

OVERREACHING ITS MANDATE? CONSIDERING THE SEC'S AUTHORITY TO REGULATE CRYPTOCURRENCY EXCHANGES

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ABSTRACT

Both the SEC and private cryptocurrency attorneys assume that if a crypto token—for example, a bitcoin—is a security when issued, then it is a security when traded on exchanges like Coinbase, Gemini, and Circle. Based on that assumption, the SEC regularly threatens exchanges with enforcement for unlicensed trading. While the literature increasingly examines cryptocurrency's appropriate regulatory treatment, this baseline assumption has gone unquestioned. This Article suggests that assumption is incorrect. A fundamental difference separates a token when issued by a developer from a token when traded on an exchange: an issuer promises further development and price appreciation, while the exchange promises neither. Unlike stocks and bonds, crypto tokens fall under a different category in the securities laws, regulating "investment contracts." To be an "investment contract," a commodity like a crypto token must be accompanied by this extra promise for further development or price appreciation. For that reason, when traded on exchanges, tokens are no longer securities.

This conclusion—that exchanges are not subject to the securities laws—has profound practical implications. The crypto market is worth hundreds of billions of dollars. To avoid SEC jurisdiction, exchanges like Coinbase, Gemini, and Circle have significantly limited the tokens they will trade. If exchanges are not subject to SEC jurisdiction, then the business conducted by these exchanges could increase substantially and immediately.

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INTRODUCTION

The human capacity for fraud and deceit sometimes seems as wide as the ocean. The seawalls built to protect the investing public—the U.S. securities laws—are similarly vast. They sweep in all the common investments—stocks, bonds, notes—but also contain a catch-all provision for “investment contracts.”¹ Under this provision, the federal courts have classified orange groves, Scotch whiskey, and beavers (yes, the animal) as securities.² But the Securities and Exchange Commission (SEC) is not storming the average pet store. Each transaction had a “plus factor” that the normal beaver sale lacks.³ Namely, the offerors promised something extra—their expertise in tending orange groves, aging whiskey, or ranching beavers—to entice the investors. And in each case, the investor was never really intended to work the groves, drink the whiskey, or walk the beaver. Instead, after the offeror managed and then sold the property, the investor was supposed to profit.⁴

In 2017 and 2018, cryptocurrencies became dinner table conversation as Bitcoin rocketed in price from \$1000 to almost \$20,000, before collapsing to a current price around \$3500.⁵ Ether, Ripple’s XRP, and countless other cryptocurrencies all charted similar courses.⁶ At the same time, the legal community has struggled to apply the securities laws to these crypto-

1. See 15 U.S.C. § 77b(a)(1) (2018).

2. See *infra* Part III.

3. See *infra* Part III.

4. See *Cont’l Mktg. Corp. v. SEC*, 387 F.2d 466, 470 (10th Cir. 1967).

5. *Bitcoin*, COINMARKETCAP, <https://coinmarketcap.com/currencies/bitcoin/> (last visited Feb. 14, 2019).

6. For charts on all major cryptocurrencies and crypto tokens, see *Top 100 Cryptocurrencies by Market Capitalization*, COINMARKETCAP, <https://coinmarketcap.com> (last visited Mar. 29, 2019).

currencies.⁷ While court decisions and academic literature are still limited, there is growing agreement that not all crypto tokens are securities, and that a reasonable framework can be built to distinguish which tokens are securities.⁸ One key consideration is whether the crypto seller has promised future profit or continued development to entice the buyer. But while the SEC has progressively worked to refine its guidance, it has only stated that Bitcoin and ether are not securities; everything else remains in limbo.⁹

While these discussions continue, the most responsible players in the cryptocurrency space—the exchanges—find themselves in a difficult position. Companies like Coinbase, Gemini, and Circle make crypto tokens available to the masses, and they generally do so after running a difficult battery of federal and state licensing requirements.¹⁰ But they are now faced with a dilemma: do they risk the SEC's wrath by expanding their product selection, or do they annoy their customers by playing it safe? As of January 2019, Coinbase offers just nine crypto options, while the broader market contains more than a thousand crypto tokens.¹¹ Gemini and Circle have similarly constrained their products.¹² Their reticence is under-

7. See Mark Popielarski, *Blockchain Research: Bitcoins, Cryptocurrency, and Distributed Leaders*, COLO. LAW., June 2018, at 10, https://www.cobar.org/Portals/COBAR/TCL/June%202018/CL_June_Departments_LRC.pdf.

8. See *infra* Part IV.

9. See *infra* Part II.

10. See Matthew E. Kohen & Justin S. Wales, *State Regulations on Virtual Currency and Blockchain Technologies*, CARLTON FIELDS (Jan. 9, 2019), <https://www.carltonfields.com/insights/publications/2018/state-regulations-on-virtual-currency-and-blockchain-technologies> (discussing various state regulations governing cryptocurrency exchanges); *Top 4 Must-Have Licenses for Cryptocurrency Exchanges in the US*, BITCOINEXCHANGEGUIDE (Aug. 10, 2018), <https://bitcoinexchangeguide.com/top-4-must-have-licenses-for-cryptocurrency-exchanges-in-the-us/> (discussing federal licensing requirements for cryptocurrency exchanges).

11. *Compare Top 50 Cryptocurrency Prices*, COINBASE, <https://www.coinbase.com/price> (last visited Feb. 14, 2019) (listing tokens available on Coinbase), *with All Cryptocurrencies*, COINMARKETCAP, <https://coinmarketcap.com/all/views/all/> (last visited Feb. 14, 2019) (listing tokens available in the broader market).

12. See *Marketplace*, GEMINI, <https://gemini.com/marketplace/#introduction> (last modified Oct. 25, 2018); *What Digital Currencies Does Circle Invest Currently Support?*, CIRCLE, <https://support.invest.circle.com/hc/en-us/articles/360000396566-What-digital-currencies-does-Circle-Invest-currently-support-> (last visited Feb. 14, 2019).

standable; the SEC has issued dire warnings about the need to responsibly comply with the securities laws.¹³

But in all this discussion, a fundamental point has been missed: unlike stocks and bonds, crypto tokens fall under a different category in the securities laws, regulating “investment contracts.” To be an “investment contract,” a commodity like a crypto token must be accompanied by an extra promise for further development, management, or price appreciation.¹⁴ Whatever the promises made by the original issuer, the exchanges themselves are not promising future profit or continued development. They are promising one thing alone: delivery of the promised crypto token. Without the future promise made by issuers, the crypto tokens delivered by the exchanges are not investment contracts, and therefore are not securities. This has profound implications. Thus far, both the SEC and the cryptocurrency community have simply assumed that if a token is a security at issuance, then it remains a security when sold by an exchange. To my knowledge, no previous court decision or literature has examined what happens when pieces of an investment contract are separated from each other. This Article concludes that they cease to be investment contracts, and therefore cease to be securities. Because exchanges are not delivering securities, they are not subject to securities law.

This Article also examines why this critical point has thus far gone unexamined by the case law and the literature. The Article suggests that it is due to a lack of focus on a critical element for an investment contract: the need for a contract. Understandably, because most enforcement proceeds against issuers—with whom an agreement generally exists—this factor has merited little previous attention. But now that this factor has come into focus, it raises further questions about how it will affect securities law going forward.

Part I of this Article presents a brief introduction to cryptocurrencies and blockchain technology. Part II discusses the

13. See *infra* Part II.

14. See *infra* Part III.

SEC's evolving position. Part III discusses the *Howey* test that defines investment contracts. Part IV discusses crypto tokens as securities when issued by the developer. Part V presents the Article's central thesis, suggesting that we should treat investment contracts as contracts, and by doing so, suggests that we cannot consider tokens as securities when traded on exchanges. Part VI briefly suggests future areas for research in crypto regulation.

I. A BRIEF INTRODUCTION TO CRYPTO TOKENS AND BLOCKCHAIN TECHNOLOGY

While attorneys can sometimes ignore the technology and focus on the law, that proves impossible with blockchain technology. Blockchain's innovative technology goes hand in hand with its innovative legal structure. In an attempt to better frame later discussions, the following sections briefly explain blockchain history and key concepts relating to crypto tokens.

A. *E-Gold and Other Centralized Virtual Currencies*

The earliest successful digital currency was e-gold. First envisioned by Douglas Jackson in 1995, he wanted to create a virtual currency "backed entirely by gold and silver."¹⁵ Accounts could be funded by purchasing e-gold through an exchange, sending physical gold or silver to the company directly, or receiving e-gold from other account holders.¹⁶ Once acquired, users could instantly and cheaply transfer e-gold to other accounts.¹⁷ In

15. See Kim Zetter, *Bullion and Bandits: The Improbable Rise and Fall of E-Gold*, WIRED (June 9, 2009, 12:00 AM), <https://www.wired.com/2009/06/e-gold/>.

16. See *Synopsis of E-Gold Transactions*, INTERNET ARCHIVE: WAYBACK MACHINE, <https://web.archive.org/web/19980627133928/http://www.e-gold.com/unsecure/synopsis.htm#CTM> (last visited Feb. 14, 2019) ("InExchange is a procedure for funding your e-metal Account. (Alternatively, simply bail metal to our custody, or accept e-metal payments from other G&SR customers).").

17. See *id.* (noting that payees can spend e-gold "immediately" and fees are 1% of transfer capped at fifty cents and 1% of storage assessed annually); Peter C. Tucker, Note, *The Digital Currency Doppelgänger: Regulatory Challenge or Harbinger of the New Economy?*, 17 CARDOZO J. INT'L & COMP. L. 589, 601 (2009) ("[M]ost, if not all, [digital currency issuers] and [digital currency exchange agents] allow users to immediately begin transferring funds following account setup . . .").

2005, e-gold had more than 3.5 million customer accounts, with millions of dollars transacted daily.¹⁸ This all came crashing down later that year, when the FBI and Secret Service first raided Jackson's home and e-gold's offices, seeking evidence of criminal activity by e-gold's customers.¹⁹ In 2007, after a long investigation, the Justice Department indicted Jackson and his colleagues for money laundering and operating an unlicensed money transmitting business.²⁰ Jackson eventually pled guilty and was sentenced to thirty-six months of supervised release.²¹ The company forfeited funds, received a fine, and was required to revamp its business practices.²²

This exposes a feature common to all centralized virtual currencies, including not only e-gold, but Paypal, Facebook credits, and countless other systems: they have a single point of failure. One company determines the balance in every user's account. One company determines whether a user can access their funds. It is difficult to overstate the power this confers. A normal bank can freeze a customer's funds. But they cannot freeze every dollar belonging to a customer everywhere in the world, even when held by another bank or kept under a customer's mattress. Centralized digital currency systems confer this power on the central authority. Certainly law enforcement agencies find this attractive when seeking to retrieve information, apply pressure, or shut a system down. But those seeking to build a robust system find it unattractive.

The alternative to the centralized model is a decentralized one, with account records kept in many different places and regularly updated.²³ Developers solved many of the issues

18. Zetter, *supra* note 15.

19. *See id.*

20. *Id.*

21. *Id.*

22. *Id.*

23. *See* David S. Evans, *Economic Aspects of Bitcoin and Other Decentralized Public-Ledger Currency Platforms* 2-3 (Coase-Sandor Inst. for Law & Econ., Working Paper No. 685, 2014), https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=2349&=&context=law_and_economics&=&sei-redir=1&referer=https%253A%252F%252Fscholar.google.com%252Fscholar

posed by this model; for example, account balances could be secured with public/private key cryptography.²⁴ As Professor Fairfield describes it:

Each person within the property system has a pair of cryptographically related keys, one public, given to everyone in the world to use, and one private, held only by the individual. The keys are mathematically related, yet it is not possible to use the public key to guess the private key. With the public key, one can send messages, bitcoins, or anything else, in a way that only the person with the private key can access. A commonly used analogy is that of a letterbox. The public key is the address of the letterbox. Anyone can put a letter in. But only the owner of the letterbox has the key to open it and retrieve the contents.²⁵

But one problem remained: double-spending.²⁶ When locating a ledger in many different places, periods will always

[%253Fhl%253Den%2526as_sdt%253D0%25252C39%2526q%253Ddecentralized%252Bbitcoin%2526btnG%253D#search=%22decentralized%20bitcoin%22](#) (describing the features of a decentralized digital currency platform).

24. Joshua A.T. Fairfield, *Bitproperty*, 88 S. CAL. L. REV. 805, 819–20 (2015).

25. *Id.* at 820.

26. See, e.g., Bill Barhydt, *The Double-Spend (What Bitcoin's White Paper Solved Forever)*, COINDESK (Oct. 27, 2018, 9:15 UTC), <https://www.coindesk.com/the-double-spend-what-bitcoins-white-paper-solved-forever/> (“Up until Satoshi’s innovation, the double-spend was the Achilles’ heel of digital currency transactions—it simply wasn’t possible for a digital system to prove two, or more, different people didn’t spend the same digital money without the use of an intermediary.”); Jack Filiba, *Double Spending: How Bitcoin Overcame This Head-Scratching Problem*, COIN SQUARE (Apr. 15, 2018), <https://news.coinsquare.com/learn-coinsquare/bitcoin-solved-double-spending-problem/> (“Double spending was an issue that left many bright cryptographers scratching their heads before Bitcoin came along. It’s believed to be one of the leading factors preventing decentralized digital currencies from reaching the market prior to Bitcoin. Luckily, Bitcoin was able to largely solve the issue through the invention of blockchain technology.”); Benjamin Wallace, *The Rise and Fall of Bitcoin*, WIRED (Nov. 23, 2011, 2:52 PM), <https://www.wired.com/2011/11/mf-bitcoin/> (“One of the core challenges of designing a digital currency involves something called the double-spending problem. . . . The conventional answer involved using a central clearinghouse to keep a real-time ledger of all transactions. . . . Bitcoin did away with the third party by publicly distributing the ledger. . . .”).

exist when the ledgers disagree.²⁷ This opens an opportunity for fraud, with account holders first spending money on one ledger, then spending the same money on a second ledger before that ledger is updated.²⁸

B. Satoshi Nakamoto Solves the Centralization Problem with Bitcoin

Bitcoin solved the double-spending problem. In a white paper published in 2008,²⁹ Satoshi Nakamoto (a pseudonym³⁰) proposed several innovations that together could ensure a secure distributed ledger system.³¹

As Nakamoto envisioned it, transactions follow a six-step process.³² First, transactions are globally broadcast over the Internet to any servers that want to participate in verifying the ledger.³³ Second, servers group them together into transaction blocks.³⁴ Third, the servers compete to solve a difficult cryptographic puzzle, for which they are rewarded bitcoins.³⁵ Called proof-of-work, this process ensures that updating the ledger requires some effort, preventing bad actors from easily altering it.³⁶ Fourth, the server finding the solution to this puzzle incor-

27. Fairfield, *supra* note 24, at 817–19.

28. *Id.* at 817–18.

29. SATOSHI NAKAMOTO, BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM 1 (2008), <https://bitcoin.org/bitcoin.pdf>.

30. Nakamoto's real identity has never been discovered. See Zoë Bernard, *Everything You Need to Know About Bitcoin, Its Mysterious Origins, and the Many Alleged Identities of Its Creator*, BUS. INSIDER (Nov. 10, 2018, 8:00 AM), <https://www.businessinsider.com/bitcoin-history-cryptocurrency-satoshi-nakamoto-2017-12>.

31. Less refined versions of these innovations were suggested by Nick Szabo in a blog post from 2008. See Nick Szabo, *Bit Gold*, BLOGSPOT: UNENUMERATED (Dec. 27, 2008, 4:16 PM), <http://unenumerated.blogspot.com/2005/12/bit-gold.html>. This is one reason Szabo is speculated to be Satoshi. Nathan Reiff, *Who Is Nick Szabo, and Is He Satoshi Nakamoto?*, INVESTOPEDIA, <https://www.investopedia.com/news/who-nick-szabo-and-he-satoshi-nakamoto/> (last updated Apr. 12, 2018).

32. NAKAMOTO, *supra* note 29, at 3.

33. *Id.*

34. *Id.*

35. *Id.* at 3–4; Carla L. Reyes, *Conceptualizing Cryptolaw*, 96 NEB. L. REV. 384, 393 (2017).

36. See Reyes, *supra* note 35, at 393 (“To prevent cheating and ensure the validity of the ledger, the Bitcoin blockchain uses a proof-of-work consensus process in which Bitcoin blockchain nodes solve complex mathematical problems to validate each block. Solving the mathematical problems, which are ‘cryptographic puzzles involving one-way functions known

porates it into the block and broadcasts that block to the other servers.³⁷ Fifth, the servers accept the block if the transactions are valid (that is, they bear the correct signature from each account holder) and the funds have not already been spent.³⁸ Sixth, the servers work on the next block in the chain, using a condensed version of the previous block (called a hash) as part of the new block.³⁹ In this way, previous blocks cannot be replaced, because each block links back to its predecessor in the chain.⁴⁰

Taken together, proof-of-work⁴¹ and the chainlinks between each block ensure that old transactions cannot be altered and every new transaction must have available funds, eliminating the double-spending problem.⁴² Falsifying transactions on the Bitcoin blockchain would require enormous effort. As Professor Fairfield describes it:

In order to falsify the block chain, an attacker must do two difficult things. If the attacker wishes to change a past transaction, the attacker must—alone!—win enough die rolls so that she outpaces

as hashes,' requires intense and expensive computing power. The difficulty and expense of validating a block deters cheating and fraudulent verification.").

37. NAKOMOTO, *supra* note 29, at 3.

38. *Id.*

39. *Id.*

40. See Reyes, *supra* note 35, at 391–92 ("A block groups transactions, marks them with a timestamp, and connects them to the previous block in the chain of transactions, leading to the name blockchain.").

41. Proof-of-work has been criticized for requiring substantial electricity and other resources. See, e.g., Daniel Shane, *Bitcoin Boom May Be a Disaster for the Environment*, CNN BUS. (Dec. 7, 2017, 9:44 PM), <https://money.cnn.com/2017/12/07/technology/bitcoin-energy-environment/index.html>. For that reason, some innovators have developed new systems that accomplish the fundamental goal of proof-of-work, ensuring an accurate (and in some cases "equitable") transaction ledger. See Alyssa Hertig, *Rethinking Proof of Work: The Quest to 'Improve' Bitcoin Heats Up*, COINDESK (Jan. 29, 2017, 13:00 UTC), <https://www.coindesk.com/rethinking-proof-of-work-the-quest-to-improve-bitcoin-heats-up>. These systems include social consensus, shareholder voting consensus, several versions of proof-of-stake, and combinations of these systems. See Vitalik Buterin, *A Proof of Stake Design Philosophy*, MEDIUM (Dec. 30, 2016), <https://medium.com/@VitalikButerin/a-proof-of-stake-design-philosophy506585978d51>; Reyes, *supra* note 35, at 394 ("Other DLT consensus models include 'unique node list' consensus and proof-of-stake consensus, among several others.").

42. See NAKOMOTO, *supra* note 29, at 2–3.

the rest of the system. That is, faking the past is prohibitively difficult because any attacker would have to match the combined processing power of the entire network over that period of time. And to continue the falsification moving forward into the future, the attacker would have to make guesses faster than the current block chain.⁴³

Nakamoto's insight forms the basis for a new, secure, decentralized monetary system. But the underlying technology—the blockchain or distributed ledger—is even more revolutionary. Leveraged correctly, it can form the basis for entirely new technological systems: better commodity and securities markets,⁴⁴ secure evidence systems,⁴⁵ powerful safeguards against identity theft,⁴⁶ and more.

C. Ethereum Creates a Universal Platform for ICOs

Vitalik Buterin was one of the first to realize this broader potential for blockchain technology.⁴⁷ He spent years trying to

43. Fairfield, *supra* note 24, at 822–23. And even this somewhat understates the difficulty in falsifying transactions. Even the massive computing power suggested here would *never* allow you to falsify a transaction in the sense of spending funds that don't belong to you. See NAKAMOTO, *supra* note 29, at 5. That would require either stealing their private key or inventing a quantum computer. The blockchain network would simply ignore any transaction lacking a proper signature. *Id.* Massive computing power enables you to do only one thing: double spend.

44. See Ian Edwards, *Nasdaq and Partners Complete Blockchain-Based Proof-of-Concept for Securities Markets*, BITSONLINE (June 20, 2018), <https://bitsonline.com/nasdaq-and-partners-complete-blockchain-based-proof-of-concept-for-securities-markets/>; Shelley Goldberg, *How Blockchain Could Revolutionize Commodity Markets*, BLOOMBERG (Dec. 22, 2017, 5:00 AM), <https://www.bloomberg.com/view/articles/2017-12-22/how-blockchain-could-revolutionize-commodity-markets>.

45. See Jeremy Wagstaff & Byron Kaye, *For Security Agencies, Blockchain Goes from Suspect to Potential Solution*, REUTERS (Dec. 2, 2017, 10:04 PM), <https://www.reuters.com/article/us-tech-blockchain-security/for-security-agencies-blockchain-goes-from-suspect-to-potential-solution-idUSKBN1DX01A>.

46. Frederic Kerrest, *Commentary: How Blockchain Could Put an End to Identity Theft*, FORTUNE (Apr. 20, 2018), <http://fortune.com/2018/04/20/blockchain-technology-identity-theft-data-privacy-protection/>.

47. Nick Szabo, a computer scientist, attorney, and cryptocurrency evangelist, is generally recognized as the person to first realize the potential for “smart contracts.” See, e.g., David Adler, *Smart Contracts*, FORDHAM J. CORP. & FIN. L.: BLOG (Apr. 26, 2018), <https://news.law.fordham.edu/jcfl/2018/04/26/smart-contracts/>; *What Is a Smart Contract?*, OKEX, <https://support.okex>

build additional functionality on the Bitcoin blockchain before recognizing its limitations and deciding to build a new system entirely.⁴⁸ His project, Ethereum, provides “a blockchain with a built-in fully fledged Turing-complete programming language.”⁴⁹ Turing-completeness is a computer science concept that signifies the ability to perform a wide range of computing tasks; essentially, a Turing machine is a computer.⁵⁰

As Buterin himself pointed out, such a system presents virtually limitless possibilities:

[O]ne might have a treasury contract of the form “A can withdraw up to X currency units per day, B can withdraw up to Y per day, A and B together can withdraw anything, and A can shut off B’s ability to withdraw.” The logical extension of this is decentralized autonomous organizations (DAOs)—long-term smart contracts that contain

.com/hc/en-us/articles/115002403171-What-is-Smart-Contract- (last visited Mar. 29, 2019). See generally Nick Szabo, *Formalizing and Securing Relationships of Public Networks*, FIRST MONDAY (Sept. 1, 1997), <https://firstmonday.org/ojs/index.php/fm/article/view/548/469-publisher=First> (developing the concept of “smart contracts”). However, Vitalik Buterin expanded these ideas into a full Turing-complete, blockchain-based computer, and implemented them. See Morgenpeck, *The Uncanny Mind that Built Ethereum*, WIRED (June 13, 2016), <https://www.wired.com/2016/06/the-uncanny-mind-that-built-ethereum/>. Buterin has also been a key theorist on blockchain economics and incentives. See, e.g., Vitalik Buterin, *On Inflation, Transaction Fees and Cryptocurrency Monetary Policy*, ETHEREUM BLOG (July 27, 2016), <https://blog.ethereum.org/2016/07/27/inflation-transaction-fees-cryptocurrency-monetary-policy/>.

48. See Robert Hackett, *Can This 22-Year Old Coder Out-Bitcoin Bitcoin?*, FORTUNE (Sept. 27, 2016), <http://fortune.com/ethereum-blockchain-vitalik-buterin/> (“Buterin also began to recognize limitations in Bitcoin. As more people began using the currency, a problem became abundantly clear: The network didn’t scale. . . . Aspiring developers also had to deal with an unfortunate reality: It’s pretty difficult to build an app on Bitcoin. The system’s primary role is being a secure means of transferring value, not being a system to create software. Nakamoto had deliberately constrained Bitcoin to make it less vulnerable.”).

49. VITALIK BUTERIN, *A NEXT GENERATION SMART CONTRACT & DECENTRALIZED APPLICATION PLATFORM 1* (2013), http://blockchainlab.com/pdf/Ethereum_white_paper_a_next_generation_smart_contract_and_decentralized_application_platform-vitalik-buterin.pdf.

50. See MICHAEL SIPSER, *INTRODUCTION TO THE THEORY OF COMPUTATION* 137 (2d ed. 2006) (“Similar to a finite automaton but with an unlimited and unrestricted memory, a Turing machine is a much more accurate model of a general purpose computer. A Turing machine can do everything that a real computer can do.”).

the assets and encode the bylaws of an entire organization.⁵¹

In other words, like the IBM-compatible computer in the 1980s and the World Wide Web in the 1990s, the Ethereum blockchain provides a platform on which others can build virtually anything they want.

Crypto enthusiasts quickly realized that one such use for the Ethereum blockchain was to create other blockchains.⁵² Indeed, consistent with its effort to foster blockchain innovation, the Ethereum Foundation developed a standardized system called ERC-20 to facilitate this use.⁵³ This “standard interface allows any tokens on Ethereum to be re-used by other applications, from wallets to decentralized exchanges.”⁵⁴ Further, “all ERC-20 tokens can easily be interchanged with other ERC-20 tokens. ERC-20 tokens have the same functions, with the same names, that take the same arguments. They use a common set of rules and guidelines, that ensure the two currency systems will be able to talk with one another.”⁵⁵ Essentially, when a tool was built to handle any ERC-20 token—from a user’s wallet for holding individual account balances to an exchange built for transferring tokens from one user to another—developers could adapt that tool to handle other ERC-20 tokens with relative ease.

During 2017, a combination of factors—among them Bitcoin’s price resurgence, ether’s popularity, and the lowered barriers to entry from the ERC-20 standard—led to a massive capital influx into crypto tokens and an explosion in initial coin offerings (ICOs). According to ICODATA.IO, in 2016 there were twenty-nine ICOs totaling slightly over \$90 million.⁵⁶ In 2017, there

51. See BUTERIN, *supra* note 49, at 1.

52. *Why Most New Tokens Are Ethereum ICOs*, DRAGLET, <https://www.draglet.com/why-ethereum-icos/> (last visited Mar. 29, 2019).

53. *See id.*

54. Fabian Vogelsteller & Vitalik Buterin, *ERC-20 Token Standard*, GITHUB (Nov. 19, 2015), <https://github.com/ethereum/EIPs/blob/master/EIPS/eip-20.md>.

55. *Why Most New Tokens Are Ethereum ICOs*, *supra* note 52.

56. *Funds Raised in 2016*, ICODATA.IO, <https://www.icodata.io/stats/2016> (last visited Mar. 29, 2019).

were 875 ICOs totaling more than \$6 billion.⁵⁷ Each ICO represented a new request for investment in a blockchain project.⁵⁸ In each case, programmers promised a new and original take on blockchain technology.⁵⁹ They promised to build, launch, and maintain this new system.⁶⁰ In each case, the programmers asked for money in return.⁶¹

Often programmers asked for money even before the project was complete, promising tokens after they had finished their work.⁶² Sometimes they asked for it when it was partially complete, offering tokens for some limited functionality while promising more to come.⁶³ And in some rare cases, they asked for it when the project was relatively or entirely complete, offering tokens as commodities or products that would work on the already-developed blockchain.⁶⁴ The problem, of course, is that at least the first situation and probably the second situation are practically the encyclopedia definition of a securities offering: “A securities offering is a discrete round of investment, by which a business or other enterprise raises money to fund operations, expansion, a capital project, an acquisition, or

57. *Funds Raised in 2017*, ICODATA.IO, <https://www.icodata.io/stats/2017> (last visited Mar. 29, 2019).

58. See Nathaniel Popper, *An Explanation of Initial Coin Offerings*, N.Y. TIMES (Oct. 27, 2017), <https://www.nytimes.com/2017/10/27/technology/what-is-an-initial-coin-offering.html> (“Coin offerings are a way for start-ups or online projects to raise money without selling stock or going to venture-capitalists—essentially a new form of crowdfunding.”).

59. *See id.*

60. *See id.*

61. *See id.*

62. *See id.* (“‘Promising to build’ is the operative phrase here, because in almost every case the services that will supposedly make these coins valuable have not yet been finished.”).

63. *See id.*

64. See William Hinman, Director, Div. of Corp. Fin., Sec. & Exch. Comm’n, Remarks at the Yahoo Finance All Markets Summit: Crypto (June 14, 2018) (transcript available at <https://www.sec.gov/news/speech/speech-hinman-061418>) (“[I]ndustry participants are beginning to realize that, in some circumstances, it might be easier to start a blockchain-based enterprise in a more conventional way. In other words, conduct the initial funding through a registered or exempt equity or debt offering and, once the network is up and running, distribute or offer blockchain-based tokens or coins to participants who need the functionality the network and the digital assets offer.”).

some other business purpose.”⁶⁵ This explosion in funding activities caught the SEC’s interest.

II. THE SEC’S POSITION ON CRYPTOCURRENCY

The SEC has incrementally developed its position on crypto tokens, with two major enforcement decisions (the DAO Report and Munchee Order) and one significant statement by William Hinman, the director of the Division of Corporate Finance. While the SEC has promised additional “plain English” guidance to come, that guidance has not yet appeared.

The SEC contends that projects funding their development through ICOs are unregistered securities offerings.⁶⁶ The SEC holds both the creators building the project and the exchanges trading the tokens liable for failing to comply with securities laws.⁶⁷ As might be expected, the SEC selected cases that highlighted the abuses inherent in the ICO process. Some token issuers behave responsibly, building a blockchain project using their own resources or private capital raised from accredited investors. Only when they have a working product do they sell their blockchain tokens to the wider world. But many token issuers do not behave responsibly. Instead of taking money for tokens on a working blockchain, they take money for promising to build a working blockchain. As this Article later discusses, this future promise composes the keystone of investment contracts—a promise absent when tokens later trade on secondary exchanges. The SEC repeatedly and correctly emphasizes the problem with this money-first-project-later group, but it has

65. *Securities Offering*, WIKIPEDIA, https://en.wikipedia.org/wiki/Securities_offering (Mar. 12, 2019); see also Hinman, *supra* note 64 (“Funds are raised with the expectation that the promoters will build their system and investors can earn a return on the instrument—usually by selling their tokens in the secondary market once the promoters create something of value with the proceeds and the value of the digital enterprise increases.”).

66. See *infra* Part II.

67. See *infra* Part II.

refused to give the more responsible group a safe harbor that would encourage innovation.⁶⁸

While the SEC has declined to articulate a position on when a crypto token is *not* a security, at least one influential SEC staff member has proposed a theory based on “centralization.”⁶⁹ This theory suggests that when a project stands independently from any single person or group, it is no longer a security. Bitcoin is a good example: even if Satoshi were to emerge publicly and even if his identity could be verified, he could not alter the blockchain, change the code running on existing miners, take control of bitcoins for which he lacked the private key, etc. His opinion would merit respect, but it would nevertheless be just another voice in the crowd.

This centralization concept presents an interesting idea. It may even promote consumer welfare. Nonetheless, this Article argues that it finds no basis in the statute or the case law, and creates substantial problems by making crypto users responsible for third parties. The Article suggests that the law should determine when a crypto token is or is not a security by treating it as a contract. When the token holder makes an ancillary promise—like future development or price appreciation—then the token is a security. When the token holder promises only the token itself or a marketplace on which to trade the token, then the token is not a security.⁷⁰

A. *The DAO Report Condemns Fundraising Disguised as Innovation*

The SEC made its first significant statement on crypto tokens in the DAO Report, which responded to the high-profile hacking and failure of a project by the same name.⁷¹ The DAO was intended as a decentralized autonomous organization as

68. See Report of Investigation Pursuant to Section 21(a) of the Securities and Exchange Act of 1934: The DAO, Exchange Act Release No. 81,207, 117 SEC Docket 5, at 11–13 (July 25, 2017) [hereinafter DAO Report].

69. Hinman, *supra* note 64.

70. See *infra* Parts V, VI.

71. DAO Report, *supra* note 68, at 2–10.

envisioned by Vitalik Buterin's original white paper, with no CEO or Board of Directors, and decisions made by people investing in the project and then casting votes through code running on the Ethereum blockchain.⁷² After the DAO had collected capital but before it began funding projects, an attacker discovered a flaw in the DAO code that he used to siphon off the DAO's assets.⁷³ To remedy this situation, the Ethereum community broadly agreed to hard-fork the blockchain, meaning they changed the fundamental rules governing the Ethereum blockchain's behavior.⁷⁴ These events drew the SEC's attention. In the resulting DAO Report, the SEC concluded that the DAO tokens were securities, that the DAO's creator Slock.it issued them, and that third-party exchanges had wrongly traded in them.⁷⁵ While the SEC did not seek punitive remedies, it reminded everyone working in the cryptocurrency space about their obligation to comply with the securities laws.⁷⁶ The DAO Report has been widely cited within the cryptocurrency community as important and largely correct guidance about the U.S. securities laws.⁷⁷

As with most blockchain projects, the DAO's intended structure was described in a white paper, authored by Christoph Jentzsch.⁷⁸ Along with his brother Simon Jentzsch and Stephen Tual, Christoph co-founded Slock.it, a German blockchain

72. See generally BUTERIN, *supra* note 49 (explaining how Ethereum, a decentralized autonomous organization and its open-ended design blockchain can be used to create long-term smart contracts which will increase the efficiency of the computational industry).

73. DAO Report, *supra* note 68, at 9.

74. *Id.* at 9–10.

75. See *id.* at 11–16.

76. See *id.* at 15–18.

77. See, e.g., Jon Buck, *Forewarned Is Forearmed: Key Takeaways from SEC DAO Report*, COINTELEGRAPH (July 30, 2017), <https://cointelegraph.com/news/forewarned-is-forearmed-key-takeaways-from-sec-dao-report>; Michael Safai, *Death of the ICO? What the SEC Report on DAO Really Means*, SEEKING ALPHA (Aug. 3, 2017, 11:49 AM), <https://seekingalpha.com/article/4094298-death-ico-sec-report-dao-really-means>.

78. See generally CHRISTOPH JENTZSCH, DECENTRALIZED AUTONOMOUS ORGANIZATION TO AUTOMATE GOVERNANCE (2016), <https://download.slock.it/public/DAO/WhitePaper.pdf> (presenting a potential solution to conventional corporate governance issues through the use of Ethereum technology and DAO code function, formation, and governance features).

solutions company.⁷⁹ Slock.it promoted the DAO through websites, marketing materials, public statements, and similar venues.⁸⁰ From April 30, 2016 through May 28, 2016, the DAO conducted what has since become known as an ICO: in return for Ether, the DAO offered DAO Tokens, which provided both voting rights in the DAO and a share in profits generated by the DAO.⁸¹

In theory, the DAO was governed by votes cast by its members.⁸² In reality, considerable power was placed in the hands of “Curators,” who controlled what addresses could receive ether from the DAO, whether proposals were put to members for a vote, and how the vote was conducted.⁸³ Slock.it chose all the Curators.⁸⁴ Slock.it also announced that it would submit the first proposal for funding by the DAO.⁸⁵ It therefore seemed that Slock.it had constructed this entire process to lead to a single, foreordained conclusion: Slock.it would obtain funding for a future project. One commentator called this “one of the most complicated, circuitous paths to seed funding for a start-up company . . . in living memory.”⁸⁶

In June 2016, an attacker discovered a vulnerability in the DAO’s code that permitted him to siphon off ether to his own benefit.⁸⁷ Although the attacker rapidly diverted approximately one-third of the ether owned by the DAO, that ether was held in an escrow account for a twenty-seven-day waiting period imposed by the DAO code.⁸⁸ After that time, the attacker would

79. See DAO Report, *supra* note 68, at 3.

80. See *id.* at 5–6.

81. See *id.* at 6.

82. See JENTZSCH, *supra* note 78, at 1 (“This paper illustrates a method that for the first time allows the creation of organizations in which (1) participants maintain direct real-time control of contributed funds and (2) governance rules are formalized, automated and enforced using software.”).

83. See DAO Report, *supra* note 68, at 7–8.

84. See *id.* at 7.

85. See *id.*

86. Kyle E. Mitchell, *Seven Takeaways from the SEC DAO Report*, /DEV/LAWYER (July 25, 2017), <https://writing.kemitchell.com/2017/07/25/DAO-Report-of-Investigation.html>.

87. See DAO Report, *supra* note 68, at 9.

88. See *id.*

be free to move it to an Ethereum wallet of his choosing.⁸⁹ The Ethereum community concluded that to return the ether to DAO members, they would need to hard-fork the entire blockchain.⁹⁰ This radical step involved Ethereum users broadly agreeing to adopt a new protocol changing the blockchain's operating rules.⁹¹ Slock.it's co-founders endorsed the hard-fork solution.⁹²

In reviewing these facts, the SEC concluded that the DAO tokens were securities.⁹³ The SEC applied the test first established by the Supreme Court in *SEC v. W.J. Howey Co.*: "[A]n investment contract for purposes of the Securities Act means a contract, transaction or scheme whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of the promoter or a third party"⁹⁴ DAO members invested ether, which is considered money.⁹⁵ They were led to expect profits from the DAO's common enterprise.⁹⁶ Slock.it's substantial promotional and managerial efforts led DAO members to expect those profits.⁹⁷

While the SEC's conclusion regarding the DAO seems a straightforward application of the *Howey* test, it nonetheless raises several questions. For example, in a truly decentralized autonomous organization, no authority exists beyond the code, the token holders, and those selected by the token holders. Those token holders may number in the millions and be scattered around the world, like shareholders in a major corporation. Even assuming the tokens are securities, do the modern securities laws present a realistic model for enforcement against such an entity? As another example, assume that users unaffiliated with the party offering the token play a significant role in

89. *See id.*

90. *See id.*

91. *See id.*

92. *See id.*

93. *See id.*

94. 328 U.S. 293, 298–99 (1946).

95. *See* DAO Report, *supra* note 68, at 11.

96. *See id.* at 11–12.

97. *See id.* at 12–15.

building the token ecosystem, maybe by submitting content. Are those users “agents” of the party offering the token? If not, can the party offering the token face liability for knowing that—like Yelp or TripAdvisor—users would engage with and build its platform?

Interesting as they are, this Article leaves these questions for another day, because the SEC’s DAO Report raises a troubling and more immediate problem: third-party crypto exchanges are held responsible for the promises made by Slock.it regarding continued development and management of the DAO.

From May 2016 through September 2016, DAO tokens were traded on multiple secondary platforms.⁹⁸ The SEC concluded that these platforms were “exchanges” under the Exchange Act.⁹⁹ But in applying the statute to the platforms at issue, the SEC’s analysis comprised only two ipse dixit sentences:

The Platforms that traded DAO Tokens appear to have satisfied the criteria of Rule 3b-16(a) and do not appear to have been excluded from Rule 3b-16(b). As described above, the Platforms provided users with an electronic system that matched orders from multiple parties to buy and sell DAO Tokens for execution based on non-discretionary methods.¹⁰⁰

While the SEC offered no further reasoning, it seems to have concluded that because the DAO tokens were securities when issued by Slock.it, they remained securities when traded on the exchanges. That assumption creates a tension with the SEC’s repeated and correct emphasis on ICO issuers that promise not only tokens *but future work to build and improve those tokens*.¹⁰¹

98. *See id.* at 8.

99. *See id.* at 17.

100. *Id.*

101. *See id.* at 12 (“Investors in [t]he DAO reasonably expected Slock.it and its co-founders, and [t]he DAO’s Curators, to provide significant managerial efforts after [t]he DAO’s launch.”); *see also* Munchee Inc., Exchange Act Release No. 10445, 2017 WL 10605969 (Dec. 11, 2017) [hereinafter Munchee Report] (“Purchasers would reasonably have had the expectation that

This future promise forms the keystone for investment contracts, a promise absent when tokens later trade on secondary exchanges.¹⁰² As explained in Part V, this Article concludes that the SEC's assumption is incorrect.¹⁰³

The DAO Report only began the SEC's guidance. In its next significant statement, the SEC would further discuss the problems with fundraising based on future functionality.

B. *The Munchee Order Emphasizes Functionality's Importance*

The next significant statement from the SEC came in December 2017. Munchee Inc. created an app for reviewing restaurant meals.¹⁰⁴ In order to build additional functionality, Munchee issued tokens via an ICO, raising approximately \$15 million.¹⁰⁵ While the offering was still ongoing, SEC staff contacted Munchee, prompting the company to shut down its offering, not issue the tokens, and return the funds raised.¹⁰⁶

In concluding that the Munchee token was a security, the Commission emphasized that at the time of sale, the tokens had no functionality: "While Munchee told potential purchasers that they would be able to use MUN tokens to buy goods or services in the future after Munchee created an 'ecosystem,' no one was able to buy any good or service with MUN throughout the relevant period."¹⁰⁷ Rather, Munchee promised future functionality, like users receiving "tokens for writing food reviews" or eating in partner restaurants, and using tokens to buy meals in those same restaurants.¹⁰⁸ Munchee also emphasized its ICO's profit potential, promising to work with exchanges to list the

Munchee and its agents would expend significant efforts to develop an application and 'ecosystem' that would increase the value of their MUN tokens.").

102. See, e.g., SEC v. W.J. Howey Co., 328 U.S. 293, 299 (1946) (stating investment contracts embody "a flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits" (emphasis added)).

103. See *infra* Part V.

104. See Munchee Report, *supra* note 101.

105. *Id.*

106. *Id.* at 2.

107. *Id.* at 4.

108. *Id.*

token and making or endorsing public statements about the token's likelihood to increase in value.¹⁰⁹ The SEC concluded that this profit would come principally from the efforts of "Munchee and its agents" in building the "ecosystem" where Munchee tokens would have a use.¹¹⁰

Probably because the Munchee tokens were never issued and thus never traded, the SEC's Order does not discuss actions by exchanges. But in a later March 2018 statement, the agency did reiterate its view that exchanges were operating unlawfully.¹¹¹ It also suggested that even platforms not meeting the "exchange" definition might be providing other services, such as wallet management, which could require broker-dealer, transfer agent, or clearing agency registration.¹¹² The press also reported that the SEC was "underwhelmed by the [exchanges'] enthusiasm for coming within the regulatory structure right now" and that "[t]here are a number of exchanges that are trading ICOs that [the SEC] would think that we would see more registrations."¹¹³

One problem lurking behind the SEC's statements was the seeming permanence of finding a particular crypto token to be a security. It seems intuitive that at some point a token should be free to trade, but it was not clear when that would occur. In its next significant statement, the SEC would start building a

109. *Id.* at 5–6.

110. *Id.* at 6–7.

111. Public Statement, U.S. Sec. & Exch. Comm'n, Statement on Potentially Unlawful Online Platforms for Trading Digital Assets (Mar. 7, 2018), <https://www.sec.gov/news/public-statement/enforcement-tm-statement-potentially-unlawful-online-platforms-trading> ("Online trading platforms have become a popular way investors can buy and sell digital assets, including coins and tokens offered and sold in so-called Initial Coin Offerings ('ICOs'). . . . A number of these platforms provide a mechanism for trading assets that meet the definition of a 'security' under the federal securities laws. If a platform offers trading of digital assets that are securities and operates as an 'exchange,' as defined by the federal securities laws, then the platform must register with the SEC as a national securities exchange or be exempt from registration.").

112. *Id.*

113. Kate Rooney, *SEC Director "Underwhelmed" by Rate of Cryptocurrency Exchanges Self-Reporting*, CNBC (June 6, 2018, 7:10 PM), <https://www.cnbc.com/2018/06/06/sec-underwhelmed-by-rate-of-cryptocurrency-exchanges-self-reporting.html>.

theoretical framework for a crypto token security to shed that security label.

C. The SEC Maps a Path for Tokens to Shed Their Security Status

The SEC's next statement came from William Hinman, the director of the Division of Corporate Finance, at the Yahoo Finance Summit in June 2018.¹¹⁴ He spoke at length on several relevant points. Importantly, he acknowledged that not all crypto tokens are securities, and he specifically cited bitcoins and ether as tokens that he does not currently view as securities.¹¹⁵ Mr. Hinman also advanced a new model for determining when a token first issued as a security later stops being a security.¹¹⁶ This model emphasizes centralization, focusing on whether a single person or company controls the crypto token's development and management.¹¹⁷ Overall, the statement suggests that the SEC has a two-step process: The SEC first uses *Howey* and its progeny to determine whether a token was ever a security.¹¹⁸ If the SEC concludes that the token was a security when issued, the SEC next focuses on the token

114. See Hinman, *supra* note 64.

115. *Id.* Hinman observed:

[W]hen I look at Bitcoin today, I do not see a central third party whose efforts are a key determining factor in the enterprise. The network on which Bitcoin functions is operational and appears to have been decentralized for some time, perhaps from inception. Applying the disclosure regime of the federal securities laws to the offer and resale of Bitcoin would seem to add little value. And putting aside the fundraising that accompanied the creation of Ether, based on my understanding of the present state of Ether, the Ethereum network and its decentralized structure, current offers and sales of Ether are not securities transactions. And, as with Bitcoin, applying the disclosure regime of the federal securities laws to current transactions in Ether would seem to add little value.

Id. SEC Chairman Clayton later echoed this point with regard to Bitcoin: "An asset like bitcoin, where it's designed to be a payment system replacement for sovereign currencies, we've determined that doesn't have the attributes of a security." Daniel Roberts, *SEC Chairman: Bitcoin 'Doesn't Have the Attributes of a Security'*, YAHOO! FIN. (Nov. 27, 2018), <https://finance.yahoo.com/news/sec-chairman-bitcoin-doesnt-attributes-security-231627590.html>.

116. Hinman, *supra* note 64.

117. *Id.*

118. *Id.*

at a snapshot in time, trying to determine whether it is currently “centralized” (still a security) or “decentralized” (not a security).¹¹⁹ This Article argues that this model incorrectly imposes a universal standard for any given crypto token, without considering the parties involved in a specific transaction. Moreover, the evident problems raised by the model point to the need for viewing each crypto token transaction as a bilateral contract between two parties.

Mr. Hinman first acknowledges that many projects are fundraising with explicit promises for future development, and that those projects raise particular concerns.¹²⁰ By contrast, other projects are fundraising through permissible channels, building their networks, and then distributing tokens “to participants who need the functionality the network and the digital assets offer.”¹²¹ Under this latter model, buyers are not investing in a future promise, but rather in a real, current product.¹²² Tokens themselves are merely commodities: “[T]he token—or coin or whatever the digital information packet is called—all by itself is not a security, just as the orange groves in *Howey* were not.”¹²³ The promise of future development turns this commodity into a security, as Mr. Hinman notes by analogy to housing units:

When someone buys a housing unit to live in, it is probably not a security. But . . . if the housing unit is offered with a management contract or other services, it can be a security. . . . The same reasoning applies to digital assets. The digital asset itself is simply code. But the way it is sold—as part of an investment; to non-users; by promoters

119. *Id.*

120. *Id.* (“Promoters, in order to raise money to develop networks on which digital assets will operate, often sell the tokens or coins rather than sell shares, issue notes or obtain bank financing Funds are raised with the expectation that the promoters will build their system When we see that kind of economic transaction, it is easy to apply the Supreme Court’s ‘investment contract’ test first announced in *SEC v. Howey*.”).

121. *Id.*

122. *Id.* (“This allows the tokens or coins to be structured and offered in a way where it is evident that purchasers are not making an investment in the development of the enterprise.”).

123. *Id.*

to develop the enterprise—can be, and, in that context, most often is, a security—because it evidences an investment contract.¹²⁴

But there is a path for a token to be deemed once but no longer a security: decentralization. When a network is sufficiently decentralized, buyers can no longer reasonably rely on the promotional or managerial efforts of a person or group.¹²⁵ Multiple competing groups engage in an ongoing contest to win user support and advance their ideas about the token's future.¹²⁶

Despite Hinman's influential position on the SEC staff, some commentators viewed a later statement by SEC Chairman Jay Clayton as marginalizing Hinman's opinion, reminding stakeholders that "staff statements are nonbinding and create no enforceable legal rights or obligations of the Commission or other parties."¹²⁷ But Clayton's statement has probably been over-emphasized by the crypto community. Notably, the statement itself does not directly refer to Hinman or his speech.¹²⁸ It may just be a general reminder that while the Commission takes advice from its staff, it can do what it wants.¹²⁹ Importantly, while the SEC may not ultimately adopt

124. *Id.* (footnotes omitted).

125. *See id.* ("If the network on which the token or coin is to function is sufficiently decentralized—where purchasers would no longer reasonably expect a person or group to carry out essential managerial or entrepreneurial efforts—the assets may not represent an investment contract. Moreover, when the efforts of the third party are no longer a key factor for determining the enterprise's success, material information asymmetries recede. As a network becomes truly decentralized, the ability to identify an issuer or promoter to make the requisite disclosures becomes difficult, and less meaningful.").

126. *See, e.g., What Is Segwit? A Beginners Crash Course!*, BLOCKGEEKS, <https://blockgeeks.com/guides/what-is-segwit/> (last visited Mar. 29, 2019) (providing an excellent example of the debate in the Bitcoin community over block size, Segwit adoption, and the Lightning network).

127. *See* Josiah Wilmoth, *What SEC Chairman Jay Clayton's New Statement Means for Ethereum*, CCN (Sept. 17, 2018), <https://www.ccn.com/what-sec-chairman-jay-claytons-new-statement-means-for-ethereum/>.

128. *See* Public Statement from Jay Clayton, Chairman, SEC, Statement Regarding SEC Staff Views (Sept. 13, 2018), <https://www.sec.gov/news/public-statement/statement-clayton-091318>.

129. *See id.* (explaining that Chairman Clayton encourages engagement by staff members but "that it is the Commission and only the Commission that adopts rules and regulations that have the force and effect of law").

“centralization” as its operative test for crypto securities, this test fits suspiciously well with the SEC’s enforcement decisions thus far.

For example, the “centralization” approach explains why the SEC provided such a cursory discussion regarding exchanges in the DAO Report.¹³⁰ Essentially, the SEC views crypto tokens as securities from issuance until the network on which they operate becomes sufficiently independent from the original issuer. This conclusion attaches to the token itself, so any party trading it or assisting in trading it remains subject to the securities laws.¹³¹ It was therefore unnecessary to include a separate analysis as to whether the tokens were securities when traded by the exchanges; the DAO Report had already discussed at length why they were securities, and no intervening change in the network had modified that conclusion.¹³²

The SEC’s centralization idea bears similarity to the 1934 Exchange Act requirement that issuers of widely held securities must generally register and periodically report those securities, even if no formal public offering was ever conducted.¹³³ But these requirements determine when an issuer of an instrument already deemed a security must register and report. There is no reason to believe that this provision should have a role—even by analogy—in deeming an instrument a security in the first place.

On the other hand, some commentators have noted that decentralization could weaken any “common enterprise”

130. See generally DAO Report, *supra* note 68 (containing some discussion of exchanges but not analyzing them in detail).

131. Securities laws do not limit liability to the original issuers. “[A]ny person” that sells an unregistered security can be held liable. See 15 U.S.C. § 77e(a) (2018). This raises the obvious question why the SEC has not threatened retail sellers of crypto tokens, like the average investor who cashes out some of their position. Practicality in pursuing such widespread enforcement actions certainly plays a part, but one also wonders whether the SEC has really grappled with the implications created by its centralization theory.

132. See DAO Report, *supra* note 68, at 11–15.

133. See 15 U.S.C. § 781(g) (2018); 1 THOMAS LEE HAZEN, THE LAW OF SECURITIES REGULATION § 1:12 (7th ed. 2016) (“Registration and periodic reporting by issuers under the 1934 Exchange Act depend generally upon the degree to which the securities are widely held.”).

under *Howey*.¹³⁴ For example, Bitcoin purchasers do not “pool[] their assets in a single, common enterprise” as is required for horizontal commonality under the *Howey* test.¹³⁵ Nor does Bitcoin’s value depend “on the expertise of the decentralized sellers of Bitcoin” as is necessary for vertical commonality under the *Howey* test.¹³⁶ This bolsters the SEC’s conclusion that Bitcoin is not currently and perhaps never was a security, due to its substantial decentralization. At most, this points to treating decentralization as one factor in a traditional *Howey* analysis, not as an overriding determinant.

If “centralization” were treated as the overriding determinant on whether a crypto token was a security, it would raise numerous questions:

(1) How is centralization measured? By location and management of wallets? Location and management of miners? Identity of code contributors? Some other metric?

(2) What if a network is deemed decentralized but a party buys up significant mining capacity?¹³⁷ Is it centralized and therefore a security again? Is that true just for transactions with the party holding the mining capacity, or for all parties?

(3) What legal authority supports this centralization metric?

134. See Jeffrey E. Alberts & Bertrand Fry, *Is Bitcoin a Security?*, 21 B.U. J. SCI. & TECH. L. 1, 17–20 (2015); Peter van Valkenburgh, *What Could “Decentralization” Mean in the Context of the Law?*, COIN CTR. (June 15, 2018), <https://coincenter.org/entry/what-could-decentralization-mean-in-the-context-of-the-law>.

135. Alberts & Fry, *supra* note 134, at 16–17.

136. *Id.* at 18.

137. One particularly dangerous subset of this situation is the 51% attack. See Jake Frankenfield, *51% Attack*, INVESTOPEDIA, <https://www.investopedia.com/terms/1/51-attack.asp> (last updated Feb. 7, 2019). Studies have suggested that for many less established (or poorly designed) cryptocurrencies, such an attack can be surprisingly affordable. See, e.g., Neer Varshney, *Here’s How Much It Costs to Launch a 51% Attack on PoW Cryptocurrencies*, TNW (May 30, 2018), <https://thenextweb.com/hardfork/2018/05/30/heres-how-much-it-costs-to-launch-a-51-attack-on-pow-cryptocurrencies/>.

But the biggest problem created by this centralization argument is the tension between universal and bilateral rules. Mr. Hinman suggests that if a token is overly centralized, then it remains a security no matter the counterparties involved.¹³⁸ But there is a tension here, because the SEC wants to have its cake and eat it, too. As demonstrated by its parallel treatment for issuers and exchanges, the SEC wants a universal rule for centralized crypto tokens. No matter who trades it, it is a security. But even once a token becomes sufficiently decentralized, the SEC wants to be able to treat it as a security if someone starts selling it with extra promises attached, as Mr. Hinman explains: “If a promoter were to place Bitcoin in a fund or trust and sell interests, it would create a new security.”¹³⁹ In this view, if a token is decentralized, then it is tentatively not a security, but it can be re-classified as a security at any time, based on the identity and intent of the counterparties involved.¹⁴⁰

The case law does not support Mr. Hinman’s universal rule. A centralized token should not be globally deemed a security, regardless of the identity and intent of the parties involved. Similarly, a decentralized token should not be globally exempted from the securities laws, regardless of the identity and intent of the parties involved. Indeed, Mr. Hinman realizes that this latter example creates a problem—hence his proposed exception when crypto tokens are offered with new promises attached.¹⁴¹ But his bilateral exception exposes the questionable foundations for his universal rule: if the exception is handled bilaterally, why isn’t the original definition? Indeed, a bilateral definition would remove any need for an exception. As this Article later explains, a party selling a purported security must make an extra promise about future development, work, profits, etc.¹⁴² Otherwise, the “security” is merely a commodity.

138. Hinman, *supra* note 64.

139. *Id.*

140. *See id.*

141. Hinman, *supra* note 64.

142. *See infra* Part III.

D. *EtherDelta and the Statement on Digital Asset Securities*

The most recent statement by the SEC on exchange enforcement was twofold: an enforcement decision against Zachary Coburn,¹⁴³ who created the EtherDelta exchange, followed shortly thereafter by a joint statement from multiple SEC divisions.¹⁴⁴

The EtherDelta enforcement decision was brought against Zachary Coburn, who created and operated the EtherDelta exchange.¹⁴⁵ This exchange permitted partially decentralized trading in crypto tokens.¹⁴⁶ Despite this being the first enforcement decision to levy a fine against an exchange operator, it provided little guidance on the SEC's views. Indeed, the few relevant paragraphs simply cite back to the SEC's DAO Report and supporting case law.¹⁴⁷ Strangely, the SEC's opinion never mentions a single, specific token that the Commission alleges to be a security. Rather, it repeatedly emphasizes that Coburn designed EtherDelta to operate with Ether and all ERC20 tokens.¹⁴⁸ The opinion simply implies that at least some of those tokens must be securities.¹⁴⁹

The EtherDelta Opinion was issued alongside other enforcement decisions against issuers and broker-dealers. The SEC issued a statement shortly after these enforcement actions, attempting to pull together these disparate decisions into one cohesive opinion.¹⁵⁰ But all it did was emphasize that the Com-

143. See Zachary Coburn, Exchange Act Release No. 84553, 2018 WL 5840155 (Nov. 8, 2018) [hereinafter EtherDelta Opinion].

144. Public Statement, Div. of Corp. Fin., Div. of Inv. Mgmt., & Div. of Trading & Markets, SEC, Statement on Digital Asset Securities Issuance and Trading (Nov. 16, 2018), <https://www.sec.gov/news/public-statement/digital-asset-securities-issuance-and-trading> [hereinafter SEC Digital Asset Statement].

145. See, e.g., EtherDelta Opinion, *supra* note 143, at 2. Despite common reference to this as the "EtherDelta opinion," it is worth noting that the EtherDelta exchange was not a party to the settlement. Coburn had sold the exchange to a foreign buyer prior to the enforcement action. See *id.* at 3.

146. *Id.* at 1–2, 7.

147. *Id.* at 9.

148. *Id.*

149. *Id.* at 1–2, 4–5, 8–9.

150. See SEC Digital Asset Statement, *supra* note 144.

mission will enforce its view of the law against all entities involved in the crypto space. It offered no further guidance regarding crypto tokens as securities and simply pointed back to the DAO Report and Munchee Order.¹⁵¹

Pressure from lawmakers has also led the SEC to promise “plain English” guidance on ICOs, but that guidance has not yet been released.¹⁵²

Having examined the SEC’s view on cryptocurrency, before discussing how the law should treat crypto tokens and more specifically crypto exchanges, this Article will next broaden the focus and review how the law treats securities that do not fall under the traditional categories of stocks and bonds.

III. THE *HOWEY* TEST FOR INVESTMENT CONTRACTS

The securities laws apply first and foremost to traditional securities like stocks and bonds.¹⁵³ These are “instruments whose names alone carry well-settled meaning.”¹⁵⁴ But Congress knew that bad actors would attempt to evade the securities laws by relabeling traditional financial instruments with new names and repackaging them with shiny new wrapping. After all, “the problems at which modern securities regulation is directed are as old as the cupidity of sellers and the gullibility of buyers.”¹⁵⁵ For that reason, the securities laws also extend to “instruments of ‘more variable character [that] were necessarily designated by more descriptive terms,’ such as ‘investment contract’ and ‘instrument commonly known as a security.’”¹⁵⁶ As mentioned above, the test for distinguishing an

151. See *id.* at n.4 (citing DAO Report).

152. See John Vibes, *SEC Official Promises “Plain English” Guidance on ICOs Coming Soon*, CRYPTOGLOBE (Nov. 6, 2018), <https://www.cryptoglobe.com/latest/2018/11/sec-official-promises-plain-english-guidance-on-icos-coming-soon/> (discussing SEC’s plan to implement plain language to explain regulation of cryptocurrencies to owners and investors of ICOs).

153. See 15 U.S.C. § 77b(a)(1) (2018).

154. *Landreth Timber Co. v. Landreth*, 471 U.S. 681, 686 (1985).

155. 1 LOUIS LOSS ET AL., *SECURITIES REGULATION* 4 (5th ed. 2014).

156. *Landreth*, 471 U.S. at 686 (quoting *SEC v. C.M. Joiner Leasing Corp.*, 320 U.S. 344, 351 (1943)). Following *Howey*, there was some question whether the Supreme Court had enunciated a new multi-pronged test for all securities, or whether the *Howey* test was only required for investment contracts. The Supreme Court later reiterated that stocks, bonds, and the other

“investment contract” was enunciated by the Supreme Court in *SEC v. W.J. Howey Co.*¹⁵⁷

As the Supreme Court explained in *Howey*, the term “investment contract” was unknown to federal law prior to the Securities Act, and it remained undefined by that Act.¹⁵⁸ But the term had previously appeared in multiple state laws, and “it had been broadly construed by state courts so as to afford the investing public a full measure of protection.”¹⁵⁹ This catch-all category reached beyond traditional stocks and bonds.¹⁶⁰ It “was . . . capable of adaptation to meet the countless and variable schemes devised by those who seek the use of money of others on the promise of profits.”¹⁶¹

The facts in *Howey* follow a pattern repeated throughout the case law: a business venture offers commodities that average investors would find difficult to manage.¹⁶² To convince investors to buy in, the venture promises to use its particular acumen to maintain and sell the commodities for a profit.¹⁶³ In *Howey*, the venture was pitching orange groves.¹⁶⁴ Alongside those orange groves, the venture offered service contracts, touting the venture’s superior skill in cultivating, harvesting, and selling oranges.¹⁶⁵ While the investors were free to choose other servicers, few did.¹⁶⁶ And once investors signed the initial service contract, they had little opportunity to revisit that choice, with a ten-year contract term and no cancellation option.¹⁶⁷

categories were separate, well-known categories that have their own tests. *See id.* at 691 (“[T]he *Howey* economic reality test was designed to determine whether a particular instrument is an ‘investment contract,’ not whether it fits within *any* of the examples listed in the statutory definition of ‘security.’”).

157. 328 U.S. 293, 298 (1946).

158. *Id.*

159. *Id.*

160. *See* *United States v. Namer*, 680 F.2d 1088, 1096 (5th Cir. 1982) (referring to “investment contract” as a “catch-all statutory phrase”).

161. *Howey*, 328 U.S. at 299.

162. *See id.* at 299–300.

163. *See id.*

164. *Id.* at 295.

165. *Id.*

166. *Id.*

167. *Id.* at 296.

After harvesting and selling the oranges, the venture would pool the proceeds for all the groves and cut each investor a check for a percentage based on the investor's specific acreage.¹⁶⁸ In short, the *Howey* defendants offered orange groves—a commodity—with a promise to work them for a profit.¹⁶⁹

The Supreme Court concluded that these were plainly investment contracts.¹⁷⁰ The Court defined an investment contract as “a contract, transaction or scheme whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of the promoter or a third party.”¹⁷¹ The *Howey* defendants offered exactly that. In return for capital, investors received a share of profits from the common enterprise in the orange grove, with the efforts made solely by the *Howey* defendants.¹⁷²

The *Howey* defendants' promise to oversee the enterprise separated this offer from a normal transaction in land:

The respondent companies are offering something more than fee simple interests in land, something different from a farm or orchard coupled with management services. They are offering an opportunity to contribute money and to share in the profits of a large citrus fruit enterprise managed and partly owned by respondents.¹⁷³

This pattern repeats throughout the case law. In *Glen-Arden Commodities, Inc. v. Costantino*, defendants sold barrels of Scotch whiskey along with warehousing and marketing services.¹⁷⁴ When accused of violating the securities laws, the *Glen-Arden*

168. *Id.*

169. *See id.* at 299–300.

170. *Id.* at 299.

171. *Id.* at 298–99.

172. *See id.* 299–300.

173. *Id.* at 299.

174. 493 F.2d 1027, 1031–32 (2d Cir. 1974).

defendants claimed to be selling whiskey and nothing more.¹⁷⁵ Defendants promised that they would provide essential services and that the whiskey would certainly appreciate in price.¹⁷⁶ The Second Circuit held that this promise transformed the transaction into an investment contract:

The defendants guaranteed services, they promised results. . . . [I]nvestors put up their money not so much to secure casks of Scotch whiskey but to participate in an enterprise which was virtually guaranteed to “double their money” in four years. It ill behooves appellants, after enticing their customers with fancy brochures touting their investment plan, now to claim that there was no investment plan but the mere sale of an unadorned commodity.¹⁷⁷

But the SEC’s repeated run-ins with beaver ranchers are the clearest (or at least the funniest) example showing that management promises can transform commodities into investment contracts.¹⁷⁸ In *Continental Marketing Corp. v. SEC*, investors were encouraged to buy into the “fabulous possibilities” of the beaver industry, which would pave their “road to riches.”¹⁷⁹ After purchasing their mating pair of beavers, investors could care for them, providing “a private swimming pool, patio, den and nesting box together with the services of a veterinarian, dental technician, breeding specialist,” and others.¹⁸⁰ If they found this too onerous, investors could contract with the beaver sellers’ affiliates to care for the beavers.¹⁸¹ Despite the evident

175. *Id.* at 1033.

176. *Id.* at 1034–35.

177. *Id.*

178. See generally *Kemmerer v. Weaver*, 445 F.2d 76 (7th Cir. 1971) (providing—almost unbelievably—another example of a court analyzing whether a beaver ranching scheme qualifies as an investment contract).

179. 387 F.2d 466, 468 (10th Cir. 1967).

180. *Id.*

181. *Id.* at 468–69.

allure of the beaver ranching lifestyle, “all who purchased from appellant elected not to take possession of their beavers and each contracted with one of the ranchers as suggested by the appellant.”¹⁸²

The beaver sellers did not merely deliver the animals. They promised to both care for them individually and to profitably develop the beaver ranching industry:

Continental’s appearance to the public, by design, was that of a representative of the domestic beaver industry, the growth and development of which was necessary to and would bring profit to investors. Purchasers were encouraged to leave their beavers at the ranches where they were located at the time of sale and where they would be “expertly housed, fed and otherwise cared for.” They were advised that all they needed to do was buy the beavers, pay ranching fees and reap “geometric profits” as the beavers reproduced and the offspring sold.¹⁸³

Again, the offerors’ promise provided the “something extra” that turned a commodity transaction into an investment contract.¹⁸⁴

Thus, the case law presents a consistent theme: a commodity combined with a promise and exchanged for money is an investment contract, subject to regulation under the securities laws.

IV. TOKENS ARE PROBABLY SECURITIES WHEN SOLD BY THE ISSUER

Most crypto tokens and structures would be considered securities under current law. Offerors make substantial promises about future development while soliciting capital in their

182. *Id.* at 469.

183. *Id.* at 470.

184. *Id.* at 471.

ICOs.¹⁸⁵ While crypto attorneys have attempted to create structures like the Simple Agreement for Future Tokens (SAFT) that insulate offerings from the securities laws,¹⁸⁶ substantial uncertainty remains. And even if these structures prove resilient, many offerors seem uninterested in abiding by them, preferring instead to market their ICOs solely outside the United States (with only weak safeguards to exclude U.S. investors) or simply to take their chances with the SEC.¹⁸⁷

ICOs routinely collect capital and issue tokens with promises for future development.¹⁸⁸ Perhaps the best example is Ethereum's crowdsale, which raised capital in mid-2014,¹⁸⁹ but did not launch even its public beta until mid-2015.¹⁹⁰ Investors committed capital to Buterin and the Ethereum team with only the promise that they would eventually bootstrap a functioning, decentralized, blockchain-based virtual machine. To the team's great credit, it succeeded. But that does not make its actions legal. The SEC has pointedly declined to address that crowdsale's legality, even while blessing Ethereum itself as having sufficient decentralization to no longer merit the label "security."¹⁹¹ Numerous ICOs have followed this pattern, raising capital first, then developing the network later.¹⁹² Few

185. See Daniel Roberts, *SEC Chairman: Bitcoin 'Doesn't Have the Attributes of a Security,'* YAHOO! FIN. (Nov. 27, 2018), <https://finance.yahoo.com/news/sec-chairman-bitcoin-doesnt-attributes-security-231627590.html>.

186. See Nareg Essaghoolian, Comment, *Initial Coin Offerings: Emerging Technology's Fundraising Innovation*, 66 UCLA L. REV. 294, 335 (2019).

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

188. See Roberts, *supra* note 185.

189. See Victoria van Eyk, *Ethereum Launches Own 'Ether' Coin, with Millions Already Sold*, COINDESK (July 23, 2014, 12:30 UTC), <https://www.coindesk.com/ethereum-launches-ether-coin-millions-already-sold/>.

190. See Vitalik Buterin, *Olympic: Frontier Pre-Release*, ETHEREUM BLOG (May 9, 2015), <https://blog.ethereum.org/2015/05/09/olympic-frontier-pre-release/>.

191. See Hinman, *supra* note 64 ("And putting aside the fundraising that accompanied the creation of Ether, based on my understanding of the present state of Ether, the Ethereum network and its decentralized structure, current offers and sales of Ether are not securities transactions." (emphasis added)).

192. See Jay Preston, Article, *Initial Coin Offerings: Innovation, Democratization and the SEC*, 16 DUKE L. & TECH. REV. 318, 323 (2018) ("[M]any initial coin offerings feature 'pre-functional' coins.").

have been as responsible as Ethereum. Many projects fail even before launch; one estimate puts total blockchain project failures at 92%.¹⁹³ Commentators agree that many crypto tokens and structures would be considered securities under current law.¹⁹⁴

Some attorneys have attempted to designate safe harbors or funding structures that would limit exposure to the securities laws. For example, the SAFT framework raises initial funding by targeting only accredited investors.¹⁹⁵ While the token is concededly a security at this point, fundraising through accredited investors has substantially fewer regulatory strictures.¹⁹⁶ After the blockchain network is developed, the SAFT creators believed that a token's utility would come primarily from user activity on the network, not from the token's issuers.¹⁹⁷ At that

193. See Conor Maloney, *92% of All Blockchain Projects Fail*, EWN (May 28, 2018), <https://ethereumworldnews.com/92-of-all-blockchain-projects-fail/>.

194. See, e.g., Tiffany L. Minks, Comment, *Ethereum and the SEC: Why Most Distributed Autonomous Organizations Are Subject to the Registration Requirements of the Securities Act of 1933 and a Proposal for New Regulation*, 5 TEX. A&M L. REV. 405, 421–26 (2018); Laura Gritz, Recent Development, *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, 197–98 (2018) (“Applying [the Howey] test, it is likely that the SEC will find the majority of the ICO tokens to be securities.”); Marco Santori (@msantoriESQ), TWITTER (July 26, 2017, 6:25 AM), <https://twitter.com/msantori/esq/status/890201325560102913> (“Many tokens are securities. Those that ICO and return revenue/profits to investors are almost certainly securities.”); see also Jeff John Roberts, *Why Tech Investors Love ICOs—and Lawyers Don't*, FORTUNE (June 26, 2017), <http://fortune.com/2017/06/26/ico-initial-coin-offering-investing/> (“‘Coins’ or tokens can look a lot like traditional securities, because they enable companies to take investors’ cash while holding out the potential for profit.”); Ed Howden, *The Crypto-Currency Conundrum: Regulating an Uncertain Future*, 29 EMORY INT’L L. REV. 741, 765 (2015) (“An ‘investment vehicle’ is an asset or item that an investor purchases in the hope that it will generate income or appreciate in value. For example, a product used by investors such as stocks, bonds, options, mutual funds, or ETFs is considered an investment vehicle. The last characteristic bears significance for bitcoin regulators. Bitcoin is purchased with fiat currency with the idea—at least for some users—that the value of bitcoin will appreciate relative to a certain currency.”).

195. See JUAN BATIZ-BENET ET AL., *THE SAFT PROJECT: TOWARD A COMPLIANT TOKEN SALE FRAMEWORK* 16–17 (2017), <https://saftproject.com/static/SAFT-Project-Whitepaper.pdf>.

196. See *Rule 506 of Regulation D*, INVESTOR.GOV, <https://www.investor.gov/additional-resources/general-resources/glossary/rule-506-regulation-d> (last visited Mar. 29, 2019) (“Companies that comply with the requirements of Rule 506(b) or (c) [by marketing solely or principally to accredited investors] do not have to register their offerings of securities with the SEC, but they must file what is known as a ‘Form D’ electronically with the SEC after they first sell their securities.”).

197. See BATIZ-BENET ET AL., *supra* note 195, at 8–11.

point, a token's purpose and its price are being decided by broader market forces, like any other commodity. For that reason, the SAFT creators believed that tokens on a well-developed blockchain would no longer be considered securities.¹⁹⁸ Though the SAFT framework received some criticism from the Cardozo Blockchain Project and others,¹⁹⁹ the "decentralization" idea espoused by the SEC's William Hinman generally supports the overall SAFT framework.²⁰⁰

Articles will continue to be written about the boundaries of the securities laws as they apply to ICOs. Interesting questions will continue to arise as creative blockchain projects bubble up and the case law continues to develop, particularly across circuits riven by doctrinal splits. But this Article suggests that a simpler route exists for exchanges: without a contract for future development or price appreciation between exchanges and their customers, exchanges are not subject to the securities laws.

V. CRYPTOCURRENCY EXCHANGES DO NOT TRADE INVESTMENT CONTRACTS AND ARE THEREFORE BEYOND THE SEC'S AUTHORITY

Exchanges fall under the securities laws only if they sell securities. While oranges, whiskey, and beavers might all be securities when sold with a promise to manage them for future profit, the SEC has never pursued fruit stands, liquor stores, or pet emporia. Understandably, the SEC has wanted to punish the real wrongdoers: the bad actors offering fraudulent securities in the first place.²⁰¹ But crypto projects make this difficult,

198. *See id.*

199. *See, e.g.,* CARDOZO BLOCKCHAIN PROJECT, NOT SO FAST—RISKS RELATED TO THE USE OF A "SAFT" FOR TOKEN SALES 1 (2017), https://cardozo.yu.edu/sites/default/files/Cardozo%20Blockchain%20Project%20-%20Not%20So%20Fast%20-%20SAFT%20Response_final.pdf ("[W]hile the [SAFT] framework proposed in the Whitepaper is arguably attractive in its simplicity, it may create more problems than it solves for sellers that follow its prescriptions.").

200. *See supra* Part II.C.

201. *See* Evelyn Cheng, *The SEC Just Made It Clearer that Securities Laws Apply to Most Cryptocurrencies and Exchanges Trading Them*, CNBC (Mar. 7, 2018, 6:48 PM), <https://www.cnbc.com/2018/03/07/the-sec-made-it-clearer-that-securities-laws-apply-to-cryptocurrencies.html> ("The commission has increased its efforts to crack down on fraudulent initial coin offerings, which tend to promote their potential returns to investors and have attracted billions of dollars globally.").

because ICOs occur frequently, and their backers can shroud themselves with anonymity. Exchanges tempt the SEC with an easier and quicker route; the Commission could shut down most purchases and sales by targeting the exchanges.²⁰² However, because the SEC has rarely targeted exchanges, it appears the Commission has never really considered the doctrinal implications. Exchanges never make the promises that issuers do, and so exchanges never actually buy or sell investment contracts, just the underlying tokens.²⁰³ Because the securities laws only extend to platforms “bringing together purchasers and sellers of securities,” they do not reach cryptocurrency exchanges.²⁰⁴

This section explains why crypto exchanges, unlike issuers, do not trade in securities. Because they do not trade in securities, crypto exchanges stand outside the securities laws. This section looks first at two *Howey* test elements—common enterprise and efforts of others—and concludes that exchanges play no part in them. It then turns to a central idea enunciated in *Howey* and echoed in later caselaw: commodities become securities when accompanied by a promise for future development or price appreciation. Exchanges provide no such promise. Finally, it considers how exchanges might reacquire liability by making imprudent promises or colluding with issuers.

A. Exchanges Are Not Part of a Common Enterprise

Howey's “common enterprise requirement focuses on . . . the extent to which the success of the investor's interest rises and falls with others involved in the enterprise.”²⁰⁵ While this seems straightforward, in reality common enterprise is perhaps the most deeply fractured of the *Howey* elements, with the circuits

202. See Noelle Acheson, *The SEC's Recent Rulings Are More About Exchanges than ICOs*, COINDESK (Nov. 24, 2018, 11:24 AM) <https://www.coindesk.com/the-secs-recent-rulings-are-more-about-exchanges-than-icos>.

203. See Hinman, *supra* note 64 (“Just as in the *Howey* case, tokens and coins are often touted as assets that have a use in their own right, coupled with a promise that the assets will be cultivated in a way that will cause them to grow in value, to be sold later at a profit.”).

204. 15 U.S.C. § 78c(a)(1) (2018) (emphasis added).

205. 1 HAZEN, *supra* note 133, § 1:52.

subscribing to at least three different tests: horizontal commonality, narrow vertical commonality, and broad vertical commonality.²⁰⁶ Most circuits agree that horizontal commonality, where present, satisfies *Howey*.²⁰⁷ The question is whether vertical commonality satisfies *Howey* and, if so, under what rationale.²⁰⁸

“Horizontal commonality is characterized by ‘a pooling of investors’ contributions and distribution of profits and losses on a pro-rata basis among investors.’”²⁰⁹ Cryptocurrency exchanges do not operate in this manner. An investor buying a specified quantity of crypto tokens acquires exactly that—a specified quantity of crypto tokens. The investor may later sell those tokens for the prevailing market price or transfer the tokens to another exchange or a wallet managed by the investor. And while cryptocurrency exchanges might pool investor tokens in common wallets until investors move them, the exchange’s profits and losses are never passed along to investors.²¹⁰

Narrow vertical commonality “requires that the fortunes of investors be tied to the fortunes of the promoter.”²¹¹ In other words, when the offerors make money, the investors make money. When the offerors lose money, the investors lose money. Cryptocurrency exchanges do not operate this way. When the exchange makes money, the investors keep their purchased tokens. When the exchange loses money, the investors keep their purchased tokens.

Under broad vertical commonality, “the critical inquiry is confined to whether the fortuity of the investments collectively

206. *See id.*

207. *See id.* (“Horizontal commonality clearly satisfies the *Howey* common enterprise requirement but the courts are divided as to whether vertical commonality will suffice.”).

208. *Id.*

209. *SEC v. Infinity Grp. Co.*, 212 F.3d 180, 187–88 (3d Cir. 2000) (quoting *Steinhardt Grp. Inc. v. Citicorp*, 126 F.3d 144, 151 (3d Cir. 1997)).

210. At least one article argues persuasively that crypto mining pools would satisfy horizontal commonality. *See Benjamin Akins et al., The Case for the Regulation of Bitcoin Mining as a Security*, 19 VA. J.L. & TECH. 669, 699–700 (2015). But Professor Akins argues less persuasively regarding the other *Howey* factors, and does not address exchanges.

211. *Revak v. SEC Realty Corp.*, 18 F.3d 81, 88 (2d Cir. 1994) (emphasis removed).

is essentially dependent upon promoter expertise.”²¹² This test differs from narrow vertical commonality by finding a common enterprise even without “direct correlation between the promoter’s success or failure and the investors’ profits or losses.”²¹³ *Long v. Shultz Cattle Co.* provides an instructive example. The offeror was running a tax shelter structured as a cattle feeding arrangement.²¹⁴ The offeror managed a cattle herd for the investors and provided individualized advice regarding tax deductions and hedging transactions.²¹⁵ But the offeror neither shared profits and losses among the investors, nor did it share its own profits and losses with the investors. Rather, the offeror made its money from fees per head of cattle.²¹⁶ Nonetheless, the Fifth Circuit held that the offeror was in a common enterprise with each investor because each investor was dependent on the offeror.²¹⁷

By contrast to the vertical communality found in *Long v. Shultz Cattle Co.*, cryptocurrency exchanges do not advise their customers how to manage their investments.²¹⁸ Customers pay them to trade on the exchange.²¹⁹ Exchanges do not promise that their customers will earn returns based on the exchange’s special expertise—indeed, they do not promise returns to their customers at all.²²⁰

212. *Long v. Shultz Cattle Co.*, 881 F.2d 129, 140 (5th Cir. 1989) (quoting *SEC v. Cont’l Commodities Corp.*, 497 F.2d 516, 522 (5th Cir. 1989)).

213. *Id.*

214. *Id.* at 135.

215. *Id.* at 130–31.

216. *Id.* at 131.

217. *See id.* at 142 (“SCCI’s clients were dependent on SCCI’s expertise to manage their investments. . . . Moreover, SCCI’s fortunes clearly were interwoven with those of their clients. SCCI received substantial ‘consulting fees’ from its clients in exchange for its services in constructing and administering effective tax shelters through the cattle feeding business. Through the inexorable force of the market, SCCI’s success would correspond to that of its clients.”)

218. *See, e.g., Coinbase User Agreement*, COINBASE, https://www.coinbase.com/legal/user_agreement?locale=en-US (last visited Feb. 21, 2019).

219. *See, e.g., Coinbase Pricing & Fees Disclosure*, COINBASE, <https://support.coinbase.com/customer/en/portal/articles/2109597-coinbase-pricing-fees-disclosures> (last visited Feb. 21, 2019).

220. *See, e.g., Coinbase User Agreement*, *supra* note 218.

Some commentators disagree, categorizing crypto exchanges as falling within vertical commonality. For example, one commentator argues that “[w]ithout people converting cash into [tokens] (or vice versa), the [exchanges] have no business model.”²²¹ But this broad conception of vertical commonality suggests that any business with customers subsists in common enterprise with them. No circuit’s test reaches that far. At the very least, the common enterprise requirement must be bounded by some link between the offeror’s advice or expertise and the investor’s success.²²²

Other commentators suggest that the blockchain *itself* is a common enterprise. Because it depends on continued efforts by programmers to develop it, miners to secure it, exchanges to make tokens available, and investors to use it, everyone involved is bound by a common cause.²²³ But these disparate

221. J. Scott Colesanti, *Trotting Out the White Horse: How the S.E.C. Can Handle Bitcoin’s Threat to American Investors*, 65 SYRACUSE L. REV. 1, 39 (2014).

222. See *Long*, 881 F.2d at 142 (“SCCI’s fortunes clearly were interwoven with those of their clients. SCCI received substantial ‘consulting fees’ from its clients in exchange for its services in constructing and administering effective tax shelters through the cattle feeding business.”).

223. See, e.g., Paul H. Farmer, Jr., *Speculative Tech: The Bitcoin Legal Quagmire & the Need for Legal Innovation*, 9 J. BUS. & TECH. L. 85, 102 (2014) (“[B]ecause Bitcoins have no inherent value and derive value based upon the continued efforts of developers and promoters, those who have ‘invested’ in them are seeking profit solely from the efforts of a promoter or third party. . . . Those that invest in Bitcoins are doing so with the expectation that the continued work of those that promote Bitcoins and the Bitcoin network will make their Bitcoins profitable.” (footnotes omitted)); Nicole D. Swartz, Comment, *Bursting the Bitcoin Bubble: The Case to Regulate Digital Currency as a Security or Commodity*, 17 TUL. J. TECH. & INTELL. PROP. 319, 331–32 (2014) (“The profits of Bitcoin investors are directly tied to the appreciation or depreciation of the bitcoin’s value, which is a direct result of the efforts and success of the miners. The miners maintain the block chain, which is essential to the operation of Bitcoin.”); Ruoke Yang, *When Is Bitcoin a Security Under U.S. Securities Law?*, 18 J. TECH. L. & POL’Y 99, 111–14 (2013) (“[I]t is clear that BitCoin does have leadership centered at the BitCoin Foundation. . . . [T]he ‘company’ as the promoter spends considerable effort attracting new participants who are then incentivized to recruit additional participants because the additional participants make their original investment in BitCoin more valuable since the enterprise feeds off of a common trust. . . . In taking charge of the technical development, the Foundation provides the expertise required to improve the enterprise and its digital security.”). But see, e.g., Reuben Grinberg, *Bitcoin: An Innovative Alternative Digital Currency*, 4 HASTINGS SCI. & TECH. L.J. 159, 197 (2012) (“The individuals who choose to promote Bitcoin are independent of one another, and there is no one money-making business that seeks to raise money through investments. Further, recent events have shown that the Bitcoin developers, although important to the continued success of Bitcoin, are far from the most important players.”); Matthew Kien-Ming Ly, Note, *Coining Bitcoin’s ‘Legal-Bits’: Examining the Regulatory Framework for Bitcoin and Virtual Currencies*, 27 HARV. J.L. &

entities are not really working together. As one commentator points out, “many of these developers are competing against each other,” as evidenced by the multiple hard forks across the crypto landscape, and “it would be difficult to substantiate that they are all working together toward a common end.”²²⁴ Similarly, miners compete against each other for block rewards. One miner has no interest in another miner’s success.

But setting aside these differences for a moment, treating an entire blockchain as a common enterprise is error for another reason: it makes individuals responsible for unrelated third parties. Exchanges did not promise that programmers would continue to develop the blockchain, nor did they promise that miners would continue to secure it. Yet this approach attributes both actions to the exchanges. It is little different from suggesting that because Nintendo promised to continue making games, then Amazon and Best Buy are responsible for selling unregistered securities whenever they ship a Switch.

The above discussion does not address edge situations like bankruptcy or hacking of the exchange’s wallet. Under these situations, an exchange’s losses may be passed along to investors.²²⁵ In that scenario, all the investors have lost in common based on the exchange’s losses. This would technically fit all three tests above. But no case law suggests that these situations merit finding a common enterprise.²²⁶ The risk that bankruptcy

TECH. 587, 598 (2014) (“In addition, the money used to buy bitcoins does not go to a common enterprise that is expected to generate profits from the efforts of the promoter or a third party.”).

224. Mitchell Prentiss, Note, *Digital Metal: Regulating Bitcoin as a Commodity*, 66 CASE W. RES. L. REV. 609, 625 (2015).

225. See, e.g., Kyt Dotson, *Third Largest Bitcoin Exchange Bitomat Lost Their Wallet, Over 17,000 Bitcoins Missing*, SILICON ANGLE (Aug. 1, 2011, 1:13 PM), <https://siliconangle.com/blog/2011/08/01/third-largest-bitcoin-exchange-bitomat-lost-their-wallet-over-17000-bitcoins-missing/>; Samuel Gibbs et al., *Head of Mt Gox Bitcoin Exchange on Trial for Embezzlement and Loss of Millions*, GUARDIAN (July 11, 2017, 6:56 AM), <https://www.theguardian.com/technology/2017/jul/11/gox-bitcoin-exchange-mark-karpeles-on-trial-japan-embezzlement-loss-of-millions>; Chase Hoffberger, *Bitcoin Exchange Site Hacked, Taken Down Indefinitely*, DAILY DOT (May 16, 2012, 12:38 PM), <https://www.dailydot.com/business/bitcoin-exchange-bitcoinica-hack/>.

226. Admittedly, in *United States v. Carman*, the Ninth Circuit interpreted *Howey*—expectation of profit or risk of loss—to be satisfied where an offeror could go insolvent. 577 F.2d 556, 563 (9th Cir. 1978) (“Avoidance of loss on either ground was clearly dependent upon the sound management and continued solvency of West Coast Schools. This risk of loss is sufficient to bring the transaction within the meaning of a security, even where the anticipated financial

or a hacker will put the exchange and its customers in the same difficult spot does not suggest they form a common enterprise.

The above discussion also never addresses managed accounts, in which an exchange trades crypto on the investor's behalf without the investor placing individual buy or sell orders. Under broad vertical commonality, the Fifth and Eighth Circuits have held managed accounts to be securities.²²⁷ By contrast, under narrow vertical commonality, the Third, Seventh, and Ninth Circuits have held that managed accounts are not securities.²²⁸ The major crypto exchanges do not operate managed accounts, but should they move to that model in the future, they could open themselves to securities claims.

Thus, even under a traditional *Howey* analysis, exchanges are not in a common enterprise with their investors. The tokens their investors trade are not securities, at least as regards the exchange and the investor.

B. Customer Profits Are Not Based on the Exchanges' Efforts

Similarly, customer profits are not based on the exchanges' efforts. Customers decide when, at what price point, and in which crypto tokens to trade. Exchanges provide the tools to facilitate that trade, but they do not drive the market price in one direction or another. Nor do they advise clients as to the appropriate time to trade.

gain is fixed."). But *Carman* runs contrary to the Supreme Court's opinion in *United Housing Foundation, Inc. v. Forman*, 421 U.S. 837 (1975). In *Forman*, the investors also raised insolvency as an argument for satisfying the last prong, arguing that if the offeror "becomes bankrupt they stand to lose their whole investment." *Id.* at 857 n.24. But as the Court explained, "the risk of insolvency . . . 'differ[s] vastly' from the kind of risk of 'fluctuating' value associated with securities investments." *Id.* The same conclusion applies here. Moreover, even if *Carman* correctly interprets the "risk of loss" prong, such edge cases do not influence the "common enterprise" prong.

227. See *SEC v. Cont'l Commodities Corp.*, 497 F.2d 516, 520–23 (5th Cir. 1974); *Booth v. Peavey Co. Commodity Servs.*, 430 F.2d 132, 133 (8th Cir. 1970).

228. See *Wasnowic v. Chicago Bd. of Trade*, 352 F. Supp. 1066, 1071 (M.D. Pa. 1972), *aff'd mem.*, 491 F.2d 752 (3d Cir. 1973); *Milnarik v. M-S Commodities, Inc.*, 457 F.2d 274, 275 (7th Cir. 1972) ("[W]e are persuaded that a discretionary trading account is not a security . . ."); *Mordaunt v. Incomco*, 686 F.2d 815, 817 (9th Cir. 1982) ("[T]hese discretionary commodities trading accounts do not constitute common enterprises, and therefore are not securities under 15 U.S.C. § 77b.").

C. *Cryptocurrency Exchanges Generally Lack the Necessary Promise Provided by Issuers and Therefore Do Not Sell Securities*

While exchanges do not satisfy a traditional *Howey* analysis, this Article's thesis is better illustrated by a slightly different argument, focusing on the promises made by crypto token sellers. A roadside fruit stand is not a securities exchange because it sells oranges. A liquor store is not a securities exchange because it sells whiskey. And while I am not entirely sure where someone can purchase a beaver, I am certain those places are not securities exchanges either. The courts have held that the original sellers in these scenarios are in fact offering securities.²²⁹ At what point does the orange, whiskey, or beaver stop being a security? When the seller stops making additional promises.

By promising future development, management, or profits, an offeror converts a regular commodity into a security. In *SEC v. C.M. Joiner Leasing Corp.*, for example, the defendants promised to drill test wells to value otherwise vanilla land leases being sold to investors.²³⁰ The Supreme Court viewed this test-well promise as transformative: "The exploration enterprise was woven into these leaseholds, in both an economic and a legal sense; the undertaking to drill a well runs through the whole transaction as the thread on which everybody's beads were strung."²³¹ Like *Joiner's* promise to develop, a promise to manage or a promise that prices will appreciate similarly converts contracts into securities. In *Long v. Shultz Cattle Co.*, the Fifth Circuit held that cattle feeding contracts were securities because the offeror's clients "were dependent on [the offeror's] expertise to manage their investments."²³² In *SEC v. Infinity Group Co.*, the Third Circuit held that promising "impossibly

229. See Ronald Shapiro, *The Expanding Definition of a "Security,"* 61 A.B.A. J. 1504, 1504–05 (1975) (listing items courts have found to be securities).

230. See 320 U.S. 344, 348 (1943).

231. *Id.*

232. 881 F.2d 129, 142 (5th Cir. 1989).

high returns at no risk” similarly transformed property transfer contracts into securities.²³³

Exchanges do not make these promises. They do not promise to develop the blockchain technology underlying the tokens they sell. They do not promise to manage the network through mining. And they do not promise price appreciation. They only promise a secure, efficient place for customers to trade tokens. That alone should prove dispositive under the case law. After all, as the Supreme Court stated under *Howey*, promising future development, management, or price appreciation separates these from standard commodity transactions:

The respondent companies are offering something more than fee simple interests in land, something different from a farm or orchard coupled with management services. They are offering an opportunity to contribute money and to share in the profits of a large citrus fruit enterprise managed and partly owned by respondents.²³⁴

Because exchanges do not make promises, exchanges never offer an investment contract to their customers. After all, the law views contracts as legally enforceable promises: “A contract is a promise or a set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty.”²³⁵

1. *Investment contracts can only reasonably bind the parties*

Contracts bind the parties, not the world entire. Courts and commentators have consistently explained that parties generally cannot bind third parties to their contracts. As the Supreme Court has said, “It goes without saying that a contract cannot

233. 212 F.3d 180, 191 (3d Cir. 2000).

234. SEC v. W.J. Howey Co., 328 U.S. 293, 299 (1946).

235. RESTATEMENT (SECOND) OF CONTRACTS § 1 (AM. LAW INST. 1981).

bind a nonparty.”²³⁶ Indeed, as *Williston* and others agree, “[A] contract can be enforced either in law or in equity only against the party who entered into it. Only a promisor can be required to keep a promise.”²³⁷

When considering whether the securities laws apply, transactions to buy and sell crypto tokens should rightly be viewed as contracts. After all, an investment contract *is a contract*. The very term and its use in the statute make this clear.²³⁸ In each case, one must consider the parties’ promises. When an offeror sells newly minted tokens to a buyer, the offeror generally makes promises about future development, management, or price appreciation. The buyer relies on those promises. When an exchange gets involved, often the exchange isn’t buying or selling at all. It just facilitates the transaction. When it does buy or sell—perhaps by accumulating or distributing its reserves to provide liquidity—then it only promises to exchange the token for the agreed-upon price. No one believes that exchanges are making promises about future development, management, or price appreciation.

Some commentators have come close to this conclusion. For example, practitioners Jeffrey Alberts and Bertrand Fry correctly analyzed Bitcoin transactions by examining the intentions of the individual seller and buyer, rather than the intentions of Satoshi Nakamoto and the buyer.²³⁹ As they noted, pur-

236. *EEOC v. Waffle House, Inc.*, 534 U.S. 279, 294 (2002).

237. 25 RICHARD A. LORD, *WILLISTON ON CONTRACTS* § 67:112 (4th ed. 2018). *Williston* acknowledges that promises can run with property, but this Article explains later why this rule is inappropriate here. See *infra* Section III.C.2. Other authorities echo *Williston*. See *Electron Energy Corp. v. Short*, 597 A.2d 175, 177 (Pa. Super. 1991) (“It is fundamental contract law that one cannot be liable for a breach of contract unless one is a party to that contract.”); SIR WILLIAM REYNELL ANSON, *ANSON’S LAW OF CONTRACT* 652 (29th ed. 2010) (“As a general rule, two persons cannot, by any contract into which they may enter, thereby impose contractual liabilities on a third party.”); see also KLAUS PETER BERGER, *THE CREEPING CODIFICATION OF THE NEW LEX MERCATORIA* 385 (2d ed. 2010) (“Contracts may not be included to the detriment of a third party (‘res inter alios acta alteri non nocet’).”).

238. 15 U.S.C. § 77b(a)(1) (2018) (“The term ‘security’ means any . . . investment contract.”).

239. See Alberts & Fry, *supra* note 134, at 17–20.

chasers do not pool their money with others, nor do they intend to enter a common enterprise with sellers.²⁴⁰

But determining that a contract binds the parties alone resolves only half the inquiry. The other half involves determining whether any *non-contractual* principles might bind the parties.

2. *Neither legal nor equitable principles justify punishing exchanges*

While contracts generally bind the parties and no one else, the law recognizes an exception for property: “Only a promisor can be required to keep a promise; however, where a promise relates to property, equity fastens an obligation upon anyone who receives the property either without consideration or with knowledge of a duty owing by its grantor in regard to it.”²⁴¹ This normally applies to real property. In theory, the offeror’s duty to develop or manage the token could travel with the token. But that would be unwise, for at least four reasons.

First, an expectation that these duties will travel with the token runs contrary to standard property law. While accepting that promises run with real property, the law also acknowledges that this creates an exception to normal privity rules.²⁴² For this reason, courts are reluctant to add to the list of property interests, leading to a principle called “the *numerus clausus*: the notion that the range of property forms should be a predetermined and closed set.”²⁴³ For that closed, well-defined set, society knows that special rules apply, so they must investigate land registers or similar sources to ensure that their property

240. See *id.* at 17 (“[P]urchasers of Bitcoin will not be pooling their assets in a single, common enterprise to which they are making payments. . . . Purchasers’ payments for Bitcoin will go to the miner who generates the Bitcoin or to someone who obtains Bitcoin from a previous holder of the Bitcoin through a market exchange. . . . [P]urchasers of Bitcoin are not investing in the profits and risks of the person or entity selling the Bitcoin.”).

241. 25 LORD, *supra* note 237, § 67:112.

242. See Fairfield, *supra* note 24, at 845–46 (“Parties are not free to vary the form of property by contract. If parties attempt to create a new property form, the rights are recognized as contractual but do not bind third parties as would a property interest.”).

243. *Id.* at 845.

remains without encumbrance.²⁴⁴ Without these principles, any object could bear endless encumbrances and obligations, which damages our fundamental expectations in property. For example, “[I]f I buy a bicycle for which I have all the sticks except the right to ride it on Tuesdays, the fundamental integrity of the bicycle as a thing that one may buy, sell, use, and exclude others from using is damaged.”²⁴⁵ And the Supreme Court has recently emphasized the importance that objects flow freely in commerce, without obligations that “stick remora-like to [an] item as it flows through the market.”²⁴⁶

Second, no one really expects exchanges to keep offerors’ promises. Assume for a moment that Willy Wonka was running a Golden Ticket contest. Assume further that Wonka dies from plummeting to his death in an improbable glass elevator. And finally, assume that Wonka plummets into his factory, destroying it. No one expects that the convenience store selling the ticket-bearing chocolate bars must now open a world-famous chocolate factory, import Oompa Loompas, and host all the children finding tickets. Similarly, no one expects that exchanges will develop or maintain the crypto tokens that trade on them.²⁴⁷ Exchanges may develop their own interfaces for interacting with a token’s blockchain, warn users during high volatility or low liquidity periods, etc., but all these actions serve the exchange’s real promise: to provide a working marketplace.²⁴⁸

244. *See id.* at 848 (“The focus is not on novel property forms that expand the range of options through which third parties must search, but on the packaging of information about property such that there are constrained and clear information inputs and outputs.”).

245. *Id.* at 844.

246. *Impression Prods. Inc. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523, 1538 (2017).

247. *Cf.* Nicholas Godlove, *Regulatory Overview of Virtual Currency*, 10 OKLA. J.L. & TECH. 1, 34 (2014) (“[O]nce bitcoins are purchased, there is no vertical common enterprise between the promot[e]r and the new owner; each new owner no longer needs to maintain a relationship with the old owner, and the transferor’s duty to and ownership of the transferee’s new coin is nil.”).

248. *See* Dan Roseman, *Token Marketplaces: The Ranges of Exchanges*, MEDIUM (May 22, 2018), <https://medium.com/@danroseman/token-marketplaces-the-ranges-of-exchanges-76b29d75507c> (“Blockchains enable frictionless transfers of value, which in turn enable entirely new ways of trading one digital asset for another.”).

Third, even if someone did expect exchanges to keep these promises, in many cases exchanges literally cannot do it. Depending on the blockchain architecture, further development or management may require private keys, privileges, or proficiency that the exchanges lack.²⁴⁹ Seven-Eleven would similarly find it difficult to locate small, orange, dancing men and women.

Finally, a rule that attaches obligations to the token will not stop at exchanges. “[A]ny person” that sells an unregistered security can be held liable.²⁵⁰ If a crypto token is deemed a security and the offeror has not complied with the registration requirements, then even downstream retail crypto consumers will be liable for trading in unregistered securities.²⁵¹ It seems unlikely that the SEC will pursue retail crypto sellers. But it could, and freedom should not depend on administrative grace.

For these reasons, attempting to impute offerors’ obligations to exchanges seems both incorrect and unwise.

3. Investment contracts are treated differently from stocks and bonds

Obviously, this treatment differs from exchanges that list stocks and bonds. Those exchanges remain subject to the securities laws. That dichotomy is doctrinally correct and normatively appropriate. It is doctrinally correct because stocks and bonds require no additional promise about development or maintenance. The underlying commodity cannot be separated. Indeed, no underlying commodity exists; the stock or bond stands alone. But the requirement for a separate promise is baked into the investment contract’s definition. An investment contract simply does not exist without that extra factor.

249. *See, e.g., id.* (citing past security breaches of reputable exchanges as a reason why users may not trust certain exchanges to be custodians of private keys).

250. *See* 15 U.S.C. § 77e (2018).

251. *See* SEC Digital Asset Statement, *supra* note 144 (“An entity that facilitates the issuance of digital asset securities in ICOs and secondary trading in digital asset securities may also be acting as a ‘broker’ or ‘dealer’ that is required to register with the Commission and become a member of a self-regulatory organization, typically FINRA.”).

As for normative appropriateness, stocks, bonds, notes, and similar instruments are so well defined that an exchange handling them knows exactly what it has in hand.²⁵² By contrast, investment contracts are amorphous. They invariably require careful analysis based on individual facts. And as evidenced by the substantial case law and literature in the area, the boundaries are never entirely clear. It therefore seems appropriate to provide exchanges with an extra buffer by declining to hold them liable for trading in instruments where reasonable actors might disagree whether they are securities.

4. Investment contracts have rarely been examined as contracts

Why have scholars and cases not previously considered whether exchanges are trading investment contracts or regular, unadorned commodities? At least three factors suggest why this has gone previously unexamined.

First, nearly all cases are brought against offerors, those who invented the investment scheme.²⁵³ This is neither surprising nor unwelcome. Both the SEC and class action plaintiffs have limited resources. The offerors themselves bear responsibility for the fraud, and should be the principal target in any investigation.

The second reason this issue has gone unnoticed likely relates to the difficult mechanics for trading investment contracts, which previously made secondary markets for them unlikely. These instruments are not like stocks, which have certain formal, repeatable characteristics that permit trading on a common exchange.²⁵⁴ An exchange for investment contracts needs tailor-

252. See *Landreth Timber Co. v. Landreth*, 471 U.S. 681, 686 (1985) (noting that the definition of "security" under 15 U.S.C. § 77b(1) is "quite broad, and includes both instruments whose names alone carry well-settled meaning, as well as instruments of 'more variable character that were necessarily designated by more descriptive terms,' such as 'investment contract' and 'instrument commonly known as a "security'"").

253. See, e.g., DIV. OF ENF'T, U.S. SEC. & EXCH. COMM'N, ANNUAL REPORT 10 (2018), <https://www.sec.gov/files/enforcement-annual-report-2018.pdf> (showing an enormous disparity between enforcement actions about securities offerings, the most common, compared to exchanges, the least common).

254. See *Common Stock vs. Preferred Stock, and Stock Classes*, INVESTORGUIDE, <http://www>

ing to each contract. Every instrument could vary wildly even within its own boundaries, let alone when compared to other instruments. Take, for example, the orange groves in *Howey*.²⁵⁵ They varied by acreage.²⁵⁶ And the service contracts, though having a fixed ten-year term in *Howey*, certainly varied in expiration based on their purchase date.²⁵⁷ Similarly, the whiskey at issue in *Glen-Arden* varied by batch, barreling date, and other characteristics.²⁵⁸ Building an exchange to account for these varied characteristics would be difficult. Writing in 1988, Professor James Gordon explained that “common trading in investment contracts [on secondary markets] is the exception rather than the rule.”²⁵⁹ But the Internet and particularly the blockchain simplify this process considerably. By its very nature, the blockchain is a distributed ledger designed to handle and record transactions.²⁶⁰ Differences between tokens can be smoothed over by using common protocols like ERC-20.²⁶¹ Suddenly, it becomes feasible to create an exchange serving a disparate collection of tokens. And so it seems likely that the advent of blockchain technology has uncovered this latent issue.

Finally, this has gained little attention because the underlying principle in *Howey* on which it relies has gained little attention. Multiple treatises, innumerable hornbooks, and substantial scholarly exposition have been directed to *Howey*’s requirements for an investment of money into a common enterprise for

.investorguide.com/article/11166/stock-classes-the-difference-between-common-stock-and-preferred-stock-igu/ (last visited Apr. 2, 2019).

255. 328 U.S. 293, 294 (1946).

256. *Id.* at 295.

257. *Id.* at 296.

258. *See* 493 F.2d 1027, 1032 (2d Cir. 1974).

259. James D. Gordon III, *Common Enterprise and Multiple Investors: A Contractual Theory for Defining Investment Contracts and Notes*, 1988 COLUM. BUS. L. REV. 635, 658 (“In fact, common trading in investment contracts is the exception rather than the rule. While isolated transactions between investors do occur, instruments in which there is common trading in a secondary market are almost by definition traded on the exchanges or in the over-the-counter market.”).

260. *See supra* Part I.

261. *See supra* notes 53–55 and accompanying text; *see also* EtherDelta Opinion, *supra* note 143, at 2 n.2 (“The widespread adoption of the ERC20 token standard has also led developers to design applications, such as EtherDelta, that are compatible with any ERC20 token.”).

a profit based on the efforts of others.²⁶² Little has been directed to the statutory requirement that an investment contract *be a contract*.²⁶³ In *Sekeres v. Arbaugh*, the Ohio Supreme Court treated a brokerage contract as a contract for purposes of resolving a conflict of law regarding attorney fees.²⁶⁴ But while later cases refer to this as an “investment contract,”²⁶⁵ it appears the Ohio Supreme Court never actually deemed this an investment contract as meant by the securities laws.²⁶⁶ The Ninth Circuit does appear to have addressed this issue in passing, holding that a distributorship agreement was not an investment contract, and therefore not a security.²⁶⁷

Though the offeror’s contractual obligations to develop and manage do not bind downstream purchasers, are there ways that the security could move back within securities law jurisdiction? This Article turns to that question next.

D. Some Circumstances Could Bring the Exchange Back Under the Securities Laws

The analysis above assumes that issuers and exchanges are operating at arm’s length. If the issuers and exchanges enter a common enterprise, then the exchanges would likely be liable on the same terms as the issuers. Exchanges could also issue independent promises of their own, like guaranteeing profit. While different than the promises made by the issuers, ex-

262. See, e.g., Christopher L. Borsani, A “Common” Problem: Examining the Need for Common Ground in the “Common Enterprise” Element of the Howey Test, 10 DUQ. BUS. L.J. 1 (2008); James D. Gordon III, *Defining a Common Enterprise in Investment Contracts*, 72 OHIO ST. L.J. 59 (2011); Gritz, *supra* note 194, at 193; ROBERT N. RAPP, BLUE SKY REGULATION, Ch. 2, § 2.01 (2018).

263. Interestingly, plaintiffs often argue both securities violations and breach of contract on the same facts. See, e.g., *Zowine v. Prussin*, No. CV-14-00892-PHX-GMS, 2016 WL 558550, at *1–2 (D. Ariz. Feb. 12, 2016). But in each case that I have seen, the court analyzes these claims separately and does not address the obvious overlap. See, e.g., *id.*

264. See 508 N.E.2d 941, 942 (Ohio 1987).

265. See, e.g., *Wise v. Zwicker & Assocs., PC*, 780 F.3d 710, 716 (6th Cir. 2015).

266. The account at issue appears to be a managed or semi-managed brokerage account. Some circuits have held that managed accounts can be considered investment contracts. See, e.g., *SEC v. Cont’l Commodities Corp.*, 497 F.2d 516, 520–23 (5th Cir. 1974). But the *Sekeres* court never performs this analysis, and indeed never refers to the contract at issue as an “investment contract.” That language was, however, used by the Sixth Circuit. See *Wise*, 780 F.3d at 716.

267. See *Chapman v. Rudd Paint & Varnish Co.*, 409 F.2d 635, 639–42 (9th Cir. 1969).

changes would still be offering a commodity with a promise attached, transforming the token sale into a security offering.

Issuers have often attempted to create their own exchanges.²⁶⁸ This allows them to profit from a secondary market for their securities without the regulatory and financial overhead implicit in dealing with an independent national exchange.²⁶⁹ Some attempts resulted from regulatory exemptions and new technology, which issuers exploited to create secondary markets in their own securities.²⁷⁰ The SEC has generally used its regulatory authority to close these loopholes.²⁷¹ And the courts have found no problem punishing companies that offer their own illicit securities on their own illicit exchange. In *SEC v. SG Ltd.*, for example, the First Circuit held that a company that promised appreciation in “virtual shares” on its “virtual stock exchange” could be held liable under federal securities laws.²⁷²

But an open question remains as to how close the relationship between the issuer and the exchange must become before it enters impermissible territory. Simple technical cooperation between the issuer and the exchange seems safe. This cooperation facilitates the listing and ensures that technical mistakes do not harm customers. But closer cooperation, like business alliances, strategic partnerships, development grants flowing in either direction, or formal legal integration would all raise questions, even if not clearly forming a common enterprise.

268. 1 HAZEN, *supra* note 133, § 1:12 (“The SEC also became concerned about companies relying on the 1933 Act registration exemption provided by Rule 504 as a vehicle for effecting a public distribution of securities via the Internet without registration under the Securities Act of 1933. A pattern emerged whereby companies would issue stock on the Internet and then provide a bulletin board or other online trading vehicle whereby initial purchasers could sell their shares to other investors. Frequently, these unregistered offerings were accompanied by a good deal of sales hype about the newly issued securities. In large part as a response to these so-called ‘pump and dump’ schemes, the SEC amended Rule 504’s exemption from registration to prohibit a general solicitation and to impose restrictions on resale unless the securities are registered under state law or issued under a state law exemption permitting a general solicitation.” (footnotes omitted)).

269. *See id.* § 2:20 (“Rule 504 did not have any disclosure requirements nor did it place any restrictions on resales of securities so issued.”).

270. *See id.* § 1:12.

271. *See id.*

272. 265 F.3d 42, 44–45, 55 (1st Cir. 2001).

Exchanges encounter similar problems when they make their own promises about future development, management, or price appreciation. *SEC v. Shavers* is instructive: Trendon Shavers operated “Bitcoin Savings and Trust” (formerly “First Pirate Savings & Trust”).²⁷³ Shavers promised investors “up to 1% interest daily” from his business “selling Bitcoin to a group of local people.”²⁷⁴ Bitcoin is a commodity.²⁷⁵ But by promising his Bitcoin management and sales expertise plus profit, Shavers began offering a security.²⁷⁶ As the Court explains: “[I]nvestors here were dependent on Shavers’ expertise in Bitcoin markets and his local connections. In addition, Shavers allegedly promised a substantial return on their investments as a result of his trading and exchanging Bitcoin. Therefore, the Court finds that there is a common enterprise.”²⁷⁷

Similarly, Professor J. Scott Colesanti is surely correct when he suggests that exchanges that promise price appreciation to their customers deserve regulation: “Once Bitcoin ‘exchanges’ are sheared of their cover, they too often more closely resemble old-fashioned offers for quick gains by promoters . . . for speculative investments to unsophisticated investors.”²⁷⁸

Exchanges can expect to be bound by the securities laws if they function as an arm of the issuer or make their own independent promises about the tokens being traded. Exchanges are certainly bound by other laws and regulations, principally but not exclusively at the state level. And while current law does not support regulating exchanges as securities platforms, Congress could certainly revisit that decision.

273. No. 4:13-CV-416, 2013 WL 4028182, at *1 (E.D. Tex. Aug. 6, 2013).

274. *Id.* at *2.

275. *See, e.g., supra* Section II.C (explaining SEC director William Hinman’s view that Bitcoin is not a security).

276. *See* 2013 WL 4028182, at *1.

277. *Id.*

278. Colesanti, *supra* note 221, at 6 (footnote omitted). Admittedly, it is unclear whether Professor Colesanti is talking about specific promises made by exchanges or the speculative nature of cryptocurrency itself. To the extent he is referring to the latter, this Article disputes Professor Colesanti’s suggestion that cryptocurrency’s nature would bring it within the SEC’s ambit. But some regulation may be appropriate. *See infra* Part VI.

VI. HOW SHOULD CRYPTOCURRENCY EXCHANGES BE REGULATED?

This Article addresses the SEC's authority to regulate exchanges under current law. It concludes that the SEC lacks the authority to regulate most exchanges. But that leaves open the normative question about how exchanges should be regulated were Congress to change the law. That question goes beyond this Article's scope, but a few points for future inquiry are sketched below. As one might expect, the options reflect the normal tension between the need for regulation to protect consumers and the concern that over-regulation will hamper a nascent industry.

Commentators have rightly noted that crypto exchanges bear risks for their users.²⁷⁹ For example, Professor J. Scott Colesanti writes that exchanges "pose a real and potentially catastrophic threat to the American investing public."²⁸⁰ While hyperbolic, certainly exchanges holding vast sums of money and tokens can pose threats to their customers. Exchange collapses have cost customers money. Technical mistakes have caused exchanges to lose their wallets and therefore their customers' tokens.²⁸¹ Lax internal security has led to external hacking.²⁸² And exchanges have seemingly embezzled from their customers.²⁸³

It is also worth noting, as Professor Julia Lee has pointed out, that regulation can have a positive effect by demonstrating that a government has blessed cryptocurrency: "The government can signal the legitimacy of the currency through regulation or public pronouncement. When U.S. law enforcement and regulatory officials acknowledged the benefits of Bitcoin and other virtual currencies during Congressional hearings in 2013, its

279. See generally Nick Marinoff, *Bear Market: Cryptocurrency Investors Around the World Are Feeling the Pinch*, BLOCKONOMI (Aug. 22, 2018), <https://blockonomi.com/bear-market-cryptocurrency/> (discussing the risks investors are taking when getting involved in the cryptocurrency market).

280. Colesanti, *supra* note 221, at 5.

281. See, e.g., Dotson, *supra* note 225.

282. See, e.g., Hoffberger, *supra* note 225.

283. See, e.g., Gibbs et al., *supra* note 225; William Suberg, *Mt. Gox's Karpeles: Embezzled Funds 'Spent on Prostitutes'*, COINTELEGRAPH (Oct. 28, 2015), <https://cointelegraph.com/news/mt-goxs-karpeles-embezzled-funds-spent-on-prostitutes>.

price soared and many new businesses began accepting it.”²⁸⁴ While some might envision crypto rising to a preeminent position based solely on its own merits, most banks, retailers, and consumers do not want to get in the government’s way. Societal sanction would substantially accelerate crypto tokens’ broader adoption.

Exchanges are not beyond regulatory control simply because they do not trade in securities. They are still subject to money laundering and Know Your Customer obligations imposed by FinCEN and others.²⁸⁵ They are still subject to anti-fraud laws in the jurisdictions where they operate.²⁸⁶ Indeed, large exchanges operating across multiple jurisdictions might well conclude that they want SEC regulation because with it comes SEC preemption.²⁸⁷

But regulation has its difficulties. As Professor William Magnuson has noted, the decentralization of the financial technology sector makes it difficult to determine the appropriate actors to target.²⁸⁸ Exchanges, in particular, handle “a portion (but not all) of bitcoin transfers (but not all transactions).”²⁸⁹ And regulators are ill-equipped to handle cutting-edge technology.²⁹⁰

And there is a greater risk. Blockchain technology can create truly decentralized autonomous organizations. While the prototypes for these organizations thus far—like the DAO—have been run by a single actor or group, it is only a matter of time before new organizations arise without these centralizing forces. Indeed, some decentralized exchanges are already in

284. Julia Y. Lee, *Money Norms*, 49 LOY. U. CHI. L.J. 57, 76 (2017).

285. See, e.g., Andrew Norry, *Bitcoin and Money Laundering: Complete Guide to Worldwide Regulations*, BLOCKONOMI (July 2, 2018), <https://blockonomi.com/bitcoin-money-laundering/>.

286. *Id.*

287. See, e.g., Robert M. Crea et al., *SEC, NASAA, and State Regulators Caution on Cryptocurrencies and ICOs*, K&L GATES (Jan. 17, 2018), <http://www.klgates.com/sec-nasaa-and-state-regulators-caution-on-cryptocurrencies-and-icos-01-17-2018/>.

288. William Magnuson, *Regulating Fintech*, 71 VAND. L. REV. 1167, 1205–06 (2018).

289. *Id.* at 1206.

290. See *id.* at 1206–07.

operation.²⁹¹ And influential voices like Vitalik Buterin have lauded their development and lamented continued centralization.²⁹² If regulation becomes onerous, more businesses will shift to these decentralized exchanges. At that point, the regulatory options become complicated. Do states start blacklisting servers associated with the entire blockchain? Do they target the individual customers? Do they ignore exchanges entirely and focus their fire on issuers? The regulatory path forward is murky at best.

CONCLUSION

Cryptocurrency and blockchain technology has the potential to transform significant parts of the economy. These technologies can form a new monetary system, better markets, efficient distribution systems, and more. For many people, the on-ramp to this crypto-economy will be an exchange like Coinbase, Gemini, or Circle. But these exchanges currently face the difficult decision of limiting their offerings to appease the SEC but annoy their customers, or expanding their offerings into crypto tokens that the SEC will likely deem securities. Exchanges need not heed the SEC's warnings. When offered by exchanges, crypto tokens lack the critical promise for future development, management, or profit that makes them securities. While the issuers may have made these promises, exchanges sell only the bare token, which is not a security.

291. See, e.g., Sudhir Katwani, *9 Best Decentralized Exchanges Which You Can Use to Trade Right Now*, COINSUTRA, <https://coinsutra.com/best-decentralized-exchanges-dex/> (last updated Dec. 12, 2018).

292. See, e.g., Helen Partz, *Ethereum's Vitalik Buterin Blasts Centralized Crypto Exchanges: "I Hope They Burn in Hell,"* COINTELEGRAPH (July 7, 2018), <https://cointelegraph.com/news/ethereum-s-vitalik-buterin-blasts-centralized-crypto-exchanges-i-hope-they-burn-in-hell>.