plaintiff returns his coins and is refunded his purchase price plus interest. At a class action scale, this liability is likely to be ruinous, especially for a company whose coins have declined in value since its ICO. Rule 10b-5 and section 12(2) are also available to plaintiffs when the offering is unregistered, providing a cause of action for false or misleading statements or omissions of material fact related to the offering. ICOs that have been registered with the SEC will likely be subject to the same liability provisions as IPOs, as discussed in Part I above.

Even if an issuer in an ICO may believe that its coin is not a security, this will not necessarily dissuade costly nuisance suits alleging violations of section 5. Furthermore, while the federal securities laws are the primary framework for analyzing legal issues in ICOs, even in cases where the coins are clearly not securities (such as those involving StoVaCoins or StableCoins), a variety of state law causes of action may still apply, such as blue sky laws and state fraud laws.

Finally, in the current regulatory climate, the threat of enforcement actions from the SEC or others is omnipresent. In many cases, the effect of such an action is similar to a lawsuit—the company is required to shut down and return all of its investors’ money.

C. Which Parties May Face Liability Following an ICO?

The first step in identifying the relevant actors with respect to D&O insurance is to determine who is at risk of liability following an ICO. In the case where a legitimate U.S. corporate entity, with managers and a board of directors, is the sole entity conducting the ICO, the answer is simple: as with IPO liability, risk falls to the corporation and its D&Os, as well as others

80 VIZCARRONDO, supra note 33, at 44. Note, however, that this cause of action still subject to certain caveats and defenses. See id. at 44–45.
81 Id. at 50.
82 See supra notes 30–34 and accompanying text.
83 Lindsay Lin, Why ICOs Should Want To Be Securities, COINDESK (Oct. 2, 2017, 12:05 UTC), http://www.coindesk.com/icos-want-securities [https://perma.cc/D8AY-KH54]. These causes of action are important because they would prevent a fraudulent “nonsecurities” ICO from evading responsibility. However, they have not frequently been invoked in ICO suits and enforcement proceedings to date.
involved in the transaction such as experts, underwriters, and “controlling persons.” Unfortunately, this situation is far from the reality for many ICOs, which are often conducted by organizations structured in nontraditional ways, such as supposedly “decentralized organizations” or as collections of individuals, corporate, and noncorporate entities. In these cases, courts and the SEC have determined on a case-by-case basis who the true principals who control the conduct of the enterprise are.

First, there have been a number of ICOs conducted by unincorporated, decentralized, or unincorporated and decentralized entities. For example, The DAO, or “decentralized autonomous organization,” attempted to structure itself as a truly decentralized entity whereby its token holders not only owned the company, but exercised managerial control over the entity’s assets as a collective. As discussed in Section II.A, The DAO was not successful in truly decentralizing its governance structure, due to the presence of centralized parties who retained meaningful control over the entity’s managerial decisions. Furthermore, regardless of whether true post-ICO decentralization is accomplished by a given entity, it seems doubtful that such a group of individuals could adequately disperse responsibility in order to avoid being targeted for liability. After all, some legal entity is generally required to perform the mechanical functions of the ICO, such as marketing, distributing tokens, and receiving funds (or other cryptocurrencies) in return. Even if the subsequent project was developed by a widely dispersed group of contributors, akin to open source software development, the initial “sponsoring” parties could still be held liable for violating the securities laws. In the case of The DAO, a German corporation named Slock.it wrote and deployed the necessary code on the Ethereum blockchain, launched a website to promote and provide information about the offering, solicited media attention, and created and updated online forums.

---

85 See supra notes 39–41 and accompanying text.
86 The decentralized nature of ICOs as a funding mechanism means that a collective action problem disincentivizes individual investors from conducting adequate due diligence, allowing companies with highly questionable governance and ownership structures to raise large amounts of capital.
87 Clements, supra note 20; see also Shin, supra note 77 (“People call them companies, and the analog in the traditional world is a company, but they’re really not companies. . . . [I]t’s best to think of them as decentralized autonomous organizations where there’s an entrepreneur and founding team but no legal entity . . . I really think of these structures as [I]nternet tribes . . . They’re collections of people from all over the world that own a token and have ownership in a product and want to bring a token to the world.”).
88 It is certainly possible that we will eventually reach a state of technological development at which these functions could be conducted automatically—that is, without human input. While we currently have methods of smart contracting that can automate certain aspects of the ICO process, such as the exchange of a currency (like Bitcoin or Ether) for the tokens being offered, we are far from being able to truly automate the process from start to finish.
89 DAO, supra note 20, at 4-5.
Tokens, investors were required to send Ether to The DAO’s Ethereum Blockchain address, which was initially set up by Slock.it. Thus, despite Slock.it’s attempts to hide behind the idea of a “decentralized” entity, the facts made it clear that Slock.it was in fact responsible for The DAO’s ICO.

Sponsoring entities like Slock.it can be held liable for their participation in a third party’s issuance of securities via the common law doctrine of participant liability, which states that the entity can be held liable “if the injury to the plaintiff flowed directly and proximately from [its] actions,” meaning that its “acts were both necessary to and a substantial factor in the sales transaction.” In the case of Slock.it, making this showing would be trivial since The DAO itself was essentially a shell entity prior to the ICO and thus Slock.it undertook all relevant steps to prepare and conduct The DAO’s ICO.

Finally, examining two other prominent ICOs, which were conducted by nontraditional entities and subsequently entangled in legal difficulties, will help clarify who is at risk of liability when an ICO organization consists of a collection of several individuals and legal entities. The PlexCorps ICO, which was conducted by a combination of three different legal entities and two natural persons, was shut down in the SEC’s newly established Cyber Unit’s first enforcement action. According to the report, PlexCorps “marketed and sold securities called PlexCoin on the Internet to investors in the U.S. and elsewhere, claiming that investments in PlexCoin would yield a 1,354 percent profit in less than 29 days.” In its motion for preliminary injunction against PlexCorps alleging violations of section 5 and Rule 10b-5, the SEC alleged that “PlexCorps, PlexCoin, and/or Sidepay are subject to suit, inter alia, as ‘unincorporated organizations’ under [s]ection 2(a)(2) of the Securities Act.” The SEC also named individuals Lacroix and Paradis-Royer, of whom the latter was the “sponsor and principal shareholder of an entity known as Sidepay Limited, incorporated in the United Kingdom.” The SEC was able to tie Sidepay and these individuals to PlexCorps via bank records, email, and physical addresses. Lacroix and Paradis-Royer argued that “PlexCorps was

90 Id. at 6.
91 SEC v. Murphy, 626 F.2d 633, 650 (9th Cir. 1980).
92 Indeed, in its Report of Investigation on The DAO, the SEC devoted only one paragraph to proving this point. See DAO, supra note 20, at 16 (“Moreover, those who participate in an unregistered offer and sale of securities not subject to a valid exemption are liable for violating [s]ection 5.”).
93 SEC Announces Enforcement, supra note 17.
96 Id.
97 Id.
not a suable entity, but rather a concept name, and therefore no action could be brought against it. The court promptly granted the preliminary injunction against PlexCorps, apparently accepting the SEC’s argument that it was in fact a suable entity.

Similarly, the Tezos ICO, which raised $232 million worth of Bitcoin and Ether (the second-largest ICO to date) was conducted by a Delaware corporation (Dynamic Ledger Solutions), a Swiss nonprofit foundation (Tezos Foundation), and a husband and wife pair (the Breitmans). The internal governance structure of these entities was messy, to say the least: according to the class action complaint filed against Tezos, it was unclear at the time who was actually controlling the Foundation due to infighting among the Breitmans and the head of the Foundation’s board of directors. The plan for the Tezos ICO was to raise funds via the Foundation, which would then acquire Dynamic Ledger Solutions, which held all the Tezos-related intellectual property. However, the specific terms of this acquisition were not disclosed to investors, and the acquisition was not required to take place until up to three years following the launch of the “Tezos Network,” which had no specified date. Furthermore, by the time the complaint was filed, the Breitmans were already alleged to have personally received tens of millions in cash. Due to the vast sum of money at stake and egregiousness of the terms of this ICO, several plaintiffs have since filed class action lawsuits (which as of March 2018 have been consolidated into one action) that name Dynamic Ledger Solutions, the Foundation, and the Breitmans as defendants.

The takeaway from these two cases is that both the SEC and courts are willing to look past entity boundaries and legal formalities to identify the principal actors responsible for an ICO. While there is, to date, no specific
information on what legal theories courts will use to tie the various entities together—for example, "controlling person" liability, participant liability, an agency relationship, or some kind of corporate syndicate—it is fairly certain that they will take a broad view of who can be pulled into this type of litigation.

III. THE CASE FOR D&O INSURANCE FOR ICO COMPANIES

As discussed in Part I above, D&O insurance is critical to both private and public companies' ability to manage risk, especially in an IPO situation. ICO companies would certainly be interested in purchasing D&O insurance given the riskiness of their industry if it could be done at a price and on terms that make economic sense. At the same time, the cryptocurrency industry represents a new market opportunity for D&O insurers, who have shown themselves willing to enter high-risk markets in the past. As of mid-2017, D&O insurance for ICO companies was practically nonexistent, leaving these companies with few risk-management options. In the intermittent months, despite the regulatory turmoil, a small number of options have materialized, though the scope of the available coverage appears to be quite limited. However, insurers who have entered the cryptomarket are currently enjoying

105 See supra notes 39–41 and accompanying text.
106 See supra note 91 and accompanying text.
107 See, e.g., Walkovszky v. Carlton, 223 N.E.2d 6, 9 (N.Y. 1966) ("The individual defendant is charged with having organized, managed, dominated and controlled a fragmented corporate entity.
108 See Karen Boto, Cryptocurrencies - To Insure or Not To Insure?, CLYDE & CO. (Aug. 29, 2018), http://www.clydeco.com/insight/article/cryptocurrencies-to-insure-or-not-to-insure [https://perma.cc/482U-JSGH] ("Many start-ups are raising funds digitally via Initial Coin Offerings (ICOs) and are consequently looking for cover for ICO related risks."); Kevin LaCroix, Cryptocurrencies and ICOs: Problems and Promise, D&O DIARY (Nov. 5, 2017), http://www.dandoiary.com/2017/11/articles/cyber-liability/cryptocurrencies-icos-problems-promise [https://perma.cc/TUM6-F6CL] ("It would be far too easy for D&O underwriters to... simply put a blanket prohibition on ICOs. However, the fact is that there is a business opportunity here, and... there is interest among the principals involved in ICOs for the kind of risk management protection that D&O insurance provides.").
109 For example, insurers who cover cybercrime and data breach liability. See infra notes 147–51.
110 See, e.g., Koehn, supra note 24 ("Raising capital increases liability, so those offering an ICO might have an interest in insurance. Insurance companies may also wish to offer coverage as a new market emerges. Nevertheless, at least for now, offering true D&O insurance that covers claims deriving from an ICO is unlikely.
111 See ICO Seeking D&O?, supra note 24 ("While coverage may be elusive, there are a handful of carriers willing to provide coverage... as in 5 or less. The marketplace may however expand slightly in the near future as insurers appear to be slowly and cautiously exploring this space."); Brian H. Mukherjee, Insurance for Cryptocurrencies: Tips for Maximizing Coverage, GOODWIN PROCTOR LLP (Jan. 16, 2018), http://www.goodwinlaw.com/publications/2018/01/01_16_18-insurance-for-cryptocurrencies [https://perma.cc/4DBD-KUMK] ("We are cautiously optimistic that options will increase as more insurers enter the market....").
112 See ICO Seeking D&O?, supra note 24 (stating that the handful of available policies tend to have high premiums, exclude Side C coverage, and carry large deductibles and aggressive exclusions).
“annual premiums [that] reportedly gulf those offered to other businesses for similar covers,” indicating that there is sufficient appetite for insurance from cryptocompanies to support these premiums. As the ICO market continues to develop and become less risky, insurance companies are in a unique position to wield their influence as pseudoregulatory institutions to impose legitimizing and stabilizing features onto the market. This Part will begin by discussing generally the means by which D&O insurers can potentially influence the conduct of their insureds and prospective insureds, and the degree to which they have been successful in doing so. Subsequently, Sections A through D will examine in more detail four potential mechanisms—underwriting criteria, risk-based pricing, contract design, and education and risk management—and how they might apply in the context of ICO insurance.

To begin, there is strong evidence to suggest that insurance companies are able to exert a regulatory influence on the industries they insure. The incentives for the insurer are simple: once they have underwritten a risk, it is in their best interest to take measures to reduce the magnitude of that risk. This leads to insurers engaging in loss prevention activities such as “advising clients on how to modify behavior to avoid losses” and engaging in research and education to identify industry best practices. Furthermore, the economics of insurance serves as a deterrent to risky behavior. Insurers respond to riskier activities by being less willing to insure at all (underwriting criteria), by charging higher premium amounts (risk-based pricing), and by including contractual terms in their policies that limit the magnitude and quality of the risk that the

113 Boto, supra note 108. Note also that companies’ willingness to pay substantially inflated premiums indicates they may also be willing to take other governance-related measures demanded by their insurers.

114 See, e.g., Baker & Griffith, supra note 26, at 2 (“D&O insurers . . . will have an opportunity to influence corporate conduct through the insurance relationship[,] . . . [including] through underwriting, monitoring, and the settlement of claims.”); Baker & Swedloff, supra note 26, at 1418 (“[I]nsurers manage the moral hazard of insurance, and hence . . . control or regulate their insureds.”); Omri Ben-Shahar & Kyle D. Logue, Outsourcing Regulation: How Insurance Reduces Moral Hazard, 111 Mich. L. Rev. 197, 213 (2012) (“[I]nsurers on occasion can provide public regulators with legislative blueprints to achieve society-wide improvements in risk reductions.”); Shauhin Talesh, A New Institutional Theory of Insurance, 5 U.C. Irvine L. Rev. 617, 625 (2015) (“[T]he insurance field’s institutionalized logics and political mobilization mediate and, at times, influence what law and compliance mean among private organizations, but they also shape the content and meaning of legislation, regulation, and court decisions.”); Shauhin A. Talesh, Data Breach, Privacy, and Cyber Insurance: How Insurance Companies Act as “Compliance Managers” for Businesses, 43 Law & Soc. Inquiry 417, 428 (2018) [hereinafter Talesh, Data Breach] (“Cyber insurance—through the risk management services that come with the insurance—provides a pathway for insurance institutions to gain influence over organizational decision making relating to compliance issues surrounding data breach and privacy.”).

115 Baker & Swedloff, supra note 26, at 1422.

116 Id. at 1422–23.
The insurer will bear (contract design). The latter three mechanisms form the core of D&O insurance’s regulatory influence in the corporate context.

However, at least in the context of publicly traded corporations, the empirical evidence indicates that insurers have limited success in managing their insured’s risk through the mechanisms described above, for a number of reasons. Though insurers attempt to price on the basis of risk, they do not feel that they are accurately able to do so. They do not generally require their prospective insureds to commit to any particular loss-prevention activities, nor are they willing to provide discounted premiums for doing so. They are also not generally successful in providing any kind of ex ante loss prevention services, primarily because agency costs between a corporation’s managers and shareholders render its managers essentially indifferent to “all but the most extraordinary securities class actions.” Insurers’ most effective tool for managing their insured’s risk is the structure of insurance contracts: large deductibles ensure that companies retain the incentive to control costs in the event of suit; caps on the amount of coverage available expose companies to potential liability in the event of serious securities fraud (involving large dollar amounts); and exclusions for a final adjudication of (intentional) fraudulent behavior prevent reimbursement for criminal conduct.

Yet despite the mixed results with publicly traded corporations generally, there is good reason to think that insurers will have significantly greater ability to regulate the cryptocurrency industry. The current paucity of D&O insurance options in this market means that, unlike in the traditional corporate context, those insurers who do offer policies wield considerable power. This will greatly increase insurers’ ability to implement the core aspects of their regulatory toolkit—underwriting criteria, risk-based pricing, and contract design. The fact that the cryptocurrency industry is so new and lacking in best practices will further empower ICO insurers to engage in activities like risk prevention services, research, and education.

---

117 Id. at 1419-20.
118 Id. at 1424-26.
119 Id. at 1424.
120 See id. (”[T]here is substantial evidence that insurers are not very confident about their ability to price on risk given that the pricing differentials are small in relation to the insured liabilities.”).
121 Id. at 1424-25.
122 BAKER & GRIFFITH, supra note 26, at 126. Once a company is sufficiently covered by D&O insurance, neither its managers nor the company itself is likely to face much, if any, liability as the result of “ordinary” securities fraud. Therefore, even though it may still be in the shareholders’ best interest to reduce the probability of suit through ex ante loss prevention, the managers have little incentive to take efforts to do so.
123 Baker & Swedloff, supra note 26, at 1425-26. Actual fraud, which generally requires scienter (intent to defraud), should be distinguished from general securities fraud, in which companies are strictly liable for false statements which may have been made mistakenly.
124 See supra note 113 and accompanying text (describing how insurers have had enough market power to demand much higher premiums for cryptocompanies than for companies in other industries).
A. Underwriting Criteria

First, insurers will much more easily be able to impose strict underwriting criteria on their insureds. In contrast to traditional D&O insurers, whose market is sufficiently crowded and clients are so large that the insurers have little power to demand engagement in loss-prevention activities, ICO insurers wield significant power over their prospective insureds. Put simply, a company that doesn't appreciate a prospective insurer's underwriting criteria cannot bring its business elsewhere. Furthermore, given the high degree of legal and regulatory uncertainty in the cryptocurrency market, would-be insureds have a strong need for insurance while insurers are hesitant to enter the market. These lopsided incentives have made insurance covering ICOs a valuable and scarce commodity, giving insurers the ability to adopt a take-it-or-leave-it approach to their underwriting criteria. This is perhaps the ICO insurer's best tool for steering the ICO market in a positive direction.

This raises the question—what kinds of preconditions for coverage should ICO insurers demand? Certainly, there are a number of factors that are fundamental to sound governance practices that cryptocurrency companies could adopt relatively easily. For example, U.S. based insurers could require that all operations and fundraising activity (including the ICO) be conducted through a single Delaware corporate entity, just as U.S. based venture capital firms typically require of the startups they invest in. This simple condition would vastly reduce the legal and regulatory uncertainty brought about by operation in foreign jurisdictions. Insurers could seek to eliminate the chance that a company's ICO is alleged to be an unregistered securities offering by requiring that it either register its coins as securities with the SEC or seek a no-action letter ruling that the SEC does not consider its coin to be a security. At the very least, insurers should require that companies seek a formal opinion, written by experienced legal counsel, as to whether their coins are securities.

Additionally, insurers could require certain preconditions that would reduce the likelihood of fraudulent or questionable behavior, which is still a

125 See BAKER & GRIFFITH, supra note 26, at 78 (“[I]f insurers refuse to cover very high risk corporations . . . then these firms must either change their practices or go uninsured.”).
126 See, e.g., Murray A. Indick, Flip Transactions: Taking Your Startup from Europe to the U.S., MORRISON & FOERSTER LLP (June 22, 2016), http://www.mofo.com/resources/publications/flip-transactions-taking-your-startup-from-europe-to-the-us.html [https://perma.cc/D4BE-QXFT] (“Although not impossible, raising money from U.S. investors as a foreign business is problematic because U.S. venture capitalists generally only invest in U.S. companies, where they are familiar with the legal and regulatory regimes and market norms.”).
127 See ICO Seeking D&O?, supra note 24 (“Outside of actually registering the ICO, providing a legal opinion to the underwriters is often the most persuasive at alleviating insurers’ concerns.”).
major concern for investors. For example, they could require that the company demonstrate its ability to succeed as a venture, such as having staff with sufficient domain expertise, detailed business plans, and a viable product or substantial progress toward one. This type of due diligence is more along the lines of what a venture capitalist might undertake, though at a lower degree of detail; the purpose is simply to ensure that the company will not crash and burn (or simply disappear) shortly after its ICO, triggering massive liability.

B. Risk-Based Pricing

Second, insurers will be better able to price on the basis of risk in the case of cryptocurrency companies. For traditional D&O insurers, the ability to accurately identify the risk profiles of their insureds is critical to their ability to operate profitably, and being better than their competitors at grading risk gives companies a significant competitive advantage. Despite these strong incentives, however, insurers are not actually very effective at pricing policies on the basis of risk. Baker and Griffith lay out a number of factors that lead to poor risk-based pricing, including personal incentives and biases of underwriters, effects of market competition, and the cyclical nature of the insurance market. That being said, some of these effects will not necessarily apply in the context of insurance for ICO companies, at least in the early days when insurers’ regulatory influence will be most needed. For example, the minimal competition among insurers and lack of established norms in pricing means that insurers will not feel pressured to price according to market rather than according to risk level.

128 While fraudulent behavior would likely be excluded from coverage through a policy’s fraud exception, there is also plenty of questionable behavior that may not qualify as outright fraud but is still likely to trigger company failure and subsequent lawsuits. See infra text accompanying note 129.

129 See Boto, supra note 108 (“It is likely that underwriters will need to heavily scrutinise the prospective insured’s . . . operations through to the integrity of people involved in the business.”).

130 Even this modest level of due diligence would have prevented a number of clearly fraudulent ICOs from being conducted. For example, Centra, a company endorsed by Floyd Mayweather that claimed to be creating a debit card for cryptocurrencies, was created by two twenty-two-year-olds with no experience in cryptocurrencies or computer science. The company raised $32 million in its ICO and was later revealed to have made up its CEO, lied about its partnerships with Visa and Mastercard, and falsely claimed it had a working product. Nathaniel Popper, How Floyd Mayweather Helped Two Young Guys from Miami Get Rich, N.Y. TIMES (Oct. 27, 2017), http://www.nytimes.com/2017/10/27/technology/how-floyd-mayweather-helped-two-young-guys-from-miami-get-rich.html [https://perma.cc/V3KF-22YS]; Sissi Cao, Investors Sue Celeb-Backed ICO: Company Has No Product or CEO, OBSERVER (Dec. 18, 2017, 5:44 PM), http://observer.com/2017/12/cryptocurrency-startup-centra-tech-sued-by-investors-over-ico-fraud [https://perma.cc/qMCH-TXzW].

131 BAKER & GRIFFITH, supra note 26, at 79-80.

132 Id. at 98-101.

133 See id. at 99 ("D&O insurers operate in a highly competitive and transparent market. . . . Insurers thus have ample opportunity and incentive to adjust their pricing on the basis of market factors that are not strictly relevant to the assessment of risk.").
Furthermore, in the context of a publicly traded corporation, the average standard of corporate conduct is relatively high and consistent across companies. Since companies are required to file extensive reports with regulators, send proxy solicitation materials to shareholders, and the like, there is a degree of oversight that makes it challenging to get away with the type of behavior that could trigger massive liability. This means that there is very little variation among companies’ observable risk levels relative to the potential liability. Therefore, relatively minor variations in corporate behavior can result in huge variations in liability, requiring insurers to pick through a company’s documents with a fine-tooth comb. It is therefore not surprising that insurers have trouble deciding which companies are riskier than others.

On the other hand, startup companies in general, and ICO companies in particular, vary wildly in their standards of corporate conduct. Some ICOs are conducted by established corporations that follow standard corporate governance procedures. Others are conducted by a patchwork of individuals and corporate entities, "decentralized" organizations, nonprofits in foreign tax havens, and the like. Since large variations in risk level are readily observable based on simple factors like corporate governance structure (indeed, factors which the insurers may be able to influence to some degree), prospective insurers will have some simple heuristics at their disposal which may help them separate the safer companies from the riskier ones. They may therefore be better able to price discriminate, which in turn will disincentivize risky business practices for those companies that seek insurance.

Even in the event a traditional D&O insurer is able to effectively price according to a company’s risk level, the threat of increased premiums may not be sufficient to deter risky behavior. In the context of large public companies for example, D&O premiums do not represent a large enough cost to cause managers to change their behavior—instead they would rather "simply pay their D&O premiums, whatever they are, and continue with business as

---

134 See Baker & Swedloff, supra note 26, at 1424 ("On the other hand, there is substantial evidence that insurers are not very confident about their ability to price on risk given that the pricing differentials are small in relation to the insured liabilities.").
135 Corporate risk managers report that insurers demand a "very thorough review and research into the guts of the finance [and] . . . operation of the company," which can take weeks and involve numerous meetings and presentations. BAKER & GRIFFITH, supra note 26, at 83.
136 E.g., supra notes 93–99 and accompanying text (discussing the PlexCorps ICO).
137 E.g., supra notes 87–92 and accompanying text (discussing The DAO’s attempt to conduct an ICO as a decentralized entity).
138 E.g., supra notes 100–04 and accompanying text (describing such an example in the Tezos ICO).
139 While it is true that there is much less information available about ICO companies generally as compared to their traditional corporate counterparts, much of this uncertainty impacts the likelihood of success of the venture, rather than its risk of catastrophic liability. Despite the uncertainty of the current regulatory environment, there are certainly best practices (such as careful compliance with U.S. securities regulations) that, if followed correctly, can greatly reduce the risk of liability.
usual.” However, the same may not be true for ICO companies. These
companies are usually small prior to their ICO (which in many cases is the
company’s first fundraising event) and represent a very high degree of risk
relative to a publicly traded corporation. Together, these factors are a recipe
for D&O premiums that are much more expensive relative to the total size of
the company, meaning that managers are more likely to be sensitive to their
magnitude. Managers at early stage startups are also not generally highly paid
and receive fewer perquisites; rather, their personal financial success is often
highly dependent on the success of the company. Therefore, expensive D&O
premiums are likely to be much more salient to them than to a public company
CEO, who can shrug these off as merely a cost of business.

C. Contract Design

Third, insurers will be more inclined and able to use aggressive contract
provisions—including deductibles, coverage limits, and various exclusions—to
limit the amount of risk they are underwriting. The primary purpose of
deductibles and coverage limits is to ensure that “insurance does not fully
insulate people from their losses,” thereby incentivizing them to limit their
risk-producing activities. Were it not for these provisions, purchasing
insurance would allow insureds to cause harm with impunity, so long as the
harm was within the limits of their policy. In the ICO context, insurers
looking to reduce risk in what they consider a “very difficult market” are using
large deductibles—$750,000 or higher—to ensure their insureds are properly
incentivized to limit their risk-producing activities. ICO insurers are also
using a number of aggressive exclusions—most notably for costs related to
regulatory proceedings or investigations. By implication, companies are
forced to bear the entire risk of SEC intervention, which is most likely to

140 BAKER & GRIFFITH, supra note 26, at 104.
141 Indeed, from the limited information available about the few existing cryptocurrency
insurers, this seems to be holding true. See Boto, supra note 108; ICO Seeking D&O?, supra note 24
(“Due to this small pool of insurers, and the perceived risk associated with such offerings, companies
should approach the process with high-premium expectations.”).
142 A startup’s managers are usually its principle shareholders prior to taking on institutional
capital. This means that a CEO who spends her company’s money on large D&O premiums is in
essence spending her own money, whereas a public company CEO, who may only own a few percent
of her company, may not experience the same reticence in engaging in such spending.
143 These provisions also help to account for the inherent uncertainty that exists in a new
insurance market, where there are fewer established methods of pricing risk. See, e.g., Talesh, Data
Breach, supra note 114, at 426 (“Because the cyber insurance market is so new, brokers and
underwriters struggle with evaluating how to price and evaluate the risk of loss.”).
144 Baker & Swedloff, supra note 26, at 1420.
146 Id.
happen as a result of issuing coins that the SEC deems to be securities. In conjunction with certain underwriting criteria, these exclusions will help ensure that companies err on the safe side of SEC regulations rather than hoping to skirt securities regulation altogether.

D. Education and Risk Management

Finally, though traditional D&O insurers do not conduct meaningful research and education efforts or provide risk management services to insureds, the emergent nature of the cryptocurrency industry affords insurers a much more significant role to play. A recent analysis of the cyber insurance industry\textsuperscript{147} (also a rapidly emerging area of technology with little precedent) found that cyber insurers “actively manage the underlying risk of data breaches”\textsuperscript{148} of their policyholders by providing data breach detection and prevention services,\textsuperscript{149} instructional materials and telephone hotlines to help policyholders better understand data security laws and best practices,\textsuperscript{150} and access to experienced and vetted networks of professionals (including IT, public relations, and legal counsel) in the event of a data breach.\textsuperscript{151}

Insurers in the cryptocurrency industry have the opportunity to engage in analogous efforts relating to regulatory compliance, financial management and growth strategy, and corporate governance. Given the current regulatory uncertainty, insurers have the opportunity to engage with public regulators to help shape the regulatory landscape, and to bring their expertise in the regulatory sphere to their policyholders. Insurers could, for example, provide access to experienced attorneys who can advise on whether a proposed coin qualifies as a security or myriad other regulatory challenges.

Insurers could also facilitate business advising related to how much money to raise, how to conduct the ICO mechanically, and how to allocate or distribute the proceeds of the offering; sound practices in these areas could help reduce the riskiness of an offering. And insurers can readily improve fledgling ICO companies’ corporate governance—one of the most important factors in determining a company’s risk level.\textsuperscript{152} In the case of traditional

\textsuperscript{147} Cyber insurance is offered to companies to cover liability resulting from data breach, privacy violations, and cyber attacks. This relatively new type of insurance has grown to become very popular (around one third of organizations now have it). Talesh, Data Breach, supra note 114, at 419.

\textsuperscript{148} Id. at 428.

\textsuperscript{149} Examples of these services include analysis of the company’s susceptibility to cyber attacks via “cyber health checks,” management of breach detection systems, evaluation of the security practices of potential vendors, and establishment of proper procedures in the event of a breach. Id. at 428-30.

\textsuperscript{150} Id. at 430-31.

\textsuperscript{151} Id. at 432-33.

\textsuperscript{152} BAKER & GRIFFITH, supra note 26, at 88-89; see also Baker & Griffith, supra note 27, at 516 (“[T]here are two ‘pillars’ of D&O underwriting: ‘Number one is the financial health of the
start up companies, venture capital firms are typically a primary source of
governance-related information such as the structure of the charter and
bylaws, board of advisors, and the like. By choosing to raise funds in a
decentralized manner, ICO companies do not have access to the same advice
and expertise, leaving an important gap that could be filled by D&O insurers,
who could either employ such advisors directly or maintain a network of
advisors that their policyholders could access. Via these advisors, insurers
could also play a role in promoting a “culture and character” of ethicality—a
factor that Baker and Griffith report as the single most important component
of corporate governance-related risk prevention.153

CONCLUSION

With the blockchain industry currently in a period of transition—from
scrappy, decentralized, idealistic upstart, to mainstream component of global
financial markets and driver of economic growth—companies are being forced
to shift their strategies from regulatory avoidance to regulatory compliance.
Many of the theories and ideals on which cryptocurrencies were initially built,
such as decentralization, independence, and lack of institutional authority, are
not tenable when aggregating vast amounts of capital and applying it to a
common enterprise—at least, not at the industry’s current level of
 technological sophistication. With great power comes great responsibility, and
U.S. regulators have clearly indicated that ICOs demand additional scrutiny
and new regulatory policies and frameworks in order to manage the abundant
opportunity for undesirable behavior inherent in the current system.

In the face of this shifting climate, insurance companies have a unique
opportunity to help shape the industry’s growth by contributing to its
ongoing standardization and legitimization. The scarcity of existing options
and lack of precedent for this type of insurance mean that insurers have
considerable power to influence their insureds by offering coverage on the
insurers’ terms. The time has come for blockchain companies to move beyond
their disreputable past and embrace sound corporate governance practices,
and insurers can play an important role in catalyzing this maturation process.

[company]. Number two is how good that company [is] at governing itself.”’” (quoting Tom Baker &
Sean J. Griffith, D&O Interviews, Underwriter #9 at 8 (2005) (unpublished confidential transcripts)
(on file with Tom Baker & Sean J. Griffith)).
153 BAKER & GRIFFITH, supra note 26, at 88.