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Virtually Possible: How to Strengthen Bitcoin Regulation within the Current Regulatory Framework

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Virtually Possible: How to Strengthen Bitcoin Regulation Within the Current Regulatory Framework*

I believe we are at the forefront of another twenty year journey of Internet-led transformation, this time in our global financial systems, and the opportunity is to foster that economic change while simultaneously putting in place the safeguards that only government can enable.

—Jeremy Allaire, Chairman and CEO of Circle Internet Financial¹

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1. *Beyond Silk Road: Potential Risks, Threats, and Promises of Virtual Currencies: Hearing Before the S. Comm. on Homeland Sec. and Governmental Affairs, 113th Cong. 6 (2013) [hereinafter *Beyond Silk Road*] (statement of Jeremy Allaire, Chairman and CEO of Circle Internet Financial).*

INTRODUCTION

Innovation leads the way to transformation. Small steps can turn into giant leaps. In the digital payments sector, “virtual currencies”² have the potential to revolutionize global finance. Bitcoin, the most popular virtual currency, represents the largest step forward in terms of financial value relative to existing currency.³ With its dual nature as a currency—like the U.S. dollar—and as a digital payments system—like PayPal⁴—Bitcoin presents a unique challenge for the U.S. government. So far, regulators and lawmakers have been proactive in their acceptance of Bitcoin but remain concerned about the potential for illicit use inherent in the virtual currency.⁵

Going forward, regulators have the opportunity to enable the use of this transformational technological innovation while maintaining certain rules that protect the U.S. financial system. Regulators can work within the existing regulatory framework without any statutory changes to create a safer and more transparent Bitcoin marketplace

2. DEP’T OF THE TREASURY, FIN. CRIMES ENFORCEMENT NETWORK, FIN-2013-G001, APPLICATION OF FINCEN’S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES 1 (2013) [hereinafter FINCEN VIRTUAL CURRENCY GUIDANCE] (“In contrast to real currency, ‘virtual’ currency is a medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency. In particular, virtual currency does not have legal tender status in any jurisdiction.”).

3. See *Market Price (USD)*, BLOCKCHAIN.INFO, <https://blockchain.info/charts/market-price> (last visited Aug. 26, 2014) (showing that in 2013, the price of one bitcoin rose from a low of \$13 to a high of \$1151). Within this Comment, Bitcoin, “with capitalization, [generally] is used when describing the concept of Bitcoin, or the entire network itself”; conversely, bitcoin, “without capitalization, [generally] is used to describe bitcoins as a unit of account.” *Some Bitcoin Words You Might Hear*, BITCOIN.ORG, <https://bitcoin.org/en/vocabulary> (last visited Nov. 13, 2014).

4. See *About Paypal*, PAYPAL, <https://www.paypal-media.com/about> (last visited Nov. 3, 2014) (“PayPal gives people better ways to . . . send money without sharing financial information and with the flexibility to pay using their PayPal account balances, bank accounts, PayPal Credit and credit cards.”). PayPal processes almost ten million payments every day for its customers. *Id.*

5. See, e.g., *The Present and Future Impact of Virtual Currency: Hearing Before the Subcomm. on Nat’l Sec. and Int’l Trade and Fin. and Subcomm. on Econ. Policy of the S. Comm. on Banking, Housing, and Urban Affairs*, 113th Cong. 1 (2013) [hereinafter Calvery November 2013 Testimony] (statement of Jennifer Shasky Calvery, Director, Financial Crimes Enforcement Network, United States Department of the Treasury).

in three ways. First, regulators should publicly promote enhanced public-private cooperation. Second, regulators should pursue tougher enforcement on non-compliant Bitcoin exchanges.⁶ Third, regulators should publicly advocate for more active filings of Suspicious Activity Reports (“SARs”)⁷ to foster certainty and trust in the marketplace.

How the government will decide to regulate Bitcoin is anything but certain. However, new laws are not necessary to confront the current challenges posed by this pioneering virtual currency. Working within the current regulatory scheme, this Comment presents four parts that examine the beginning of Bitcoin and its existence under the current regulations and then recommends steps to improve the existing regulatory environment. Part I offers a brief background and explanation of Bitcoin and analyzes why Bitcoin matters to regulators and lawmakers. Part II examines the current regulatory environment for virtual currencies. Part III proposes a new approach to Bitcoin regulation and offers three suggestions for a stronger regulatory environment: (1) private businesses and government regulators should work together to achieve a safer and more secure Bitcoin marketplace; (2) government regulators should take stronger enforcement actions on non-compliant Bitcoin exchanges; and (3) lawmakers and regulators should build on the current system of SAR filing to effectively monitor illegal activity surrounding Bitcoin transactions. Part IV considers these suggestions, weighing the benefits of regulation against the risk of driving Bitcoin users away with government oversight.

6. See Robert McMillan & Cade Metz, *The Rise and Fall of the World's Largest Bitcoin Exchange*, WIRED (Nov. 6, 2013, 6:30 AM), <http://www.wired.com/2013/11/mtgox/> (describing a Bitcoin exchange as a forum where people can convert traditional currency into bitcoins).

7. See generally *Suspicious Activity Reporting Guidance*, FIN. CRIMES ENFORCEMENT NETWORK, http://www.fincen.gov/news_room/rp/sar_guidance.html (last visited Aug. 26, 2013) (providing several publications that help financial institutions file SARs).

I. WHAT IS BITCOIN AND WHY DO REGULATORS CARE?

A. *A Brief Explanation of Bitcoin's Technical Framework*

Bitcoin is a peer-to-peer electronic cash system.⁸ Satoshi Nakamoto, the pseudonym used by an unknown inventor or group of inventors,⁹ released the Bitcoin software on January 3, 2009.¹⁰ The system allows payments to be sent over the Internet directly from one party to another without the involvement of a banking institution.¹¹ With the absence of an intermediary, “Bitcoin is completely decentralized, with no central organization controlling the supply of the electronic currency.”¹² Thus, it operates exclusively in a peer-to-peer network as an Internet-based¹³ payment system using virtual currency that represents online cash.¹⁴

Without describing the cryptographic underpinnings of Bitcoin transactions in great detail,¹⁵ this Comment presents a brief summary of Bitcoin's technical framework. Bitcoin is a “new kind of payment

8. See Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, BITCOIN.ORG 1, <https://bitcoin.org/bitcoin.pdf> (last visited Nov. 13, 2014).

9. See Paul Vigna & Michael J. Casey, *BitBeat: Satoshi Nakamoto, Hacked or Not, Remains Anonymous*, WALL ST. J. (Sept. 12, 2014, 4:23 PM), <http://blogs.wsj.com/moneybeat/2014/09/12/bitbeat-satoshi-nakamoto-hacked-or-not-remains-anonymous/> (describing how the creator of Bitcoin remains a mystery after an alleged hacking attempt).

10. See Joshua Davis, *The Crypto-Currency*, THE NEW YORKER (Oct. 10, 2011), http://www.newyorker.com/reporting/2011/10/10/111010fa_fact_davis (“[Nakamoto] used an e-mail address and Web site that were untraceable. In 2009 and 2010, he wrote hundreds of posts in flawless English, and though he invited other software developers to help him improve the code, and corresponded with them, he never revealed a personal detail. Then, in April[] 2011, he sent a note to a developer saying that he had ‘moved on to other things.’ He has not been heard from since.”).

11. See *id.*

12. See JERRY BRITO & ANDREA CASTILLO, BITCOIN: A PRIMER FOR POLICYMAKERS 1 (Mercatus Ctr. 2013), available at http://mercatus.org/sites/default/files/Brito_BitcoinPrimer_v1.3.pdf.

13. *Id.* at 4.

14. See *id.*

15. See *id.* at 5. A detailed explanation of the cryptographic underpinnings of Bitcoin is beyond the scope of this Comment.

system.”¹⁶ It functions as “a way to exchange money . . . between parties with no pre-existing trust: A string of numbers is sent over email or text message in the simplest case.”¹⁷ One party in a transaction sends chains of digital signatures to another party on the other side of the transaction.¹⁸ In the Bitcoin network, transactions of these digital signatures are irreversible¹⁹: once a user has sent a bitcoin to another user, the transaction can only be refunded by the recipient to the issuer.²⁰ Moreover, Bitcoin transactions are simultaneously pseudonymous and public²¹—“[t]he public can see that someone is sending an amount to someone else, but without information linking the transaction to anyone.”²² In this unique process, “[t]ransactions are verified, and double-spending is prevented, through the clever use of public-key cryptography.”²³ Public-key cryptography involves assigning each individual “two

16. Marc Andreessen, *Why Bitcoin Matters*, N.Y. TIMES (Jan. 21, 2014, 11:54 AM), <http://dealbook.nytimes.com/2014/01/21/why-bitcoin-matters/> (“Bitcoin is an Internet-wide distributed ledger. You buy into the ledger by purchasing one of a fixed number of slots, either with cash or by selling a product and service for [b]itcoin. You sell out of the ledger by trading your [b]itcoin to someone else who wants to buy into the ledger.”).

17. *Id.* (“Bitcoin is the first Internetwide payment system where transactions either happen with no fees or very low fees (down to fractions of pennies). Existing payment systems charge fees of about 2 to 3 percent—and that’s in the developed world.”).

18. See Nakamoto, *supra* note 8, at 2.

19. *Some Things You Need to Know*, BITCOIN, <https://bitcoin.org/en/you-need-to-know> (last visited Sept. 30, 2014) (“Any transaction issued with Bitcoin cannot be reversed, they can only be refunded by the person receiving the funds.”). The irreversible nature of Bitcoin transactions reduces the need for third parties to mediate disputes between users on both ends of a transaction, as is the case with other forms of electronic payments. See Nakamoto, *supra* note 8, at 1 (“With the possibility of reversal, the need for trust spreads. Merchants must be wary of their customers, hassling them for more information than they would otherwise need. A certain percentage of fraud is accepted as unavoidable.”).

20. *Some Things You Need to Know*, *supra* note 19.

21. See Nakamoto, *supra* note 8, at 6; see also Andy Greenberg, *5 Bitcoin Projects That Could Make Payments Far More Anonymous*, WIRED (May 5, 2014, 6:30 AM), <http://www.wired.com/2014/05/bitcoin-anonymous-projects/> (“Bitcoin transactions are public by default, visible to anyone who searches the blockchain, the distributed public ledger of all [B]itcoin payments that keeps it safe from forgery and fraud. Deny bitcoiners the ability to hide their identity, and they’re left with a serious privacy problem.”).

22. See Nakamoto, *supra* note 8, at 6.

23. BRITO & CASTILLO, *supra* note 12, at 5.

'keys,' one private key that is kept secret like a password, and one public key that can be shared with the world."²⁴ With only a finite number of bitcoins available, the Bitcoin network's protocol was designed to release a new block of bitcoins every ten minutes until twenty-one million bitcoins were released, with the blocks getting smaller as time progresses.²⁵

The entire Bitcoin system depends on a decentralized community of "miners."²⁶ Miners are users who provide their computing power to log and to reconcile transactions.²⁷ Miners patrol the public key system by checking each transaction to ensure that no fraud infiltrates the payment network, such as double spending.²⁸ Bitcoin miners operate computers that solve complex math problems, which in turn verify the transactions in the public key ledger, or block chain.²⁹ Structurally, "the [Bitcoin] protocol was designed so that each miner contributes a computer's processing power toward maintaining the infrastructure needed to support and authenticate the currency network."³⁰

24. *Id.*

25. *How Bitcoin Works*, FORBES (Aug. 1, 2013, 12:25 PM), <http://www.forbes.com/sites/investopedia/2013/08/01/how-bitcoin-works/>.

26. See generally Nathaniel Popper, *Into the Bitcoin Mines*, N.Y. TIMES (Dec. 21, 2013, 1:42 PM), <http://dealbook.nytimes.com/2013/12/21/into-the-bitcoin-mines/> (describing the Bitcoin mining technology and the miners' roles in the Bitcoin system).

27. See *Bitcoin Under Pressure*, ECONOMIST (Nov. 30, 2013), <http://www.economist.com/news/technology-quarterly/21590766-virtual-currency-it-mathematically-elegant-increasingly-popular-and-highly> ("The Bitcoin system offers a reward to volunteer users, known as 'miners,' who bundle up new transactions into blocks and add them on to the end of the chain.").

28. See Popper, *supra* note 26 ("[M]ining computers are also verifying and assigning unique identifying tags to each Bitcoin transaction, acting as accountants for the virtual currency world. 'The network is providing the infrastructure for making sure the currency is being transferred between people according to the rules' . . . 'and making sure people aren't creating illegal currency.'").

29. See *Bitcoin Under Pressure*, *supra* note 27 ("Miners pull active transactions waiting to be recorded from the peer-to-peer network and perform the complex calculations to create the new block, building on the cryptographic foundation of the previous block.").

30. BRITO & CASTILLO, *supra* note 12, at 6.

After miners earn bitcoins through the mining process, bitcoins are available for transfer in the marketplace.³¹ Bitcoins enter circulation most commonly in one of two ways: either through miners spending the bitcoins they have earned,³² or through people buying bitcoins from someone who already has them via websites known as Bitcoin exchanges.³³ Before trading conventional currency like U.S. dollars for bitcoins, those looking to make the exchange must create a “wallet” in which to store bitcoins.³⁴ This digital wallet is “essentially a computer file that holds digital money.”³⁵ The exchange websites allow people to trade conventional currencies for bitcoins and then store the bitcoins in these wallets.³⁶ In addition to the wallets, “[e]ven more convenient are Bitcoin exchanges like Coinbase, which will withdraw cash from a bank account and convert it into bitcoins at the current exchange rate.”³⁷

Once the bitcoins are in circulation, they can move freely between buyers and sellers through transactions in plain view of the public.³⁸ The block chain, or shared public ledger,³⁹ holds all the public keys for every transaction.⁴⁰ The public keys, also known as

31. *Id.* at 5.

32. *See id.* (“Once created, the virtual currency can be traded or used as tender to purchase goods and services from those who accept it.”).

33. *See* Matthew Sparks, *How to Get Your Virtual Hands on Some Bitcoins*, THE TELEGRAPH (Jan. 15, 2014, 8:00 AM), <http://www.telegraph.co.uk/technology/news/10559175/How-to-get-your-virtual-hands-on-some-bitcoins.html>.

34. *Id.*

35. *Id.*

36. *See* Timothy B. Lee, *12 Questions About Bitcoin You Were Too Embarrassed to Ask*, WASH. POST (Nov. 19, 2013), <http://www.washingtonpost.com/blogs/the-switch/wp/2013/11/19/12-questions-you-were-too-embarrassed-to-ask-about-bitcoin/>.

37. *Id.*

38. *See* Joshua Brustein, *Bitcoin May Not Be So Anonymous, After All*, BLOOMBERG BUSINESSWEEK (Aug. 27, 2013), <http://www.businessweek.com/articles/2013-08-27/bitcoin-may-not-be-so-anonymous-after-all> (“While Bitcoin is regularly described as anonymous, it is more accurate to describe it as pseudonymous. Every transaction is stored in a public record called a block chain, with information on the accounts involved and the number of [b]itcoins exchanged.”).

39. *See How Does Bitcoin Work?*, BITCOIN, <https://bitcoin.org/en/how-it-works> (last visited Sept. 30, 2014) (discussing terms in reference to Bitcoin’s operation generally).

40. *See* BRITO & CASTILLO, *supra* note 12, at 8.

“Bitcoin addresses,” “are recorded in the block chain . . . [but] are not tied to anyone’s identity.”⁴¹ Thus, Bitcoin is a pseudonymous currency, similar to an author writing under a pen name, rather than an anonymous currency, as is sometimes reported in the media.⁴² It is pseudonymous because “if a person’s identity were linked to a public key, one could look through the recorded transactions in the block chain and easily see all transactions associated with that key.”⁴³ Although Bitcoin is not a completely anonymous system, “users do enjoy a much higher level of privacy than do users of traditional digital-transfer services, who must provide detailed personal information to the third-party financial intermediaries that facilitate the exchange.”⁴⁴

Independent of the public and private aspects of Bitcoin, some critics doubt whether bitcoins have any true worth.⁴⁵ In reality, “[bitcoins] are worth whatever individuals choose to believe they are worth.”⁴⁶ As such, bitcoins can be used as a medium of exchange just

41. *Id.*

42. See Brustein, *supra* note 38.

43. See BRITO & CASTILLO, *supra* note 12, at 8.

44. *Id.* at 9.

45. See, e.g., Joseph Weisenthal, *Here’s the Answer to Paul Krugman’s Difficult Question About Bitcoin*, BUS. INSIDER (Dec. 30, 2013, 12:04 PM), <http://www.businessinsider.com/why-bitcoin-has-value-2013-12> (“Bitcoin is something that’s valued because lots of people use it. It’s not that different from Napster. Napster was game-changing technology in terms of how people get music, but it only had value once it was used by a lot of people. Same with Facebook.”); Paul Krugman, *Bitcoin Is Evil*, N.Y. TIMES (Dec. 28, 2013, 2:35 PM), <http://krugman.blogs.nytimes.com/2013/12/28/bitcoin-is-evil/> (“And I have to say that I’m still deeply unconvinced [about Bitcoin]. To be successful, money must be both a medium of exchange and a reasonably stable store of value. And it remains completely unclear why Bit[c]oin should be a stable store of value.”).

46. See Mark Hendrickson, *The Digital Currency Sideshow: Are Bitcoins Really Worth Anything*, FORBES (Dec. 13, 2013, 4:35 PM), <http://www.forbes.com/sites/markhendrickson/2013/12/13/the-digital-currency-sideshow-are-bitcoins-really-worth-anything/>.

like traditional currencies, such as dollars and euros.⁴⁷ But, like traditional currencies, bitcoins do not have any inherent worth.⁴⁸

Bitcoin's technical framework provides for low-cost, instantaneous transactions that have made the currency increase in popularity and in value over the past several months. The price required to purchase one bitcoin rose astronomically in 2013, from a low of \$13 to a high of \$1151.⁴⁹ Bitcoins have been valued this high for several reasons, including "privacy, convenience, superior portability... and independence from central banks..."⁵⁰ These attractive qualities make bitcoins more valuable to interested parties.⁵¹ Likewise, bitcoins have proved to be cost-effective transactional instruments capable of avoiding banks' transfer fees or wire transfer services' costs.⁵² In the context of cross-border value transfer, bitcoins have assisted those looking to inexpensively send remittances across national borders.⁵³ For example, Kenyan start-up BitPesa plans to charge Bitcoin users \$6 to send \$200 back to Kenya, whereas Western Union and Moneygram would charge \$10 to \$17 for the same amount of money.⁵⁴ Moreover, mere speculation may also give them value, as investors pour money into Bitcoin like common stock in the pursuit of higher profits.⁵⁵ Regardless of how bitcoins

47. *See id.*

48. *Id.* In this sense, bitcoins and dollars alike have little value in and of themselves, meaning that the dollar itself has no value unless the parties on both sides of the transaction believe the dollar has value. *Id.*

49. *Market Price (USD)*, *supra* note 3.

50. *See* Hendrickson, *supra* note 46.

51. *Id.*

52. *See* Andreessen, *supra* note 16.

53. *See* Joshua Brustein, *Will Migrant Workers Drive Bitcoin's Mundane Future?*, BLOOMBERG BUSINESSWEEK (Oct. 8, 2013), <http://www.businessweek.com/articles/2013-10-08/will-migrant-workers-drive-bitcoins-mundane-future>.

54. Eric Ombok, *Bitcoin Service Targets Kenya Remittances with Cut-Rate Fees*, BLOOMBERG (Nov. 28, 2013, 10:36 AM), <http://www.bloomberg.com/news/2013-11-28/bitcoin-service-targets-kenya-remittances-with-cut-rate-fees-1-.html>.

55. *See id.* ("The price of Bitcoin today traded at a record [price]... fueled by speculators snapping up the virtual currency as it gains wider acceptance.")

derive value, the cost to buy one has fluctuated significantly in the past year.⁵⁶

B. Consumer Protection and Bitcoin's Potential for Use in Illicit Financial Activity

With a basic understanding of the Bitcoin ecosystem, this Comment now turns to why Bitcoin matters to government regulators. Since bitcoins are pseudonymous and difficult to trace without knowing a certain public key, they can serve as a vehicle for moving illicit money.⁵⁷ In her November 19, 2013 testimony to the United States Senate Committee on Banking, Housing, and Urban Affairs, the director of the Financial Crimes Enforcement Network ("FinCEN"), Jennifer Shasky Calvery, explained that virtual currency, like any other medium of exchange, "has the potential to be exploited for money laundering . . ."⁵⁸ Accordingly, Calvery concluded that "[w]ith money laundering activity already valued in the billions of dollars, virtual currency is certainly worthy of FinCEN's attention."⁵⁹

One example illustrative of Bitcoin's potential for illicit use is the website Silk Road.⁶⁰ The website, dubbed the "eBay of illegal drugs,"⁶¹ began as a marketplace for underground drug trading and grew to enable black market dealings ranging from forged documents to assassinations.⁶² Silk Road ran on bitcoins, which allowed buyers and sellers to remain hidden behind their public keys and free to

56. See *Market Price (USD)*, *supra* note 3.

57. See Calvery November 2013 Testimony, *supra* note 5, at 5–6.

58. *Id.*

59. *Id.* at 7.

60. See Joseph Goldstein, *Arrest in U.S. Shuts Down a Black Market for Narcotics*, N.Y. TIMES, (Oct. 2, 2013), http://www.nytimes.com/2013/10/03/nyregion/operator-of-online-market-for-illegal-drugs-is-charged-fbi-says.html?_r=0 (describing the U.S. law enforcement actions that led to the shutdown of Silk Road).

61. See Joshua Kopstein, *How the eBay of Illegal Drugs Came Undone*, THE NEW YORKER (Oct. 3, 2013), <http://www.newyorker.com/tech/elements/how-the-ebay-of-illegal-drugs-came-undone> ("The F.B.I.'s criminal complaint alleges that the site has handled approximately 1.2 billion dollars in sales, producing eighty million dollars in commissions, during its lifetime.")

62. See Goldstein, *supra* note 60.

engage in illegal commerce.⁶³ Some experts believed Silk Road was responsible for nearly half of all Bitcoin transactions.⁶⁴ After a grand jury charged the creator of Silk Road with drug trafficking, computer hacking, money laundering, and engaging in a continuing criminal enterprise,⁶⁵ Bitcoin's reputation was tarnished for being associated with such nefarious activities.⁶⁶ Although the potential for illegal activity exists with all forms of money—virtual or tangible—the unique threat posed by the use of bitcoins in connection with Silk Road heightened regulators' awareness of this possibility.⁶⁷

Although the potential for illegal use clearly causes concern for regulators, the sheer size of the Bitcoin market makes discussing Bitcoin regulation unavoidable. At the beginning of 2013, Bitcoin's market capitalization was barely over \$150 million; however, by December 2013, the market capitalization reached almost \$14 billion.⁶⁸ As a bureau of the U.S. Department of the Treasury, "FinCEN's mission is to safeguard the financial system from illicit use and combat money laundering and promote national security through the collection, analysis, and dissemination of financial intelligence and strategic use of financial authorities."⁶⁹ Considering Bitcoin's sheer

63. *See id.*

64. *Id.*

65. William Welch, *Feds Indict Silk Road Black-Market Site Operator*, USA TODAY (Feb. 4, 2014, 6:58 PM), <http://www.usatoday.com/story/news/nation/2014/02/04/silk-road-indictment/5208361> ("Prosecutors said Silk Road used a special 'Tor' network of computers distributed around the world and designed to conceal the IP addresses of the computers and identities of their operators. The transactions were made using a Bitcoin-based payment system that helped conceal identities, prosecutors said.").

66. *See* BRITO & CASTILLO, *supra* note 12, at 24.

67. *See id.* ("Following the publication of an article on Silk Road in 2011, senators Charles Schumer and Joe Manchin sent a letter to Attorney General Eric Holder and the Drug Enforcement Administration's administrator Michele Leonhart calling for a crackdown on Silk Road . . . and Bitcoin.").

68. *See Market Capitalization*, BLOCKCHAIN.INFO, <https://blockchain.info/charts/market-cap> (last visited Sept. 4, 2014) (providing the option to expand the graphical display by clicking the "2 Year" link, which then displays Bitcoin's market capitalization over a two-year period).

69. FIN. CRIMES ENFORCEMENT NETWORK, <http://fincen.gov/> (last visited Sept. 2, 2014).

size in the market and its potential for illicit use, FinCEN's focus on the currency's activity is undoubtedly warranted.

Finally, tax issues will affect how consumers engage with Bitcoin. On March 25, 2014, the Internal Revenue Service ("IRS") issued a notice on the treatment of Bitcoin: "[V]irtual currency is treated as property [for federal tax purposes]. General tax principles applicable to property transactions apply to transactions using virtual currency."⁷⁰ The IRS rejected the alternative, which was to treat Bitcoin as a currency "that could generate foreign currency gain or loss for U.S. federal tax purposes."⁷¹ This notice determined that "[a] taxpayer who receives virtual currency as payment for goods or services must, in computing gross income, include the fair market value of the virtual currency, measured in U.S. dollars, as of the date that the virtual currency was received."⁷² In order to report an exchange of traditional currency into bitcoins, "the fair market value of the virtual currency is determined by converting the virtual currency into U.S. dollars (or into another real currency which in turn can be converted into U.S. dollars) at the exchange rate, in a reasonable manner that is consistently applied."⁷³ In effect, this IRS notice "means anyone who spends bitcoin, even on a \$2 cup of coffee, may have to pay taxes based on any 'gain' over that bitcoin's original value."⁷⁴ The "extra burden on the [B]itcoin ecosystem" associated with tax reporting could affect the Bitcoin marketplace because law-abiding users must now maintain extensive records associated with each Bitcoin transaction.⁷⁵ However, popular exchange Coinbase

70. I.R.S. Notice 2014-21, 2014-16 I.R.B. 938, available at <http://www.irs.gov/pub/irs-irbs/irb14-16.pdf>.

71. *Id.*

72. *Id.*

73. *Id.* at 939.

74. Ryan Tracy, *Tax Plan May Hurt Bitcoin*, WALL ST. J. (Apr. 2, 2014, 6:20 PM), <http://online.wsj.com/news/articles/SB10001424052702303847804579477810652902256>

("The rules are similar to reporting a 'capital gain' on selling a stock: The spenders would have to figure out a 'cost basis' for a transaction and report a gain or loss, calculated by comparing how much they paid for the bitcoin originally and its value when they traded it for a cup of joe.").

75. *Id.*

“provide[s] a specialized Cost Basis for Taxes report” that might make it easier to track gains and losses.⁷⁶ Despite this potential advance, Coinbase still advises users to “keep [their] own records for best results and update the report accordingly.”⁷⁷ Understanding how to comply with this IRS tax notice is still in its early stages and will be an issue for both users and exchangers going forward.

II. CURRENT REGULATIONS IMPACTING BITCOIN

Bitcoin falls within the existing framework of financial regulation.⁷⁸ In her testimony before Congress in November 2013, FinCEN Director Jennifer Shasky Calvery described the legal requirements for Bitcoin exchanges: “FinCEN’s guidance explains that . . . exchangers of virtual currencies must register with FinCEN, and institute certain recordkeeping, reporting and [Anti-Money Laundering (“AML”)] program control measures”⁷⁹ The primary money laundering statute, 18 U.S.C. § 1956(a)(2), hinges on a knowledge requirement:

Whoever transports, transmits, or transfers, or attempts to transport, transmit, or transfer a monetary instrument or funds . . . (A) with the intent to promote the carrying on of specified unlawful activity; or (B) knowing that the monetary instrument or funds involved in the transportation, transmission, or transfer represent the proceeds of some form of unlawful activity and knowing that such transportation, transmission, or transfer is designed in whole or in part—(i) to conceal or disguise the nature, the location, the source, the

76. *How Do I Report Taxes?*, COINBASE, <https://support.coinbase.com/customer/portal/articles/1496488-how-do-i-report-taxes-> (last updated Oct. 1, 2014, 6:27 PM).

77. *Id.*

78. See Jennifer Shasky Calvery, Dir., Fin. Crimes Enforcement Network, *The Virtual Economy: Potential, Perplexities, and Promises*, Remarks Before the United States Institute of Peace (June 13, 2013), available at http://www.fincen.gov/news_room/speech/html/20130613.html (“[Virtual currency] businesses are as much a part of the financial framework as any other type of financial institution. As such, they have the same obligations as other financial institutions, and the same obligations as any other money services business out there.”).

79. See Calvery November 2013 Testimony, *supra* note 5, at 9.

ownership, or the control of the proceeds of specified unlawful activity; or (ii) to avoid a transaction reporting requirement under State or Federal law, shall be sentenced to a fine of not more than \$500,000 or twice the value of the monetary instrument or funds involved in the transportation, transmission, or transfer, whichever is greater, or imprisonment for not more than twenty years, or both.⁸⁰

According to its text, § 1956(a)(2) requires knowledge of unlawful activity in order to apply.⁸¹ Therefore, someone dealing in bitcoins could deny any knowledge of where the proceeds of illicit activity were flowing. Proving a knowledge requirement would be rather difficult because of the inherent pseudonymity of Bitcoin. First, law enforcement would have to locate the person behind the public key. Second, law enforcement would have to prove that those in the transaction knowingly used their bitcoins to finance some type of unlawful activity.⁸² This process could prove to be difficult because law enforcement would have to identify some evidence of intent associated with Bitcoin transfers.

In addition to the law enforcement problem, and similar to the potential issues faced by the IRS, regulators face the problem of how to define Bitcoin. “Monetary instrument” is defined in 18 U.S.C. § 1956(c)(5) to mean “coin or currency of the United States or of any other country, travelers’ checks, personal checks, bank checks, and money orders, or investment securities or negotiable instruments, in bearer form or otherwise in such form that title thereto passes upon delivery.”⁸³ Based on a purely textual reading of the statute, it is unclear whether Bitcoin, as a virtual currency, might be classified as a monetary instrument.⁸⁴ Bitcoin does not belong to any nation, so it is not technically a coin or currency of the United States or any other

80. 18 U.S.C. § 1956(a)(2) (2012).

81. *Id.* (requiring intent and knowledge in subparts (a)(2)(A)–(B)).

82. *See id.*

83. 18 U.S.C. § 1956(c)(5) (2012).

84. *See id.*

country.⁸⁵ Moreover, Bitcoin might not be considered an investment vehicle under the definition either because it can be used as a medium of exchange, resembling a currency or payment system rather than a stock or bond.⁸⁶

Some federal agencies have offered guidance to help clarify the fundamental issue of defining Bitcoin, but there is no universal governmental consensus. Federal regulators have taken varied approaches to defining virtual currencies. In an August 2013 letter, Securities and Exchange Commission Chair Mary Jo White wrote that “[w]hether a virtual currency is a security under the federal securities laws, and therefore subject to our regulation, is dependent on the particular facts and circumstances at issue.”⁸⁷ In an October 2013 letter, Principal Deputy Assistant Attorney General Peter Kadzik wrote that “[t]he FBI’s approach to virtual currencies is guided by a recognition that online payment systems, both centralized and decentralized, offer legitimate financial services.”⁸⁸ Then-Chairman of the Federal Reserve Board of Governors Ben Bernanke wrote that “[a]lthough the Federal Reserve generally monitors developments in virtual currencies and other payments system innovations, it does not necessarily have authority to directly supervise or regulate these innovations or the entities that provide

85. See Nakamoto, *supra* note 8, at 1 (“What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party.”).

86. See Todd Zerega and Tom Watterson, *Regulating Bitcoins: CFTC vs. SEC?*, THE SWAP REPORT (Dec. 31, 2013, 12:24 PM), <http://www.theswapreport.com/2013/12/articles/general/regulating-bitcoins-cftc-vs-sec/> (“The strongest regulatory hook for deeming Bitcoin to be a security may be categorizing it a[s] an ‘investment contract.’”).

87. Letter from Mary Jo White, Chair, Sec. and Exch. Comm’n, to Sen. Thomas R. Carper, Chairman, Comm. on Homeland Sec. and Governmental Affairs 1 (Aug. 30, 2013), available at <http://online.wsj.com/public/resources/documents/VCurrenty111813.pdf>.

88. Letter from Peter J. Kadzik, Principal Deputy Assistant Att’y Gen., U.S. Dep’t of Justice, to Sen. Thomas R. Carper, Chairman, Comm. on Homeland Sec. and Governmental Affairs, and Sen. Tom A. Coburn, Ranking Minority Member, Comm. on Homeland Sec. and Governmental Affairs 1 (Oct. 23, 2013), available at <http://online.wsj.com/public/resources/documents/VCurrenty111813.pdf>.

them to the market.”⁸⁹ FinCEN Director Calvery described virtual currency as lacking legal tender status in any jurisdiction and as “a medium of exchange that operates like a currency in some environments but does not have all the attributes of real currency.”⁹⁰ She defined Bitcoin as an example of a decentralized virtual currency because it has “no central repository and no single administrator.”⁹¹ Given the various opinions and viewpoints regarding how to define and how to regulate Bitcoin, it is easy to see why regulators have not yet reached a universal consensus.

Despite the lack of consensus, FinCEN issued explicit guidance to help users and exchangers of virtual currency understand if and when existing regulations apply to them.⁹² According to FinCEN’s guidance, “[a] person that creates units of this convertible virtual currency and uses it to purchase real or virtual goods and services is a user of the convertible virtual currency and not subject to regulation as a money transmitter.”⁹³ Therefore, users of decentralized virtual currencies like Bitcoin, simply purchasing real or virtual goods, do not have to register with FinCEN as a money transmitter.⁹⁴ An exchanger of virtual currency, however, is subject to existing money transmitter regulations:

By contrast, a person that creates units of convertible virtual currency and sells those units to another person for real currency or its equivalent is engaged in transmission to another location and is a money transmitter. In addition, a person is an exchanger and a money transmitter if the person accepts such de-centralized convertible virtual currency from one person and transmits it to another person as part of the acceptance and

89. Letter from Ben S. Bernanke, Chairman, Board of Governors of the Fed. Reserve Sys., to Sen. Thomas R. Carper, Chairman, Comm. on Homeland Sec. and Governmental Affairs, and Sen. Tom A. Coburn, Ranking Minority Member, Comm. on Homeland Sec. and Governmental Affairs 2 (Sept. 6, 2013), available at <http://online.wsj.com/public/resources/documents/VCurrenty111813.pdf>.

90. See Calvery November 2013 Testimony, *supra* note 5, at 2.

91. *Id.* at 3.

92. See FINCEN VIRTUAL CURRENCY GUIDANCE, *supra* note 2, at 5.

93. *Id.*

94. *Id.*

transfer of currency, funds, or other value that substitutes for currency.⁹⁵

The distinction in FinCEN's virtual currency guidance highlights the critical difference in how regulators treat Bitcoin: simple users, performing transactions in bitcoins over the Internet—whether buying real goods or not—are not subject to money services business regulations. On the other hand, each exchanger of bitcoins, according to FinCEN's guidance, must comply with existing laws that pertain to money transmitters.⁹⁶ This difference in regulation between user and exchanger has serious flaws. Primarily, it neglects the Bitcoin miners and may allow them to bypass FinCEN's guidance and to operate completely free of government regulation.⁹⁷ If a miner obtains bitcoins as a result of successfully solving the complex math algorithms on the mining software, then that miner will possess those bitcoins without needing to register as a money transmitter under this FinCEN guidance.⁹⁸ Therefore, the regulatory landscape divides the Bitcoin marketplace into two different groups: those who must register as money transmitters since they exchange traditional currency to digital currency and the Bitcoin users who are not subject to FinCEN's registration, reporting, and recordkeeping regulations.⁹⁹

95. *Id.*

96. *See id.* at 1; *see also* 31 C.F.R. § 1010.100(ff)(5)(i)(A) (2014) (“A [money transmitter is a] person that provides money transmission services. The term ‘money transmission services’ means the acceptance of currency, funds, or other value that substitutes for currency from one person *and* the transmission of currency, funds, or other value that substitutes for currency to another location or person by any means. ‘Any means’ includes, but is not limited to, through a financial agency or institution; a Federal Reserve Bank or other facility of one or more Federal Reserve Banks, the Board of Governors of the Federal Reserve System, or both; an electronic funds transfer network; or an informal value transfer system . . .”).

97. *See* DEP'T OF THE TREASURY, FIN. CRIMES ENFORCEMENT NETWORK, FIN-2014-R001, APPLICATION OF FINCEN'S REGULATIONS TO VIRTUAL CURRENCY MINING OPERATIONS 3 (2014) (“To the extent that a user mines Bitcoin and uses the Bitcoin solely for the user's own purposes and not for the benefit of another, the user is *not* [a money services business] under FinCEN's regulations . . .”).

98. *See id.*

99. *See id.*; FINCEN VIRTUAL CURRENCY GUIDANCE, *supra* note 2, at 3 (“The definition of a money transmitter does not differentiate between real currencies and convertible virtual currencies. Accepting and transmitting anything of value that

The current regulations and guidance surrounding Bitcoin have created an environment where regulations take effect only upon entry into the world of virtual currency. Once inside the marketplace, after turning traditional currency into digital currency, users can operate without any government oversight. Such a system problematically creates different regulations for market participants; however, this problem could be remedied by creating a regulatory environment similar to the SAR filing system, whereby users and private financial institutions operating exchanges are incentivized to keep the system free from illicit use.¹⁰⁰ By working with financial institutions that operate Bitcoin exchanges, the federal government could better regulate the Bitcoin market with even-handed and sensible techniques.

III. A NEW THREE-PRONGED APPROACH TO MORE EFFECTIVE BITCOIN REGULATION

Bitcoin offers none of the traditional protections afforded by government to traditional currencies, such as the ability to pursue fraud or to print new money to keep the system afloat.¹⁰¹ Indeed, without features of the traditional U.S. banking system like deposit insurance and fraud protection, Bitcoin may be doomed to failure.¹⁰² Although the value of Bitcoin has skyrocketed since its inception in

substitutes for currency makes a person a money transmitter under the regulations implementing the [Bank Secrecy Act].”)

100. See *Reporting Suspicious Activity – A Quick Reference Guide for MSBs*, FIN. CRIMES ENFORCEMENT NETWORK, http://www.fincen.gov/statutes_regs/guidance/pdf/msbsar_quickrefguide.pdf (last visited Sept. 3, 2014).

101. See David Yermack, *Is Bitcoin a Real Currency? An Economic Appraisal* 17 (New York Univ. Stern Sch. of Bus. and Nat’l Bureau of Econ. Research, Working Paper No. 19747, 2013), available at <http://ssrn.com/abstract=2361599> (“Bitcoin transactions also are risky due to the absence of basic consumer protection, such as the provision of refunds that result from disputes between merchants and customers. . . . Again due to its lack of affiliation to any sovereign, [B]itcoin is ill-suited for use in credit markets because no government can foreclose and seize it in the event of default.”).

102. See *id.* (“Bitcoin appears to suffer by being disconnected from the banking and payment systems of the U.S. and other countries. Most currencies are held and transferred through bank accounts, which in turn are protected by layers of regulation, deposit insurance, and international treaties.”).

2009, its overall market capitalization is still relatively small compared to the overall financial system.¹⁰³ Some commentators still see Bitcoin as too unprotected and view the lack of government involvement as a hindrance to adoption.¹⁰⁴ Despite these shortcomings, the fact still remains that the market for those willing to exchange real currency into bitcoins has grown significantly in the past year.¹⁰⁵ Regardless of whether commentators think Bitcoin will survive,¹⁰⁶ the increased size and activity—exchange, transmission, and use—of the market necessitates a new system of regulation based largely on the involvement of Bitcoin exchanges.

Regulators should focus on Bitcoin exchanges in the exchanges' role as gatekeepers to the Bitcoin marketplace. Specifically, regulators should pursue three goals to improve the current Bitcoin regulatory structure: (1) promoting cooperation between regulators and Bitcoin exchangers; (2) increasing enforcement of non-compliant exchanges; and (3) advocating the use of SARs to alert law enforcement regarding potentially illicit activity. A change in the approach to regulation, rather than statutory changes, will help achieve these goals.¹⁰⁷ FinCEN has issued interpretive guidance that explains the applicability of current laws to virtual currencies, without

103. See *GDP (Current US\$)*, THE WORLD BANK, <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries/1W?display=graph> (last visited Nov. 3, 2014). According to the World Bank, the total worldwide gross domestic product was nearly \$75 trillion at the end of 2013. *Id.*

104. See, e.g., Edward Hadas, *Five Lessons from Bitcoin*, N.Y. TIMES (Jan. 8, 2014, 12:02 PM), http://dealbook.nytimes.com/2014/01/08/five-lessons-from-bitcoin/?_r=0 (“For anyone in the legal economy, the lack of official support is a significant negative.”).

105. See *Market Capitalization*, *supra* note 68.

106. See, e.g., Felix Salmon, *Why Bitcoin Won't Disrupt Digital Transactions*, REUTERS (Feb. 7, 2014, 11:12 PM), <http://blogs.reuters.com/felix-salmon/2014/02/06/why-bitcoin-wont-disrupt-digital-transactions/> (“I wish [Bitcoin] luck, but it's going to need it. Because it's up against formidable incumbents, in the form of both huge corporations and entrenched government interests. My bet is on Goliath, not David.”).

107. See *Beyond Silk Road: Potential Risks, Threats, and Promises of Virtual Currencies: Hearing Before the S. Comm. on Homeland Sec. and Governmental Affairs*, 113th Cong. 13 (2013) [hereinafter Murck November 2013 Testimony] (statement of Patrick Murck, Bitcoin Foundation General Counsel) (“Our belief, supported by the agency activities noted above, is that Bitcoin and Bitcoin businesses largely fit into existing regulatory structures.”).

proposing new laws or official administrative orders.¹⁰⁸ The existing framework of the Bank Secrecy Act grants regulators enough power to successfully change current Bitcoin regulation.¹⁰⁹

A. *Public and Private Cooperation*

Public and private cooperation should be the baseline for a new approach to Bitcoin regulation because the regulator-exchanger relationship sets the tone for the Bitcoin marketplace. FinCEN Director Calvery notes that one of the biggest challenges facing the financial regulator “is striking the right balance between the costs and benefits of regulation.”¹¹⁰ Indeed, the costs to the federal government and the users of virtual currencies should not outweigh the benefits of regulation.¹¹¹ Calvery notes that “[l]egitimate financial institutions, including virtual currency providers, do not go into business with the aim of laundering money on behalf of criminals. Virtual currencies are a financial service, and virtual currency administrators and exchangers are financial institutions.”¹¹² As financial intermediaries, Bitcoin exchangers are incentivized to maintain their businesses and to promote their growth. The government and regulators can work together to achieve sustained growth through regulations that do not become a hindrance to private financial institutions.¹¹³ According to Director Calvery, “[e]very financial institution needs to be concerned about its reputation and show that it is operating with transparency and integrity within the bounds of the law.”¹¹⁴

108. See FINCEN VIRTUAL CURRENCY GUIDANCE, *supra* note 2, at 1.

109. See, e.g., Timothy Lee, *Here's How Bitcoin Charmed Washington*, WASH. POST (Nov. 21, 2013), <http://www.washingtonpost.com/blogs/the-switch/wp/2013/11/21/heres-how-bitcoin-charmed-washington/> (“All three Obama administration officials who testified this week stressed that [B]itcoin has legitimate uses and argued that no new regulations were needed to police illicit uses of the network. Most of the other witnesses echoed those sentiments.”).

110. Calvery November 2013 Testimony, *supra* note 5, at 8.

111. See *id.* at 2.

112. *Id.* at 10.

113. See *id.*

114. *Id.*

Director Calvery expanded on the compelling reasons for financial institution cooperation, noting that “[l]egitimate customers will be drawn to a virtual currency or administrator or exchanger where they know their money is safe and where they know the company has a reputation for integrity.”¹¹⁵ Government cooperation does not have to put an end to Bitcoin as some suggest,¹¹⁶ and both parties can work together to promote integrity in the Bitcoin marketplace. In his testimony before Congress, BitPay¹¹⁷ co-founder and CEO Anthony Gallippi cautioned lawmakers against moving too quickly on Bitcoin regulation.¹¹⁸ He likened the advent of Bitcoin to that of the Internet in the 1990s and concluded that “Americans will benefit from a similar openness and wait-and-see approach to Bitcoin.”¹¹⁹ Moreover, Gallippi stated that he did not believe “new legislation or regulation around [B]itcoin is needed. The rules for consumer protection and anti-money laundering already exist today.”¹²⁰ By not proposing new legislation, regulators assure Bitcoin businesses that the current legal scheme is in place, which in turn promotes consistency and legitimacy in the marketplace.

Potential concerns regarding new regulation could drive law-abiding Bitcoin businesses further into secrecy or out of the United States entirely: Lawful Bitcoin business operators “want a balanced

115. *Id.*

116. *See, e.g.,* Tim Worstall, *It Could Be The Bureaucrats That Kill Bitcoin*, FORBES (May 16, 2013, 2:03 PM), <http://www.forbes.com/sites/timworstall/2013/05/16/it-could-be-the-bureaucrats-that-kill-bitcoin/> (“Another way of putting this might be that now that Bitcoin has become popular enough to be widely talked about it’ll get strangled in its adolescence by the regulatory requirements of interacting with the current global financial system.”).

117. BitPay is an agent that helps facilitate transactions in the Bitcoin marketplace. *See The Present and Future Impact of Virtual Currency: Hearing Before the Subcomm. on Nat’l Sec. and Int’l Trade and Fin. and Subcomm. on Econ. Policy of the S. Comm. on Banking, Housing, and Urban Affairs*, 113th Cong. 5 (2013) (statement of Anthony Gallippi, BitPay CEO) (“At BitPay, our role in the [B]itcoin ecosystem is very close to that of the traditional merchant acquirers in the credit card space. We act as an agent of the payee, to help merchants clear and settle transactions over the [B]itcoin network.”).

118. *Id.* at 10–11.

119. *Id.* at 11.

120. *Id.*

approach to regulation that legitimizes virtual currency without burdening new and growing companies with bureaucracy.”¹²¹ The incentives for Bitcoin exchanges and small businesses to comply with FinCEN regulations remain uncertain because exchangers can simply take their operations entirely out of the government’s purview.¹²² A Bitcoin exchanger may retreat into secrecy and subvert any attempt by regulators to force the business to register with FinCEN.¹²³ Bitcoin businesses may have a “head start” on regulators’ efforts to force compliance,¹²⁴ but if these businesses perceive government regulations as too onerous, they may leave the United States entirely.¹²⁵ Since Bitcoin belongs to no nation and is used by individuals around the world, Bitcoin start-ups and users always have the option to move to a foreign country. In order to avoid a movement underground or an exodus from the country and, instead, to attract the greatest possible number of users (and resulting transfer fees), the U.S. government should impose a balanced approach that adds credibility to the system and allows Bitcoin users to operate freely.

In order to create this balanced approach to Bitcoin regulation, regulators must learn more about Bitcoin before taking action. The congressional hearings that have taken place are a good start, but there are also organizations working to educate regulators and the public about the potential uses of Bitcoin. For instance, the Bitcoin Foundation, a non-profit organization affiliated with the Bitcoin

121. Marc Ferranti, *Bitcoin Regulation Urged by Law Enforcement Officials at New York Hearing*, PC WORLD (Jan. 29, 2014, 2:20 PM), <http://www.pcworld.com/article/2092780/bitcoin-regulation-urged-by-law-enforcement-officials-at-new-york-hearing.html>.

122. See Felix Salmon, *When Disruption Meets Regulation*, REUTERS (Jan. 30, 2014), <http://blogs.reuters.com/felix-salmon/2014/01/30/when-disruption-meets-regulation/> (“But in the case of [B]itcoin, the scoundrels have the head start, and the regulators are never going to be able to catch them.”).

123. *Id.* (“Bitcoin is *built* on libertarian mistrust of regulations; indeed, much of the enthusiasm surrounding it comes precisely because it is such a powerful and elegant means of circumventing government control.”).

124. *Id.*

125. See Ferranti, *supra* note 121 (“Onerous regulations could cause innovative companies to stay out of the U.S., said panelists, who pointed out that the major [B]itcoin exchanges are located abroad.”).

community, is working “to broaden the use of Bitcoin through public education and by fostering a safe and sane legal and regulatory environment.”¹²⁶ Despite this, in June 2013, the Bitcoin Foundation received a cease-and-desist order from California’s Department of Financial Institutions for allegedly engaging in the business of money transmission without a license or proper authorization.¹²⁷ Since the Bitcoin Foundation is a non-profit group that does not operate a money services business,¹²⁸ the regulatory order reflected the regulators’ basic misunderstanding of the product, the system, and the issues. This basic mistake, which engendered distrust between Bitcoin operators and the government, could have been avoided if the regulators had possessed the appropriate knowledge before taking action. Regulatory actions like these¹²⁹ must be limited in order to promote a sense of professional cooperation between regulators and Bitcoin businesses.

B. Effective Enforcement for Non-Compliant Bitcoin Exchanges and the Challenges Faced by Regulators

In addition to establishing a positive relationship with Bitcoin exchanges and the greater Bitcoin community, regulators should also maintain a tough stance on non-compliant Bitcoin exchanges. A tough stance on non-compliance would help increase credibility and certainty in the Bitcoin marketplace. FinCEN must enforce compliance from all Bitcoin exchanges that qualify as money services businesses. In order to qualify, Bitcoin exchanges would have to fit within one of the definitions found in 31 C.F.R. § 1010.100, most

126. Murck November 2013 Testimony, *supra* note 107, at 2.

127. See Jon Matonis, *Bitcoin Foundation Receives Cease and Desist Order from California*, FORBES (June 23, 2013, 11:11 AM), <http://www.forbes.com/sites/jonmatonis/2013/06/23/bitcoin-foundation-receives-cess-and-desist-order-from-california/>.

128. See *id.* However, the government has effectively regulated unlicensed money services businesses. See, e.g., Declan McCullagh, *Homeland Security Cuts Off Dwolla Bitcoin Transfers*, CNET (May 14, 2013, 4:47 PM), http://news.cnet.com/8301-13578_3-57584511-38/homeland-security-cuts-off-dwolla-bitcoin-transfers/ (noting that the “U.S. Department of Homeland Security confirmed it has initiated legal action that prompted the Dwolla payment service to stop processing [B]itcoin transactions”).

129. See Matonis, *supra* note 127.

likely under the definition of a money transmitter.¹³⁰ FinCEN must carefully analyze which businesses actually merit regulation, while being sure not to impose too onerous regulations on the marketplace. FinCEN must also issue clear and consistent guidance to foster a marketplace of certainty, while facing the challenges of Bitcoin users who intentionally evade regulatory control. Some clarity and consistency will benefit the virtual currency landscape. Certainty helps Bitcoin entrepreneurs innovate, investors fund new ideas, and businesses grow without fear of onerous government intervention.¹³¹

Regulators and Bitcoin exchangers have similar incentives to operate within the existing rules.¹³² FinCEN must enforce the existing laws by taking enforcement actions against non-compliant exchanges. Director Calvery highlights that “[w]hat is important is for institutions to put controls in place to deal with those money laundering threats, and to meet their AML reporting obligations. At the same time, being a good corporate citizen and complying with regulatory responsibilities is beneficial to a company’s bottom line.”¹³³ Bitcoin exchangers, then, have an interest in complying with regulatory responsibilities, which in turn helps regulators know who is exchanging traditional currency into virtual currency before users enter the marketplace and gain pseudonymity.¹³⁴ Thus, FinCEN should take enforcement actions to ensure that each Bitcoin exchange is registered as a money services business and compliant with existing regulations.

Instead, FinCEN has taken only small steps toward enforcement against non-compliant exchanges. In order to categorize which exchanges fall within its regulatory purview, “FinCEN employs an

130. See 31 C.F.R. § 1010.100 (2013).

131. See Stephen Foley, *New York Finance Regulator Voices Backing for Bitcoin*, FIN. TIMES (Jan. 29, 2014, 6:27 PM), <http://www.ft.com/intl/cms/s/0/2b25c21c-88a9-11e3-9f48-00144feab7de.html#axzz2t388pmRQ>. Benjamin Lawsky, superintendent of the New York Department of Financial Services, stated that his “hope is to move relatively quickly so we can give some certainty to businesses [because his] experience has been that businesses can deal with regulation. What they can’t deal with is uncertainty.” *Id.*

132. See *id.*

133. See Calvery November 2013 Testimony, *supra* note 5, at 10.

134. See *id.*

activity-based test to determine when someone dealing with virtual currency qualifies as a money transmitter.”¹³⁵ Moreover, it “closely coordinates with its state regulatory counterparts, such as state regulators of financial institutions, to encourage appropriate application of FinCEN guidance as part of the states’ separate AML compliance oversight of financial institutions.”¹³⁶ Recently, this activity-based test has resulted in increased enforcement activity.¹³⁷ Near the end of 2013, FinCEN had “mailed roughly a dozen letters to businesses linked to the digital currency Bitcoin warning they may be money transmitters and be required to comply with federal law and regulation.”¹³⁸ The letters required responses from the recipients clarifying their business models and put them “on notice that if there is legal ‘gray area’ they are ‘better off to [err] on the side of caution’ and comply with FinCEN’s rules.”¹³⁹ Thus, when a business is unsure whether its activities require compliance, FinCEN is advocating for Bitcoin businesses to be overly cautious.¹⁴⁰ The letters and state coordination are small but important steps because they show that FinCEN is communicating with private enterprises and working toward a collaborative relationship.

While ensuring that all existing Bitcoin exchanges comply with FinCEN’s rules is a positive step toward effective enforcement, FinCEN must first carefully examine which exchanges actually qualify as money transmitters by thoroughly examining the specific facts and circumstances of each Bitcoin operation. FinCEN has a difficult task in analyzing various Bitcoin exchanges’ business models and

135. *Id.* at 9.

136. *Id.* at 9–10.

137. *Id.*

138. Brett Wolf, *U.S. Treasury Cautions Bitcoin Businesses on Compliance Duties, Advocate Cites ‘Chilling Effect,’* REUTERS (Jan. 6, 2014), <http://blogs.reuters.com/financial-regulatory-forum/2014/01/06/u-s-treasury-cautions-bitcoin-businesses-on-compliance-duties-advocate-cites-chilling-effect/> (“These letters, sent in recent weeks by Treasury’s Financial Crimes Enforcement Network (FinCEN), are a form of ‘industry outreach’ aimed at making Bitcoin businesses aware of their potential anti-money laundering compliance obligations, FinCEN spokesman Steve Hudak said.”).

139. *Id.*

140. *Id.*

determining whether compliance is required. In November 2013, for example, FinCEN issued a compliance letter to a sole proprietor who minted physical bitcoins by placing private keys (the string of numbers and letters representing the actual currency) on physical coins.¹⁴¹ The coin-maker received payment only in bitcoins for his novelty service of turning digital currency into physical coins.¹⁴² He had not registered as a money services business because he was only dealing with bitcoin-to-bitcoin exchanges, thus staying away from the traditional-currency-into-virtual-currency situation that would prompt federal compliance.¹⁴³ Following the FinCEN letter, the coin-maker stopped taking orders for his minting service and ceased business operations in order to contact a lawyer.¹⁴⁴ As this situation illustrates, intimidation by the threat of civil and criminal sanctions for non-compliance with federal law may produce a “chilling effect” on Bitcoin businesses.¹⁴⁵ The chilling effect has the possibility to render the current regulatory scheme ineffective because FinCEN cannot regulate users that actively avoid detection and contact with the government.

Second, FinCEN must issue clear and consistent guidance to foster growth in the Bitcoin marketplace and to help Bitcoin entrepreneurs innovate. While a chilling effect could cause domestic businesses to temporarily suspend operations, over-enforcement or misguided enforcement may drive Bitcoin businesses out of the

141. See Robert McMillan, *U.S. Government Nastygram Shuts Down One-Man Bitcoin Mint*, WIRED (Dec. 12, 2013, 6:30 AM), <http://www.wired.com/wiredenterprise/2013/12/casascius/> (“Basically, these physical bitcoins are novelty items. . . . [Mike Caldwell’s] run as the premiere bitcoin minter may be at an end. Caldwell has been put on notice by the feds.”).

142. *Id.*

143. *Id.*

144. *Id.* (“And with his operations suspended, [the coin-maker] is going to be taking a revenue hit, just as the holidays approach. . . . ‘It’s good money, but I went and spent \$5,000 in lawyer bills in two weeks.’”).

145. Wolf, *supra* note 138 (“But the letters have had a ‘chilling effect’ on Bitcoin businesses, which are intimidated by the threat of civil and criminal sanctions for non-compliance with federal law and may effectively be ‘put out of business in an extrajudicial manner,’ said Jon Matonis, executive director of the Bitcoin Foundation, an advocacy group.”).

United States entirely.¹⁴⁶ Clear regulatory guidance is a crucial step toward fostering an understandable regulatory environment where Bitcoin exchangers understand that they must comply with FinCEN if they turn traditional currency into bitcoins.¹⁴⁷ Certain rules already in place within the current regulatory framework “include the development of strong Know Your Customer (‘KYC’) standards for customers and counterparties, transaction monitoring, and regulatory reporting.”¹⁴⁸ These baseline compliance requirements, which predate Bitcoin’s invention, have been in place for over a decade but remain appropriate for regulating digital currency,¹⁴⁹ as they were clarified by FinCEN in March 2013.¹⁵⁰ Therefore, capital flight or a chilling effect would be unwarranted at this point because clear and consistent guidance for Bitcoin regulation is already in place.

Despite earnest efforts to regulate virtual currency, FinCEN still faces the problem of Bitcoin businesses intentionally subverting government intervention. Since the regulations have been consistent and relatively clear, non-compliant Bitcoin exchanges do not have solid footing to argue that regulators have imposed overly onerous rules hindering their compliance. Non-compliant Bitcoin exchanges, however, may wish to remain free from any type of government oversight. In addition to innovators, merchants, and investors, Bitcoin

146. See *Beyond Silk Road*, *supra* note 1, at 5 (“We do not think that it is in anyone’s best interest for digital currency to become an offshore industry, or an industry dominated by China. No other country in the world has a startup entrepreneurial culture like the United States. We should protect and embolden this spirit that creates economic growth and provides us with a considerable global advantage.”).

147. See *id.*

148. *Id.*

149. See Wolf, *supra* note 138 (“For more than a decade the money-transmission industry has been required to enact anti-money laundering controls, report suspicious activity, register with FinCEN and obtain state licenses. These steps are required to comply with the Bank Secrecy Act and avoid running afoul of a federal law that bans unlicensed money transmitters.”).

150. See FINCEN VIRTUAL CURRENCY GUIDANCE, *supra* note 2, at 1 (“[FinCEN] is issuing this interpretive guidance to clarify the applicability of the regulations implementing the Bank Secrecy Act to persons creating, obtaining, distributing, exchanging, accepting, or transmitting virtual currencies.”).

also appeals to libertarians¹⁵¹ and those who view Bitcoin as “more philosophy than finance.”¹⁵² This stance on Bitcoin represents the ideology of some who want to use Bitcoin simply to undermine government control over the money supply. For years after Nakamoto released the original Bitcoin paper, libertarian and anarchist groups pursued Bitcoin as a means of “removing the money supply from the grasping hands of government.”¹⁵³

Regulators face a difficult enforcement challenge when trying to corral unwilling participants who have not read the definition of a money service business. Generally, the Bitcoin community seems to be divided “between moderate elements in the movement who sense the necessity of cooperating with officialdom, and a more uncompromising faction that wants to keep [B]itcoin free from any government regulation.”¹⁵⁴ This division highlights the possibility that tougher regulation in the form of harsh penalties for non-compliance will drive some Bitcoin users underground, operating in a way so as to avoid any government oversight.

151. *Bitcoin Paradise*, ECONOMIST (Dec. 25, 2013, 10:20 PM), <http://www.economist.com/blogs/schumpeter/2013/12/libertarian-enclaves> (“A group of self-described anarchists, libertarians and Ron Paul supporters fleeing the crumbling world economic system have founded Galt’s Gulch, a community in Chile inspired by Ayn Rand’s ‘Atlas Shrugged’—and with an economy based entirely on [B]itcoin.”).

152. See Alan Feuer, *The Bitcoin Ideology*, N.Y. TIMES, (Dec. 14, 2013), http://www.nytimes.com/2013/12/15/sunday-review/the-bitcoin-ideology.html?_r=0 (“One could argue that [B]itcoin isn’t chiefly a commercial venture at all, a funny thing to say about a kind of online cash. To its creators and numerous disciples, [B]itcoin is—and always has been—a mostly ideological undertaking, more philosophy than finance.”).

153. *Id.* (“It is only in the last few months, as [B]itcoin has attracted the attention of political parties, regulators and speculative investors that the narrative of [B]itcoin as a tool for change has been drowned out by a simpler story line: that of [B]itcoin as a kind of crypto-credit card—or, even more, as a digitized casino game.”).

154. *Id.*; see also *Beyond Silk Road: Potential Risks, Threats, and Promises of Virtual Currencies: Hearing Before the S. Comm. on Homeland Sec. and Governmental Affairs*, 113th Cong. 2 (2013) (statement of Jerry Brito, Senior Research Fellow, Mercatus Center at George Mason University) (“More to the point, serious criminals looking to hide their tracks are more likely to choose a centralized virtual currency run by an intermediary willing to lie to regulators for a fee, rather than a decentralized currency like Bitcoin that, as a technical matter, must make a record of every transaction, even if pseudonymously.”).

Overall, while the challenges to governmental regulation are certainly present, FinCEN has the enforcement tools necessary to strengthen its approach. Public guidance, like the one issued in March 2013, serves as a strong warning signal to bring about a first wave of compliance. Mt. Gox, formerly the world's largest Bitcoin exchange,¹⁵⁵ took notice of FinCEN's guidance and complied with existing requirements.¹⁵⁶ As the next step from an awareness perspective, "industry outreach" letters serve as an important warning mechanism to gather information on potentially non-compliant Bitcoin exchanges.¹⁵⁷ FinCEN already has these tools in place¹⁵⁸ but must begin to take tougher actions past the point of issuing warning letters. Although it is challenging to locate non-compliant exchanges and administer regulations, especially on exchanges actively evading certain regulatory requirements, a tougher stance on non-compliance is necessary to ensure a safe marketplace. Administering tougher penalties would serve as an important signal that FinCEN will hold non-compliant exchanges accountable.

C. *Hybrid System of Regulation Based on the Suspicious Activity Report Model*

The mechanism for collaborative regulation of Bitcoin exchanges already exists within the SAR process. In addition to stronger public-private cooperation and tougher enforcement on non-compliant

155. See Garrick Hileman, *Bitcoin Trading Volume Concentrating in Largest Exchanges*, COINDESK (Mar. 15, 2014, 2:09 PM), <http://www.coindesk.com/bitcoin-trading-volume-concentrating-largest-exchanges/> ("Prior to the start of its decline in mid-2013, Mt. Gox had what amounted to an effective monopoly on bitcoin trading volume, often commanding upwards of 80–90% of total US dollar-denominated volume.").

156. See Jeffrey Sparshott, *Bitcoin Exchange Makes Apparent Move to Play by U.S. Money-Laundering Rules*, WALL ST. J. (June 28, 2013, 5:33 PM), <http://online.wsj.com/news/articles/SB10001424127887323873904578574000957464468> ("The world's largest [B]itcoin trading exchange appears to have taken a key step to comply with U.S. anti-money-laundering rules and potentially avoid additional run-ins with authorities.").

157. See Wolf, *supra* note 138 ("In response, [FinCEN spokesman] Hudak said the letters are an attempt at gathering information. He likened them to the letters that banks sometimes send to customers seeking information about the customer's transactions in an effort to determine whether suspect transactions are truly linked to illicit activity.").

158. *Id.*

Bitcoin exchanges, regulators should advocate for more active use of SAR filing from Bitcoin exchanges. Every money services business must file a SAR with FinCEN if the business notices a “suspicious transaction relevant to a possible violation of law or regulation.”¹⁵⁹ FinCEN offers the following definition:

Suspicious activity is any conducted or attempted transaction or pattern of transactions that you know, suspect or have reason to suspect meets any of the following conditions: (1) Involves money from criminal activity. (2) Is designed to evade Bank Secrecy Act requirements, whether through structuring or other means. (3) Appears to serve no business or other legal purpose and for which available facts provide no reasonable explanation. (4) Involves use of the money services business to facilitate criminal activity.¹⁶⁰

This guard against money laundering enlists the help of financial brokers on the front lines of financial activity. In the context of the Bitcoin marketplace, those businesses that exchange traditional currency have the opportunity to alert government authorities if they notice “red flags” of potentially suspicious transactions.¹⁶¹ FinCEN should issue consistent public guidance explaining the importance of SAR filings in relation to stopping illicit financial activity. Bitcoin exchangers are in a unique position where they deal directly with customers looking to move money. If Bitcoin exchangers were more active in keeping the Bitcoin marketplace clean, then they could help law enforcement discover potential illicit activity in the early stages of money laundering.¹⁶²

159. 31 C.F.R. § 1022.320 (2013).

160. *Reporting Suspicious Activity—A Quick Reference Guide for MSBs*, *supra* note 100.

161. *Id.* (“There are a number of possible factors, or ‘red flags,’ which signal that an activity or transaction might be suspicious. Observing a ‘red flag’ should trigger some questions, such as: Is the amount of the transaction unusually large for the typical customer or for the MSB?”).

162. *See* FED. FIN. INSTS. EXAMINATION COUNCIL, BANK SECRECY ACT/ANTI-MONEY LAUNDERING EXAMINATION MANUAL 7 (2007) (“The first and most vulnerable stage of laundering money is placement. The goal is to introduce the unlawful proceeds into the financial system without attracting the attention of financial institutions or law enforcement.”).

Since Bitcoin is pseudonymous, one potential market function is to trace public keys connected to suspicious activity. If exchanges could identify certain accounts linked to suspicious activity, then those exchanges could file SARs to FinCEN based on the completely public transactions.¹⁶³ FinCEN should promote this type of tracing activity because it has the capability to alert law enforcement to potentially illegal financial transactions. By discovering who engages in suspicious activity and where such activity is located, FinCEN can target certain areas for investigations and potentially remedy troubled areas. Moreover, FinCEN does not have to incur the costs or do any of the work associated with investigations. Rather, FinCEN would only incur the cost of investigating the SARs *after* exchanges or interested users have already done the legwork. Even if exchanges do not actively track potential “bad actors,” FinCEN should publicly promote SAR filings as a way for Bitcoin exchanges to know their customers and to protect against potentially suspicious activity.

In addition to saving FinCEN significant costs, increased SAR filings also build relationships with the exchanges. Several prosecutions of criminals are grounded in the detection and analysis of suspect transactions by financial institutions.¹⁶⁴ The success of SAR filing is apparent based on the fact that “law enforcement entities [have] launched major investigations based on quality records filed by financial institutions.”¹⁶⁵ Similarly, Bitcoin exchangers can help aid law enforcement investigations with more proactive filing.¹⁶⁶ More consistent SAR filing builds trust between regulators and Bitcoin businesses while also adding legitimacy to the entire industry. Given

163. See Kashmir Hill, *Sanitizing Bitcoin: This Company Wants To Track ‘Clean’ Bitcoin Accounts*, FORBES (Nov. 13, 2013, 8:17 AM), <http://www.forbes.com/sites/kashmirhill/2013/11/13/sanitizing-bitcoin-coin-validation/> (“[Building a database of ‘clean addresses’] could be good for flagging and generating suspicious activity reports, as long as it doesn’t come with an absurdly high punishment for accounts that may have been incorrectly flagged.”).

164. See Fin. Crimes Enforcement Network, U.S. Dept. of Treasury, *THE SAR ACTIVITY REVIEW: TRENDS, TIPS, AND ISSUES*, Issue 23, at 53 (May 2013), available at http://www.fincen.gov/news_room/rp/files/sar_tti_23.pdf.

165. *Id.*

166. *See id.*

the importance of SARs to regulating illicit activity in the financial system, FinCEN could bring much needed awareness to the issue by publicly advocating for Bitcoin exchangers to file more SARs.¹⁶⁷ Through public advocacy, FinCEN could promote a cooperative relationship with exchangers and not only build goodwill, but also help keep the Bitcoin marketplace in compliance with the law.

CONCLUSION

Bitcoin regulation remains an ongoing issue centered on the virtual currency's potential for illicit use.¹⁶⁸ While Bitcoin is pseudonymous and each transaction can be traced to a publicly visible identifier, the opportunity for secrecy and corresponding illicit financial activity in the marketplace remains strong.¹⁶⁹ Despite this reality, opportunities for illegal transactions are strong in *all* currencies—not just those of the virtual variety.¹⁷⁰

Regulators can work within the existing statutory framework to build trust with Bitcoin businesses while also adding certainty and legitimacy to the use of bitcoins. Although the more activist regulatory approach has the potential to drive Bitcoin proprietors further into secrecy and may ignite continued subversion to government interests, the benefits of regulation outweigh the risks. First, regulators should build trust with Bitcoin businesses by showing public support and cooperation with the technological innovators.

167. See *Reporting Suspicious Activity—A Quick Reference Guide for MSBs*, *supra* note 100.

168. See Robin Sidel, *Bitcoin Advocates Speak Up*, WALL ST. J. (Jan. 28, 2013, 7:28 PM), <http://online.wsj.com/news/articles/SB10001424052702303553204579348811827084626?KEYWORDS=bitcoin+regulation> (describing the statement of Benjamin Lawsky, superintendent of the New York Department of Financial Services, who said that “regulators are in new and uncharted waters” when it comes to virtual currencies).

169. See BRITO & CASTILLO, *supra* note 12, at 25. (“Although these worries are currently more theoretical than evidential, Bitcoin could indeed be an option for those who wish to discreetly move ill-gotten money.”).

170. *Id.* at 23 (“Indeed, like cash, it can be used for ill as well as for good.”); see also Calvery November 2013 Testimony, *supra* note 5, at 5 (“Any financial institution, payment system, or medium of exchange has the potential to be exploited for money laundering or terrorist financing. Virtual currency is not different in this regard.”).

Second, regulators should hold Bitcoin exchanges accountable to the existing laws. While tougher enforcement may not engender camaraderie between private businesses and the government, this is a necessary step to show that Bitcoin exchange operators, like all others operating as money services businesses, must comply with basic federal regulations. Lastly, regulators should enlist the help of Bitcoin exchangers, who operate on the front lines of virtual currency, and publicly call for increased filing of SARs. With these small steps, regulators can ensure a safer and cleaner Bitcoin marketplace while not strangling the virtual currency in its infancy.

This is a transformational period for Bitcoin, which has seen its relative value rapidly increase in the preceding year. By taking cautious and incremental steps, regulators have the opportunity to both ensure a safer future for Bitcoin and a safer experience for all those involved with the virtual currency.

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