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REGULATION WITHOUT DEFLATION: CRYPTOCURRENCY AND ITS INSIDER TRADING CONUNDRUM

EMILY CRANE*

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Abstract

2017 was a landmark year for cryptocurrency. In that year, it burst onto the global economic scene and attracted investments from people and organizations all around the world. Its popularity gave rise to cryptocurrency exchange platforms, which seemed to further herald its arrival into the mainstream. However, these entirely unregulated exchange platforms have fostered insider trading that has no discernable recourse—and U.S. policymakers have done little to stop it. As such, this article explores the phenomenon that is cryptocurrency, the trend of insider trading, and the difficulties facing U.S. officials as they attempt to reconcile cryptocurrency’s novelty with its need for stability. The article concludes this discussion by outlining and recommending three solutions to the cryptocurrency insider trading conundrum.

I. INTRODUCTION

Although created in 2008,¹ cryptocurrency exploded onto the global economic scene in 2017, attracting *billions* of dollars in investment throughout the globe.² Cryptocurrency’s investor appeal

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1. Arthur Sullivan, *Bitcoin: Charting the life and times of a cryptocurrency*, DW (Feb. 6, 2018), www.dw.com/en/bitcoin-charting-the-life-and-times-of-a-cryptocurrency/a-42470161.

2. Kevin Roose, *Is There a Cryptocurrency Bubble? Just Ask Doge.*, N.Y.

lies primarily in its decentralization.³ Without regulation slowing it down, trading cryptocurrency is faster, cheaper, and easier than any services offered by traditional financial institutions.⁴ However, the massive demand for cryptocurrency trading has given rise to cryptocurrency exchange platforms that resemble traditional securities exchanges. Unlike stock exchanges, however, these exchange platforms are entirely unregulated, with U.S. policymakers struggling to determine exactly where they fit into the existing regulatory regime.⁵ Despite the apparent appeal of deregulation, cryptocurrency exchange platforms quickly fell victim to blatant insider trading, with no recourse for investors.⁶

As it currently stands, the U.S. still has no insider trading regulation in place for cryptocurrency exchange platforms, meaning that consumers could fall victim again at any time. Despite a plethora of remedial options, federal policymakers have been relatively inactive on the issue of cryptocurrency insider trading. Additionally, U.S. officials have provided little clarity regarding how cryptocurrency insider trading should be treated by U.S. institutions and consumers are left without any recourse when they have been harmed. As such, this article asserts that it is no longer acceptable to remain stagnant with regard to regulation of insider trading amongst cryptocurrency exchange platforms.

To reach this point, Section II of this article gives readers an introductory explanation of what exactly cryptocurrency is and how it works. Next, this article examines the various issues associated with a completely unregulated cryptocurrency market and explains how consumers are harmed. Section IV gives an overview of how insider trading is traditionally regulated in the United States, the uncertainties policymakers face when trying to apply those traditional notions to such a novel market, and the various approaches taken by states around the globe. Finally, this article concludes by outlining and comparing three recommended solutions to cryptocurrency's insider trading conundrum.

TIMES (Sept. 15, 2017), www.nytimes.com/2017/09/15/business/cryptocurrency-bubble-doge.html.

3. Joseph Young, *Cryptocurrencies vs. Banks: Advantage of Decentralized Financial Systems*, COINTELEGRAPH (Mar. 10, 2018), www.cointelegraph.com/news/cryptocurrencies-vs-banks-advantage-of-decentralized-financial-systems.

4. Ameer Rosic, *7 Incredible Benefits of Cryptocurrency*, HUFFINGTON POST (Dec. 6, 2017), www.huffingtonpost.com/ameer-rosic/7-incredible-benefits-of-_1_b_13160110.html.

5. Michelle Price & Pete Schroeder, *U.S. regulators to back more oversight of virtual currencies*, REUTERS (Feb. 5, 2018, 12:04 PM), www.reuters.com/article/us-global-bitcoin-congress/u-s-regulators-to-back-more-oversight-of-virtual-currencies-idUSKBN1FP2FJ.

6. See *infra* Section IV (explaining that the United States currently has no certain legal remedy in place for those who are damaged by insider trading on cryptoexchanges).

II. WHAT IS CRYPTOCURRENCY AND HOW DOES IT WORK?

Cryptocurrency is, at its simplest, a digital currency.⁷ Specifically, cryptocurrency is any virtual currency that is traded electronically using encryption techniques (i.e., coding) that “control the generation of . . . currency and verify the transfer of funds[.]”⁸ As with any currency, cryptocurrency only has value if people assign value to it.⁹ However, factors such as limited supply, ease of use and storage, and surrounding legal issues (such as the one discussed in this article) may also affect the value of any given cryptocurrency.¹⁰ Unlike other standard currencies, however, cryptocurrency is entirely decentralized; meaning it is “not issued or guaranteed by central banks and therefore fall[s] outside the purview of regulators.”¹¹ Recently, the cryptocurrency industry has seen massive growth, with over 1,500 different cryptocurrencies on the market today.¹² Before one can fully explore the concept of cryptocurrency, however, it is imperative to understand the technology behind it: blockchain.

A. Blockchain Technology at a Glance

A blockchain is an entirely electronic system known as a “distributed ledger system.”¹³ A distributed ledger system is one in which the information is neither stored nor connected to one common place, but is instead controlled by a community of users.¹⁴ Each ledger is comprised of individual timestamped data records, known as “blocks.”¹⁵ The coded transactions comprising these

7. Patrick Schuettel, *The Concise Fintech Compendium*, FRIBOURG SCH. OF MGMT., 8 (2017), [www.heg-fr.ch/FR/HEG-FR/Communication-et-evenements/evenements/SiteAssets/Pages/patrick-schuffel/Schueffel%20\(2017\)%20The%20Concise%20FINTECH%20COMPENDIUM.PDF](http://www.heg-fr.ch/FR/HEG-FR/Communication-et-evenements/evenements/SiteAssets/Pages/patrick-schuffel/Schueffel%20(2017)%20The%20Concise%20FINTECH%20COMPENDIUM.PDF).

8. *Id.*

9. *How is the Price of Cryptocurrency Defined?*, BITCONNECT, www.bitconnect.co/bitcoin-information/10/how-is-the-price-of-cryptocurrency-defined (last visited Aug. 28, 2018).

10. *Id.*

11. Hannah Murphy, *Drivers and risks of the cryptocurrency boom*, FIN. TIMES (Nov. 29, 2017), www.ft.com/content/8db6ce04-d458-11e7-8c9a-d9c0a5c8d5c9.

12. *All Cryptocurrencies*, COINMARKETCAP, www.coinmarketcap.com/all/views/all/ (last visited Aug. 28, 2018).

13. Joshua S. Morgan, *What I Learned Trading Cryptocurrencies While Studying the Law*, 25 U. MIAMI INT'L & COMP. L. REV. 159, 175 (2017).

14. *Id.*; Nolan Bauerle, *What is Blockchain Technology?*, COINDESK, www.coindesk.com/information/what-is-blockchain-technology/ (last visited Aug. 28, 2018); Ryan Surujnath, *Off the Chain! A Guide to Blockchain Derivatives Markets and the Implications on Systemic Risk*, 22 FORDHAM J. CORP. & FIN. L. 257, 262-63 (2017).

15. Morgan, *supra* note 13; Alan Cohn, Travis West & Chelsea Parker, *Smart After All: Blockchain, Smart Contracts, Parametric Insurance, and Smart Energy Grids*, 1 GEO. L. TECH. REV. 273, 277 (2017); Srinivas

blocks create a link between them (hence, the “chain” in blockchain), thereby allowing users to buy, sell, and trade things of value (e.g., cryptocurrency).¹⁶ This is accomplished by providing users who own something of value within the blockchain with the “private key” (i.e., code) necessary to share that value with another user in exchange for consideration of some kind.¹⁷

The use of private keys in blockchain technology establishes identity and ownership, since no one can purport to own the value without the corresponding access key.¹⁸ Additionally, each blockchain transaction is recorded on a publicly accessible online ledger, which is updated in real time.¹⁹ The result is an entirely decentralized, peer-to-peer network that is capable of secure and efficient transactions without necessitating the supervision of an authoritative third party (e.g., a bank).²⁰

B. The Bitcoin Example

Of course, the next question is, what does this have to do with cryptocurrency? The short answer is that blockchain technology is what makes the trading of cryptocurrency possible and appealing to investors.²¹ Bitcoin, the first and arguably most popular cryptocurrency, is “the most visible implementation of [blockchain] technology right now,” making it an excellent example of how blockchain and cryptocurrency work together.²² First, a short

Mazumdaru, *Bitcoin, cryptocurrencies—how do they work?*, DW (Dec. 6, 2017), www.dw.com/en/bitcoin-cryptocurrencies-how-do-they-work/a-41679663.

16. Cohn, West & Parker, *supra* note 15.

17. Morgan, *supra* note 13; Cohn, West & Parker, *supra* note 15, at 278-79.

18. *Id.*

19. Mazumdaru, *supra* note 15; Morgan, *supra* note 13 (noting that the ledgers are extremely difficult to change); Cohn, West & Parker, *supra* note 15, at 278-79.

20. Cohn, West & Parker, *supra* note 15, at 278-79; Kiran Vaidya, *Decoding the enigma of Bitcoin*, MEDIUM (Oct. 14, 2016), www.medium.com/all-things-ledger/decoding-the-enigma-of-bitcoin-e77c3a3f42f3.

21. Olga Kharif & Matthew Leising, *Bitcoin and Blockchain*, BLOOMBERG (Jan. 28, 2018, 8:40 PM), www.bloomberg.com/quicktake/bitcoins; Blockchain has important implications far beyond cryptocurrency as well, in arenas such as real estate; see S. H. Spencer Compton & Diane Schottenstein, *Blockchain Technology and Its Applicability to the Practice of Real Estate Law*, 2017 EMERGING ISSUES 7512 (2017) (recognizing that Blockchain has important implications far beyond cryptocurrency as well, in arenas such as real estate); see also Jane Susskind, *Decrypting Democracy: Incentivizing Blockchain Voting Technology for an Improved Election System*, 54 SAN DIEGO L. REV. 785 (2017) (explaining Blockchain’s importance in voting).

22. Bernard Marr, *Bitcoin, Blockchain Splits And What It Means For Business*, BERNARD MARR & CO. (2017), www.bernardmarr.com/default.asp?contentID=1168; see also Kiran Vaidya, *Bitcoin’s implementation of Blockchain*, MEDIUM (Dec. 7, 2016), www.medium.com/all-things-ledger/bitcoins-implementation-of-blockchain-2be713f662c2 (stating that “Bitcoin is the first and time-tested implementation [of blockchain] used by millions”).

introduction to Bitcoin is required.

Purportedly born out of frustration with financial institutions following the global financial crisis, Bitcoin began in 2008 when Satoshi Nakamoto,²³ a person whose identity remains a mystery, published a paper titled *Bitcoin: A Peer-to-Peer Electronic Cash System*.²⁴ Nakamoto quickly followed up the paper with 31,000 lines of code, and in January of 2009, the first block in the Bitcoin blockchain was “mined.”²⁵ The cryptocurrency steadily gained value until it achieved mainstream appeal in December of 2014, when Microsoft announced it would accept Bitcoin as payment for its software.²⁶ Bitcoin enjoyed relative success and a general increase in value until 2017, when its price began skyrocketing and plummeting unpredictably (and continues to do so in 2018).²⁷

Despite the currency’s volatility, however, the blockchain technology behind it remains consistent. In the Bitcoin blockchain, each block contains complete and validated transactions in which Bitcoin was transferred from user to user.²⁸ To trade or sell the Bitcoin, the owner uses their private key to share the Bitcoin with the buyer in exchange for valuable consideration.²⁹ In other words, by transferring control of the Bitcoin, the seller has also transferred the value of the Bitcoin—all without ever setting foot in a bank or paying a single brokerage fee.³⁰

23. Sullivan, *supra* note 1; Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, BITCOIN (2008), www.bitcoin.org/bitcoin.pdf; Zoë Bernard, *Everything you to know about Bitcoin, its mysterious origins, and the many alleged identities of its creator*, BUS. INSIDER (Dec. 2, 2017, 11:00 AM), www.businessinsider.com/bitcoin-history-cryptocurrency-satoshi-nakamoto-2017-12.

24. Nakamoto, *supra* note 23; Bernard, *supra* note 23.

25. The concept of Bitcoin mining is complex and could fill an entire article on its own and is beyond the scope of this Article. In this context, think of it as the first link in the Bitcoin blockchain being forged from the existing lines of code. For a brief overview of Bitcoin mining, *See* Ameer Rosic, *What is Bitcoin Mining? A Step-by-Step Guide*, HUFFINGTON POST (Dec. 22, 2017), www.huffingtonpost.com/ameer-rosic/what-is-bitcoin-mining-a-_b_13764842.html (providing a brief overview of Bitcoin mining).

26. Sullivan, *supra* note 1; Stan Higgins, *Microsoft Adds Bitcoin Payments for Xbox Games and Mobile Content*, COINDESK (Dec. 12, 2014), www.coindesk.com/microsoft-adds-bitcoin-payments-xbox-games-mobile-content/. A number of major retailers now also accept cryptocurrency as payment, *7 Major Companies That Accept Cryptocurrency*, NASDAQ (Jan. 31, 2018, 9:56 AM), www.nasdaq.com/article/7-major-companies-that-accept-cryptocurrency-cm913745.

27. Sullivan, *supra* note 1; Jay Adkisson, *Why Bitcoin Is So Volatile*, FORBES (Feb. 9, 2018, 11:40 PM), www.forbes.com/sites/jayadkisson/2018/02/09/why-bitcoin-is-so-volatile/#3d99232c39fb.

28. Cohn, West & Parker, *supra* note 15, at 278-79; Morgan, *supra* note 13; Surujnath, *supra* note 14, at 265-70.

29. *Id.*

30. Alex Tapscott & Don Tapscott, *How Blockchain is Changing Finance*, HARV. BUS. REV. (Mar. 1, 2017), www.hbr.org/2017/03/how-blockchain-is-changing-finance.

C. Cryptocurrency Trading Platforms

The success of Bitcoin has made cryptocurrency a very lucrative market, spawning thousands of various digital currencies,³¹ and laying the foundation for the creation of cryptocurrency exchanges (“cryptoexchanges”). Cryptoexchanges are platforms that allow users to buy, sell, exchange, and manage all manner of cryptocurrency via websites, apps, and digital wallets.³² Although the appeal of cryptocurrency lies largely in the absence of traditional financial institutions, many of the most successful cryptoexchange platforms closely resemble stock exchanges.³³ One popular platform, Coinbase, is backed by investors, insures customers’ stored currency,³⁴ and allows users to buy and sell four different kinds of cryptocurrency all in one place.³⁵ Overall, these exchanges strike a balance with crypto-novices and seasoned pros alike who crave the familiarity of a traditional stock exchange setting, but enjoy the decentralized nature of blockchain-based trading.

III. THE CATCH

The biggest problem with the cryptocurrency trade and all that it entails (blockchain, cryptoexchanges, etc.) is exactly what makes it all so appealing: lack of regulation.³⁶ In fact, the entire concept of cryptocurrency was created precisely to avoid the need for third-party financial institutions, such as banks and government

31. COINMARKETCAP, *supra* note 12; Chloe Cornish, *Growing number of cryptocurrencies spark concerns*, FIN. TIMES (Jan. 9, 2018), www.ft.com/content/a6b90a8c-f4b7-11e7-8715-e94187b3017e (analyzing 1,387 cryptocurrencies and their markets caps).

32. Ameer Rosic, *Best Cryptocurrency Exchanges: The Ultimate Guide*, BLOCKGEEKS (2017), www.blockgeeks.com/guides/best-cryptocurrency-exchanges/; Sarah Hansen, *Guide To Top Cryptocurrency Exchanges*, FORBES (June 20, 2018, 9:30 AM), www.forbes.com/sites/sarahhansen/2018/06/20/forbes-guide-to-cryptocurrency-exchanges/#4feae24a2572.

33. *Id.*; Cornish, *supra* note 31.

34. That is, it is insured only until it is hacked or frozen by the exchange, at which time both coin owner and investor lose out; *See also* *Greene v. Mizuho Bank, Ltd.*, No. 14 C 1437, 2018 U.S. Dist. LEXIS 95536, at *14 (N.D. Ill. June 7, 2018) (stating “from the outset, the gist of the claims against Mizuho has been that its decision to stop processing outbound wire transfers as of late June 2013 created a ‘trap’ for investors based in the United States: “money could go into Mt. Gox’s account at Mizuho, but it could never leave”).

35. *Id.* The four currencies are Bitcoin, Ethereum, Litecoin, and Bitcoin Cash.

36. Brian Fung, *U.S. regulators say they don’t have enough power over cryptocurrency exchanges*, WASH. POST (Feb. 6, 2018), washingtonpost.com/news/the-switch/wp/2018/02/06/u-s-regulators-say-they-dont-have-enough-power-over-cryptocurrency-exchanges/?utm_term=.4d6cfd773a2c.

agencies.³⁷ This decentralization liberates users from the sluggish pace of traditional trading and the high transaction costs associated with conventional financial proceedings.³⁸ Without regulatory red tape, cryptocurrency traders are able to maximize their economic gain by completing transactions faster and easier than ever before.³⁹

However, complete lack of regulation in a financial market also opens participants up to significant risks. For one, cryptocurrency is subject to the risks that come with any unregulated market: volatility, market manipulation, lack of consumer protection, etc.⁴⁰ In addition, unregulated cryptocurrency has its own unique set of risks. For example, nonexistent regulatory standards mean that cryptocurrency transactions taking place via blockchain are never legally and finally settled.⁴¹ Lack of legal finality in an economic transaction has consequences for various areas of the law, such as contract enforcement and taxation. Furthermore, without firm reporting requirements, false information and scams are running rampant within the cryptocurrency market, prompting the SEC to step in (despite its lack of regulatory authority).⁴²

Additionally, high prices combined with the entirely code-based transaction system have made cryptocurrency holders (e.g., trading platforms) valuable targets for hackers, with no recourse for victims.⁴³ Crowdfunding of Initial Coin Offerings (“ICO”) for new trading platforms are especially vulnerable to hacking.⁴⁴ For

37. Nakamoto, *supra* note 23.

38. Rosic, *supra* note 4.

39. *Time Value of Money*, INVESTOPEDIA, www.investopedia.com/terms/t/timevalueofmoney.asp (last visited Aug. 28, 2018) (stating that “any amount of money is worth more the sooner it is received”).

40. Chris Seabury, *Free Markets: What’s The Cost?*, INVESTOPEDIA, www.investopedia.com/articles/economics/08/free-market-regulation.asp (last visited Aug. 28, 2018). For example, one of the first cryptoexchanges, Mt. Gox, fell to ruin after a devastating hack stole \$460 million worth of its customers’ Bitcoin and \$27.4 million of its other assets in 2014. Robert McMillan, *The Inside Story of Mt. Gox, Bitcoin’s \$460 Million Disaster*, WIRED (Mar. 3, 2014, 6:30 AM), www.wired.com/2014/03/bitcoin-exchange/.

41. Murphy, *supra* note 11.

42. For example, the SEC suspended trading by The Crypto Company, a cryptocurrency trading firm, following concerns that the firm was spreading false information and had plans for insider sales. This is remarkable because, although the SEC has authority over shares of The Crypto Company, they do not have any clear authority over the cryptocurrency traded by investors in The Crypto Company. Paul R. La Monica, *SEC suspends trading of red-hot bitcoin stock*, CNN MONEY (Dec. 19, 2017), www.money.cnn.com/2017/12/19/investing/bitcoin-cryptocurrencies-sec-bubble/index.html?iid=EL.

43. Murphy, *supra* note 11.

44. *Problems and risks of cryptocurrencies*, KASPERSKY LAB DAILY (Nov. 3, 2017), www.kaspersky.com/blog/cryptocurrencies-intended-risks/20034/. Initial coin offerings are a new form of crowdfunding (like Kickstarter or GoFund Me) centered around the trade of cryptocurrency. Programmers looking to fund their projects create and sell a cryptocurrency that is unique and limited to the online program they are building. Initial coin offerings have been the subject of much

example, in July 2017, a hacker gained access to the project website of a start-up known as CoinDash and replaced its address with his own, garnering over \$7 million from investors before the spoofed site was shut down.⁴⁵ In 2016, \$150 million was stolen from a start-up project called The DAO through a similar hacking scheme.⁴⁶ Furthermore, a Bitcoin exchange called Youbit filed for bankruptcy in 2017 after hackers stole 20% of its clients' stored currency.⁴⁷ Hacking does not only occur in the context of ICOs, however. In a very large and very public hacking, \$530 million was stolen from the Japanese cryptoexchange called Coincheck.⁴⁸ Unfortunately, the cryptocurrency hacking horror stories could go on for pages.⁴⁹

IV. THE INSIDER TRADING CONUNDRUM

One of the largest problems with the lack of cryptocurrency regulations, and the one at the heart of this article, is insider trading. Insider trading is the action of “buying or selling a security . . . while in possession of material, nonpublic information about the security.”⁵⁰ Although insider trading law is incredibly nuanced, illegal insider trading generally occurs when a person uses material

SEC scrutiny because of their similarity to initial public offerings of stock. Unlike IPOs, however, initial coin offerings avoid falling into SEC purview by not attaching an ownership stake to the purchase of the coins. Nathaniel Popper, *An Explanation of Initial Coin Offerings*, N.Y. TIMES (Oct. 2, 2017), www.nytimes.com/2017/10/27/technology/what-is-an-initial-coin-offering.html.

45. Wolfie Zhao, *\$7 Million Lost in CoinDash ICO Hack*, COINDESK (July 20, 2017), www.coindesk.com/7-million-ico-hack-results-coindash-refund-offer/.

46. *Id.*

47. Daniel Shane, *Bitcoin exchange goes bust after hack*, CNN TECH (Dec. 20, 2017, 2:54 AM), www.money.cnn.com/2017/12/20/technology/south-korea-bitcoin-exchange-closes/index.html?iid=EL.

48. This high-profile \$530 million hacking only added to existing lawmaker concerns about the volatility of cryptocurrency, lack of investor protections, and the increased risk of cybercrime that come with cryptocurrency trading. This hack also prompted action by U.S. regulators in the form of a Senate hearing, where regulators sought to “highlight limitations in the current U.S. regulatory structure, whereby virtual currencies fall into a gray area between the SEC, CFTC, Treasury, the Fed, and state regulators.” Michelle Price & Pete Schroeder, *U.S. regulators may ask Congress for virtual currency legislation*, REUTERS (Feb. 6, 2018, 12:06 AM), www.reuters.com/article/us-global-bitcoin-congress/u-s-regulators-may-ask-congress-for-virtual-currency-legislation-idUSKBN1FQ0KU.

49. Steven Russolillo, *Hackers Steal More Than \$70 Million in Bitcoin*, WALL ST. J. (Dec. 7, 2017), www.wsj.com/articles/millions-may-be-missing-in-bitcoin-heist-1512625176 (noting that a cryptocurrency marketplace called NiceHash had \$70 million stolen by hackers); Steven Russolillo & Eun-Young Jeong, *Cryptocurrency Exchanges Are Getting Hack Because It's Easy*, WALL ST. J. (July 16, 2018, 1:14 AM), www.wsj.com/articles/why-cryptocurrency-exchange-hacks-keep-happening-1531656000.

50. *Insider Trading*, SEC (Jan. 15, 2013), www.sec.gov/fast-answers/answersinsiderhtm.html. A “security” is either a piece of stock, a stock option, or a bond.

inside information not available to the public to trade securities to their advantage.⁵¹ The classic example is the corporate employee who learns that the corporation is about to be bought out by a larger company and uses that information to buy stock in the corporation before the buy-out is announced and the corporation's stock price goes up.⁵²

As mentioned in Section II Part C, many cryptocurrency trading platforms closely resemble classic stock exchanges, such as the New York Stock Exchange.⁵³ However, one important way in which cryptoexchanges do not mimic standard stock markets is in their complete lack of insider trading regulation.⁵⁴ Insider trading has plagued cryptocurrency markets from the beginning, with two high-profile, international scandals occurring within two months of each other.

In January of 2018, South Korea's Financial Supervisory Service ("FSC") announced it was launching an internal probe into potential incidences of insider trading by FSC employees.⁵⁵ According to the reports, several FSC employees sold their Bitcoin holdings right before South Korean Justice Minister Park Sang-ki announced a potential ban on cryptocurrency trading.⁵⁶ In response to citizen outrage and concerns about government neutrality, the FSC also stated that it was exploring the potential for a law prohibiting FSC employees from trading in cryptocurrency at all.⁵⁷

In a problem happening closer to home, the popular U.S. cryptoexchange Coinbase recently announced it was investigating reports of insider trading among its employees.⁵⁸ The issue arose when, mere hours before Coinbase announced it was starting support of trades in a cryptocurrency called Bitcoin Cash ("BCH"), trading of BCH increased and its price soared.⁵⁹ The activity was so

51. Joshua Kennon, *What Is Insider Trading and Why Is It Illegal?*, THE BALANCE (July 31, 2018), www.thebalance.com/what-is-insider-trading-and-why-is-it-illegal-356337.

52. *Id.*

53. Rosic, *supra* note 32.

54. Fung, *supra* note 36.

55. Joseph Young, *South Korean Official Initiated Insider Trading, Bought Bitcoin Before Trading Ban Fiasco*, CCN (Jan. 19, 2018), www.ccn.com/south-korean-officials-initiated-insider-trading-bought-bitcoin-before-trading-ban-fiasco/.

56. *Id.*

57. *Id.*

58. Aaron Smith, *Coinbase investigates possible insider trading of bitcoin cash*, CNN MONEY (Dec. 20, 2017), www.money.cnn.com/2017/12/20/investing/coinbase-bitcoin-cash/index.html; Brian Armstrong, *Our employee trading policy at Coinbase*, THE COINBASE BLOG (Dec. 19, 2017), www.blog.coinbase.com/our-employee-trading-policy-at-coinbase-1d4e860b7837.

59. Shannon Liao, *Coinbase halts Bitcoin Cash transactions amidst accusations of insider trading*, THE VERGE (Dec. 20, 2017), www.theverge.com/2017/12/20/16800940/coinbase-bitcoin-cash-fork-insider-trading-probe.

suspicious that Coinbase halted all BCH transactions only four hours after introducing it on its trading platform.⁶⁰ In a twist that would not be out of place in a modern movie plot, it was determined that an insider revealed Coinbase's support of BCH trading in a Reddit post the day before the official announcement.⁶¹ Following this anonymous Reddit post, the price of BCH immediately skyrocketed, increasing in value by 700% within one hour.⁶² Although this type of trading is prohibited by Coinbase's employee policy, the U.S. has no regulatory or legal authority over insider trading by cryptoexchange employees—meaning it can happen again at any time.⁶³

A. Traditional Insider Trading Regulation

Generally, the United States is considered to have “the most comprehensive and strongly enforced laws against insider trading.”⁶⁴ U.S. insider trading regulation in traditional securities transactions exists for a variety of reasons and in a variety of

60. John Koetsier, *Alleged: Bitcoin Cash Insider Trading Discovered Via Coinbase With Potential 8X Return*, FORBES (Dec. 25, 2017, 2:49 PM), www.forbes.com/sites/johnkoetsier/2017/12/25/alleged-bitcoin-cash-insider-trading-discovered-via-coinbase-with-potential-8x-return/#.

61. *Id.* Reddit is a website that allows users to engage in online discussion in forums covering a variety of topics. The original Reddit post is also shown in the article. See also, Aaron Smith, *Coinbase investigates possible insider trading of bitcoin cash*, CNN MONEY (Dec. 20, 2017), www.money.cnn.com/2017/12/20/investing/coinbase-bitcoin-cash/index.html (reiterating that the spike in BCH prices hours before the announcement sparked suspicion of insider trading by Coinbase employees).

62. Koetsier, *supra* note 60 (stating that the price of BCH went from “\$1k to \$8k in an hour”).

63. Fung, *supra* note 36; Brian Armstrong, *Our employee trading policy at Coinbase*, THE COINBASE BLOG (Dec. 19, 2017), www.blog.coinbase.com/our-employee-trading-policy-at-coinbase-1d4e860b7837. However, New York recently launched investigations into cryptoexchange insider trading and is the first U.S. jurisdiction to attempt to regulate cryptoexchanges, so protections may start appearing at the state level. Frank Chaparro, *New York's attorney general launches an investigation into cryptocurrency*, BUS. INSIDER (Apr. 17, 2018, 2:33 PM). It's also important to note that some cryptoexchanges actually do want to be regulated by the SEC. For example, the cryptoexchange Poloniex has applied for compliance with the SEC. Romain Dillet, *SEC says cryptocurrency exchanges are an unregulated mess*, TECHCRUNCH (Mar. 7, 2018) www.techcrunch.com/2018/03/07/sec-says-cryptocurrency-exchanges-are-an-unregulated-mess/.

64. Laura E. Hughes, *The Impact of Insider Trading Regulations on Stock Market Efficiency: A Critique of the Law and Economics Debate and a Cross-Country Comparison*, 23 TEMP. INT'L & COMP. L.J. 479, 488 (2009). This strict regulatory scheme may be precisely why several cryptoexchanges are setting up in Malta, rather than in the United States. Joseph Young, *Binance's Fiat Integration May Lead Cryptocurrency Exchanges to Move to Malta*, CCN (June 13, 2018, 7:04 PM), www.ccn.com/binances-fiat-integration-may-lead-cryptocurrency-exchanges-to-move-to-malta/.

forms.⁶⁵ Modern economic theory indicates that insider trading stems from an asymmetry of information between the insiders and the general public.⁶⁶ This informational asymmetry increases market volatility and transaction costs, while decreasing market liquidity and the accuracy of stock prices.⁶⁷ Empirical research grounds this theory in the real world, by indicating that insider trading regulation generally leads to more efficient stock markets.⁶⁸

In a more nebulous sense, this focus on regulating insider trading developed through a uniquely American fascination with insider trading schemes.⁶⁹ Development of the United States' financial regulatory scheme began with the economic crash of 1929, followed by the Great Depression.⁷⁰ Fear of another Depression led to the creation of federal securities laws and the Securities and Exchange Commission ("SEC") in a move meant to stabilize financial markets and protect consumers in the future.⁷¹ Almost immediately, the U.S. focused its regulatory efforts on insider trading by passing the Securities Exchange Act of 1934.⁷² The 1980s saw significant regulatory focus on insider trading as well, culminating in the passage of the Insider Trading Sanctions Act of 1984 and the Insider Trading and Securities Fraud Enforcement Act of 1988.⁷³

In the late 20th century and early 21st century, insider trading and its regulation became a pop culture phenomenon—resulting in iconic moments like Gordon Gekko's *Wall Street* speech.⁷⁴ By the time Martha Stewart was imprisoned for an insider trading charge in 2006 and Bernie Madoff's catastrophic Ponzi scheme unraveled in 2008, insider trading had fully captured the American

65. Fung, *supra* note 36.

66. Hughes, *supra* note 64, at 481.

67. *Id.* at 480.

68. *Id.* at 485.

69. *Id.* at 488.

70. *Id.*

71. Hughes, *supra* note 64.

72. *Id.* at 489 (citing Securities Exchange Act, 15 U.S.C. §§ 78(a)-78(nn) (1934)).

73. *Id.* (citing 15 U.S.C. §§ 78(a)-78(nn) (1984) and Insider Trading and Securities Fraud Enforcement Act, 102 Stat. 4677 (1988)). The Securities Exchange Act of 1934, the Insider Trading Sanctions Act of 1984, and the Insider Trading and Securities Fraud Enforcement Act of 1988 remain the primary insider trading regulations to this day.

74. *Id.* at 488. Gekko's "Greed is good" speech occurs in one of the more dramatic and tension-filled moments of the movie. In it, Gekko calls out Teldar Paper's "33 different vice presidents" for using the company and its dealings for their own gain rather than for the gain of the stockholders. The speech's most iconic line, now cemented in the ideals of American pop culture, is, "Greed, in all of its forms—greed for life, for money, for love, knowledge—has marked the upward surge of mankind. And greed—you mark my words—will not only save Teldar Paper, but that other malfunctioning corporation called the USA." *Wall Street* (1987), AM. RHETORIC: MOVIE SPEECHES, www.americanrhetoric.com/MovieSpeeches/moviespeechwallstreet.html (last visited Sept. 12, 2018).

imagination.⁷⁵ One expert suggests that U.S. captivation with insider trading is due to its possession of “all of the elements of [a] great drama”: secrets, a betrayal of trust, detective work, and more.⁷⁶

However, despite this rich history of insider trading regulation, the regulation of cryptocurrency has proven to be a daunting task for many reasons. First and foremost, the entire cryptocurrency market has recently been seized by a variety of uncertainties.⁷⁷ One uncertainty lies in how exactly cryptocurrency is classified for legal, tax, and regulatory purposes.⁷⁸

On one hand, the IRS recently released a notice clarifying that cryptocurrency would be treated as property (as opposed to currency) for the purpose of determining federal income tax liability.⁷⁹ However, under the Foreign Account Tax Compliance

75. See Stephanie Yang, *How Bernie Madoff's Ponzi Scheme Worked*, BUS. INSIDER (July 1, 2014), www.businessinsider.com/how-bernie-madoffs-ponzi-scheme-worked-2014-7 (describing Madoff's Ponzi scheme, which is largest investment fraud in United States history, in which Madoff convinced “thousands of investors to hand over their savings, falsely promising consistent profits in return”; see also *United States v. Stewart*, 433 F.3d 273, 279 (2d Cir. 2006) (describing the case in which Martha Stewart, home-making mogul, used insider information to sell off her shares in a company called ImClone).

76. Hughes, *supra* note 64, at 488. (quoting Linda Chatman Thomsen, *Remarks Before the Australian Securities and Investments Commission 2008 Summer School: U.S. Experience of Insider Trading Enforcement* (Feb. 19, 1998), www.404.gov/news/speech/2008/spch021908lct.htm).

77. Cryptocurrency has some characteristics of a variety of existing legal concepts. For example, it can be bought and sold like personal property, but it also represents an intangible exchange of value or an investment like a stock or bond. It also can be used to buy and sell other objects of value like a traditional currency, or it may be collected and valued on its own like rare coins. Cryptocurrency doesn't necessarily fit neatly into any of these categories, leaving it unclear which regulatory agency has jurisdiction. Charles Bovaird, *Cryptocurrency Markets Gripped By Wait and See Mentality*, FORBES (Feb. 12, 2018, 2:23 PM), www.forbes.com/sites/cbovaird/2018/02/12/cryptocurrency-markets-gripped-by-wait-and-see-mentality/#573378eb3712; Trey Huffine, *How cryptocurrency is classified by the government—and why it should be changed*, MEDIUM (July 23, 2018), www.levelup.gitconnected.com/how-cryptocurrency-is-classified-by-the-government-and-why-it-should-be-changed-d26bed3d2b23.

78. Craig W. Smalley, *The Classification of Bitcoin and Cryptocurrency by the IRS*, CPA PRAC. ADVISOR (Nov. 12, 2017), www.cpapracticeadvisor.com/news/12380583/the-classification-of-bitcoin-and-cryptocurrency-by-the-irs; Huffine, *supra* note 77. See generally Sarah Jane Hughes & Stephen T. Middlebrook, *Advancing a Framework for Regulating Cryptocurrency Payments Intermediaries*, 32 YALE J. ON REG. 495 (2015) (discussing a potential framework for the regulation of cryptoexchanges and thereby the cryptocurrency traded on them).

79. *Id.* (“[T]he IRS is classifying cryptocurrency as property, not currency, except for the purposes of Foreign Bank Account Reporting (FBAR) regulations, where cryptocurrency is treated as a currency.”). This IRS treatment of cryptocurrency as property creates vastly different tax consequences than if it was treated as currency. For example, if it is classified as property, then each exchange of cryptocurrency would be a taxable event contemplated by existing

Act, cryptocurrency exchanges are classified as financial institutions—meaning the cryptocurrency traded on those cryptoexchanges must be reported as currency.⁸⁰ Additionally, the American Institute of Certified Public Accountants recently published an open letter recommending that cryptocurrency holdings be reported as financial assets.⁸¹ Further complicating things, the Commodity Futures Trading Commission (“CFTC”) ruled in 2015 that cryptocurrency is a commodity, while the Financial Crimes Enforcement Network (“FinCEN”) classifies it as virtual currency.⁸² In order to bring cryptocurrency under state authority, several state regulators insist it is “money used for money transmission.”⁸³ It has even been suggested that cryptocurrency be analogized to precious metals, such as gold, for regulatory purposes.⁸⁴ Finally, in order to bring the cryptocurrency market within the regulatory purview of the SEC, it has been suggested that cryptocurrency be treated as a security.⁸⁵

Thus, it is currently unclear whether cryptocurrency is property, currency, a financial asset, a security, or something else

U.S. tax law. This would not be the case if cryptocurrency was treated as a currency for tax purposes.

80. *Id.*; Annie Nova, *How cryptocurrency investors could find themselves behind bars*, CNBC (Apr. 9, 2018, 1:01 PM), www.cnn.com/2018/04/09/how-cryptocurrency-investors-could-find-themselves-behind-bars.html (noting that certain U.S. taxpayers must report cryptocurrency traded on foreign-based cryptoexchanges via Form 8938 that must be filed with their tax returns).

81. *Id.*; Letter from Troy K. Lewis, CGMA Chair, AICPA Tax Executive Committee, American Institute of Certified Public Accountants, to Internal Revenue Service (June 10, 2016) www.aicpa.org/advocacy/tax/downloadabledocuments/aicpa-comment-letter-on-notice-2014-21-virtual-currency-6-10-16.pdf.

82. Peter Van Valkenburgh, *Framework for Securities Regulation of Cryptocurrencies*, COIN CTR. REP., 2-3 (Jan. 2016), www.coincenter.org/wp-content/uploads/2016/01/SECFramework2.5.pdf; In the Matter of Coinflip, Inc., CFTC Docket No. 15-29 (Sep. 2015) www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfcoinflipprorde; *Application of FinCEN’s Regulations to Persons Administering, Exchanging, or Using Virtual Currencies*, FINCEN (Mar. 18, 2013), www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering.

83. *Id.*

84. *Id.* at 1-2; Jay Clayton, *Statement on Cryptocurrencies and Initial Coin Offerings*, SEC (Dec. 11, 2017), www.sec.gov/news/public-statement/statement-clayton-2017-12-11 (stating that “cryptocurrencies purport to be items of inherent value [similar . . . to cash or gold]”).

85. Tama Churchouse, *Is a cryptocurrency like a stock? This is what the SEC says...*, STANSBERRY CHURCHOUSE RES. (July 28, 2017), www.stansberrychurchouse.com/asia-wealth-investment-daily/cryptocurrency-like-stock-sec-rules/; *Is A Cryptocurrency Like A Stock? The SEC Weighs In*, SEEKING ALPHA (Aug. 1, 2017, 8:03 AM), www.seekingalpha.com/article/4093012-cryptocurrency-like-stock-sec-weighs?page=4 (stating that in the SEC’s opinion cryptocurrency might be a security); *SEC Charges Bitcoin Entrepreneur With Offering Unregistered Securities*, SEC (June 3, 2014), www.sec.gov/news/press-release/2014-111.

entirely.⁸⁶ This uncertainty is a large stumbling block for regulators hoping to make any progress, especially if cryptocurrency is a concept that is not contemplated by any existing regulatory or statutory regimes.

Another uncertainty facing regulators is exactly how to approach the regulation of cryptocurrency. Policymakers attempting to craft regulation in a new area can be analogized to a physician treating a new patient.⁸⁷ First, the doctor assesses the patient's symptoms and attempts to discover the disease that is at the root of the patient's ailment.⁸⁸ Once the disease is diagnosed, the doctor compiles a list of viable remedies to treat the disease.⁸⁹ Finally, the physician weighs the pros and cons of each possible remedy and selects the one that "will provide the greatest net benefit to the patient."⁹⁰

If lack of cryptocurrency regulation is the disease and global financial regulators are the treating physicians, then they have committed malpractice against their patient. Instead of engaging in a careful consideration about the net benefits of each remedy, regulators around the world have thrown the metaphorical mud against the wall and are waiting to see what sticks. For example, Belarus recently made cryptocurrency entirely free from regulation and taxation.⁹¹ Although the bold deregulation may attract foreign investors to the country's economy,⁹² it also threatens to destabilize the country's financial and legal sectors.⁹³ Twenty-four years of authoritarian rule has stunted the growth of the Belarusian justice system, meaning that these new, liberalized cryptocurrency laws will likely be inconsistently applied, creating an unpredictable and volatile economic situation.⁹⁴

On the other end of the spectrum lies Vietnam, which has entirely outlawed the use of cryptocurrencies since the early days of

86. Irwin Stein, *Classifying Crypto-Currency*, LAW AND ECON. IN THE CAP. MAR. (July 18, 2017), www.laweconomicscapital.com/2017/07/classifying-crypto-currency/ (stating that various legal opinions have come to opposite conclusions regarding the proper classification of cryptocurrency).

87. Thomas A. Lambert, *How to Regulate: A Guide for Policymakers* 14-15 (2017).

88. *Id.*

89. *Id.*

90. *Id.*

91. Kevin Helms, *Cryptocurrency Activities Will Be Legal and Tax Free in Belarus Starting in March*, Bitcoin.com (Jan. 18, 2018), www.news.bitcoin.com/cryptocurrencies-activities-legal-tax-free-belarus-starting-march/.

92. *Id.*

93. Tatsiana Kulakevich, *Why would authoritarian Belarus liberalize cryptocurrencies?*, Wash. Post (Jan. 25, 2018), www.washingtonpost.com/news/monkey-cage/wp/2018/01/25/why-would-authoritarian-belarus-liberalize-cryptocurrencies/?utm_term=.3384f324b7e6.

94. *Id.*

the Bitcoin boom.⁹⁵ The law makes it illegal for financial institutions and individual citizens alike to issue and use cryptocurrency, with violators facing a fine of up to 200 million dong (\$9,000 USD).⁹⁶ The ban was apparently precipitated by rampant use of cryptocurrency for crimes such as money laundering, as well as widespread fraud.⁹⁷ However, a complete ban on cryptocurrency is just as problematic as a complete deregulation for two reasons: (1) the anonymity and distributed database technology render a complete ban ineffective at stopping individual cryptocurrency use;⁹⁸ and (2) cryptocurrency—and the blockchain technology behind it—is here to stay,⁹⁹ which puts any country where it's outlawed at a financial disadvantage when it comes to attracting foreign investors.¹⁰⁰

In contrast to these two extreme approaches, United States regulators have remained relatively inactive on the issue of cryptocurrency, and on cryptoexchange insider trading specifically.¹⁰¹ Although SEC and CFTC officials have recently become more outspoken about the need for cryptocurrency insider trading regulation, little regulatory progress has been made.¹⁰² This delay is likely due in part to uncertainty regarding cryptocurrency's classification,¹⁰³ in part to confusion about how to approach the regulation of cryptocurrency,¹⁰⁴ and in part to concerns that any regulation of cryptocurrency will destroy its appeal.¹⁰⁵ However, it

95. Lisa Froelings, *Vietnamese Central Bank Bans Cryptocurrencies*, COINTELEGRAPH (Oct. 29, 2017), www.cointelegraph.com/news/vietnamese-central-bank-bans-cryptocurrencies.

96. *Id.*; *Using Bitcoin will be fined up to 200 million, criminal investigation*, NGUOI LAO DONG (Oct. 28, 2017, 11:59 AM) www.nld.com.vn/kinh-te/dung-bitcoin-se-bi-xu-phat-toi-200-trieu-dong-truy-cuu-hinh-su-20171028114036368.htm; Nate Fischler, *Vietnam has a cryptocurrency dilemma*, ASIA TIMES (Feb. 1, 2018, 5:21 PM), www.atimes.com/article/vietnam-cryptocurrency-dilemma/.

97. Fischler, *supra* note 96.

98. Froelings, *supra* note 95.

99. Tallha Abdulrazaq, *Cryptocurrencies are here to stay*, AL JAZEERA (Feb. 3, 2018), www.aljazeera.com/indepth/opinion/cryptocurrencies-stay-bitcoin-blockchain-180201085633760.html.

100. Froelings, *supra* note 95.

101. Fung, *supra* note 36. Although federal regulators have done little to regulate cryptoexchanges, note that New York has become the first U.S. state to attempt to regulate cryptocurrency, Chaparro, *supra* note 63.

102. *Id.*; *See also Statement on Potentially Unlawful Online Platforms for Trading Digital Assets*, SEC (Mar. 7, 2018), www.sec.gov/news/public-statement/enforcement-tm-statement-potentially-unlawful-online-platforms-trading (stating that many cryptoexchanges “provide a mechanism for trading assets that meet the definition of a ‘security’ under the federal securities laws” and must “register with the SEC as a national securities exchange or be exempt from registration”).

103. Stein, *supra* note 86.

104. Smalley, *supra* note 78.

105. *Will government regulations destroy Bitcoin? Harvard Perspective*, A TO Z FOREX (Jan. 9, 2018), www.atozforex.com/news/will-government-regulations-destroy-bitcoin/.

is clear that insider trading among cryptoexchanges cannot be allowed to continue without any regulatory oversight to protect consumers.¹⁰⁶ With the considerations of freedom and consumer protection directly competing with one another, U.S. officials may be left asking, “What’s the solution?”

V. THE SOLUTION(S)

Regulation is an appropriate solution when market failures lead to potential adverse outcomes.¹⁰⁷ In this case, the market failure—the failure of cryptoexchanges to privately regulate insider trading—has led to adverse outcomes for non-insider investors and, more broadly, the cryptocurrency market as a whole.¹⁰⁸ Insider trading not only costs investors money,¹⁰⁹ it also undermines their faith in the market—faith that is already wearing thin when it comes to cryptocurrency.¹¹⁰ Therefore, despite U.S. officials’ reluctance to act, cryptocurrency insider trading is a “prime target for regulation.”¹¹¹ As such, U.S. regulators are now at a crossroads, with several viable remedies for the insider trading disease plaguing cryptoexchanges, each with its own benefits and pitfalls.¹¹² This article recommends one of three solutions, outlined below.

A. Create a New Regulatory Scheme

The first and most drastic solution is to create an entirely new regulatory scheme centered specifically around cryptocurrency insider trading.

As discussed above, various institutions have come to conflicting conclusions about exactly how cryptocurrency should be classified within existing regulatory and legal frameworks.¹¹³ Furthermore, it is unclear which regulatory body has oversight of

106. Fung, *supra* note 36.

107. Lambert, *supra* note 87.

108. Fung, *supra* note 36.

109. Uptal Bhattacharya & Hazem Daouk, *The World Price of Insider Trading*, 57 J. OF FIN. 75, 77 (Feb. 2002), www.faculty.fuqua.duke.edu/~charvey/Teaching/BA453_2005/BD_The_world.pdf (indicating that costs of equity are 5% higher when insider trading regulations are not enforced).

110. Peter J. Henning, *Why Insider Trading Is Wrong*, N.Y. TIMES (Apr. 11, 2011, 3:51 PM), www.dealbook.nytimes.com/2011/04/11/why-is-insider-trading-wrong/; Erica Smith, *Explaining The Current Lack Of Confidence In Cryptocurrencies*, GAZETTE (Feb. 2, 2018), www.gazetteday.com/2018/02/explaining-current-lack-confidence-cryptocurrencies/.

111. Lambert, *supra* note 87.

112. See *supra* Section IV-A (describing the difficulties of orienting cryptoexchange insider trading within the existing U.S. regulatory and legal framework).

113. *Id.*

cryptoexchanges in the first place.¹¹⁴ On one hand, the CTFC has claimed authority over all virtual currency since 2015, but the SEC has hinted that it has jurisdiction over cryptoexchanges.¹¹⁵ Additionally, the Treasury Department and state virtual trading platform licensers have also laid claim to authority over cryptocurrency trading.¹¹⁶ Cryptocurrency and cryptoexchanges essentially fall into the gray areas between existing institutions and legal definitions, leading some U.S. market regulators and legislators to conclude that a new regulatory framework—and perhaps even a new regulatory body—is necessary.¹¹⁷

The biggest potential problem with creating new regulations can be summarized in three words: cost, cost, cost. Requiring cryptoexchanges to comply with federal regulations will increase current transaction costs and decrease efficiency, making the exchanges similar to the traditional financial institutions that crypto-traders detest.¹¹⁸ Furthermore, it is no secret that drafting, proposing, and implementing federal regulations is expensive in both time and money—one study indicates that federal regulations cost the U.S. *trillions* of dollars.¹¹⁹

However, federal officials would not have to start from scratch. Policymakers could pull language from existing insider trading laws and regulations, adapt the phrases to cryptocurrency, and use those as the building blocks for cryptoexchange insider trading regulations. Additionally, various rules regarding cryptocurrency trading already exist sporadically throughout U.S. institutions.¹²⁰ This “patchwork” of rules may be compiled and used as a foundation for creation of a “rationalized federal [regulatory] framework” for cryptoexchange insider trading.¹²¹ By adapting existing insider trading and cryptocurrency regulations instead of starting from scratch, the cost of creating a new regulation schema would be reduced. However, existing U.S. insider trading regulation is incredibly complex, meaning that finding, selecting, and editing the necessary portions would be a monumental and expensive task.¹²²

114. Price & Schroeder, *supra* note 5.

115. *Id.*

116. *Id.*

117. *Id.*

118. Tapscott, *supra* note 30.

119. Patrick McLaughlin, *An Economy Buried by Regulations*, U.S. NEWS (Aug. 27, 2013, 9:00 AM), www.usnews.com/opinion/blogs/economic-intelligence/2013/08/27/regulations-cost-the-us-economy-trillions-of-dollars; *The Cost of Federal Regulation to the U.S. Economy, Manufacturing, and Small Business*, NAT'L ASS'N OF MANUFACTURERS (2014), www.nam.org/Data-and-Reports/Cost-of-Federal-Regulations/Federal-Regulation-Executive-Summary.pdf.

120. Price & Schroeder, *supra* note 5.

121. *Id.*

122. Marco Ventoruzzo, *Comparing Insider Trading in the United States and in the European Union: History and Recent Development*, EUR. CORP. GOVERNANCE INST. (May 2014), www.papers.ssrn.com/sol3/

Furthermore, this solution has the potential to saddle cryptoexchanges with so much regulation that they become just as costly and inefficient as traditional financial institutions.

B. *Expand Interpretation of Existing CFTC Regulations*

Although several state and federal regulatory bodies have asserted jurisdiction over cryptocurrency trading,¹²³ streamlining the regulation of crypto insider trading necessitates consolidation of authority in a single regulatory agency.¹²⁴ One of the best claims for sole authority over cryptoexchanges comes from the CFTC.¹²⁵ The CFTC is a regulatory agency that “aims to protect market users and their funds, consumers, and the public from fraud, manipulation, and abusive practices related to . . . products that are subject to the Commodity Exchange Act.”¹²⁶

Currently, the CFTC officially asserts that cryptocurrencies are commodities for the purposes of the Commodity Exchange Act (“CEA”), thereby giving it the authority to regulate them.¹²⁷ Additionally, the CFTC has recently adopted rules claiming “broad anti-fraud and anti-manipulation authority over commodity transactions”—in other words, authority over insider trading involving commodities.¹²⁸ As such, those rules have already been used by the CFTC to pursue charges in a case involving insider trading in futures contracts, indicating that the CFTC is willing to use its authority to fight insider trading.¹²⁹ Therefore, under the CFTC’s expanded definition of “commodity,” its anti-manipulation authority may easily be broadened to encompass cases of insider trading involving cryptocurrency.¹³⁰

papers.cfm?abstract_id=2442049 (noting that the U.S. insider trading regime is “overly complex”).

123. Price & Schroeder, *supra* note 5.

124. *Cf. U.S. Department of Commerce Releases Report on Streamlining Government Permitting and Reducing Unnecessary Regulations on the Domestic Manufacturing Industry*, U.S. DEP’T. OF COMM. (Oct. 6, 2017), www.commerce.gov/news/press-releases/2017/10/us-department-commerce-releases-report-streamlining-government (indicating that overlap coordination between regulatory agencies should be eliminated to streamline their processes).

125. Price & Schroeder, *supra* note 5; Sam Sullivan, *Insider Trading in Cryptocurrency: Exploring New Territory for the CFTC*, COLUMBIA BUS. L. REV. (Apr. 3, 2018, 11:33 PM), www.cblr.columbia.edu/insider-trading-in-cryptocurrency-exploring-new-territory-for-the-cftc/.

126. *Mission & Responsibilities*, U.S. CFTC, www.cftc.gov/About/MissionResponsibilities/index.htm (last visited Aug. 28, 2018).

127. Sullivan, *supra* note 125.

128. *Id.*; Prohibition Against Manipulation, 17 C.F.R. § 180 (2011).

129. Sullivan, *supra* note 125.

130. *Id.*

The biggest benefit of this solution is clear: expanding the interpretation of the CFTC's existing authority would be much less expensive than creating an entirely new regulatory regime. In fact, due to the CFTC's official definition of cryptocurrency as a commodity and its existing rules asserting authority over insider trading in commodity transactions, much of the work is already completed.¹³¹ Additionally, since cryptocurrency does not perfectly fit into the definition of a security, the SEC (CFTC's chief rival for authority over cryptoexchanges) may not be adequately suited to handle regulation of cryptocurrency insider trading.¹³²

On the other hand, since the CFTC is so new to fighting insider trading,¹³³ it may not be the proper agency to handle the regulation of such a novel market. Furthermore, simply asserting that an existing legal definition now includes cryptocurrency is likely an insufficient method to address the market's atypical characteristics—the definitional equivalent of attempting to put a square peg through a round hole.¹³⁴ Finally, consolidating control in a single overarching regulatory agency such as the CFTC may drive investors away from cryptoexchanges by making them akin to the traditional financial institutions that traders sought to escape by turning to cryptocurrency.¹³⁵

C. Modify Existing SEC Regulations

The SEC is a federal regulatory agency meant to “protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.”¹³⁶ Pursuant to that mission, the SEC, in conjunction with statutes and the judiciary, is the agency that traditionally regulates insider trading of securities.¹³⁷ Arguably the best contender to regulate cryptocurrency insider trading as well, the SEC has recently made significant strides towards assuming authority over cryptoexchanges.¹³⁸ However, the first step in allowing the SEC to officially regulate cryptocurrency insider trading is not for it to simply assert authority, but rather to formally

131. *Id.*

132. Price & Schroeder, *supra* note 5.

133. The CFTC's rules claiming broad anti-manipulation authority were not promulgated until 2011. Prohibition Against Manipulation, 17 C.F.R. § 180 (2011).

134. Price & Schroeder, *supra* note 5 (noting that cryptocurrency falls into gray areas of U.S. institutions).

135. Rosic, *supra* note 32.

136. *What We Do*, SEC, www.sec.gov/Article/whatwedo.html (last visited Aug. 28, 2018).

137. SEC, *supra* note 50.

138. Evelyn Chang, *The SEC just made it clearer that securities laws apply to most cryptocurrencies and exchanges trading them*, CNBC (Mar. 7, 2018, 6:48 PM), www.cnn.com/2018/03/07/the-sec-made-it-clearer-that-securities-laws-apply-to-cryptocurrencies.html.

modify the official definition of “security” to include cryptocurrency traded on cryptoexchanges.¹³⁹

The SEC is not bound by other agencies’ classification of cryptocurrency as property or commodity, and including cryptocurrency as a security allows the SEC to apply to cryptoexchanges the same insider trading regulations that other securities exchanges are subject to.¹⁴⁰ For example, formally defining cryptocurrency as a security would allow the SEC to require registration of cryptoexchanges as National Securities Exchanges under the Securities Exchange Act of 1934.¹⁴¹ Bringing cryptoexchanges under the SEC’s regulatory umbrella via registration would also subject them to SEC rules regarding insider trading, including sanctions pursuant to the Insider Trading Sanctions Act of 1984 and the Insider Trading and Securities Fraud Enforcement Act of 1988.¹⁴²

Since it only requires changing the formal definition of a security, bringing cryptoexchanges into the regulatory purview of the SEC would cost significantly less than creating an entirely new regulatory regime.¹⁴³ Additionally, since the SEC is already the primary regulator of insider trading, it is likely the best current option for regulating insider trading on cryptoexchanges.¹⁴⁴ This option also provides benefits to both cryptoexchanges and cryptocurrency traders. Registering as a National Securities Exchange with the SEC would give legitimacy to the cryptoexchanges, which may bolster investors’ confidence in the cryptocurrency market.¹⁴⁵ On the consumer side of things, the availability of legal recourse for insider trading provided by the SEC protects traders, which will likely encourage participation in the

139. Tama Churchouse, *Is a cryptocurrency like a stock? This is what the SEC says...*, STANSBERRY CHURCHOUSE RES. (July 28, 2017), www.stansberrychurchouse.com/asia-wealth-investment-daily/cryptocurrency-like-stock-sec-rules/.

140. Price & Schroeder, *supra* note 5.

141. National Security Exchanges, 15 U.S.C. § 78(f) (2018).

142. Laura E. Hughes, *The Impact of Insider Trading Regulations on Stock Market Efficiency: A Critique of the Law and Economics Debate and a Cross-Country Comparison*, 23 TEMP. INT’L & COMP. L.J. 479, 489 (2009). Japan already requires cryptoexchanges to register with the government. Takahiko Wada & Hideyuki Sano, *Japan’s FSA Gives Official Endorsement to 11 Cryptocurrency Exchanges*, U.S. NEWS (Sept. 29, 2017, 3:38 AM), www.usnews.com/news/technology/articles/2017-09-29/japans-fsa-approves-11-companies-as-operators-of-crypto-currency-exchanges.

143. Patrick McLaughlin, *An Economy Buried by Regulations*, U.S. NEWS (Aug. 27, 2013, 9:00 AM), www.usnews.com/opinion/blogs/economic-intelligence/2013/08/27/regulations-cost-the-us-economy-trillions-of-dollars.

144. SEC, *supra* note 50.

145. Sandro Psaila, *Cryptocurrency Security Standard (CCSS)*, DELOITTE, www2.deloitte.com/mt/en/pages/technology/articles/mt-article-cryptocurrency-security-standard-CCSS.html# (last visited Aug. 28, 2018) (noting that one of the biggest problems with cryptocurrency is confidence).

cryptocurrency market.¹⁴⁶

However, there are significant potential issues with this solution. For one, even the SEC itself has admitted that cryptocurrency does not perfectly fit the definition of a security, and therefore is potentially outside the reach of the SEC.¹⁴⁷ The definition of security includes specific items like stocks and bonds, but has also been defined more generally to include “the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits.”¹⁴⁸ In contrast, the trading of cryptocurrency is not necessarily prefaced on the promise of profits in exchange for an organization’s use of investors’ money, and therefore does not entirely harmonize with the notion of a security.¹⁴⁹ Additionally, formalizing the SEC’s authority over cryptoexchanges may require the passage of new or additional legislation,¹⁵⁰ which will increase the cost of implementing this solution and is not necessarily guaranteed to happen. Finally, requiring cryptoexchanges to register as National Securities Exchanges quite literally transforms them into traditional financial institutions—the very thing cryptocurrency was created to avoid.¹⁵¹

VI. CONCLUSION

It is indisputable that cryptocurrency is here to stay.¹⁵² The freedom, accessibility, and efficiency of the cryptocurrency market have drawn investors from all over the world. However, cryptocurrency’s decentralization has also given rise to unregulated cryptoexchanges in which insider trading has been allowed to occur without recourse.¹⁵³ The time has come for policymakers to take action.

Aside from traditional rationales underlying consumer protection, there are several cryptocurrency-specific reasons to implement cryptoexchange insider trading regulations. If

146. *Trust in the Digital Economy*, OECD (June 2016), www.oecd.org/internet/ministerial/meeting/Consumer-Trust-and-Market-Growth-discussion-paper.pdf (noting that consumer protection is necessary to encourage development of markets).

147. Churchouse, *supra* note 139; Cryptocurrency ICOs may in fact be akin to traditional securities, but they are beyond the scope of this article. See Sullivan, *supra* note 125.

148. *Marine Bank v. Weaver*, 455 U.S. 551, 556 (1982) (paraphrasing *S.E.C. v. W.J. Howey Co.*, 328 U.S. 293, 299 (1946)).

149. Churchouse, *supra* note 139.

150. Price & Schroeder, *supra* note 48.

151. Sullivan, *supra* note 1; see generally Nakamoto, *supra* note 23 (describing the origin of Bitcoin, namely the goal of avoiding financial institutions such as those that precipitated the 2008 financial crisis).

152. Tallha Abdulrazaq, *Cryptocurrencies are here to stay*, ALJAZEERA (Feb. 3, 2018), www.aljazeera.com/indepth/opinion/cryptocurrencies-stay-bitcoin-blockchain-180201085633760.html.

153. *Supra* Section IV.

cryptoexchanges are regulated with regard to insider trading, then transactions occurring on those exchanges will now exist within a cognizable legal framework. Ensuring that cryptoexchange transactions are discernible by the U.S. regulatory regime provides consumers with a form of recourse for harm caused by insider trading, which may increase confidence in the market. Increased confidence leads to increased market engagement,¹⁵⁴ meaning that regulation may be key to fostering the continued development of the novel economic opportunity that cryptocurrency provides. Furthermore, those who do not like the regulation of cryptoexchanges are always free to buy and sell cryptocurrency as it was originally designed to be traded—directly peer-to-peer.

On the other hand, the potential for regulation of cryptoexchange insider trading gives rise to a few pressing concerns. The most prevalent of these concerns is the fear that any regulation of cryptocurrency at all, even regulation meant to protect traders, will cause a mass exodus from the cryptocurrency market. Cryptocurrency was created precisely to avoid the regulatory red tape necessitated by traditionally regulated financial institutions.¹⁵⁵ In fact, lack of government regulation is “one of the biggest reasons that many investors buy into cryptocurrencies in the first place.”¹⁵⁶ As such, the implementation of insider trading regulation may in fact increase the transaction costs and decrease the efficiency of cryptoexchanges to the point that their benefit over traditional financial institutions will cease to exist in the eyes of investors.

As a result, it appears that those involved in cryptocurrency need government regulation to avoid insider trading, but they also fear that it will bring the market crashing down around them.¹⁵⁷ Resolving this paradox—regulation without market deflation—is the unenviable task facing U.S. policymakers as they attempt to balance freedom with safety. The solutions outlined in this article are just three of many paths available to regulators, and it is currently unclear which choice they will make. However, one thing is clear: a change must be made.

154. OECD, *supra* note 146 (noting that consumer protection is necessary to encourage development of markets).

155. Sullivan, *supra* note 1; *see generally* Nakamoto, *supra* note 23.

156. Jay Adkisson, *Bitcoin, Cryptocurrency And The Government Regulation Paradox*, FORBES (Jan. 29, 2018, 12:47 PM), www.forbes.com/sites/jayadkisson/2018/01/29/bitcoin-cryptocurrency-and-the-government-regulation-paradox/2/#7e0535592fae.

157. *Id.*