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BLOCKCHAINS, SECURITIES, AND SECTIONS 11
AND 12 OF THE SECURITIES ACT

RICHARD PAN*

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* J.D. Candidate, 2019, New York University School of Law. The author would like to thank Professor Stephen Choi for his insights into securities laws, the Notes Committee of the *NYU Journal of Law & Business* for their support throughout the editing process, and Justin Tzeng for his helpful comments.

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INTRODUCTION

Although the earliest notions of distributed ledgers and blockchains were first proposed in the 1990s, Satoshi Nakamoto's 2008 whitepaper on Bitcoins marked a tipping point for these technologies; eventually, they would reach the forefront of modern discourse.¹ While the cryptocurrency's creator may have hoped to circumvent traditional financial systems with his product, the concept of storing data on an instantly verifiable, decentralized system has immense implications for the regulation of our financial markets.

Governments, courts, and companies have all noted the potential for blockchains and distributed ledgers to help solve many of the problems we face today in ensuring the integrity and security of our markets, but also the inherent risks associated with blindly embracing new and often misunderstood concepts. Legislators have created laws attempting to classify cryptocurrencies as distinct asset classes to provide better guidance for market participants,² various federal agencies have vied for jurisdiction over a blockchain's corresponding tokens,³ judges have noted in their opinions the need for distributed ledgers to assist them in resolving disputes,⁴ and companies have implemented this technology to support their financing and operational needs.⁵

1. See Stuart Haber & W. Scott Stornetta, *How to Time-Stamp a Digital Document*, 3 J. CRYPTOLOGY 99 (1991); SATOSHI NAKAMOTO, BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM, BITCOIN, <https://bitcoin.org/bitcoin.pdf> (last visited Feb. 19, 2019).

2. H.B. 70, 64 Leg. (Wyo. 2018).

3. See *Commodity Futures Trading Comm'n v. McDonnell*, 287 F. Supp. 3d 213 (E.D.N.Y. 2018); Press Release, Sec. & Exch. Comm'n, Company Halts ICO after SEC Raises Registration Concerns (Dec. 11, 2017).

4. *In re Dole Food Co.*, No. 8703-VCL, 2015 WL 5052214 (Del. Ch. 2015).

5. See, e.g., Michael del Castillo, *Overstock Raises \$10.9 Million in First Blockchain Stock Issuance*, COINDESK (Dec. 16, 2016, 09:54 PM), <https://www.coindesk.com/overstock-first-blockchain-stock-issuance/>.

One way for traditional companies to layer this innovative technology onto our existing financial system would be to issue traditional types of securities such as stocks and bonds, under no illusion that they are exempt from Securities and Exchange Commission (SEC) reporting requirements, onto a blockchain.⁶ Various corporations have already begun testing the potential for this method and have built platforms to facilitate its adoption.⁷

Others are also turning towards the cryptocurrency industry to raise funds through the use of initial coin offerings (“ICOs”).⁸ These ICOs often mirror traditional public offerings of securities like stocks and bonds, and certain issuers already familiar with the public markets make no attempt at disguising them as otherwise.⁹ However, many of these issuers opt not to register their offerings with the SEC, claiming the offerings do not involve the sale of securities.¹⁰

How these tokens are classified remains a contentious debate, with some believing that they should be treated as traditional securities, others claiming the opposite for failure to pass the *Howey* test,¹¹ and some further arguing that a more

6. For a detailed explanation of how blockchains function, see David Yermack, *Corporate Governance and Blockchains*, 21 REV. FIN. 7 (2017).

7. Michael del Castillo, *Overstock Could Raise \$30 Million With Blockchain Stock Offering*, COINDESK (Nov. 22, 2016, 12:07 PM), <https://www.coindesk.com/overstock-raise-30-million-blockchain-stock-offering/>; Chuan Tian, *Goldman Sachs Granted ‘SETLcoin’ Cryptocurrency Patent*, COINDESK (July 13, 2017, 10:30 PM), <https://www.coindesk.com/goldman-sachs-granted-setl-coin-cryptocurrency-patent/>.

8. See Markus Kasanmescheff, *PwC Report Finds That 2018 ICO Volume Is Already Double That of Previous Year*, COIN TELEGRAPH (June 30, 2018), <https://cointelegraph.com/news/pwc-report-finds-that-2018-ico-volume-is-already-double-that-of-previous-year>.

9. See, e.g., del Castillo, *supra* note 5; Nina Trentmann, *Daimler Uses Blockchain to Issue Bonds*, WALL ST. J. (July 12, 2017), <https://blogs.wsj.com/cfo/2017/07/12/daimler-uses-blockchain-to-issue-bonds/>.

10. See *Munchee Inc.*, Securities Act Release No. 10,445, 118 SEC Docket 5 (Dec. 11, 2017), <https://www.sec.gov/litigation/admin/2017/33-10445.pdf> (finding that Munchee was in violation of Section 5 of the Securities Act because it had not registered with the SEC with respect to the offering).

11. Section 2(a)(1) of the Securities Act of 1933 defines the term “security.” In addition to instruments traditionally understood to be securities, such as stocks and bonds, Section 2(a)(1) also lists investment contracts under this definition. Investment contracts have evolved to become a catch-all provision for securities that do not fall into any of the other buckets. *SEC v. W.J. Howey Co.* established the test for determining whether any given in-

granular distinction should be made between equity tokens and utility tokens.

While many stakeholders are justifiably excited about the supposed benefits of introducing blockchains into our current financial system, it is also crucial to take note of the impact this could have on our existing securities regulations. Specifically, two sections within the Securities Act of 1933 (“’33 Act”), Sections 12(a)(1) and 11 are potentially cause for concern for these interested parties.¹²

Section 12(a)(1) states that any person (which includes an organization) in violation of Section 5 of the ’33 Act shall be liable to the purchaser of such security for the consideration paid.¹³ Section 5(a)(1) in turn states in part that unless a registration statement is in effect, it shall be unlawful to sell such security. If tokens issued as part of an ICO are determined to be securities, it may ultimately lead to rescission of the offering and a failure for issuers attempting to generate capital using blockchain technology.

Section 11 deals with the civil liabilities associated with making material misstatements or omissions on the registration statement and provides for near strict liability.¹⁴ However, the Section has developed a procedural hurdle over time that plaintiffs must satisfy, namely that they must be able to trace their purchased securities to the fraudulent registration statement in question to obtain standing to sue.¹⁵ In practice, this limits Section 11 liability to initial public offerings (“IPOs”), debt offerings, and investors purchasing directly from an issuer or underwriter’s allotment in a seasoned offering. However, as blockchains provide the ability for holders of the corresponding securities to trace their specific assets all the way back to the genesis block, this current procedural hurdle may no longer serve as much of a deterrent for putative litigants.

strument was an investment contract. Under the test, a scheme is an investment contract when there is (1) an investment of money; (2) an expectation of profit; (3) in a common enterprise; and (4) solely from the efforts of others. 328 U.S. 293 (1946). Depending on the cryptocurrency, it could fail any or all of the prongs in the *Howey* test. See *infra* Part II.

12. Section 11 is codified as 15 U.S.C. § 77k (1933) within the United States Code.

13. 15 U.S.C. § 77l (1933).

14. 15 U.S.C. § 77k (1933).

15. *Krim v. pcOrder.com, Inc.*, 402 F.3d 489 (2005).

This could expand the Section's scope in ways not contemplated by the original drafters of the legislation or market participants.

This paper aims to analyze the potential liabilities that Sections 12(a)(1) and 11 may create for securities issued on blockchains, the impact that these provisions could have on our regulatory regime, rationales for potential legislative amendments to address the advent of blockchains and distributed ledgers, and how our existing securities market can adequately adapt to these developments.

I will begin with a brief overview of the *Howey* case, the factors used in its test, and other ways an instrument may be considered a security. I will apply this test to various examples of tokens that have been issued in the past to determine whether they constitute securities, and the potential consequences under Section 12(a)(1) of such a determination. I will then discuss how issuers may voluntarily choose to issue securities on a blockchain in compliance with securities regulations and the benefits this will have for various stakeholders, followed by a more detailed explanation of Section 11's function within our regulatory scheme and how it acts as a mechanism to deter fraudulent offerings. Finally, I will show how securities offerings made on a blockchain may have unintended or unique interactions with regulations as they exist and analyze the implications of such interactions.

I.

THE *HOWEY* CASE

Decided by the Supreme Court in 1946, *Howey*¹⁶ involved two Florida corporations that owned and managed large tracts of orange groves in the state. They kept half of the land for their own purposes and sold portions of the other half to investors. However, as the investors would presumably not remain in Florida to manage the small parcels of orange groves, *Howey* would enter into service contracts with them whereby *Howey* would cultivate, harvest, and market the oranges for a fee. The service contracts did not have registration statements filed with the SEC, and the issue before the court was whether these contracts, in tandem with the sale contracts, constituted

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

“investment contracts” under Section 2(a)(1)’s definition of a security.¹⁷ If they were, the issuers would be required to comply with Section 5(a) of the Act, which they patently had not, as evidenced by the lack of a registration statement.

In determining that the service contracts were in fact investment contracts and therefore securities, the Supreme Court established a four-factor test to assess such instruments. These four factors are: (1) an investment of money; (2) that the money is invested in a common enterprise; (3) an expectation of profits from the investment; and (4) that any profits come from the efforts of a third party.¹⁸ All four factors must be present for an instrument to be deemed an investment contract.

This *Howey* test has come to complement the other categories of instruments that are commonly thought of as securities, such as stocks, bonds, notes, and debentures,¹⁹ with investment contracts becoming a catchall provision that defines securities that do not fit neatly into the other buckets.

II.

CRYPTOCURRENCIES AND THE *HOWEY* TEST

A. *Utility Versus Security Tokens*

Even before applying the factors in the test to various ICOs, it is helpful to distinguish between utility tokens, those tokens that purport to have some use on the cryptocurrency’s ecosystem or network, and other tokens that merely mirror traditional securities. The tokens in this latter group often behave as traditional securities and afford their holders the same rights, but with the added benefits that blockchains provide, such as instant settlement and enhanced tracing. Naturally, it would be superfluous to apply the *Howey* test to this category. Instead, it is much more worthwhile to conduct this analysis as applied to utility tokens, which may plausibly be characterized as something other than a security.

17. *Id.*

18. *Id.*

19. Courts have determined that instruments labeled as such should be treated as securities. *See, e.g., Landreth Timber Co. v. Landreth*, 471 U.S. 681 (1985).

B. *Investment of Money and Common Enterprise*

The first two prongs of the *Howey* test, that there be an investment of money in a common enterprise, are easily satisfied in most utility token ICOs.²⁰ Participants in these ICOs make a conscious decision to contribute money in exchange for a token, and their corresponding allotment of tokens determines how much of the good or service they can purchase at a later date, when the product or service is fully developed.

This initial transfer of money for tokens supplies the consideration necessary to constitute an investment of money as seen in *Teamsters v. Daniel*, and participating in an ICO is a voluntary investment decision as opposed to an involuntary contribution in that case.²¹

Furthermore, the pro-rata apportioning of tokens based on investment amount creates a scenario where all investors in the ICO “share in the profits and risks of the enterprise.”²² If the company successfully develops its product, the value of its utility tokens will increase to afford their holders the ability to purchase the company’s product or service. This satisfies the horizontal commonality requirement the First, Sixth, Seventh, and Ninth Circuits employ to test for a common enterprise.²³

These two factors combined satisfy the requirements of the first two prongs of the *Howey* test, lending support for a determination that utility tokens constitute securities.

20. This assertion is corroborated by multiple academic papers. See, e.g., Laura Gritz, *Teaching a New Dog Old Tricks: Why the Howey Test Is Still the SEC’s Best Friend When Examining Initial Coin Offerings*, 19 N.C. J.L. & TECH. 193, 203 (2018); Todd Henderson & Max Raskin, *A Regulatory Classification of Digital Assets: Towards an Operational Howey Test for Cryptocurrencies, ICOs, and Other Digital Assets* (Univ. of Chi. Pub. Law Working Paper No. 683, 2018).

21. *Teamsters* involves a retired trucker who sued his union and pensioner trustee alleging misrepresentations and omissions of material facts with respect to his interest in a pension plan, in violation of § 17(a) of the Securities Act of 1933. The Supreme Court held that the noncontributory, compulsory pension plan that the employee participated in did not comport with the commonly held understanding of an investment contract under the Act as it did not involve an investment of money. Int’l Bhd. of Teamsters v. Daniel, 439 U.S. 551 (1979).

22. SEC v. SG Ltd., 265 F.3d 42 (1st Cir. 2001).

23. *Id.*

C. *Expectation of Profit*

In determining whether there is an expectation of profits, “[t]he *Howey* test looks at the intent of the investor.”²⁴ For utility tokens, if investors are purchasing tokens in an ICO for the purpose of resale as opposed to actually spending the token within the company’s blockchain ecosystem, the ICO likely satisfies the *Howey* test’s expectation of profit prong. In determining this investor intent, “the sophistication and knowledge of the investor is a strong factor in weighing his or her intent.”²⁵ Tokens issued in ICOs open to retail investors are more at risk of meeting this requirement, as it is unlikely many retail investors²⁶ contribute to an ICO with the goal of eventually using that product.²⁷ At the same time, issuers who market their ICOs this way may also be perceived to be inducing an expectation of profit, as the white papers that often accompany an ICO to retail investors seldom explain the product or service in a manner digestible by the average retail investor.²⁸ This is especially true given the complex nature of the products and services provided by companies involved in the industry, and the mass media hype that has engulfed all things related to blockchains.

Various cryptocurrencies that have been specifically tailored to serve sophisticated parties in unique industries may fail to meet this prong by virtue of marketing themselves to actual end-users. In 2017, Goldman Sachs patented a proposed cryptocurrency settlement system dubbed “SETLcoin.”²⁹ The coins are to house multiple securities and be used by traders to instantly settle trades within the system.³⁰ Rather than purchase these tokens with an expectation of profit, traders would presumably employ them in the ordinary course of their jobs.

24. Gritz, *supra* note 20, at 203.

25. *Id.* at 204.

26. Refer to small individual investors who commit capital for their personal account. See *Retail Investors*, NASDAQ, <https://www.nasdaq.com/investing/glossary/r/retail-investors> (last visited Feb. 10, 2019).

27. Gritz, *supra* note 20, at 204.

28. Munchee Inc., *supra* note 10.

29. Tian, *supra* note 7.

30. Stan Higgins, *Goldman Sachs Seeking Crypto Trade Settlement Patent*, COINDESK (Dec. 1, 2015, 10:50 PM), <https://www.coindesk.com/goldman-sachs-crypto-patent>.

As such, it seems that ICOs that are marketed and sold to retail investors would satisfy the third prong of the *Howey* test.

D. *Efforts of Others*

In determining whether cryptocurrency investments are based on the efforts of others, the crucial word here is “others.”³¹ For notable cryptocurrencies such as Bitcoin and Ethereum, the network is decentralized in a manner such that tokens are freely obtainable by the general public if they can successfully mine them. The issuer does not determine who receives the newly generated tokens, and the tokens are not distributed proportionally based on the amount of resources dedicated to the mining endeavor. In these networks, the issuers are not expected to perform any managerial or entrepreneurial efforts, and William Hinman, the SEC’s Director of Corporate Finance stated in a speech that “if the network on which the token or coin is to function is sufficiently decentralized—the assets may not represent an investment contract.”³²

However, most ICOs contemplated by companies would not fall under this category. They involve direct transfers of money to the issuer in exchange for tokens proportional to the value of the investment. The number of tokens generated is at the issuer’s discretion, and the value of the tokens is determined by the success of the contemplated product or service. As such, it appears that utility tokens issued as part of ICOs are predicated on the efforts of others, thereby satisfying the final prong of the test.

This determination would imply that utility tokens issued on a private network by companies involved with blockchain technology to fund their businesses classify as investment contracts under the *Howey* test, thus making them securities under the ’33 Act.

31. See Henderson & Raskin, *supra* note 20, at 8.

32. *Id.* at 7.

III.

IMPLICATIONS OF CRYPTOCURRENCIES AS SECURITIES

A. *Section 12(a)(1) Liability*

One implication of finding utility tokens to be securities would be that a great deal of ICOs would be found in violation of Section 12(a)(1) of the '33 Act. As discussed in the introduction, Section 12(a)(1) states that any person (which includes an organization) in violation of Section 5 of the '33 Act shall be liable to the purchaser of such security for the consideration paid.³³ Section 5(a)(1) in turn states in part that unless a registration statement is in effect, it shall be unlawful to sell such security. As these ICOs are regularly conducted without filing registration statements of any kind, the issuers are in violation of Sections 5 and 12(a)(1). The ICO issuers would thus be liable to the purchasers for the value of the consideration paid. However, ordering the issuers to return the funds to investors poses two immediate problems. The first relates to the fact that many of these funds may already be spent towards developing the issuer's product or service, and the second is what "currency" in which the funds will be returned.

B. *Invested Funds Already Spent*

As ICOs envision an exchange of money for tokens to further the research and development of the issuer's network, the invested funds are presumably being continuously spent on this cause. A determination that the issuer is in violation of Section 12(a)(1) after the sale has already been completed may entitle investors to rescission of the transaction, but if the issuer no longer has the money, then investors may be left without much recourse. This is compounded by the fact that many ICO issuers are newly formed companies without other assets investors can target. While this is a situation shared by many companies not only in the blockchain industry, and existing bankruptcy laws may be able to address the issue to a certain extent, the '33 Act's goals are frustrated by issuers attempting to skirt its provisions through the use of ICOs.

33. 15 U.S.C. § 77l (1933).

C. *Units of Remittance*

Even if issuers can successfully return the funds to investors, a question remains as to what currency this remittance will be in. The obvious answer would be whatever official currency the issuing entity's state of incorporation uses, but many ICOs are not so straightforward. Each ICO effectively issues a new token that can be used only within its issuer's network. These disparate tokens have been deemed "altcoins," and rather than transacting in traditional currencies, they are often purchased using Bitcoins or some other widely adopted cryptocurrency, such as Ethereum. The issuers can then convert the Bitcoins to different currencies to finance their operations, or simply pay other willing parties using Bitcoins.

If the issuers return the investors' money in the form of Bitcoins, the constant (often wide) fluctuations of the asset may result in investors receiving far less than their original investments in real-world terms. The asset's drop from over \$17,000 per coin in December 2017 to barely above \$3,000 a year later highlights this risk.³⁴ Conversely, returning investors their money in traditional currencies could prove to be a logistical nightmare. Parties would have to determine not only the value of the investment, but also when the investor purchased their Bitcoins, and whether any single Bitcoin purchased in a specific transaction was used to participate in the ICO.

IV.

PUTTING TRADITIONAL SECURITIES ON A BLOCKCHAIN

Considering the concerning implications of finding that an ICO improperly failed to register with the SEC, issuers may instead contemplate the possibility of integrating our existing methods of issuing securities with blockchains to best make use of this technology.

One recent example of this implementation is Overstock .com, Inc.'s ("Overstock") shelf registration for the sale of digital securities on its own proprietary blockchain.³⁵ The first of its kind, would-be purchasers signed up for accounts through Overstock's designated broker-dealer. The broker-dealer then

34. See *Bitcoin Charts*, COINMARKETCAP, <https://coinmarketcap.com/currencies/bitcoin/#charts> (last visited Jan. 16, 2019).

35. Reade Ryan & Mayme Donahue, *Securities on a Blockchain*, 73 BUS. LAW. 85 (2017).

provided purchasers with access to the company's registered alternative trading system ("ATS"), designed by an Overstock subsidiary known as t0.com, Inc.³⁶ Overstock's board of directors authorized this mechanism in tandem with a personal identity information database, and the securities are registered under each holder's name with records maintained by an entity associated with the broker-dealer.³⁷ On the fixed income front, Daimler AG, the German multinational corporation most famous for being the producer of Mercedes-Benz vehicles, gave itself, the bank, and investors access to a decentralized portal where parties could execute loan contracts, and receive in exchange a digital token reflecting the transaction.³⁸ Although this process creates a closed universe where purchasers may only trade a single company's securities over its ATS, it serves as a proof of concept that our notions of traditional securities can be placed onto blockchains; the rest is a question of scalability.

Using this method, prominent stock exchanges registered under Section 6 of the Securities Exchange Act of 1934 ("34 Act"), or their equivalents in the cryptocurrency markets, could coordinate to develop a uniform and integrated system of trading securities on blockchains.³⁹ Such an integrated blockchain-based exchange is likely more efficient than a jumble of ATSS offering disparate pockets of securities, whose impact could resemble the original establishment of the National Market System ("NMS") back in 1975.⁴⁰

Perhaps in anticipation of such changes, companies both in the United States and abroad are investing heavily to establish themselves in this space. In 2016, the Australian Stock Exchange ("ASX") began creating and implementing a new system for post-trade processing and settling equity transactions

36. *Id.* at 91.

37. *Id.*

38. Trentmann, *supra* note 9.

39. For a full list of national securities exchanges registered with the SEC, see *National Security Exchanges*, SEC. & EXCH. COMM'N, <https://www.sec.gov/fast-answers/divisionsmarketregmrexchangesshtml.html> (last visited May 15, 2018).

40. Aulana L. Peters, Comm'r, Sec. & Exch. Comm'n, *The National Market System: Thoughts on Past and Future Developments* (Oct. 6, 1985).

using distributed ledgers and blockchain technologies.⁴¹ This was meant to replace its existing system, CHESSE, where trades conducted over the exchange took two business days to settle, referred to as “T+2.”⁴² Using blockchain technology, trades are theoretically instantly verifiable, hence Overstock’s subsidiary’s moniker “t0,” meant to symbolize “T+0.” More recently, the Hong Kong Stock Exchange (“HKEX”), the world’s sixth largest stock exchange by market capitalization as of 2015, began discussions with ASX on developing a similar system.⁴³ Domestically, Goldman Sachs’ SETLcoins, when used to represent the securities of a variety of companies, offer functionality beyond Overstock’s initial concept. Furthermore, each SETLcoin wallet or account can house tokens associated with different entities.⁴⁴ Such a system could not only drastically reduce the settlement times required for trades conducted within the bank’s internal dark pools, but also interbank transactions if adopted industry wide. Lastly, even companies that are not traditionally associated with securities transactions are making plays within the market: Circle, a company involved in mobile money transfers, purchased cryptocurrency exchange Poloniex, and Yahoo Japan, the country’s largest online auction website, acquired a minority stake in another exchange, BitARG.⁴⁵ Evidently, large players in both the technology and finance industries are betting that blockchains will be the next step in transforming the way we conduct transactions in the securities markets.

V.

BENEFITS OF PLACING SECURITIES ON THE BLOCKCHAIN

Naturally, these firms would not pursue this technology without adequate incentives. With respect to investors, issuers, and intermediaries such as exchanges and underwriters, the benefits of placing securities onto a blockchain can be broken

41. *Chess Replacement*, AUSTL. STOCK EXCH., <https://www.asx.com.au/services/chess-replacement.htm> (last visited May 15, 2018).

42. *Id.*

43. Emma Dunkley, *HKEX working with ASX on Blockchain*, FIN. TIMES. (Mar. 20, 2018), <https://www.ft.com/content/b9b17762-2c0e-11e8-9b4b-bc4b9f08f381>.

44. Tian, *supra* note 7.

45. *Id.*

down into two categories: increased efficiency and greater transparency.

A. *Efficiency*

Starting with efficiency, these benefits can generally be attributed to cost savings from getting rid of non-essential parties to transactions and time savings from reducing the delay caused by settlement periods.

When purchasing stocks, the average retail investor may possess the misguided belief that somewhere in the world a document exists purporting to reflect their ownership stake in a company. While investors can indeed request that physical stock certificates be printed and sent to them, there are many reasons why this may not be in the investor's best interests. Firstly, they "may have to pay a nominal fee for the added expense of issuing a paper certificate."⁴⁶ Secondly, they cannot quickly take advantage of price fluctuations when disposing of their securities as they must first deliver their certificates to the broker or company before executing a sale.⁴⁷ Thirdly, losing or misplacing their certificate may trigger a costly process of reissuing new documents and verifying their ownership.⁴⁸

As such, our financial system's current preferred method of recording ownership is to store these physical stock certificates with the Depository Trust Company ("DTC"). Known as Street Name Registration, brokers keep records on behalf of individual investors indicating they are the beneficial owners, while the physical stock certificates remain tucked away in a warehouse in Delaware under the DTC's stewardship.⁴⁹ This allows for faster transaction times, as physical documents do not need to be passed back and forth, and accurately reflects

46. See Julia Verhage & Olga Kharif, *Goldman-Backed Circle Agrees to Buy Crypto Exchange Poloniex*, BLOOMBERG (Feb. 26, 2018), <https://www.bloomberg.com/news/articles/2018-02-26/goldman-backed-circle-buys-digital-exchange-poloniex>; *Yahoo Japan to Buy Minority Stake in Cryptocurrency Exchange*, REUTERS (Apr. 13, 2018), <https://www.reuters.com/article/uk-crypto-currencies-yahoo-japan-test/yahoo-japan-to-buy-minority-stake-in-cryptocurrency-exchange-idUSKBN1HK0O3>.

47. *Holding Your Securities Get the Facts*, SEC. & EXCH. COMM'N, <https://www.sec.gov/reportspubs/investor-publications/investorpubsholdsechtm.html> (last visited May 15, 2018).

48. *Id.*

49. *Id.*

the nature of our securities markets and the high volume of stocks being traded daily. However, in return for this flexibility and convenience, the DTC undoubtedly adds an additional cost to transacting.

Blockchain technology may render entities like the DTC obsolete, as buyers and sellers will no longer need to store physical copies of their certificates. This is because the content traditionally on a stock certificate can be stored on the blockchain, supplanting the need for the DTC's services. Furthermore, tracing the shares back to the initial or genesis block can even reveal information such as the Secretary of State's original signature authorizing the issuance of the shares. For example, Bitcoin's genesis block contains text from a British newspaper dated the day of the cryptocurrency's release regarding the "brink of a second bailout for banks," a memento of the technology's birth and a possible dig at our traditional banking system.⁵⁰ By eliminating the need for the DTC, parties in the transaction can reduce the added costs of conducting business with each other, which could be critical for exchanges operating in an industry where "nobody wants to spend money to do anything."⁵¹ Perhaps in recognition of this threat to its business model, DTC's parent company the Depository Trust & Clearing Corporation ("DTCC") is establishing a mainframe using blockchains that aims to simplify transaction reporting for the swaps market.⁵²

Secondly, reducing the time it takes for transactions to settle will not only allow faster turnarounds for subsequent transactions, but also provide the corollary benefit of preventing fraud in settlement redemptions and shareholder voting.⁵³ Like the ASX's T+2 settlement period, the SEC in 2017 adopted a new T+2 settlement cycle, an upgrade from the old

50. *Id.*

51. Jamie Redman, *Bitcoin's Quirky Genesis Block Turns Eight Today*, BITCOIN.COM (Jan. 3, 2017), <https://news.bitcoin.com/bitcoins-quirky-genesis-block-turns-eight-years-old-today/>.

52. Dunkley, *supra* note 43.

53. Helen Bartholomew, *DTCC on Track for Q1 2018 Blockchain CDS Reporting*, REUTERS (May 19, 2017), <https://www.reuters.com/article/derivatives-dtcc-on-track-for-q1-2018-bl/derivatives-dtcc-on-track-for-q1-2018-blockchain-cds-reporting-idUSL8N1IJ5BF>.

T+3 standard first introduced in 2004.⁵⁴ This adoption will apply to all domestic broker–dealers, and while it is a step in the right direction, blockchain’s potential for instant settlement and verification neutralizes these accounting inefficiencies altogether, and may lower transaction costs by providing market participants with enhanced security and integrity.

B. *Transparency*

The transparency benefits are mainly attributed to blockchain’s ability to trace transaction histories and ownership identities. Most retail investors use their brokerage accounts to purchase securities, and these transactions usually take place on the secondary markets. While brokerage accounts keep tallies of their individual clients’ holdings, for the most part there is effectively no difference between shares of the same company held in different client accounts. However, investors purchasing securities placed onto a blockchain may access a more granular breakdown of the information behind each individual share. Most critically, investors will be able to trace the transaction history of each share back to their respective genesis blocks, and thus the specific offering under which the shares were issued. This aspect will be key to Section 11 liability. Even if the information contained on the blockchain is only accessible by the issuing corporation and government regulators, investors benefit from the fact that this information exists on an immutable ledger, and may be attainable when necessary, such as during litigation.

Issuer management teams implementing variations of Overstock’s personal identity database may benefit from a corporate governance perspective. Instant verification will allow issuers to understand the ownership structure of their companies on a real-time basis, a much more useful reference point than the 5% disclosure threshold currently in place under Section 13D of the ’34 Act in the context of fending off hostile takeovers or activist investors.⁵⁵

Additionally, issuers may also benefit from placing their securities on blockchains through the transparency afforded

54. *See, e.g., In re Dole Food Co.*, No. 8703-VCL, 2015 WL 5052214 (Del. Ch. Aug. 27, 2015).

55. Press Release, SEC. & EXCH. COMM’N, SEC Adopts T+2 Settlement Cycle for Securities Transactions (2017) (on file with author).

to their investors. Assuming investors value this increased access to information, then *ceteris paribus*, this additional value will be reflected in a higher share price for issuers vis-à-vis competitors who choose not to provide the same degree of transparency.

C. *Benefits Involving Both Efficiency and Transparency*

Based on the above observations, efficiency benefits stem from reduced costs and reduced settlement periods, while transparency gains come from improved access to information. In practice, many scenarios involve an overlap of these two areas.

For example, in the context of litigation settlements, investors attempting to claim money allocated based on share ownership would be protected by instant settlement of transactions and share traceability. In one prior settlement order regarding Dole Food Company, Inc.'s going-private transaction, the company discovered when distributing the negotiated settlement that 49,164,415 eligible shares had come forward with claims despite there only being 36,793,758 shares in the class.⁵⁶ One explanation for this was that because the accounting settlement period was using T+3, the DTC's ledger did not accurately reflect the trades on the day of claims submission. As such, shareholders who had already sold their shares but had yet to settle their transactions were able to effectively double dip, benefitting both from selling their shares and claiming funds to which they were not legally entitled. In his order, Judge Laster, Vice Chancellor of the Delaware Court of Chancery, noted how distributed ledgers could have cured this anomaly, presumably by instantly settling stock sales to reflect accurate accounting, and sniffing out fraudulent claims by matching up the identities of actual owners.⁵⁷

Evidently, all stakeholders would appear to benefit from this innovative technology. However, while companies are justifiably excited, these gains may come at the cost of potentially expanded risks. Specifically, increased Section 11 liability serves as a hazard for would-be issuers and underwriters.

56. 17 C.F.R. § 240.13D-1 (2010).

57. *See Dole*, 2015 WL 5052214.

VI.

SECTION 11 OF THE SECURITIES ACT OF 1933

Section 11 of the '33 Act in relevant part states that "in case any part of the registration statement, when such part became effective, contained an untrue statement of a material fact or omitted to state a material fact . . . any person acquiring such security . . . may, either at law or in equity, in any court of competent jurisdiction, sue" ⁵⁸ Potential Section 11 defendants can include (1) the corporate issuer of the securities; ⁵⁹ (2) every person who signed the registration statement; ⁶⁰ (3) every person who was a director of or partner in the issuer at the time of filing; ⁶¹ (4) accountants, engineers, or appraisers; ⁶² and (5) underwriters. ⁶³

One key factor that distinguishes Section 11 from the '34 Acts' more prominent Section 10 and its corresponding Rule 10b-5's anti-fraud provision is the strict liability applied to defendants, even for "innocent misstatements." ⁶⁴ No scienter is required in a Section 11 analysis, and reliance (that purchasers bought the securities of the registration statement's misstatement or omission) is also presumed for the first year. ⁶⁵ To make a prima facie case for Section 11, plaintiffs need only show that the registration statement contained a material misstatement or omission. ⁶⁶ This powerful provision was introduced to deter issuers and underwriters, those who possess the most up-to-date information regarding the company, to be forthcoming and accurate in their disclosures, thereby better protecting investors participating in public offerings. ⁶⁷

However, Section 11 does not completely eclipse Section 10's relevance, as courts have also read in a procedural hurdle

58. *Id.*

59. 15 U.S.C. § 77k (1933).

60. The corporate issuer is not directly listed in the statute, but the CEO signing on behalf of the corporation in his/her capacity as CEO suffices for the purposes of the statute; 15 U.S.C. § 77k(e) (1933).

61. *Id.*

62. *Id.*

63. *Id.*

64. *Id.*

65. Hillary A. Sale, *Disappearing without a Trace: Sections 11 and 12(a)(2) of the 1933 Securities Act*, 75 WASH. L. REV. 429 (2000).

66. 15 U.S.C. § 77k(e) (1933).

67. Sale, *supra* note 65.

that limits the Section's scope in light of its relaxed substantive requirements. Shareholders in a Section 11 suit must show that they purchased their securities "in" the offering in question or "pursuant to" the offering in question.⁶⁸ This restricts Section 11 cases to only certain situations, namely investors purchasing as part of an IPO, a debt offering, secondary market transactions involving issuers that have only conducted an IPO, or rare instances where the subsequent purchasers can definitively show their securities are traceable to a particular registered offering.⁶⁹

For equities, secondary market transactions are difficult to trace under Street Name Registration.⁷⁰ Because retail investors often lack both the opportunity and resources necessary to purchase shares directly from an issuer or underwriting broker-dealer, they can only acquire them through the secondary markets. Unfortunately, securities are effectively indistinguishable immediately upon hitting the secondary markets, as rapid successive trades cloud the chain of title to the point that it is next to impossible to show a particular share came from a particular offering. While the Supreme Court has not yet ruled on this issue, lower courts that have allowed secondary market purchasers to bring Section 11 claims have conditioned such claims on satisfying the tracing requirement.⁷¹

Accordingly, practically speaking Section 11 is reserved for only those instances where there has been a misstatement in a registration statement related to an IPO. However, this result may have been the logical interpretation to the Section's enactment, given the ease of finding liability and the consequences. Congress may have wished to hold those companies issuing their shares for the first time, whose information was rarely, if ever, disclosed, to the highest possible standards, and to afford investors purchasing shares of a newly public com-

68. See Harry Shulman, *Civil Liability and the Securities Act*, 43 YALE L.J. 227, 227 (1933); Elisabeth Keller, Introductory Comment, *A Historical Introduction to the Securities Act of 1933 and the Securities Exchange Act of 1934*, 49 OHIO ST. L.J. 329, 345 (1988).

69. Sale, *supra* note 65, at 431.

70. One example would be a transaction involving a secondary and initial purchaser who were both not holding any of the issuer's stock prior to the offering, and the initial purchaser transferred their shares without the use of any intermediaries.

71. *Holding Your Securities Get the Facts*, *supra* note 47.

pany the highest degree of protection, given the lack of public information available in the market.⁷²

Bearing this existing framework in mind, it is easy to see how this regulatory regime may be disrupted by placing securities onto a blockchain and providing the transparency necessary to overcome the procedural barrier under Section 11.

VII.

SECURITIES ON A BLOCKCHAIN OVERCOME SECTION 11'S HURDLE

By placing their securities on a blockchain, issuers are effectively giving their investors more tools at their disposal to hold companies liable for '33 Act violations. Allowing investors to trace the securities in their investment accounts to individual offerings will reveal whether they have standing to sue under Section 11. Even if this information were stored on a private blockchain only accessible by the issuer, it is conceivable that a judge may order the information be made available to investors when faced with a putative class action. This would effectively expand Section 11 liability beyond the current landscape to include secondary market transactions involving securities from seasoned offerings, and could cause a shift away from Section 10b-5 suits as investors gravitate towards a cause of action that is easier to recover under.

This is a reasonable development, as assuming companies benefit from bumps in share price attributed to greater transparency, they must also bear the burden of expansive scrutiny and hold themselves to higher standard.

VIII.

IMPLICATIONS OF INCREASED SECTION 11 LIABILITY

A. *Increased Frequency of Section 11 Claims*

Given its likelihood, it is important to assess the potential implications of an expanded Section 11 on our securities markets. The most obvious result would be an increased prevalence of Section 11 suits against issuers and underwriters. This can be attributed to two reasons. First, expanding the types of offerings that could result in Section 11 liability will naturally

72. See Joseph A. Grundfest, *Morrison, the Restricted Scope of Securities Act Section 11 Liability, and Prospects for Regulatory Reform*, 41 J. CORP. L. 1 (2015).

funnel in more claims. Second, because Section 11 has far fewer elements required to survive a motion to dismiss stage (by enabling tracing) compared to a 10b-5 claim, potential litigants will be more willing to bring forth such cases. Most securities suits result in settlements as opposed to being litigated at trial, and studies show that the further a case progresses, the higher the average settlement value.⁷³ Even if the actual suits may have little to no merit, litigants may be incentivized to file strike suits simply to extract value from issuers, especially if they know the negative publicity associated with such suits will decrease share prices and put added pressure on the board and management.

However, it is unclear if there will truly be a greater number of such cases, and even if there are, corporations may still stand to benefit from placing their securities on a blockchain. First, truly meritorious suits may still choose to avoid Section 11 in favor attempting recovery under Rule 10b-5. Under Section 11(e), damages under the section are limited to rescission.⁷⁴ Thus, even in the unlikely event the share price fell to zero, the maximum value a litigant could obtain upon success at trial is the initial value paid for their shares. Factoring in the additional costs associated with litigation, plaintiffs stand to gain far more from a 10b-5 claim than under Section 11. When applied to extortionary strike suits, the number of settlements may increase, but the value of those settlements may be offset by gains in company share price and market capitalization from adopting blockchain technology.

Secondly, although seasoned offerings may now be subject to Section 11 liability, issuers and underwriters are afforded some protection by the twelve-month reliance requirement in Section 11(a).⁷⁵ Plaintiffs making Section 11 claims after one year of the initial offering must show reliance, which makes Section 11 far less attractive. Instead, litigants may be inclined to pursue 10b-5 claims as there is no damages cap, further limiting Section 11's expansion. It therefore remains to be seen through empirical evidence, provided widespread

73. See Shulman, *supra* note 68.

74. Laarni T. Bulan, *Securities Class Action Settlements: 2016 Review and Analysis*, CORNERSTONE RES. (Apr. 18, 2017).

75. 15 U.S.C. § 77k(e) (1933).

adoption of this technology, whether Section 11 cases will truly become more prevalent in practice.

B. *Bifurcation of Shares*

Another concern affecting Section 11's applicability and the feasibility of a blockchain-based exchange is the inevitable bifurcation of our notion of "common stock"; importantly, issuing securities on a blockchain will lead to the establishment of two effectively distinct classes of securities, both purporting to be equity. While common stock issued both on and off a blockchain would entitle the holder to the same proportion of ownership in the company, the same level of priority in bankruptcy proceedings, and all the other bells and whistles associated with equity, one stark difference is the ability to bring a Section 11 suit. If one class of essentially new owners is able to trace their holdings back to the genesis block and the rest are left holding fungible shares, existing shareholders may be reluctant to adopt this technology.

It is improbable that upon electing to place future securities issuances on a blockchain, a company could completely place its currently outstanding shares onto a blockchain at the same time. This may be due to a combination of factors such as investor skepticism, prohibitive costs, technological barriers, or simply investor inertia. Regardless of the reason, this technological adoption will likely be a prospective endeavor as opposed to a retroactive adjustment. In this case, holders of existing securities will be left wanting, as this divergence of rights could negatively impact them in unintended ways. For example, market participants could be faced with a situation where the same shares in a company end up commanding different share prices, a reflection of a "blockchain premium."

However, this price differential should be viewed as a fundamentally fair result. Companies regularly issue separate classes of shares, and technology companies headed by their founders frequently have a tiered ownership structure.⁷⁶ Securities should arguably reflect the rights afforded to their owners, and the fact that one group of investors has rights different from another, resulting in different share prices is not cause for concern; this is simply a problem of naming conventions. Instead of labeling securities issued on a blockchain as simply

76. 15 U.S.C. § 77k(a) (1933).

“common stock,” a new designation such as “common stock *plus*” is a more apt characterization of these securities.

Another response grounded in the policy behind securities regulation is that many of the advantages enjoyed by holders of securities issued onto blockchains are shared with pre-existing holders. If regulations are promulgated at least in part to deter would-be fraudsters from engaging in illegal conduct, then holders of securities not issued on a blockchain also stand to gain.⁷⁷ Although drops in share price affect all equity holders, the threat of expanded Section 11 liability essentially holds issuers and underwriters to a higher standard in crafting their registration statements, to the benefit of all equity holders. Even if this results in a lower share price for old equity holders vis-à-vis new equity, the overall boost to their holdings more than justifies the disparity.

Finally, in terms of timing, if issuers are truly concerned about potential opposition from existing shareholders, then the current market conditions are perfect for adoption of this technology. Under the Tax Cuts and Jobs Act of 2017, American corporate share repurchase programs are at an all-time high.⁷⁸ More than 350 companies in the S&P 500 have bought back shares in 2018, putting them on track to repurchase as much as \$1 trillion by the end of this year, smashing an over twenty-year old record.⁷⁹ By replenishing their treasury stock in the wake of corporate tax savings and reducing the number of outstanding shares, corporations have established a solid foundation for implementing blockchain technology.

Given these responses, despite a possible split in the availability of Section 11 to existing stockholders, downward price pressures as a result of share bifurcation, and expanded liability for various parties, we should still push forward with issuing securities on blockchain for its many benefits.

77. *Facebook and the Meaning of Share Ownership*, ECONOMIST (Sept. 30, 2017), <https://www.economist.com/business/2017/09/30/facebook-and-the-meaning-of-share-ownership>.

78. *See generally* Mary Jo White, Chair, Sec. & Exch. Comm’n, *The Challenge of Coverage, Accountability and Deterrence in Global Enforcement* (Oct. 1, 2014).

79. Akane Otani, Richard Rubin & Theo Francis, *Boom in Share Buybacks Renews Question of Who Wins From Tax Cuts*, WALL ST. J. (Mar. 1, 2018), <https://www.wsj.com/articles/boom-in-share-buybacks-renews-question-of-who-wins-from-tax-cuts-1519900200>.

CONCLUSION

In conclusion, issuing securities on blockchains provides many noteworthy and tangible benefits. By digitally storing the information traditionally written on a stock certificate or corporate bond and allowing these instruments to be traded, investors, issuers, and intermediaries stand to gain from increased efficiency and transparency in our financial markets.

However, these benefits come with the added cost of potentially heightened liability under the Securities Act of 1933. Specifically, Section 12(a)(1) of the '33 Act imposes serious consequences should an offering violate Section 5 of that same act. Given the characteristics many ICOs exhibit, it appears likely that many of them will be deemed to be securities, with disastrous consequences for their issuers.

Those wishing to still make use of the technology's benefits may instead voluntarily register their tokens as securities and simply conduct a traditional offering layered onto a blockchain. But rather than being a panacea, this form of issuance has its own potential risks. Namely, Section 11 of the '33 Act's strict liability standard could potentially expand outside its current scope of primarily IPOs to include seasoned offerings and secondary market transactions. Despite these risks, the actual implications are difficult to discern prior to actual adoption and may in fact be negligible.

Furthermore, any increase in the number of Section 11 claims may be tempered by the statutory cap on damages, as well as the additional elements that must be established when bringing cases one year after issuance. Similarly, the bifurcation of shares into those on and off the blockchain, leading to different prices for the same security, is an accurate reflection of the additional rights afforded to new investors. This bifurcation also benefits existing shareholders of the old shares, as they benefit from the deterrent effect these new shares will have on managers who would otherwise violate Section 11.

Given this technology's potentially revolutionary impact, as well as the ideal current environment of massive stock buyback programs, it appears that companies should make a concerted investment into placing securities on the blockchain to reap its many benefits.