

# Bitcoin and Money Laundering: Mining for an Effective Solution

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## INTRODUCTION

Technology forges ahead at a rapid pace, whether we like it or not. Criminals recognize this inevitability and use technological improvements to advance their craft,<sup>1</sup> committing crimes from half a world away in real time. Meticulous criminals also use technological advancements to distance themselves from their illegal activities and profits through use of virtual banking and electronic money transfer systems, which allow criminals to buy, sell, and exchange goods without any physical interaction. Though such services use digital logs that serve to identify a sender and a receiver's digital identities, criminals possess the means to obfuscate their digital identity by simply spoofing their Internet Protocol address or by using another individual's account, essentially making their activities untraceable.

New virtual currencies, such as Bitcoin, add yet another layer of anonymity by allowing users to transfer value without the collection of any personally identifiable information. Regulations often fail to affect such virtual currencies due to lack of foresight by the regulation writers, creating a legal gray area. Thus, criminals can continue to capitalize on technological innovation to bolster their illegal activities. Money laundering is one particular criminal craft that stands to benefit from technological advancement.

This Note analyzes the effects of Bitcoin and analogous virtual currencies on anti-money laundering (AML) enforcement. Part I gives a brief primer on money laundering and virtual currencies. Part II offers a Bitcoin primer, which differentiates Bitcoin technology from traditional currencies and competing virtual currencies. Part III analyzes whether Bitcoin is legal to use or trade in the United States, using domestic and international adoption of Bitcoin for guidance. Part IV discusses whether current U.S. AML regulatory schemes encompass the entirety of Bitcoin use, finding that it does not. Finally, Part V offers suggestions for a regulatory scheme encompassing Bitcoin and analogous virtual currency technologies. Ultimately, this Note recommends regulating Bitcoin currency exchanges under existing AML regulation schemes instead of broadening statutory definitions to control all aspects of Bitcoin or analogous virtual currencies.

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1. See Cyrus Farivar, *Man Accused of Placing GPS Device on Victim's Car Before Burglarizing Her Home*, ARS TECHNICA (Apr. 28, 2013, 11:22 AM), <http://arstechnica.com/tech-policy/2013/04/man-accused-of-placing-gps-device-on-victims-car-before-burglarizing-her-home>.

Attempting to regulate parties other than currency exchanges in the Bitcoin network will prove too onerous from a cost-benefit analysis perspective.<sup>2</sup>

## I. MONEY LAUNDERING PRIMER

### A. Money Laundering

Money laundering is “the process of making illegally-gained proceeds (i.e. ‘dirty money’) appear legal (i.e. ‘clean’),”<sup>3</sup> and AML laws are the legislative attempts to curtail such illegal activity.<sup>4</sup> Criminals typically accomplish money laundering in three steps: (1) placement, where criminals inject dirty money into the financial system; (2) layering, where launderers transfer or convert dirty money to dissociate it from its illegal source; and (3) integration, where cleaned funds reenter the financial system in a seemingly legitimate state.<sup>5</sup> Due to the illegal character of the transactions, some organizations caution against attempting to estimate the total amount of money laundered per year;<sup>6</sup> however, the United Nations Office on Drugs and Crime (UNODC) report estimated the aggregate amount of laundered money to be approximately 2.7% of global GDP in 2009, or roughly \$1.6 trillion.<sup>7</sup> In an increasingly digitized world, one question that emerges is whether innovative virtual currencies will make money laundering estimates and AML efforts more difficult for regulators and law enforcement.

### B. Virtual Currencies

A virtual currency acts like a currency in some respects but is not directly akin to a real currency.<sup>8</sup> Virtual currency transactions are therefore different from simply

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2. See *infra* Part V.

3. *History of Anti-Money Laundering Laws*, FIN. CRIMES ENFORCEMENT NETWORK, [http://www.fincen.gov/news\\_room/aml\\_history.html](http://www.fincen.gov/news_room/aml_history.html) [hereinafter *AML History*].

4. See *Anti-Money Laundering*, FIN. INDUS. REG. AUTHORITY, <https://www.finra.org/Industry/Issues/AML>.

5. *Money Laundering*, FIN. ACTION TASK FORCE, <http://www.fatf-gafi.org/pages/faq/moneylaundering>.

6. *Id.*

7. Yury Fedotov, *Preface* to UNITED NATIONS OFFICE ON DRUGS AND CRIME, ESTIMATING ILLICIT FINANCIAL FLOWS RESULTING FROM DRUG TRAFFICKING AND OTHER TRANSNATIONAL ORGANIZED CRIMES 5, 5 (2011), available at [https://www.unodc.org/documents/data-and-analysis/Studies/Illicit\\_financial\\_flows\\_2011\\_web.pdf](https://www.unodc.org/documents/data-and-analysis/Studies/Illicit_financial_flows_2011_web.pdf); see also Michel Camdessus, Managing Dir., Int'l Monetary Fund, Address at the Plenary Meeting of the Financial Action Task Force on Money Laundering, Money Laundering: The Importance of International Countermeasures (Feb. 10, 1998), available at <https://www.imf.org/external/np/speeches/1998/021098.htm> (estimating in 1998 that the aggregate amount of money laundered was between 2% and 5% of global GDP, or roughly \$590 billion and \$1.5 trillion).

8. The Financial Crimes Enforcement Network (FinCEN) defines real currency as coin or paper money that circulates, is designated as legal tender, and is customarily used and accepted as a medium of exchange in the issuing country. Conversely, virtual currency “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.”

transferring fiat currency<sup>9</sup> via an electronic medium (e.g., Automated Clearing House (ACH) transfers, PayPal).<sup>10</sup> Virtual currencies add another layer of complexity to AML efforts because, contrary to traditional currency transfer, there are no physical materials to observe or intercept for proof of illicit activities. Virtual currencies come in several formats: (1) physical, where a virtual currency is represented on a physical medium;<sup>11</sup> (2) centralized, where all transfers occur through an intermediary;<sup>12</sup> and (3) decentralized, where the network distributes transactions between nodes of a network, an example of which is Bitcoin.<sup>13</sup>

### C. Bitcoin

Bitcoin is a decentralized, virtually anonymous<sup>14</sup> (commonly called pseudonymous),<sup>15</sup> peer-to-peer (transactions occur directly between users) network. Bitcoin's decentralization and peer-to-peer infrastructure allows it to be virtually immune to the risks of server raids or the loss of a central database to hackers.<sup>16</sup>

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FIN. CRIMES ENFORCEMENT NETWORK, FIN-2013-G001, APPLICATION OF FINCEN'S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES 1 (2013) [hereinafter GUIDANCE], available at [http://www.fincen.gov/statutes\\_regs/guidance/pdf/FIN-2013-G001.pdf](http://www.fincen.gov/statutes_regs/guidance/pdf/FIN-2013-G001.pdf).

9. A fiat currency is a "[c]ommon type of currency issued by official order, and whose value is based on the issuing authority's guarantee to pay the stated (face) amount on demand, and not on any intrinsic worth or extrinsic backing. All national currencies in circulation, issued and managed by the respective central banks, are fiat currencies." *Fiat Currency Definition*, BUSINESSDICTIONARY.COM, <http://www.businessdictionary.com/definition/fiat-currency.html>. It is also known as fiat money. *Fiat Money Definition*, INVESTOPEDIA, <http://www.investopedia.com/terms/f/fiatmoney.asp>. Examples are USD, EUR, etc. *See id.*

10. *Digital Currency*, BITCOIN WIKI, [https://en.bitcoin.it/wiki/Digital\\_currency](https://en.bitcoin.it/wiki/Digital_currency) (last modified Mar. 1, 2012).

11. One example of a physical virtual currency is the now defunct DigiCash. *See* Steven Levy, *E-Money (That's What I Want)*, WIRED, Dec. 1994, at 174.

12. An example of a centralized virtual currency is WebMoney. *See* About, WEBMONEY, <http://www.wmtransfer.com/eng/about/>.

13. BITCOIN PROJECT, <http://bitcoin.org>.

14. *Introduction*, BITCOIN WIKI, <https://en.bitcoin.it/wiki/Introduction> (last modified July 14, 2013).

15. *See, e.g.*, Morgen E. Peck, *The Cryptoanarchists' Answer to Cash*, IEEE SPECTRUM, June 2012, at 50, 56 ("Bitcoin is often described as providing pseudoanonymity, by creating enough obfuscation to provide users with plausible deniability."); Thomas Lowenthal, *Bitcoin: Inside the Encrypted, Peer-to-Peer Digital Currency*, ARS TECHNICA (June 8, 2011, 9:00 AM), <http://arstechnica.com/tech-policy/2011/06/bitcoin-inside-the-encrypted-peer-to-peer-currency> ("Bitcoin—a pseudonymous cryptographic currency . . ."). Pseudonymity is the use of a fictitious name or identity. BLACK'S LAW DICTIONARY 1347 (9th ed. 2009). In Bitcoin's case, this refers to the use of an alphanumeric string that represents the source or destination in a Bitcoin transfer. *Address*, BITCOIN WIKI, <https://en.bitcoin.it/wiki/Address> (last modified Jan. 16, 2013). Thus, a pseudonym identifies the user instead of any personally identifiable information and is virtually anonymous to an onlooker to the transaction.

16. This does not mean Bitcoin currency exchanges cannot be hacked; it means that the Bitcoin protocol infrastructure is relatively safe. *See, e.g.*, Press Release, Mark Karpeles,

Due to the possibility of its use for nefarious activities such as money laundering, Bitcoin's pseudonymous network negatively impacted the image of emerging virtual currency systems, and some authorities view Bitcoin solely as a platform for criminals.<sup>17</sup> Whatever the perceived or potential economic role may be for Bitcoin,<sup>18</sup> the question remains as to how current U.S. Federal AML and state money transmitter laws will apply to Bitcoin and analogous technologies.

## II. BITCOIN PRIMER

### A. Comparison to Other Currency Systems

Bitcoin's inventor, Satoshi Nakamoto,<sup>19</sup> sought to create a system that would solve several issues with traditional fiat currency systems.<sup>20</sup> A traditional fiat currency system is vulnerable to inflation,<sup>21</sup> whereas Bitcoin for the most part, is not.<sup>22</sup> Cash and Bitcoin transactions are similarly anonymous or pseudonymous, but Bitcoin does not require face-to-face transactions. Finally, a governmental body backs a fiat currency, which provides reputational stability to the fiat currency that

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Chief Exec. Officer, Tibanne Co. Ltd., Clarification of Mt. Gox Compromised Accounts and Major Bitcoin Sell-Off (June 30, 2011), [https://mtgox.com/press\\_release\\_20110630.html](https://mtgox.com/press_release_20110630.html).

17. E.g., Mike Masnick, *Senator Schumer Says Bitcoin Is Money Laundering*, TECHDIRT (June 6, 2011, 9:26 AM), <https://www.techdirt.com/articles/20110605/22322814558/senator-schumer-says-bitcoin-is-money-laundering.shtml>; see also Letter from Charles E. Schumer & Joe Manchin, U.S. Senators, to Eric Holder, Att'y Gen. of the United States (June 6, 2011), available at <http://manchin.senate.gov/public/index.cfm/press-releases?ID=284ae54a-acf1-4258-be1c-7acee1f7e8b3>. Senators Schumer and Manchin urged the U.S. Attorney General and Drug Enforcement Agency to shut down Silk Road, an anonymous online marketplace used for selling illicit substances, which used Bitcoin as a currency. *Id.* The Senators referred to Bitcoin in the letter as "untraceable." *Id.*

18. Some view Bitcoin as a possible solution to the issues that fiat currencies face, such as government intervention and currency inflation. See, e.g., Jon Matonis, *Bitcoin Prevents Monetary Tyranny*, FORBES (Oct. 4, 2012, 11:58 AM), <http://www.forbes.com/sites/jonmatonis/2012/10/04/bitcoin-prevents-monetary-tyranny>.

19. See generally Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, BITCOIN PROJECT, <http://bitcoin.org/bitcoin.pdf>. Satoshi Nakamoto is most likely a pseudonym of the actual inventor or inventors of Bitcoin. *Satoshi Nakamoto*, BITCOIN WIKI, [https://en.bitcoin.it/wiki/Satoshi\\_Nakamoto](https://en.bitcoin.it/wiki/Satoshi_Nakamoto) (last modified June 13, 2013).

20. See Jon Matonis, *ECB: "Roots of Bitcoin Can Be Found in the Austrian School of Economics"*, FORBES (Nov. 3, 2012, 11:04 AM), <http://www.forbes.com/sites/jonmatonis/2012/11/03/ecb-roots-of-bitcoin-can-be-found-in-the-austrian-school-of-economics> (describing theoretical economical roots of Bitcoin).

21. See, e.g., DavidC, *What Is the Significance of the Fiat Currency?*, INFLATIONDATA.COM (Sept. 20, 2012), <http://inflationdata.com/articles/2012/09/20/significance-fiat-currency>.

22. Colin Dean, Comment to *Why Are Fiat Currencies Inflationary and Bitcoin Deflationary?*, STACK EXCHANGE (Dec. 28, 2012, 5:30 PM), <http://bitcoin.stackexchange.com/questions/5931/why-are-fiat-currencies-inflationary-and-bitcoin-deflationary> ("Bitcoin's deflationary quality is based on the assertion that a currency must have scarcity in order to be valuable. By limiting what amount can enter the system, it ensures that no individual can increase the supply and inflate the value relative to physical goods.").

a new virtual currency inherently lacks. Trading in fiat currency will allow the parties to have relative faith in the currency's value as stated by the distributing government, but Bitcoin has no set value, and its value can fluctuate dramatically.<sup>23</sup> Thus, Bitcoin is less inflation prone and offers greater anonymity for the transacting parties, but it lacks the reputational security and trust associated with a fiat currency backed by the full faith and credit of a sovereign government.

Nakamoto also sought to solve several issues with centralized virtual currency systems with the Bitcoin system.<sup>24</sup> Virtual currency systems with centralized authority typically require users to have accounts so the central authority can administrate transactions;<sup>25</sup> a centralized system will also be vulnerable to attacks on the central infrastructure, possibly leading to a complete shutdown of the system.<sup>26</sup> However, the authority inherent in a central infrastructure gives assurance to users that issues with transactions and fraud on the network can be solved administratively.<sup>27</sup> Some users may wish to sacrifice anonymity and network security in exchange for such assurance against fraud, which the pseudonymous Bitcoin network cannot provide. Thus, compared to a centralized virtual currency system, the Bitcoin protocol is superior for anonymity and flexibility; however, Bitcoin lacks authoritative backing and central control.

### B. Operational Overview

Bitcoin is a pseudonymous,<sup>28</sup> decentralized virtual currency system that operates purely by algorithm,<sup>29</sup> using bitcoin as the unit of currency.<sup>30</sup> No government sets a bitcoin's value; instead, supply and demand of Bitcoin users in the marketplace sets the value.<sup>31</sup> A Bitcoin user may obtain bitcoins by buying bitcoins from others<sup>32</sup> or

23. Bitcoin's value rose from \$34 on March 6, 2013 to \$266 by April 10, 2013, only to crash to approximately \$104 (a 61% decline) in less than a day. Timothy B. Lee, *An Illustrated History of Bitcoin Crashes*, FORBES (Apr. 11, 2013, 12:45 AM), <http://www.forbes.com/sites/timothylee/2013/04/11/an-illustrated-history-of-bitcoin-crashes>.

24. See Lowenthal, *supra* note 15; Nakamoto, *supra* note 19.

25. See *Security Recommendations*, E-GOLD, <http://www.e-gold.com/security.html>; *Security*, PAYPAL, <https://www.paypal.com/webapps/mpp/paypal-safety-and-security>.

26. See Alison Gendar & John Marzulli, *Cops Bust Hackers Who Shut Down PayPal After Online Payment Service Cut Ties with WikiLeaks*, N.Y. DAILY NEWS (July 20, 2011, 4:00 AM), <http://www.nydailynews.com/news/crime/cops-bust-hackers-shut-paypal-online-payment-service-cut-ties-wikileaks-article-1.159867>.

27. See PAYPAL, *supra* note 25.

28. See *supra* note 15 and accompanying text.

29. See, e.g., Lowenthal, *supra* note 15; Nicolás Mendoza, *Understanding Bitcoin*, AL JAZEERA, <http://www.aljazeera.com/indepth/opinion/2012/05/20125309437931677.html> (last modified June 9, 2012).

30. Note that the units of currency are lowercased (bitcoins), whereas the currency system and network are capitalized (Bitcoin). *Introduction*, *supra* note 14. Units of bitcoins are commonly represented as BTC. *Vocabulary*, BITCOIN PROJECT, <http://bitcoin.org/en/vocabulary>.

31. See *FAQ*, BITCOIN WIKI, <https://en.bitcoin.it/wiki/FAQ> (last modified July 24, 2013).

32. *Getting Started with Bitcoin*, WEUSECOINS, <http://www.weusecoins.com/getting-started.php> (discussing how to get bitcoins by completing bonus programs, trading with

by using their computer's processing power to help facilitate transactions on the Bitcoin network in a process called mining.<sup>33</sup>

Bitcoin transactions begin when a buyer transmits a quantity of bitcoins from his or her personal digital wallet<sup>34</sup> through a Bitcoin client<sup>35</sup> to the coded Bitcoin payment address representing the seller's digital wallet.<sup>36</sup> The Bitcoin network recognizes this broadcast of information, and each node (called a miner) of the network processes the transaction and adds the value of the transaction to the end of a coded string representing other recently broadcast transactions.<sup>37</sup> Miners then encode this "block" of recently broadcast transmissions onto the end of all the previous completed blocks<sup>38</sup> at a rate of approximately one block per ten minutes.<sup>39</sup> Finally, the individual miner who finalizes the block receives a set number of bitcoins.<sup>40</sup> To finalize a block and receive the bitcoin reward, the miner's calculated value of the block must match a generated value from the Bitcoin system, and the difficulty of matching this value modulates as the total computational power from the miners in the network increases to maintain the ten-minute completion rate.<sup>41</sup> Once a block finalizes, that transaction is practically irreversible without controlling the majority of the network's processing power.<sup>42</sup> Thus, there will be a relatively predictable payout of bitcoins following the predetermined block creation rate until the total number of BTC reaches a preset cap of 21 million bitcoins, and

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local Bitcoin users, purchasing through currency exchanges, and trading directly with other Bitcoin users online).

33. See Peck, *supra* note 15, at 56.

34. A Bitcoin wallet is a digital container where a Bitcoin user can store data referring to the user's addresses, transactions, preferences, etc. *Wallet*, BITCOIN WIKI, <https://en.bitcoin.it/wiki/Wallet> (last modified Mar. 31, 2013). A user may choose from several forms of digital wallets. Vitalik Buterin, *Bitcoin Wallet Reviews—Ease of Use and Security*, BITCOIN MAG. (Mar. 5, 2012), <http://bitcoinmagazine.com/bitcoin-wallet-options>.

35. Clients can create and interface with Bitcoin wallets, allowing the user to send and receive bitcoins. See WEUSECOINS, *supra* note 32.

36. See Peck, *supra* note 15, at 54.

37. *Id.* at 54–55. A miner is a user that uses his or her computer's resources to try to process and verify transactions on the Bitcoin network into blocks by way of mathematical calculations. See *Vocabulary*, *supra* note 30.

38. This is called a block chain. Peck, *supra* note 15, at 55–56; see also *Block Chain*, BITCOIN WIKI, [https://en.bitcoin.it/wiki/Block\\_chain](https://en.bitcoin.it/wiki/Block_chain) (last modified May 18, 2013) (providing more background and technical data of block chain design).

39. *FAQ*, *supra* note 31.

40. Peck, *supra* note 15, at 56. This block completion reward halves once half of all remaining bitcoins have been produced, which will occur approximately once every four years. The reward halved from 50 BTC to 25 BTC on November 28, 2012. See Adrienne Jeffries, *Total Number of Bitcoins Hits 10.5 Million, Production Halves to Stop Inflation*, VERGE (Nov. 28, 2012, 10:44 AM), <http://www.theverge.com/2012/11/28/3701434/total-number-of-bitcoins-hits-10-5-million-production-halves-to-stop>. This system is intended to simulate the scarcity of a limited resource commodity, such as gold, and prevent inflation. Vitalik Buterin, *Block Reward Halving: A Guide*, BITCOIN MAG. (Nov. 27, 2012), <http://bitcoinmagazine.com/block-reward-halving-a-guide>.

41. See Buterin, *supra* note 40.

42. See *id.* (“[A]fter four to six blocks, any attempt to fraudulently change the transaction history to your own benefit becomes impractical because of all the work that has already been done overtop.”).

the strength of the network itself would theoretically prevent fraudulent reversed transactions.

A typical Bitcoin transaction, including those that involve money laundering activities, includes approximately five entities: (1) a Bitcoin sender that initiates the transaction on the network, in this case with dirty money; (2) a Bitcoin receiver who accepts the bitcoins, or in this case the launderer who helps the sender obfuscate the dirty money's source; (3) Bitcoin miners that act as transaction verifiers and processors by completing blocks, sometimes for a nominal fee; (4) the core Bitcoin development team, which updates the Bitcoin codebase as necessary; and (5) Bitcoin currency exchanges, which facilitate conversion of bitcoins to other currencies and vice versa. This Note principally examines possible legal actions in light of these five entities.

### *C. Differences Affecting Money Laundering*

The primary features of Bitcoin that prove beneficial to its survival, and harmful to effective AML regulation, are the protocol's anonymity and resilience through flexibility. Without being able to tie an identifiable user to a single Bitcoin address, tracking the injection, layering, and reentry of laundered funds would be extremely difficult for enforcement entities. Additionally, as each mining node of the Bitcoin network receives and processes all transactions, and the Bitcoin network automatically scales the difficulty for completing blocks based on the total processing power of all miners, stopping the Bitcoin network from functioning requires disabling every miner on the network.<sup>43</sup> Therefore, AML efforts face a target that is both difficult to identify and essentially impervious to interruption.

Bitcoin potentially allows any user—legitimate or criminal—to transfer money at near instantaneous speed at little or no cost, with very low barriers to entry, while remaining virtually anonymous without what could otherwise require a public paper trail. Users' abilities to exchange bitcoins directly for other currencies, to transfer through an endless number of different Bitcoin addresses for obfuscation, and to trade with other users for physical goods further frustrates AML efforts. Essentially, Bitcoin and analogous virtual currencies could enable money launderers to move illicit funds faster, cheaper, and more discretely than ever before.

## III. LEGALITY OF BITCOIN IN THE UNITED STATES

### *A. Constitutional Limits on Currency*

Although Bitcoin may frustrate AML efforts, discussion of solutions under current AML frameworks is unnecessary if Bitcoin is unconstitutional per se. Bitcoin might be seen as illegal because it attempts to assume powers expressly reserved to the federal government under the U.S. Constitution; however, Bitcoin

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43. See *supra* note 41 and accompanying text. Even if only a single miner remained, the network will allow a block to be created approximately every ten minutes, and transactions will still process on the network.

likely falls outside of these powers. The U.S. Constitution reserves rights for the federal government to coin money for the nation,<sup>44</sup> to regulate value of the nation's coin,<sup>45</sup> to prosecute counterfeiters,<sup>46</sup> and it prohibits states from coining money.<sup>47</sup> However, the federal government appears to allow local currencies when there appears to be no likelihood of confusion with the nation's currency.<sup>48</sup> Conversely, the federal government has prosecuted currencies that pass off as the nation's legitimate currency.<sup>49</sup> Thus, as a purely digital currency, the likelihood that Bitcoin would be confused with the nation's federal currency is quite low.<sup>50</sup> Although Congress could potentially restrict Bitcoin or other virtual currencies through legislative action, perhaps through its Commerce Clause powers,<sup>51</sup> the clauses that relate to the coining of money should not render Bitcoin inherently illegal.

### *B. Bitcoin's Image in the United States*

Bitcoin's image within the United States is polarized. Some view it as a tool used by criminals to commit crimes,<sup>52</sup> whereas others view it as a tool for a legal system of currency that is free from unlawful government interference.<sup>53</sup> Most notably, in 2011 Senators Charles Schumer and Joe Manchin denounced Bitcoin in a letter to U.S. Attorney General Eric Holder and the Drug Enforcement Administration (DEA) as “[t]he only method of payment” for an illegal Internet

44. U.S. CONST. art. I, § 8, cl. 5 (“To coin Money”).

45. *Id.* (“To . . . regulate the Value thereof, and of foreign Coin”).

46. *Id.* art. I, § 8, cl. 6 (“To provide for the Punishment of counterfeiting the Securities and current Coin of the United States”).

47. *Id.* art. I, § 10, cl. 1 (“No State shall . . . coin Money . . . [or] make any Thing but gold and silver Coin a Tender in Payment of Debts . . .”).

48. See Reuben Grinberg, *Bitcoin: An Innovative Alternative Digital Currency*, 4 HASTINGS SCI. & TECH. L.J. 159, 182 (2012) (“However, organizations have been issuing a certain type of private currency—community currencies meant to circulate only within a particular community—in the U.S. for decades. Government officials have known about these currencies and have commented that they seem to pose no threat.”). One such example is the Ithaca Hours local alternative currency. ITHACA HOURS, <http://www.ithacahours.com>.

49. See Grinberg, *supra* note 48, at 191–94; Alan Feuer, *Prison May Be the Next Stop on a Gold Currency Journey*, N.Y. TIMES, Oct. 25, 2012, at A18; see also *Private Tender: Anti-Government Group Mints Its Own Coins*, FED. BUREAU INVESTIGATION (Apr. 5, 2011), [http://www.fbi.gov/news/stories/2011/april/dollar\\_040511/dollar\\_040511](http://www.fbi.gov/news/stories/2011/april/dollar_040511/dollar_040511).

50. The federal government unsuccessfully attacked several private payment articles using the Stamp Payments Act of 1862 when the articles were too dissimilar from official U.S. currency or contrary to the purposes of the Act. See Grinberg, *supra* note 48, at 183–85. Because virtual currencies bear little resemblance to official U.S. currency, and the applicability of a statute over 150 years removed from modern society is questionable, it is unlikely that the government could entirely limit virtual currencies through the Stamp Payments Act. See *id.* at 186–91.

51. It seems likely that the sale or use of bitcoins to buy goods or fiat currency would have interstate effects.

52. See *supra* note 17 and accompanying text.

53. See, e.g., evoorhees, Comment to *How Do You Feel About Market Regulation?*, BITCOIN F. (July 4, 2011, 3:41 AM), <https://bitcointalk.org/index.php?topic=25653.msg321165#msg321165>.



marketplace called Silk Road.<sup>54</sup> More recently, an anonymous group claimed to steal copies of presidential candidate and former Massachusetts Governor Mitt Romney's tax records and threatened to release them to the public if the group did not receive \$1 million worth of bitcoins.<sup>55</sup>

In addition to the specific uses of Bitcoin for illegal activities, some agencies examined Bitcoin for more general law enforcement concerns. A leaked U.S. Federal Bureau of Investigation (FBI) report from April 2012 examined the challenges created by Bitcoin for law enforcement.<sup>56</sup> The report's summary notes that the FBI (1) has "medium confidence that, in the near term, cyber criminals will treat Bitcoin as another payment option alongside more traditional and established virtual currencies which they have little reason to abandon"<sup>57</sup> and (2) has "low confidence, based on current user and vendor acceptance, that malicious actors will exploit Bitcoin to launder money."<sup>58</sup> Although the report mentions several possible illegal uses for Bitcoin, including laundering money and trading illicit goods, the report never categorizes Bitcoin as inherently illegal. Although the FBI does not explain this lapse in the report, the most likely reason is that it may be used for other legitimate purposes. Just as a hundred dollar bill may buy a family's groceries or an addict's drugs, so too could a bitcoin buy both legal and illegal goods.

Although some may use Bitcoin for illegal purposes, others see it as a viable alternative for private individuals to trade value. In essence, Bitcoin proponents see the virtual currency as either (1) an alternative currency or (2) a commodity.<sup>59</sup> In the first view, the bitcoins are functionally equivalent to USD, EUR, or any other currency system.<sup>60</sup> Alternatively, bitcoins act as commodities, similar to purchased goods.<sup>61</sup> Under either theory, the use of bitcoins should be lawful.<sup>62</sup>

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54. See *supra* note 17 and accompanying text.

55. Josh Levs, *Group Claiming to Have Romney Tax Records Threatens to Leak Them*, CNN.COM (Sept. 6, 2012, 4:45 PM), <http://www.cnn.com/2012/09/06/politics/romney-tax-threat/index.html>; see also Jay Hathaway, *Blackmailers Make \$50 on Romney's Tax Returns*, DAILY DOT (Sept. 28, 2012), <http://www.dailydot.com/news/blackmailers-50-dollars-bitcoin-romney-taxes> (stating the ransom was not paid and the blackmailers only made about \$50).

56. FBI DIRECTORATE OF INTELLIGENCE, CYBER INTELLIGENCE SECTION & CRIMINAL INTELLIGENCE SECTION, *BITCOIN VIRTUAL CURRENCY: UNIQUE FEATURES PRESENT DISTINCT CHALLENGES FOR DETERRING ILLICIT ACTIVITY* (2012) [hereinafter *FBI REPORT*], available at [http://www.wired.com/images\\_blogs/threatlevel/2012/05/Bitcoin-FBI.pdf](http://www.wired.com/images_blogs/threatlevel/2012/05/Bitcoin-FBI.pdf).

57. *Id.* at 2 (footnote omitted).

58. *Id.*

59. See, e.g., evoorhees, Comment to *Let's End One Debate: Commodity vs Money*, BITCOIN F. (Oct. 7, 2011, 1:13 AM), <https://bitcointalk.org/index.php?topic=47111.msg560958#msg560958>; NewLibertyStandard, Comment to *Definition of a Commodity & Are Bitcoins a Commodity?*, BITCOIN F. (Aug. 14, 2010, 8:40 PM), <https://bitcointalk.org/index.php?topic=815.msg9258#msg9258>.

60. See Richard Satran, *How Did Bitcoin Become a Real Currency?*, U.S. NEWS & WORLD REP. (May 15, 2013), <http://money.usnews.com/money/personal-finance/articles/2013/05/15/how-did-bitcoin-become-a-real-currency>.

61. See Steve Forbes, *Bitcoin: Whatever It Is, It's Not Money!*, FORBES (Apr. 16, 2013, 10:50 AM), <http://www.forbes.com/sites/steveforbes/2013/04/16/bitcoin-whatever-it-is-its-not-money>.

62. Bitcoin users probably will also need to lawfully disclose any earnings for tax purposes. The IRS has not issued guidance specifically on this issue, although some believe

Bitcoin also gained some governmental acceptance at the state level. In July 2012, New Hampshire State Representative Mark Warden began accepting donations to his campaign through Bitcoin.<sup>63</sup> Shortly thereafter, Vermont State Senate candidate Jeremy Hanson verified Bitcoin's use for donations to be acceptable with two Vermont offices before also accepting contributions through Bitcoin.<sup>64</sup> Thus, it appears some politicians are willing to accept the system, at least when it comes to receiving contributions, and some state governments allow Bitcoin's use as well.

Finally, on March 18, 2013, the Financial Crimes Enforcement Network ("FinCEN") issued interpretive guidance for applying FinCEN's regulations to virtual currencies.<sup>65</sup> FinCEN primarily administers compliance with the Bank Secrecy Act (BSA), discussed in detail in Part IV of this Note.<sup>66</sup> Though not identifying Bitcoin by name, FinCEN clearly meant to include Bitcoin under its "De-Centralized Virtual Currencies" section of the guidance.<sup>67</sup> Some have viewed this as validating Bitcoin's legitimacy in the United States,<sup>68</sup> but others disagree.<sup>69</sup> Patrick Murck of the Bitcoin Foundation noted that FinCEN does not have authority to promulgate new rules without first going through the required notice and comment proceeding of the Administrative Procedures Act.<sup>70</sup> Realistically, although FinCEN's acknowledgment of Bitcoin is promising, the guidance does little to clarify Bitcoin's legal status beyond the BSA.

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it will. See Robert W. Wood, *IRS Takes a Bite Out of Bitcoin*, FORBES (May 2, 2013, 3:40 AM), <http://www.forbes.com/sites/robertwood/2013/05/02/irs-takes-a-bite-out-of-bitcoin>. However, taxation of Bitcoin or other virtual currencies is beyond the scope of this Note.

63. BitPay, *Accepting Bitcoin for Political Campaign Donations*, HOW TO ACCEPT BITCOIN (Sept. 1, 2012, 5:03 PM), <http://www.howtoacceptbitcoin.com/2012/09/accepting-bitcoin-for-political.html>.

64. Jahvt, *Vermont State Senate Candidate Accepts Bitcoin Contributions*, VT. ELECTION WORKING GROUP (Sept. 24, 2012), <http://vermontelection.org/2012/09/24/bitcoin> (candidate verified Bitcoin's appropriateness as campaign contribution with both the Vermont Secretary of State's office and the Vermont Attorney General's office, finding "that Bitcoin-denominated contributions can be legally accepted and documented as 'in-kind' donations, so long as the donations [meet campaign contribution requirements]").

65. GUIDANCE, *supra* note 8.

66. See *infra* Part IV.A.1.

67. GUIDANCE, *supra* note 8, at 5 ("[A] de-centralized convertible virtual currency [is one] (1) that has no central repository and no single administrator, and (2) that persons may obtain by their own computing or manufacturing effort.").

68. E.g., Michael Carney, *Bitcoin Is Legal, but Mainstream Adoption Will Mandate Playing by the Rules*, PANDODAILY (May 17, 2013), <http://pandodaily.com/2013/05/17/bitcoin-is-legal-but-mainstream-adoption-will-mandate-playing-by-the-rules>.

69. E.g., WiW, Comment to *Bitcoins Are Not "Legalized" in the US—Understanding FinCEN's Announcement*, BITCOIN F. (Mar. 19, 2013, 2:51 PM), <https://bitcointalk.org/index.php?topic=154905.msg1642139#msg1642139>.

70. Patrick Murck, *Today, We Are All Money Transmitters . . . (No, Really!)*, BITCOIN FOUND. BLOG (Mar. 19, 2013), <https://bitcoinfoundation.org/blog/?p=152>.

*C. Bitcoin's Image in the International Community*

The international community appears largely in favor of allowing Bitcoin's legitimate use. A spokesperson for the Bank of Finland recently stated that people can use whatever currency they wish and that Bitcoin is legal to use in Finland.<sup>71</sup> A 2012 report by the European Central Bank examined Bitcoin as a virtual currency.<sup>72</sup> The report concluded that, under the European Union legal framework, Bitcoin most likely does not fall under the Electronic Money Directive,<sup>73</sup> stating, "Bitcoin clearly falls outside the scope of the Payment Services Directive."<sup>74</sup> The report additionally noted that, although such virtual currency schemes did not pose risk to the price stability of traditional currencies and do not fall within current regulation schemes, they did fall within the central bank's responsibility.<sup>75</sup> This means, at least for now, that Bitcoin shares characteristics with established payment systems in the European Union but is currently not under regulation schemes.

The German Federal Financial Supervisory Authority, BaFin, determined that Bitcoin is not "E-Geld"—roughly e-money or digital money—even though bitcoins serve the same economic function as E-Geld.<sup>76</sup> BaFin also found that currencies like Bitcoin hold monetary value as units of account and therefore fall under the definition of a financial instrument of payment.<sup>77</sup> This implies that Bitcoin service providers will fall within the definition of a financial services business and would require a license from BaFin to legally operate in Germany.<sup>78</sup> Thus, Bitcoin itself is

71. TehMatoking, *Ajankohtainen Kakkonen: Bitcoin [English Subtitles]*, YOUTUBE (Sept. 12, 2012), <http://www.youtube.com/watch?v=7vYH1JH73pw> (spokesperson for Bank of Finland replies to a question on a news report for Finnish TV about whether Bitcoin was illegal in Finland, roughly stating that people are free to invest in and use whatever forms of money that they prefer, at 3:30–4:20); see also *BitPay Exceeds 1,000 Merchants Accepting Bitcoin*, BITPAY (Sept. 11, 2012, 8:52 AM), <http://blog.bitpay.com/2012/09/bitpay-exceeds-1000-merchants-accepting.html>.

72. EUROPEAN CENT. BANK, VIRTUAL CURRENCY SCHEMES (2012) [hereinafter EU REPORT], <http://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf>. This means that Bitcoin is not regulated by a key European Union regulation initiative that "creat[ed] single, cross-border deposit accounts and harmoniz[ed] payment obligations and laws for credit transfers, direct debits, and payment cards across borders and payment instruments." Amelia H. Boss, *Convergence in Electronic Banking: Technological Convergence, Systems Convergence, Legal Convergence*, 2 DREXEL L. REV. 63, 64 (2009).

73. Council Directive 2009/110, 2009 O.J. (L 267) 7 (EC).

74. EU REPORT, *supra* note 72, at 43.

75. *Id.* at 47.

76. *Merkblatt—Hinweise zu dem Gesetz über die Beaufsichtigung von Zahlungsdiensten (Zahlungsdiensteaufsichtsgesetz—ZAG)* [Data Sheet—Notes to the Act on the Supervision of Payment Services (Payment Services Oversight Act—ZAG)], BUNDESANSTALT FÜR FINANZDIENSTLEISTUNGS-AUFSICHT (Dec. 22, 2011) (Ger.), [http://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Merkblatt/mb\\_111222\\_zag.html](http://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Merkblatt/mb_111222_zag.html) [hereinafter BAFIN]. The definition of E-Geld in section (4)(b) roughly states that bitcoins fall outside the definition of e-money, even though they are functionally the same as e-money, and are more similar to units of value like barter or private payment systems.

77. *See id.*

78. Akka, Comment to *An English Analysis on BAFIN?*, BITCOIN F. (Oct. 20, 2012,

legal under German law; however, businesses that would transact and hold customer funds from Bitcoin would need to have a license and would be regulated as such an entity.

A 2012 Australian Transaction Reports and Analysis Centre (AUSTRAC) report examined digital currencies, including Bitcoin, for use in criminal activities<sup>79</sup> and specifically looked at their use in money laundering.<sup>80</sup> The report concluded that digital currencies generally fall outside AML legislation globally and that digital currency exchanges could provide criminals with the ability to serially convert their digital currencies to other digital currencies before reintroduction as a fiat currency.<sup>81</sup> However, the report notes that use of digital currencies for illegal activities is not without drawbacks, citing the limited size of the digital currency markets and the limited rate of acceptance for payment.<sup>82</sup> It concluded, overall, that digital currencies “may currently be limited to niche crimes in the cyber environment and individual or smaller scale illicit activity.”<sup>83</sup> This tone resonates with the seemingly apathetic opinion of the FBI report on Bitcoin.<sup>84</sup>

#### D. Widespread Use

Despite the possibility of using Bitcoin for illegal activity, only a few U.S. cases have dealt with Bitcoin’s use, and none of those cases has specifically dealt with the question of Bitcoin’s legality. The first Bitcoin case in the United States, between TradeHill, a Bitcoin exchange, and Dwolla, a payment processor, involved multiple causes of action.<sup>85</sup> However, the court vacated the lawsuit, compelling the parties to arbitrate.<sup>86</sup>

In a later case, users of a Bitcoin exchange filed suit against Bitcoinica, a Bitcoin exchange.<sup>87</sup> After a class action suit failed to attract sufficient support,<sup>88</sup>

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12:48 PM), <https://bitcointalk.org/index.php?topic=119425.msg1285574#msg1285574>.

79. AUSTRALIAN TRANSACTION REPORTS & ANALYSIS CTR., *TYPLOGIES AND CASE STUDIES REPORT 2012*, at 16–19 (2012) [hereinafter AUSTRAC REPORT], [http://www.austrac.gov.au/files/typ\\_rprt12\\_full.pdf](http://www.austrac.gov.au/files/typ_rprt12_full.pdf).

80. *Id.* at 19.

81. *Id.*

82. *Id.* at 17.

83. *Id.*

84. *See supra* text accompanying notes 56–58.

85. Complaint for Damages Resulting from: 1) Violation of 18 U.S.C. § 1964(c); 2) False Advertising; 3) Breach of Contract; 4) Intentional Misrepresentation; 5) Negligent Misrepresentation; 6) Concealment; 7) Restitution After Rescission; 8) Conversion; & 9) Defamation, *TradeHill, Inc. v. Dwolla, Inc.*, No. CV 12 1082 JSC (C.D. Cal. Mar. 5, 2012), 2012 WL 1601094.

86. Order Granting Defendant’s Motion to Compel Arbitration; Denying as Moot Defendants’ Alternative Motion to Dismiss; Vacating Hearing, *TradeHill, Inc. v. Dwolla, Inc.*, No. C-12-1082 MMC (N.D. Cal. May 9, 2012), 2012 WL 1622668.

87. Complaint for: (1) Breach of Contract; (2) Open Book Account; (3) Account Stated; (4) Negligence; & (5) Conversion, *Cartmell v. Bitcoinica LP*, No. CGC-12-522983 (Cal. Super. Ct. Aug. 6, 2012) [hereinafter Bitcoinica Complaint].

88. *See Class Action Litigation vs. Bitcoinica Consultancy LTD & Intersango LTD*, BITCOIN F. (July 13, 2012, 3:11 PM), <https://bitcointalk.org/index.php?topic=93109.0>; all (former Bitcoinica users discussing legal action with no eventual consensus).

four users filed suit individually.<sup>89</sup> The users alleged multiple losses of user funds due to hacks against the website.<sup>90</sup> The court denied the defendant's motion to dismiss the trial<sup>91</sup> and continued accepting motions.

Finally, the SEC brought an action against Trendon Shavers, owner of the former Bitcoin Savings & Trust,<sup>92</sup> for violations of the Securities Act of 1933 and the Exchange Act of 1934.<sup>93</sup> Magistrate Judge Mazzant of the U.S. District Court of the Eastern District of Texas stated, in response to Shaver's challenge of the court's subject matter jurisdiction over the case,<sup>94</sup> "[i]t is clear that Bitcoin can be used as money."<sup>95</sup> The court further determined that "the [Bitcoin Savings & Trust] investments meet the definition of investment contract, and as such, are securities" and found that the court had subject matter jurisdiction to preside over the case.<sup>96</sup>

Besides these cases, a few other notable events made headlines, including the unexpected shutdowns of Bitfloor<sup>97</sup> and TradeHill,<sup>98</sup> major Bitcoin exchanges, and an online digital wallet provider, MyBitcoin.<sup>99</sup> However, the owners of these services initiated the shutdowns, not the government.<sup>100</sup> The low number of lawsuits may be due in part to an aversion to governmental authority on the part of Bitcoin users,<sup>101</sup> but the fact remains that no court has specifically examined Bitcoin's legality.

Another indicator of whether Bitcoin is considered legal is its adoption by businesses and organizations and the lack of government intervention against these

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89. Bitcoinica Complaint, *supra* note 87, at 1.

90. Adrienne Jeffries, *Bitcoin Woes: Users File Lawsuit over \$460k in Missing Funds*, VERGE (Aug. 10, 2012, 4:20 PM), <http://www.theverge.com/2012/8/10/3233711/second-bitcoin-lawsuit-is-filed-in-california>.

91. *Cartmell v. Bitcoinica*, No. CGC-12-522983 (Cal. Super. Ct. Jan. 28, 2013) (order denying motion to dismiss or stay action).

92. See Todd Mokos, *SEC Files Charges Against Bitcoin Ponzi Mastermind Trendon Shavers*, BITCOIN MAG. (July 24, 2013), <http://bitcoinmagazine.com/5889/sec-files-charges-against-bitcoin-ponzi-mastermind-trendon-shavers/>. Some believe that the Bitcoin Savings & Trust was a Ponzi scheme. *Id.*; see also Adrienne Jeffries, *The Bernie Madoffs of Bitcoin? As Market Heats Back Up, Virtual Hedge Funds Claim Fantastical Profits*, VERGE (Aug. 15, 2012, 2:27 PM), <http://www.theverge.com/2012/8/15/3243200/bitcoin-ponzi-schemes-savings-and-trust>.

93. Complaint, SEC v. Shavers, No. 4:13CV-00416 (E.D. Tex. July 7, 2013).

94. SEC v. Shavers, No. 4:13-CV-416, at 1 (E.D. Tex. Aug. 6, 2013) (opinion regarding the court's subject matter jurisdiction).

95. *Id.* at 3.

96. *Id.* at 4.

97. Cyrus Farivar, *Bitfloor, Number Four Bitcoin-Based Exchange, Shuts Down for Good*, ARS TECHNICA (Apr. 18, 2013, 10:36 AM), <http://arstechnica.com/business/2013/04/bitfloor-number-four-bitcoin-based-exchange-shuts-down-for-good>.

98. Timothy B. Lee, *Major Bitcoin Exchange Shuts Down, Blaming Regulation and Loss of Funds*, ARS TECHNICA (Feb. 15, 2012, 10:15 AM), <http://arstechnica.com/tech-policy/2012/02/major-bitcoin-exchange-shuts-down-blaming-regulation-and-loss-of-funds>.

99. Adrienne Jeffries, *Search for Owners of MyBitcoin Loses Steam*, BETABEAT (Aug. 19, 2011, 10:15 AM), <http://betabeat.com/2011/08/search-for-owners-of-mybitcoin-loses-steam>.

100. See Farivar, *supra* note 97; Jeffries, *supra* note 99; Lee, *supra* note 98.

101. Jeffries, *supra* note 90.

businesses and organizations. Many individuals and online businesses have voiced support for—or have begun to accept payments through—Bitcoin,<sup>102</sup> including security-consulting firms, Internet-hosting companies, food services, and nonprofit companies.<sup>103</sup> Some businesses also facilitate the conversion of bitcoins to fiat currencies.<sup>104</sup> Again, none of these organizations have been shut down due to use of Bitcoin itself.<sup>105</sup> As the U.S. government previously stopped currencies<sup>106</sup> and virtual currencies<sup>107</sup> that the government found to violate U.S. currency laws, and stopped companies that operate under state laws in conflict with federal law,<sup>108</sup> the lack of any such action by the U.S. government indicates that it either tolerates Bitcoin as an unregulated virtual currency or believes that current laws adequately regulate Bitcoin.

However, some organizations either have stopped accepting Bitcoin donations or have refused to accept them outright. The Electronic Frontier Foundation, a notable advocate for digital privacy rights, initially accepted Bitcoin donations, then stopped due to legal uncertainties in 2011,<sup>109</sup> and then resumed accepting donations in 2013 after the FinCEN guidance.<sup>110</sup> Additionally, Wikimedia, the nonprofit organization that runs Wikipedia, rejected the use of Bitcoin for donations, stating that “[Wikimedia] do[es] not accept ‘artificial’ currencies—that is, those not backed by the full faith and credit of an issuing government.”<sup>111</sup>

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102. See, e.g., Andy Skelton, *Pay Another Way: Bitcoin*, JUST ANOTHER WORDPRESS WEBLOG (Nov. 15, 2012, 10:21 PM), <http://en.blog.wordpress.com/2012/11/15/pay-another-way-bitcoin> (announcing official WordPress acceptance of Bitcoin transactions).

103. See *Trade*, BITCOIN WIKI, <https://en.bitcoin.it/wiki/Trade> (last modified Oct. 22, 2013) (listing services and organizations that accept Bitcoin payments).

104. See, e.g., BITPAY, <https://bitpay.com>; PAYSIOUS, <http://paysius.com>.

105. Most shutdowns of legitimate businesses seem to be due to lack of or loss of funds. See, e.g., Lee, *supra* note 98. Many of the illegal shutdowns are due to other violations. See *supra* notes 85–101 and accompanying text.

106. Grinberg, *supra* note 48, at 191–94 (discussing the Liberty Dollar currency).

107. *Id.* at 204–06 (discussing the e-gold currency).

108. Cf. Meredith Bennett-Smith, *DEA Raids Legal Medical Marijuana Dispensaries in Washington, ‘Humiliating’ Shop Owners*, HUFFINGTON POST (July 25, 2013, 2:55 PM), [http://www.huffingtonpost.com/2013/07/25/dea-raid-marijuana-dispensaries-washington-state\\_n\\_3653071.html](http://www.huffingtonpost.com/2013/07/25/dea-raid-marijuana-dispensaries-washington-state_n_3653071.html). The federal government has made no statement to date explicitly rejecting Vermont’s position on accepting Bitcoin for campaign donations.

109. Cindy Cohn, *EFF and Bitcoin*, ELECTRONIC FRONTIER FOUND. (June 20, 2011), <https://www.eff.org/deeplinks/2011/06/eff-and-bitcoin>.

110. Cindy Cohn, Peter Eckersley, Rainey Reitman & Seth Schoen, *EFF Will Accept Bitcoins to Support Digital Liberty*, ELECTRONIC FRONTIER FOUND. (May 17, 2013), <https://www.eff.org/deeplinks/2013/05/eff-will-accept-bitcoins-support-digital-liberty>. However, the EFF does not accept bitcoins directly, instead using BitPay to convert the bitcoins. *Id.*

111. Maggie Dennis, *Answers Archive/November 2011*, WIKIMEDIA FOUND. (Nov. 3, 2011, 8:33 PM), [https://wikimediafoundation.org/wiki/Answers\\_archive/November\\_2011#Finance:\\_Why\\_does\\_the\\_Wikimedia\\_Foundation\\_not\\_currently\\_accept\\_Bitcoin.3F](https://wikimediafoundation.org/wiki/Answers_archive/November_2011#Finance:_Why_does_the_Wikimedia_Foundation_not_currently_accept_Bitcoin.3F).

Interestingly, BitPay, a Bitcoin payment processor that converts bitcoins to fiat currencies, announced that it would allow Bitcoin users to donate their bitcoins to Wikipedia by processing the transactions to USD and then donating the result to Wikipedia at no charge. *Donate to Wikipedia with Bitcoin*, BITPAY (Nov. 29, 2012, 11:13 AM), <http://blog.bitpay.com/2012/11/donate-to-wikipedia-with-bitcoin.html>.

Overall, this displays some hesitation to accept Bitcoin by some; however, it hardly shows rejection of Bitcoin at large.

#### *E. Bitcoin Is Legal*

The domestic and international outlooks on the legality of virtual currencies are somewhat complimentary, and a more comprehensive picture emerges when viewing the two outlooks simultaneously. Both domestic and international parties share the view that Bitcoin is not inherently illegal; however, international views tend to specify that Bitcoin is a legal currency. As Bitcoin's founder computed the first block in 2009,<sup>112</sup> and Bitcoin only achieved widespread attention in 2011,<sup>113</sup> it is unsurprising that so few cases exist concerning Bitcoin domestically and internationally. However, because of acceptance in the United States and abroad by many businesses and some governmental entities, and because no attempts have been made thus far by the government to intervene in an area where it has frequently intervened in the past, Bitcoin likely will be legal to own and use in the United States.<sup>114</sup>

### IV. BITCOIN AND U.S. ANTI-MONEY LAUNDERING REGULATORY SCHEMES

#### *A. Federal Law*

Although Bitcoin is most likely a legal virtual currency, federal AML regulations may still apply when Bitcoin usage falls within regulation boundaries. Two categories effectively separate federal AML regulations: (1) prevention through regulatory measures and (2) punishment through criminal sanctions.<sup>115</sup> Prevention through regulation attempts to prevent dirty money from entering the U.S. financial system in the first place, and the Bank Secrecy Act and its

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112. See *Genesis Block*, BITCOIN WIKI, [https://en.bitcoin.it/wiki/Genesis\\_block](https://en.bitcoin.it/wiki/Genesis_block) (last modified June 1, 2013) (the first block in the Bitcoin block chain).

113. Timothy B. Lee, *Bitcoin Implodes, Falls More than 90 Percent from June Peak*, ARS TECHNICA (Oct. 18, 2011, 12:45 PM), <http://arstechnica.com/tech-policy/2011/10/bitcoin-implodes-down-more-than-90-percent-from-june-peak>.

114. Another topic that warrants examination, which is beyond the scope of this Note, is whether Bitcoin is technically a legal currency or a legal commodity. A currency is “[a]n item (such as a coin, government note, or banknote) that circulates as a medium of exchange.” BLACK’S LAW DICTIONARY, *supra* note 15, at 440. A commodity is “[an] article of trade or commerce . . . [that is] only tangible goods, such as products or merchandise, as distinguished from services . . . [or] [a]n economic good, esp. a raw material or an agricultural product.” *Id.* at 310. Bitcoin seems to fall under both of these definitions in different ways (e.g., it does circulate as a medium of exchange; however, it also might be argued as a product “mined” from computational power). This determination may result in differing conclusions regarding under which regulatory schemes Bitcoin may fall.

115. See Shawn Turner, Note, *U.S. Anti-Money Laundering Regulations: An Economic Approach to Cyberlaundering*, 54 CASE W. RES. L. REV. 1389, 1402–06 (2004); see also Grinberg, *supra* note 48, at 204–06 (discussing regulation and sanction means in relation to virtual currencies).

subsequent amendments represents the central pillar of this regulatory scheme.<sup>116</sup> Criminal sanctions, by contrast, attempt to disincentivize possible launderers through fines, imprisonment, or both, and to punish those who knowingly transact with money launderers.<sup>117</sup> The Money Laundering Control Act<sup>118</sup> is the primary vehicle for effecting criminal sanctions for money laundering, and some secondary vehicles include the prohibition of unlicensed money transmitting businesses provisions of 18 U.S.C. § 1960 and the bulk cash smuggling provisions of 31 U.S.C. § 5332.<sup>119</sup> Theoretically, the regulatory and criminal arms of AML policy act to detect and punish money laundering; however, the reach of these provisions to virtual currencies may be somewhat limited.

### 1. Regulatory Provisions and the Bank Secrecy Act

The United States' first legislative attempt to fight money laundering was the Bank Secrecy Act (BSA),<sup>120</sup> which established reporting requirements for institutions that might be used as money laundering vehicles.<sup>121</sup> The BSA effectively made certain institutions accountable for keeping records of transactions in excess of a \$10,000 threshold when that institution might benefit from transaction and processing fees due to laundering activities.<sup>122</sup> These requirements gave investigators a paper trail to prosecute launderers and to find possible tax evaders.<sup>123</sup> However, launderers quickly began circumventing the BSA by breaking large transactions into smaller transactions of less than \$10,000,<sup>124</sup> using financial service providers outside the scope of the BSA,<sup>125</sup> and using wire transfer systems to circumvent regulators until new regulations passed in 1995.<sup>126</sup>

After 1995, financial institutions required to record and report under the BSA included many nonbanking entities classified as money service businesses (MSBs).<sup>127</sup> After a refinement in 2011, this group includes:<sup>128</sup> (1) dealers in foreign

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116. See *AML History*, *supra* note 3.

117. Turner, *supra* note 115, at 1405–06.

118. Money Laundering Control Act of 1986, Pub. L. No. 99-570, 100 Stat. 3207-18 to -21 (1986) (codified as amended at 18 U.S.C. §§ 1956–57 (2006)).

119. See CHARLES DOYLE, CONG. RESEARCH SERV., RL33315, MONEY LAUNDERING: AN OVERVIEW OF 18 U.S.C. 1956 AND RELATED FEDERAL CRIMINAL LAW 36–39 (2012), available at <http://www.fas.org/sgp/crs/misc/RL33315.pdf>.

120. Turner, *supra* note 115, at 1402.

121. *Id.*

122. *Id.*

123. See *id.* at 1402–03.

124. *Id.* at 1403.

125. *Id.*

126. See Amendment to the Bank Secrecy Act Regulations Relating to Recordkeeping for Funds Transfers and Transmittals of Funds by Financial Institutions, 60 Fed. Reg. 220 (Jan. 3, 1995) (to be codified at 31 C.F.R. pt. 103) (establishing reporting requirements for transfers of U.S. \$3000 or more); see also Turner, *supra* note 115, at 1403 (describing amendment proposal and effects).

127. Turner, *supra* note 115, at 1404.

128. See Bank Secrecy Act Regulations—Definitions and Other Regulations Relating to



exchange, (2) check cashers, (3) issuers of traveler's checks or money orders, (4) providers of prepaid access, (5) money transmitters, (6) the U.S. Postal Service, and (7) sellers of prepaid access.<sup>129</sup> Finally, the 2001 USA PATRIOT Act ("Patriot Act")<sup>130</sup> extended the already broad definition of money transmitter.<sup>131</sup> This addition expanded the scope of the BSA from traditional financial institutions to nearly any person or business who facilitates money transfer.<sup>132</sup> The Patriot Act also extended the definition of financial institutions to include foreign banks and gave federal courts jurisdiction over some foreign-based money launderers.<sup>133</sup>

On March 18, 2013, FinCEN issued interpretive guidance for applying the BSA to virtual currencies.<sup>134</sup> This guidance came as a surprise to many, a welcome acknowledgement to some, and a harbinger of regulatory crackdown to others.<sup>135</sup> Overall, the guidance managed to clear up a few circulating questions, while also introducing a few new issues.

Interpreting from the composite BSA and subsequent amendments, the guidance begins by noting that FinCEN will not treat virtual currencies as equivalent to "real" currencies—that is, fiat currencies—even though the two share features.<sup>136</sup> FinCEN defined "real" currency as circulating legal tender of a country that is typically "used and accepted as a medium of exchange in the country of issuance";<sup>137</sup> however, no country accepts virtual currencies as a legal tender.<sup>138</sup> Further, the guidance noted that FinCEN would treat some users of virtual currencies as money transmitter MSBs, specifically defining roles of users, administrators, and exchangers,<sup>139</sup> but FinCEN will not consider virtual currency users as providers or sellers of prepaid access or dealers in foreign exchange.<sup>140</sup> The guidance does not discuss whether FinCEN would categorize Bitcoin users under the check casher, issuer of traveler's checks or money orders, or U.S. Postal Service MSB categories; however, it seems reasonable to assume that FinCEN

Prepaid Access, 76 Fed. Reg. 45404 (July 29, 2011) (codified as amended at 31 C.F.R. pts. 1010 and 1022).

129. 31 C.F.R. § 1010.100(ff) (2012) (defining "money services business").

130. Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, Pub. L. No. 107-56, 115 Stat. 272.

131. *See id.* § 359(a), 115 Stat. at 328 (including as money transmitters "any person who engages as a business in an informal money transfer system or any network of people who engage as a business in facilitating the transfer of money").

132. Aside from simply including informal money transfer systems, the BSA also fails to define the phrase "as a business" and thus leaves a great deal of uncertainty. *See id.*

133. *Id.* § 377, 115 Stat. at 342 (extending 18 U.S.C. § 1029 to conduct committed abroad, so long as the tools or proceeds of the crimes pass through or are in the United States).

134. GUIDANCE, *supra* note 8, at 1.

135. *See* Jennifer Shasky Calvery, Dir., Fin. Crimes Enforcement Network, Remarks at United States Institute of Peace, *The Virtual Economy: Potential, Perplexities and Promises* 1 (June 13, 2013), available at [http://www.fincen.gov/news\\_room/speech/pdf/20130613.pdf](http://www.fincen.gov/news_room/speech/pdf/20130613.pdf).

136. GUIDANCE, *supra* note 8, at 1.

137. *Id.* at 1 (citing 31 C.F.R. § 1010.100(m) (2012)).

138. *Id.*

139. *See id.* at 1–3.

140. *Id.* at 1, 5–6.

purposely omitted these categories due to their irrelevance. Thus, the guidance effectively pertains only to the money transmitter MSB category.

At the simplest level, the guidance defined a virtual currency user as “a person that obtains virtual currency to purchase goods or services.”<sup>141</sup> Merely using virtual currency to purchase real or virtual goods or services will not transform a user into an MSB.<sup>142</sup> FinCEN arrived at this conclusion by reasoning that money transmitters must provide money transmission services, which means they must accept value from one person and transmit value to another location or person.<sup>143</sup> Plainly stated, a money transmitter is an intermediary between the buyer and seller. Therefore, a mere user does not engage in money transmission services.

However, once the user provides money transmission services, that user becomes a virtual currency exchanger, an administrator, or both.<sup>144</sup> The guidance defines an exchanger as “a person engaged *as a business* in the exchange of virtual currency for real currency, funds, or other virtual currency,” and an administrator as “a person engaged *as a business* in issuing (putting into circulation) a virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency.”<sup>145</sup> If an administrator or exchanger then “(1) accepts and transmits a convertible virtual currency or (2) buys or sells convertible virtual currency for any reason,” that administrator or exchanger becomes a money transmitter under FinCEN’s regulations and must comply with MSB requirements.<sup>146</sup> Although Bitcoin users, administrators, and exchangers fall under the “De-Centralized Virtual Currencies” section of the guidance,<sup>147</sup> the guidance muddies the waters when describing which entities fall under each of the three guidance-defined categories.

In keeping with the above guidance theme, users that merely use the virtual currency for real or virtual goods will not be subject to money transmitter regulation, even if that user created the virtual currency.<sup>148</sup> However, if the user sells virtual currency for “real currency or its equivalent,” then that user becomes a money transmitter.<sup>149</sup> Further, if the user acts as an intermediary, accepting virtual currency from one user and transmitting it to another user during “the acceptance and transfer of currency, funds, or other value that substitutes for currency,” then that user is both a money transmitter and an exchanger.<sup>150</sup> Thus, a miner who sells his or her bitcoins for a video game faces no regulation as an MSB, whereas a miner who sells a few bitcoins to a friend may be a money transmitter, and a Bitcoin exchange that transfers bitcoins and fiat currencies between users may be

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141. *Id.*

142. *Id.* at 2–3.

143. *Id.* at 3. Interestingly, FinCEN makes no distinction for money transmitters between real or virtual currencies. *Id.*

144. *See id.* at 2–3.

145. *Id.* at 2 (emphasis added).

146. *Id.* at 3.

147. *See supra* note 67 and accompanying text.

148. GUIDANCE, *supra* note 8, at 5.

149. *Id.*

150. *Id.*

both a money transmitter and an exchange. Although this all seems relatively straightforward, certain questions arise.

As both exchanger and administrator definitions require the person to be acting “as a business,”<sup>151</sup> but never define what acting as a business entails, the guidance introduces uncertainty into the determination process. Imagine if a miner trades three hundred bitcoins—worth a net value of approximately \$39,000—for a real good, such as a 2007 Porsche Cayman S.<sup>152</sup> Under current FinCEN guidance rules, this miner avoids MSB status. Conversely, when the same miner sells one bitcoin—assume a value of \$130/BTC—to a friend for \$5, the miner gains MSB status and faces regulation. However, when did the miner act as a business? Certainly, the \$39,000 vehicle transaction seems more businesslike than sending a bitcoin to a friend at below market price. Similarly, imagine a Bitcoin exchange that allows users, at no charge, to only trade between several different virtual currencies. Such an exchange would cost the operator money to maintain in electricity and bandwidth, a net loss if he or she does nothing to monetize the exchange. Further, as the exchange only allows trading virtual currencies, money laundering of fiat currencies seems like a remote prospect. Yet the exchange operator faces regulation as both an exchanger and a money transmitter if FinCEN considers the exchange to be a business.

Given the apparent injustice of such scenarios, it seems appropriate for FinCEN to clarify its new definitions. This by no means implies that certain entities should not face regulation from FinCEN to combat money laundering that might occur on exchanges; however, the current definitions may result in unnecessarily tedious disputes over the definition of a business while continuing to allow money laundering through the sale of real goods.

## 2. Criminal Sanctions

### a. Money Laundering Control Act

The Money Laundering Control Act of 1986 (MLCA)<sup>153</sup> made money laundering or knowingly assisting money laundering a federal crime.<sup>154</sup> The MLCA is broken down into two sections. The first section, codified at 18 U.S.C. § 1956, pertains to financial transactions involving the proceeds of certain other crimes,<sup>155</sup> either perpetrated or attempted,<sup>156</sup> known as “specified unlawf[ul] activit[ies]” (SUA).<sup>157</sup> The transaction must be accomplished (1) with the intent to promote SUA, (2) with the intent to evade taxation, (3) knowing the transaction is designed to conceal laundering, or (4) knowing the transaction is designed to avoid AML

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151. *Id.* at 2.

152. See Mike Flacy, *Texas Family Sells Porsche – For 300 Bitcoins?*, DIGITAL TRENDS (Apr. 3, 2013), <http://www.digitaltrends.com/cars/texas-family-sells-porsche-for-300-bitcoins>.

153. Money Laundering Control Act of 1986, Pub. L. No. 99-579, 100 Stat. 3207-18 to -21 (1986) (codified as amended at 18 U.S.C. §§ 1956–57 (2006)).

154. Turner, *supra* note 115, at 1405 (citing 18 U.S.C. § 1956 (2006)).

155. 18 U.S.C. § 1956(a)(1) (2006).

156. *Id.* (“Whoever . . . conducts or attempts to conduct”).

157. *Id.*; see also *id.* § 1956(c)(7) (defining “specified unlawful activity”).

reporting requirements.<sup>158</sup> Additionally, anyone who attempts to or successfully “transports, transmits, or transfers . . . a monetary instrument or funds” into or from the United States from outside the United States, while meeting certain intent requirements, will also be guilty of money laundering.<sup>159</sup>

The second MLCA section, codified at 18 U.S.C. § 1957, goes beyond § 1956 by criminalizing monetary transactions greater than \$10,000 derived from SUA.<sup>160</sup> A monetary transaction is a “deposit, withdrawal, transfer, or exchange, in or affecting interstate or foreign commerce, of funds or a monetary instrument . . . by, through, or to a *financial institution*.”<sup>161</sup> Although the defendant must know that the transaction involved criminally derived property,<sup>162</sup> no requirement exists that the defendant know of the tainting SUA,<sup>163</sup> thus, the defendant may not claim lack of knowledge of the SUA as a defense.<sup>164</sup> As long as the monetary transaction exceeded \$10,000, involved criminally derived property from SUA, and involved a financial institution, then the defendant may be fined, imprisoned for up to ten years, or both.<sup>165</sup>

Applying the MLCA to Bitcoin, it may be difficult to prove § 1956 violations due to the knowledge or intent requirements.<sup>166</sup> However, because § 1957 has no such requirements, it would be easier to hold individuals accountable for tainted Bitcoin transfers. The overriding concern with either of these sections is that some SUA must be proven as a predicate offense and a person must be found to charge. In simple peer-to-peer transactions, where funds might be scattered among many Bitcoin addresses to hide the dirty money’s source, tying any particular person to a pseudonymous account will prove extremely difficult. Even if a launderer uses a physical goods merchant that accepts Bitcoin payments to reintroduce cleansed money, and authorities can trace the transactions back to an original Bitcoin address, they would still need to tie that original Bitcoin address with a SUA. However, Bitcoin exchanges can be made resistant to such activity by requiring the exchange to identify both buyer and seller accounts, in line with AML requirements,<sup>167</sup> and then requiring the exchange to keep information about

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158. *Id.* § 1956(a)(1)(A)(i)–(B)(ii).

159. *Id.* § 1956(a)(2).

160. *Id.* § 1957(a).

161. *Id.* § 1957(f)(1) (emphasis added) (defining “monetary transaction”).

162. *Id.* § 1957(a).

163. *Id.* § 1957(c).

164. *See United States v. Flores*, 454 F.3d 149, 155 (3d Cir. 2006) (“[T]he defense’s argument—that the Government needed to prove that Flores knew of, or was willfully blind to, the fact that the funds originated in drug trafficking to obtain a money laundering conviction—fails. *See* 18 U.S.C. § 1957(c) . . .”).

165. 18 U.S.C. § 1957(b).

166. That is, proving that the alleged money launderer possessed intent to promote SUA or to evade taxation, or knowingly concealed laundering or avoided AML reporting requirements, may prove difficult when Bitcoin allows users to be virtually anonymous.

167. 31 C.F.R. § 1010.312 (2012) (“[A] financial institution shall verify and record the name and address . . . identity, account number, and the social security or taxpayer identification number . . .”). Mt. Gox, the world’s largest Bitcoin exchange, announced on May 30, 2013, that all users wishing to deposit or withdraw currencies other than Bitcoin would need to become verified. Press Release, Mt. Gox Co. Ltd. Team, Statement Regarding

transactions and participants for five years. With these safeguards in place, authorities could be able to verify at least two parties in the chain of laundering. Although this is not a perfect solution, as it may not capture every step that a launderer may take to clean the dirty money, it may be as complete as can be achieved given the pseudonymous nature of Bitcoin.

#### b. Unlicensed Money Businesses

In addition to the MLCA, another avenue of pursuing money launderers is through 18 U.S.C. § 1960, which prohibits knowingly operating any part of an unlicensed money transmitting business (MTB).<sup>168</sup> According to 31 U.S.C. § 5330, a MTB includes any person or persons operating as an informal money transfer system outside of the conventional financial institutions system.<sup>169</sup> An unlicensed MTB is broadly defined as a MTB that affects interstate or foreign commerce to any degree<sup>170</sup> and that falls within one of three categories. The first category occurs when any MTB operates without a money-transmitting license within a state that requires licensure.<sup>171</sup> There is no requirement of knowledge that the MTB must be licensed;<sup>172</sup> however, the defendant must have known that he or she was operating a MTB and that his or her MTB was unlicensed.<sup>173</sup> The second category occurs when a MTB fails to comply with MTB registration requirements through the U.S. Department of the Treasury.<sup>174</sup> Again, the defendant must know that he or she is operating a MTB,<sup>175</sup> but he or she does not need to know the registration requirements.<sup>176</sup> Finally, the third category applies to a properly licensed MTB used to knowingly transmit or transport money that is derived from criminal activity or that is intended to finance criminal activity.<sup>177</sup>

Although Bitcoin almost certainly falls under the MTB definition because it is an informal money transfer system outside conventional financial institutions, there

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Account Verifications (May 30, 2013), [https://mtgox.com/press\\_release\\_20130530.html](https://mtgox.com/press_release_20130530.html). Verification requires sending Mt. Gox multiple documents for authentication. Marion, *AML Account Statuses*, Mt. Gox (May 31, 2013, 5:35 PM), <https://support.mtgox.com/entries/21651045-AML-Account-Statuses>.

168. 18 U.S.C. § 1960(a) (2006).

169. 31 U.S.C. § 5330(d)(1)(A) (2006).

170. 18 U.S.C. § 1960(b)(1).

171. *Id.* § 1960(b)(1)(A).

172. *Id.*

173. *E.g.*, *United States v. Elfgeeh*, 515 F.3d 100, 133 (2d Cir. 2008) (“We infer from the language of subsection (a) itself and from the absence from subsection (b)(1)(A) of a ‘whether or not’ clause mentioning knowledge of the possession of a license, that in order to convict under the amended § 1960(a), the government is required to prove that the defendant knew the money-transmitting business was unlicensed.”); *United States v. Talebnejad*, 460 F.3d 563, 568 (4th Cir. 2006) (“The parties agree that the Government must allege and prove the defendant’s knowledge [(1) that he operated a money transmitting business, (2) that it affected interstate commerce, and (3) that it was unlicensed under state law].”), *cert. denied*, 549 U.S. 1234 (2007).

174. *See* 18 U.S.C. § 1960(b)(1)(B).

175. *United States v. Uddin*, 365 F. Supp. 2d 825, 828–30 (E.D. Mich. 2005).

176. *See id.*; *see also Talebnejad*, 460 F.3d at 568.

177. 18 U.S.C. § 1960(b)(1)(C).

are several issues that might arise when trying to apply § 1960 to Bitcoin users and transactions. Under the first category—operating in a state without the required license—the user or service would have to know that they were in fact a MTB, and the state in which the operation occurred would need to require MTB licensure. Many average users would not necessarily know that sending money to another person would categorize them as a business, so proving knowledge may be difficult. Further, although most states today have state money transmitter laws,<sup>178</sup> there are still some that do not.<sup>179</sup> Failing to meet either of these elements would exclude Bitcoin transactions under the first category. Under the second category—operating without complying with Treasury Department regulations—registration is mandatory on a federal level;<sup>180</sup> however, the user still must know that he or she is a MTB, which may be difficult as discussed for the first category. Finally, under the third category—knowingly transmitting or transporting dirty money—licensure

178. See ALA. CODE §§ 8-7-1 to -15 (LexisNexis 2002 & Supp. 2012); ALASKA STAT. §§ 06.55.101–107 (2012); ARIZ. REV. STAT. ANN. §§ 6-1201 to -1218 (2007); ARK. CODE ANN. §§ 23-55-101 to -1006 (2012); CAL. FIN. CODE §§ 2000–2153 (West 2013); COLO. REV. STAT. ANN. §§ 12-52-101 to -206 (West 2010 & Supp. 2012); CONN. GEN. STAT. ANN. §§ 36a-595 to -610 (West 2011); DEL. CODE ANN. tit. 5, §§ 2301–2318 (2001 & Supp. 2012); D.C. CODE §§ 26-1001 to -1027 (LexisNexis 2012); FLA. STAT. ANN. §§ 560.203–213 (West 2012); GA. CODE ANN. §§ 7-1-680 to -692 (2004 & Supp. 2013); HAW. REV. STAT. §§ 489D-1 to -34 (2008 & Supp. 2012); IDAHO CODE ANN. §§ 26-2901 to -2928 (2000 & Supp. 2013); 205 ILL. COMP. STAT. ANN. 657/1 to /105 (West 2007 & Supp. 2013); IND. CODE ANN. §§ 28-8-4-1 to -61 (West 2010 & Supp. 2012); IOWA CODE ANN. §§ 533C.101–.904 (West 2011 & Supp. 2013); KAN. STAT. ANN. §§ 9-508 to -513d (Supp. 2012); KY. REV. STAT. ANN. §§ 286.11-001 to -067 (LexisNexis 2012); LA. REV. STAT. ANN. §§ 6:1031–1053 (2005); ME. REV. STAT. ANN. tit. 32, §§ 6101–6146 (1999 & Supp. 2012); MD. CODE ANN., FIN. INST. §§ 12-401 to -431 (LexisNexis 2011 & Supp. 2012); MASS. ANN. LAWS ch. 169, §§ 1–16 (LexisNexis 2009 & Supp. 2013); MICH. COMP. LAWS ANN. §§ 487.1001–.1047 (West Supp. 2013); MINN. STAT. ANN. §§ 53B.01–.27 (West 2012 & Supp. 2013); MISS. CODE ANN. §§ 75-15-1 to -35 (Supp. 2011); MO. ANN. STAT. §§ 361.700–.729 (West 2000 & Supp. 2013); NEB. REV. STAT. ANN. §§ 8-1001 to -1019 (LexisNexis 2011); NEV. REV. STAT. ANN. §§ 671.010–.190 (LexisNexis 2009); N.H. REV. STAT. ANN. §§ 399-G:1 to :22 (Supp. 2012); N.J. STAT. ANN. §§ 17:15C-1 to -27 (West 2001); N.Y. BANKING LAW §§ 640 to 652-b (McKinney 2013); N.C. GEN. STAT. ANN. §§ 53-208.1 to .30 (West 2005 & Supp. 2012); N.D. CENT. CODE §§ 13-09-01 to -26 (2009 & Supp. 2013); OHIO REV. CODE ANN. §§ 1315.01–.19 (LexisNexis 2012); OKLA. STAT. ANN. tit. 6, §§ 1511–1515 (West Supp. 2013); OR. REV. STAT. §§ 717.200–.905 (2011); 7 PA. CONS. STAT. ANN. §§ 6101–6122 (West 1995 & Supp. 2013); R.I. GEN. LAWS §§ 19-14-1 to -14-33 (Supp. 2012); S.D. CODIFIED LAWS §§ 51A-17-1 to -47 (Supp. 2013); TENN. CODE ANN. §§ 45-7-201 to -229 (Supp. 2013); TEX. FIN. CODE ANN. §§ 151.301–.309 (West 2013); UTAH CODE ANN. §§ 7-1-501 to -508 (LexisNexis 1995 & Supp. 2013); VT. STAT. ANN. tit. 8, §§ 2500–2561 (2009 & Supp. 2012); VA. CODE ANN. §§ 6.2-1900 to -1921 (2010 & Supp. 2013); WASH. REV. CODE ANN. §§ 19.230.005–.905 (West 2013); W. VA. CODE ANN. §§ 32A-2-1 to -28 (LexisNexis 2011); WIS. STAT. ANN. §§ 217.01–.21 (West 2009); WYO. STAT. ANN. §§ 40-22-101 to -129 (2013).

179. Montana, South Carolina, and New Mexico do not have state money transmitter laws. A similar New Mexico statute applies only to checks and money orders, not money transmissions. See N.M. STAT. ANN. § 58-20-1 (West 2003).

180. 31 U.S.C. § 5330(a)(1) (2006).

is a nonissue, but the MTB must knowingly transmit or transport dirty money. This category again suffers from a knowledge requirement, and innocent transmitters, who have no knowledge of a transaction's tainted status, are likely to be excluded under this category.

The best chance for holding a prospective MTB in violation of 18 U.S.C. § 1960 occurs either when the individual knows that he or she functions as a MTB, and therefore would qualify under the second category (and also under the first category if the state requires money transmitters to register with the state). An alternative avenue exists when the individual clearly knows the transactions involve dirty money, thus qualifying under the third category. Setting category three aside, as additional evidence would be needed to support the underlying criminal offense, Bitcoin exchanges are in the best position to understand their role as a MTB. An exchange operates as an intermediary between buyer and seller by its very design, and even the most ignorant exchange could probably be held liable for willful blindness given the circumstances surrounding their activities.<sup>181</sup>

In fact, on May 14, 2013, Magistrate Judge Susan Gauvey signed a seizure warrant for the contents of an account used by Mt. Gox, the largest Bitcoin exchange in the world, pursuant to 18 U.S.C. § 1960 for Mt. Gox's failure to register as a money transmitter with either the federal government or any state government.<sup>182</sup> The supporting affidavit established probable cause to believe that Mt. Gox operated an account as an unlicensed money transmitter business and noted that Mt. Gox completed a form indicating that it did not act as a money transmitter.<sup>183</sup> However, even if prosecutors were unable to prove actual knowledge, they may be able to show that Mt. Gox was willfully blind of its position given the nature and size of the exchange.<sup>184</sup>

### 3. Federal Law Summary

Federal AML efforts may impose regulations or criminally punish some Bitcoin users. Under the BSA and FinCEN's recent guidance for virtual currencies, those who exchange bitcoins for fiat currency or act as intermediaries to virtual currency transactions may be subject to regulations. Punishment under the MLCA may be possible if the underlying SUA can be proven. Finally, punishment under 18 U.S.C. § 1960 will be most effective where knowledge of a licensure requirement can be shown or if the money is clearly dirty. In all of these categories, exchanges will be the most likely candidates for action.

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181. *Cf.* *United States v. Schnabel*, 939 F.2d 197, 203 (4th Cir. 1991) (“The willful blindness instruction allows the jury to impute the element of knowledge to the defendant if the evidence indicates that he purposely closed his eyes to avoid knowing what was taking place around him.”).

182. Application and Affidavit for Seizure Warrant, *In re* the Seizure of the Contents of One Dwolla Account, No. 1:13-mj-01162-SKG (D. Md. May 28, 2013).

183. Affidavit in Support of Seizure Warrant at 2–4, *In re* the Seizure of the Contents of One Dwolla Account, No. 1:13-mj-01162-SKG (D. Md. May 28, 2013).

184. *See Schnabel*, 939 F.2d at 203–04; *see also* text accompanying *supra* note 181.

*B. State Law*

## 1. Uniform Money Services Act

In addition to federal AML laws, many states have also passed laws that could regulate Bitcoin money laundering. In 2000, the National Conference of Commissioners on Uniform State Laws (NCCUSL) developed the Uniform Money Services Act (UMSA) in an attempt to create a cohesive set of state laws to effectively regulate MSBs.<sup>185</sup> Theoretically, the UMSA's adoption by the states would establish clear, consistent licensure requirements.<sup>186</sup>

The UMSA defines MSBs as nonbank entities that provide alternative payment or exchange mechanisms, distinct from traditional banks or financial institutions.<sup>187</sup> The UMSA also creates three categories of licensees: (1) money transmission services,<sup>188</sup> which may also perform check cashing and currency exchange; (2) check cashers,<sup>189</sup> which may also perform currency exchange; and (3) currency exchanges,<sup>190</sup> which may only perform currency exchange.<sup>191</sup> However, because money transmission services encapsulate both lower categories, money transmission services are subject to comparatively greater application and security requirements.<sup>192</sup>

To accommodate new Internet-based transaction schemes, the UMSA broadens the definition of money to "monetary value," which includes "a medium of exchange, whether or not redeemable in money."<sup>193</sup> Internet payment and stored-value schemes are then broken down into several categories including (1) stored

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185. *See* UNIF. MONEY SERVS. ACT pref. n.A (amended 2013), 7A Pt. III U.L.A. 163 (2006). Alaska, Arkansas, Iowa, Puerto Rico, Texas, U.S. Virgin Islands, Vermont, and Washington have adopted the UMSA. *Legislative Fact Sheet—Money Services Act*, UNIF. LAW COMMISSION, <http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Money%20Services%20Act>.

186. UNIF. MONEY SERVS. ACT pref. n.A.

187. *Id.* at pref. n.B(1).

188. *Id.* § 102(14).

189. *Id.* § 102(4).

190. *Id.* § 102(6) ("'Currency exchange' means receipt of revenues from the exchange of money of one government for money of another government.").

191. *See id.* at pref. n.C.

192. *Compare id.* §§ 202–03, with *id.* §§ 302, 402. "[C]heck cashers [under § 302] and currency exchangers [under § 402] are subject to different types of reporting and record-keeping requirements [than money transmitters under §§ 202–03] and similarly are exempt from bond and net worth requirements." *Id.* at pref. n.C. The UMSA drafters explained this difference in treatment to be reasonable because "check cashers and currency exchangers do not accept funds from consumers for obligations that might remain unpaid. Rather, both check cashers and currency exchangers immediately provide customers with funds. There is no risk that customers may lose their money (unlike the risk posed by purchasing a money order that might not be redeemed)." *Id.*

193. *Id.* § 102(11); *id.* at cmt. 10.



value,<sup>194</sup> (2) E-money and Internet payment mechanisms,<sup>195</sup> (3) Internet scrip,<sup>196</sup> (4) Internet funds transfer,<sup>197</sup> (5) gold or precious metals transfer and payment,<sup>198</sup> and (6) Internet bill payment services.<sup>199</sup> For the UMSA to apply, Bitcoin would first need to fall within the definition of a medium with monetary value.

Bitcoin will fall into the above UMSA definition, as it can be a medium of exchange for Bitcoin users, merchants, and Bitcoin exchanges. Additionally, Bitcoin likely falls into one or more Internet payment and stored-value scheme categories. Further, Bitcoin may be a stored value because all Bitcoin transactions and balances exist in the decentralized, public record. Bitcoin also serves as a token or notational system, as all bitcoins are essentially encoded data strings that serve as cash substitutes. Additionally, bitcoins may act like scrip because they are a form of alternative value exchanged over the Internet; however, it may be difficult to call bitcoins coupons or bonus points instead of a virtual currency in and of itself.<sup>200</sup> Finally, bitcoins most likely will not fall under the remaining terms because Bitcoin is not money accepted by any government, does not involve precious metals, and does not function as an automated bill payment intermediary. Thus, bitcoins have monetary value as (1) stored value, (2) a token e-money, or (3) a scrip.

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194. *See id.* § 102(21) (“‘Stored value’ means monetary value that is evidenced by an electronic record.”).

195. E-money refers to “money or a money substitute” stored on a computer device for transfer over information systems. *Id.* at pref. n.D(2). E-money is further broken down into two categories: (1) traditional payment mechanisms (e.g., ACH), where the Internet serves only as a communication channel; and (2) Internet payment mechanisms involving E-money. Internet-based E-money systems further break down into two categories: (1) token or notational systems, where electronic tokens (represented as numbers or symbols) are purchased from an issuer and serve as cash substitutes to merchants, which then redeem value from the issuer; and (2) account-based systems, where the consumer purchases E-money by withdrawing value from a bank or credit card account and the E-money issuer stores this value for a merchant to withdraw. *Id.*

196. Scrip refers to value exchanged over the Internet but not redeemable for money, analogous to coupons or bonus points which may be exchanged for goods or services but which have no cash value. *Id.* at pref. n.D(3).

197. These are “[n]ew payment services offered by banks and nonbanks [that] will transfer money over the Internet.” *Id.* at pref. n.D(4). Here, money refers to a medium of exchange authorized or adopted by the United States, a foreign government, or both. *Id.* § 102(12) (defining “money”).

198. *Id.* at pref. n.D(5).

199. *Id.* at pref. n.D(6).

200. A coupon is “[a]n interest or dividend certificate that is attached to another instrument, such as a bond, and that may be detached and separately presented for payment of a definite sum at a specified time.” BLACK’S LAW DICTIONARY, *supra* note 15, at 404. Bitcoins, however, are not attached to another instrument, as they may be traded on their own on an exchange or between two users. *See, e.g.,* LOCAL BITCOINS.COM, <https://localbitcoins.com>. Bitcoins also do not necessarily represent a definite sum due to constant fluctuation in value. *See Lee, supra* note 113. Bonus points are given by merchants to customers as patronage rewards, redeemable through the merchant for some other good or prepaid value card. *See, e.g.,* MYPPOINTS, <https://www.mypoints.com>. Conversely, bitcoins would instead be a reward offered on redemption of bonus points.

Next, the licensee hierarchy under which to classify Bitcoin must be determined. Categorizing peer-to-peer Bitcoin transactions under the most regulated category, money transmission services, is difficult because the definition of money transmission excludes intermediary entities that merely act as transaction clearing agents, provide delivery services, or act as data transmission channels.<sup>201</sup> In a simple peer-to-peer transfer, the Bitcoin protocol and the miners who complete blocks act as the intermediary entities largely excluded under the definition. Conversely, the money transmission does include “Internet payment services that hold customer’s funds or monetary value for their own account rather than serve simply as clearing agents.”<sup>202</sup> This most likely would include Bitcoin currency exchanges, which can hold value from both buyers and sellers for trades. Thus, Bitcoin exchanges might fall within the more rigorous requirements of the first category, but simple transactions between peers may not.

The second category, check cashing, also has strained relevance to Bitcoin. The comments to the UMSA note that check-cashing entities must collect a fee in consideration for their provided check cashing service.<sup>203</sup> Although the Bitcoin network has in place arbitrary minimum transaction fees that a sender pays,<sup>204</sup> there is no fee actually necessary for a transaction to be included in a completed block.<sup>205</sup> Further, the individual who completes the block receives the fees collected, not the sending or receiving parties.<sup>206</sup> Thus, neither party necessarily generates a fee in the peer-to-peer transfer nor is a fee necessarily collected from the transfer if the sender does not specify such a fee. Check cashing might apply to a Bitcoin exchange that takes some amount of the transaction as payment for its service,<sup>207</sup> however, without such a fee, the transaction does not meet the definitional requirements for check cashing.

Finally, categorizing Bitcoin under the third category, currency exchange, is difficult. This is primarily due to the definition as “the exchange of money of one government for money of another government.”<sup>208</sup> No government accepts bitcoins as an official form of money, and therefore it is unclear how such a definition would ever include a non-government-backed currency of any kind.

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201. UNIF. MONEY SERVS. ACT § 102 cmt. 9 (discussing the definition of “money transmission”).

202. *Id.*

203. *Id.* § 102 cmt. 3.

204. *Transaction Fees*, BITCOIN WIKI, [https://en.bitcoin.it/wiki/Transaction\\_fees](https://en.bitcoin.it/wiki/Transaction_fees) (last modified Aug. 31, 2013).

205. *See id.*; *see also Free Transaction Relay Policy*, BITCOIN WIKI, [https://en.bitcoin.it/wiki/Free\\_transaction\\_relay\\_policy](https://en.bitcoin.it/wiki/Free_transaction_relay_policy) (last modified Oct. 18, 2012) (describing an alternative mode of accepting bitcoins that does not filter “unacceptable” transactions like the standard Bitcoin client).

206. *See Transaction Fees*, *supra* note 204.

207. *See, e.g., Adam, Step 3—Buying or Selling Bitcoins*, MT. GOX (July 21, 2011, 4:03 PM), <http://support.mtgox.com/entries/20294238-step-3-buying-or-selling-bitcoins> (“Please note that our ordering system currently subtracts the trade fee from the ‘Total’ when the order is processed.”).

208. UNIF. MONEY SERVS. ACT § 102(6) (defining “currency exchange”).

## 2. California

The 2010 California Money Transmission Act (“California Act”) defines a money transmission as “(1) [s]elling or issuing payment instruments[,], (2) [s]elling or issuing stored value[, or] (3) [r]eceiving money for transmission.”<sup>209</sup> When asked what the California Act encompassed, a spokesperson stated, in agreement with the earlier simplification in this Note,<sup>210</sup> that the California Department of Financial Institutions uses a plain-English test: “Do you take funds/value from A and agree to pay them to B on behalf of A; and/or Do you take funds/value from A, and store it so that A can make purchases from third parties or take cash out at a later date.”<sup>211</sup> Unsurprisingly, critics accuse the law’s broad language of chilling innovation.<sup>212</sup> Many payment technology startups hold money for some period or act as a payment intermediary between buyers and sellers.<sup>213</sup> Forcing these companies, which may be cash-strapped already, to pay the required surety bonds of at least \$500,000 or 50% of average daily outstanding payment instrument and stored value obligations<sup>214</sup> may prove disastrous for the company’s survival.

However, it is unlikely that a peer-to-peer Bitcoin transfer will qualify under this plain-English test. If A is the buyer and B is the seller, then whom is the person or company holding the funds during the transfer? In a simple peer-to-peer transfer, no entity holds the funds during the transfer; the network simply sees a broadcast of information deducting one Bitcoin address of a set amount of bitcoins and crediting another Bitcoin address with that same amount of bitcoins. This is not the case with a Bitcoin currency exchange, which can hold fiat currencies or bitcoins on behalf of a user, or perhaps some sort of Bitcoin proxy payment service that a money launderer might use to obfuscate dirty money’s origins.<sup>215</sup> Nevertheless, the fact remains that the California Act is not written in a way that would include all Bitcoin transactions, and the plain-English test stated by the California Act’s officiating body supports this conclusion.

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209. CAL. FIN. CODE § 2003(o)(1)–(3) (West 2013).

210. *See supra* text accompanying note 144 (“Plainly stated, a money transmitter is an intermediary between the buyer and seller.”).

211. Owen Thomas, *This Innovation-Killing California Law Could Get a Host of Startups in Money Trouble*, BUS. INSIDER (July 11, 2012, 6:21 PM), <http://www.businessinsider.com/california-money-transmitter-act-startups-2012-7>.

212. *See id.*; *see also* Aaron Greenspan, *In Fifty Days, Payments Innovation Will Stop in Silicon Valley*, QUORA (May 11, 2011), <https://www.quora.com/Aaron-Greenspan/Posts/In-Fifty-Days-Payments-Innovation-Will-Stop-In-Silicon-Valley>; James Mariani, *The California Money Transmission Act: Boon to Consumers or Bane to Innovation?*, U. ILL. J.L. TECH. & POL’Y TIMELY TECH, (Sept. 26, 2012), <http://illinoisjltp.com/timelytech/hello-world/>.

213. *See, e.g., iTunes*, APPLE, <https://www.apple.com/itunes/what-is/#store>; *Google Play*, GOOGLE, <https://play.google.com/store>; *FAQ*, KICKSTARTER, <http://www.kickstarter.com/help/faq/kickstarter%20basics>.

214. CAL. FIN. CODE § 2037(d).

215. *See, e.g., BITLAUNDRY*, <http://app.bitlaundry.com>.

### 3. Virginia

The Virginia Money Order Sellers and Money Transmitters (“Virginia Act”) provision of the Virginia Code<sup>216</sup> defines “money transmission” as “receiving money or monetary value for transmission by wire, facsimile, electronic means or other means or selling or issuing stored value.”<sup>217</sup> It also defines “monetary value” as “a medium of exchange, whether or not redeemable in money”;<sup>218</sup> and defines “stored value” as “monetary value that is evidenced by an electronic record.”<sup>219</sup> The Virginia Act requires a license for any person engaged in selling money or in the business of money transmission,<sup>220</sup> a surety bond of between \$25,000 and \$1 million that can remain in effect for five years after licensee ceases activity,<sup>221</sup> a \$750 annual renewal fee,<sup>222</sup> and retention of records for at least three years.<sup>223</sup> The Virginia Act also imposes a civil penalty of a fine up to \$2500 and a criminal penalty of a class one misdemeanor for any persons that act as money transmitters without proper licensure.<sup>224</sup>

The Virginia Act applies more readily to Bitcoin than does the California Act. The first part of the money transmission, according to the Virginia Act, requires “receiving money or monetary value for transmission.”<sup>225</sup> This indicates value came from a sending party, went to a money transmitter, and is awaiting transmission to a final receiving party. Thus, a money transmitter under the Virginia Act is essentially the same as a money transmitter under the California Act, and a simple peer-to-peer Bitcoin transaction has no such intermediary. However, the second part of the definition includes “selling or issuing stored value.”<sup>226</sup> Because a stored value is any medium of exchange that is electronically recorded, which does not need to actually be redeemable, it would likely capture Bitcoin within its definition. Bitcoin is publicly recorded as a block chain, does not necessarily have to be redeemed, and can act as a medium of exchange for Bitcoin users as evidenced by the individuals and organizations that accept it.

Virginia validated these assumptions, at least partially, on May 31, 2013, when Tangible Cryptography, LLC, received notice from the Commonwealth of Virginia that the company might be operating as an unlicensed money transmitter in the state, despite being registered with FinCEN as an MSB.<sup>227</sup> Thus, the company violated the state requirement for licensure while fulfilling the federal requirement. The company suspended its operations pending further review, but the ordeal raises

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216. VA. CODE ANN. §§ 6.2-1900 to -1921 (2010 & Supp. 2013).

217. *Id.* § 6.2-1900.

218. *Id.*

219. *Id.*

220. *Id.* § 6.2-1901.

221. *Id.* § 6.2-1904.

222. *Id.* § 6.2-1905.

223. *Id.* § 6.2-1916.

224. *Id.* §§ 6.2-1920 to -1921.

225. *Id.* § 6.2-1900 (emphasis added).

226. *Id.*

227. See Johann Summers, *FastCash4Bitcoins Suspends Sales*, BITCOIN MAG. (June 3, 2013), <http://bitcoinmagazine.com/fastcash4bitcoins-suspends-sales>.

questions about the difficulties of compliance with disparate federal and state laws in addition to the general lack of clarity resulting from FinCEN's guidance.<sup>228</sup>

The differing status of Bitcoin between Virginia and California state laws is largely one of definition. Although the California Act is broadly worded, it fails to capture transmissions outside of intermediaries. The Virginia Act, however, includes both intermediaries and those simply selling or issuing stored value. Virginia codified the Virginia Act in 1974 and subsequently modified it five times.<sup>229</sup> California passed the California Act 2010, combining preexisting California licensing schemes and expanding licensing to new technologies and domestic transmissions.<sup>230</sup> Therefore, the failure to include Bitcoin-like technologies in the California Act may have merely been an oversight in drafting that will be remedied in future revisions. In essence, the Virginia Code may simply be more mature and refined than the California Act.<sup>231</sup>

#### 4. State Law Summary

Similar to federal regulation schemes, where an entity falls within the Bitcoin transaction largely determines whether that entity will face enforcement under state laws. The UMSA will likely exclude simple peer-to-peer Bitcoin transactions from regulation. Although Bitcoin probably falls within the definition of monetary value for the UMSA, it most likely will fall outside the three categories for licensing. The only real exception to this may be Bitcoin currency exchanges, which probably would fall into at least one of the licensing schemes.

#### V. GOING FORWARD: WHOM TO REGULATE?

Regulation of the Bitcoin network will be difficult because of its complex and decentralized nature, which renders it essentially impervious to a single point of failure. Instead of trying to control all aspects of the Bitcoin network, it is more effective to analyze each Bitcoin transaction entity individually and determine in an abbreviated cost-benefit analysis what will be the best aspects to regulate. As previously shown, regulation of the Bitcoin transaction largely depends upon the targeted regulation entity, further enforcing this entity-by-entity analysis.

##### *A. Sender*

Regulating the initial Bitcoin sender will likely prove unfeasible due to the largely pseudonymous and dispersed nature of senders' identities in the Bitcoin network. When a sender simply sends bitcoins to another average Bitcoin user or to a money laundering service, no personally identifiable information (PII) is interchanged. Unless there is some physical or traceable output from the transaction

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228. *Id.*

229. *See* VA. CODE ANN. § 6.2-1900.

230. *See* Mariani, *supra* note 212.

231. Thanks to Professor Sarah Jane Hughes for this comparison. Interview with Sarah Jane Hughes, Univ. Scholar & Fellow in Commercial Law, Maurer School of Law, in Bloomington, Ind. (Mar. 26, 2013).

(e.g., the sender supplied his shipping address), the likelihood of identifying the owner of a one-time-use Bitcoin address is extremely low. Further, attacking a community's user base will likely result in greater distrust and disapproval toward government, a key reason Bitcoin was established,<sup>232</sup> and could lead to increased anonymization.<sup>233</sup> Thus, the input of resources to attempt to track users that have not provided any PII greatly outweighs the benefit of regulating what are likely to be minor transactions and may possibly result in even greater obfuscation of money laundering.

### B. Launderer

Similarly, regulating the Bitcoin receivers or launderers will be unfeasible. Although this could allow for targeted enforcement and regulation of those acting with clear criminal intent (e.g., blatant money launderers) and avoid the community backlash that might result from attempting to regulate all Bitcoin senders, regulation of launderers faces the same issues of anonymity. If there is no physical output or PII to trace, law enforcement will devote significant resources for relatively small rewards. Additionally, many blatant infringers may hide behind less rigorous international laws and avoid U.S. regulations while openly promoting criminal activities. Thus, going after Bitcoin receivers in general, and money launderers specifically, will prove inefficient.

### C. Processors

Although Bitcoin processors (miners) more readily fit within current regulatory schemes, they would prove unreasonably difficult to regulate. Miners effectively take the place of a payment processor, including possibly taking a small fee in return for their work, but there is no actual requirement for such a fee in Bitcoin transactions.<sup>234</sup> Further, a certain lack of mens rea culpability exists when processing the transaction, as the mining software processes transactions for the block without user intervention. Although some Bitcoin users may understand how the Bitcoin network operates and how their mining activity may complete a block of transactions, the majority of users may simply be incentivized by the possibility of rewards.

Although there may be a reasonable probability of proving willful blindness, it may still be unwise to pursue Bitcoin miners individually. Even though each block rewards the successful miner, and that miner's Bitcoin address is recorded in the

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232. See Jeffries, *supra* note 90; see also *supra* text accompanying note 101.

233. This could occur through many established and emerging anonymization protocols. See, e.g., *Tor: Overview*, TOR PROJECT, <https://www.torproject.org/about/overview.html>; I2P ANONYMOUS NETWORK, <http://www.i2p2.de>; see also Adrian Chen, 'Dark Net' Kiddie Porn Website Stymies FBI Investigation, GAWKER (June 11, 2012, 12:02 PM), <http://gawker.com/5916994/dark-net-kiddie-porn-website-stymies-fbi-investigation>; Sean Gallagher, *Anonymous Takes Down Darknet Child Porn Site on Tor Network*, ARS TECHNICA (Oct. 23, 2011, 7:00 PM), <http://arstechnica.com/business/2011/10/anonymous-takes-down-darknet-child-porn-site-on-tor-network>.

234. See *supra* notes 204–06 and accompanying text.

public Bitcoin record, a miner is still pseudonymous. The possibility of further fracturing and obfuscating the Bitcoin network, as in the above two scenarios, means pursuing Bitcoin miners is also inefficient and possibly detrimental.

#### *D. Bitcoin Development Team*

Although regulating the Bitcoin development team might seem like an efficient attack on a central authority figure that would prevent the Bitcoin network from uniformly reacting to challenges faced by Bitcoin, this assumption fails to recognize the reality of Bitcoin as an open-source software<sup>235</sup> with an active community. Because the Bitcoin code is open-source,<sup>236</sup> distributed to all those who wish to inspect it,<sup>237</sup> stopping the development team would not actually stop distribution of the code. At most, it would temporarily delay code updates until another group of individuals took over code updates, probably in a more secretive manner instead of the publicly known group<sup>238</sup> that operates today.

Additionally, it would be hard to say that the Bitcoin development team has any actual input on the individual transactions that may occur on the network. The development team acts more as a standards agency,<sup>239</sup> rather than as a central authority that controls the operation of the network. Thus, although the Bitcoin development team would be a known target, and thus easier to personally prosecute, it is questionable whether removing their influence on the network would serve to lessen illegal activity that might occur through Bitcoin.

#### *E. Currency Exchanges*

Finally, and most promising, is the regulation of Bitcoin currency exchanges. Because Bitcoin exchanges usually deal with fiat currencies, they will more readily fall under money exchange laws that define money as currency backed by a government. Additionally, because they can hold value from buyers and sellers for transactions, they should easily be classified as money transmitters—that is, intermediaries between a buyer and a seller—under money transmitter laws. Further, exchanges gain credibility through user confidence and volume. If the

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235. Open-source software is “[s]oftware that is [usually] not sold for profit, includes both human-readable source code and machine-readable object code, and allows users to freely copy, modify, or distribute the software.” BLACK’S LAW DICTIONARY, *supra* note 15, at 1200.

236. BITCOIN PROJECT, *supra* note 13 (“Bitcoin is open-source; its design is public, nobody owns or controls Bitcoin and everyone can take part.”) (emphasis omitted).

237. *See Bitcoin*, SOURCEFORGE, <http://sourceforge.net/projects/bitcoin/files/Bitcoin>.

238. *See People*, BITCOIN WIKI, <https://en.bitcoin.it/wiki/People> (last modified June 13, 2013) (giving a more expansive list of individuals involved in the Bitcoin project).

239. *See, e.g., Frequently Asked Questions*, BITCOIN PROJECT, <http://bitcoin.org/en/faq> (“While developers are improving the software, they can’t force a change in the Bitcoin protocol because all users are free to choose what software and version they use. In order to stay compatible with each other, all users need to use software complying with the same rules. Bitcoin can only work correctly with a complete consensus among all users. Therefore, all users and developers have a strong incentive to protect this consensus.”).

exchange has few users willing to trade or if the exchange is not trustworthy, it will not easily allow the stages of money laundering to occur without attracting attention. Due to this tradeoff, exchanges are likely to be less decentralized, and therefore will be easier to target for regulation. An exchange that facilitates hundreds or thousands of transactions, possibly receiving fees for processing the transactions, will fail to prove a legitimate lack of knowledge, as it is unreasonable that its activity would go unregulated while similar payment exchanges are subject to state, federal, and international money exchange and transmission laws. Therefore, out of the core entities of a Bitcoin transaction, regulation of Bitcoin currency exchanges seems likely to have the greatest effect for the least investment of resources.

#### CONCLUSION

Bitcoin represents a disruptive financial technology that many AML and money transmitter statutes are ill prepared to deal with. Virtual currencies in general have broken the trend of physical, government-backed coin and paper currencies, and it is unlikely that any new law will capture all iterations of emerging technologies for any significant period. But this does not mean that Bitcoin and similar virtual currencies should be deemed illegal or should be onerously regulated to compensate for the lack of initial oversight. In an increasingly digital world, it makes perfect economic and societal sense to allow digital currencies, government-backed or otherwise.

Regulation of such currencies should occur at the point where law enforcement can most effectively punish civil and criminal violations with the least overhead. Because Bitcoin is a decentralized, peer-to-peer virtual currency, it makes little sense to regulate entities other than Bitcoin currency exchanges. Increased pressure on users will only serve to increase the cost of enforcement in the long run. Some Bitcoin currency exchanges have already shown initiative by registering as MSBs under current AML schemes.<sup>240</sup> Instead of increasing regulation and trying to predict the next generation of disruptive technologies, it would ultimately be better to understand the technologies and police the points of public contact with existing legal schemes.

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240. See e.g., *MSB Registrant Search Web Page*, FINCEN, [http://www.fincen.gov/financial\\_institutions/msb/msbstateselector.html](http://www.fincen.gov/financial_institutions/msb/msbstateselector.html) (Mt. Gox registered as MSB Registration Number/DCN: 31000029348132; Bitfloor registered as MSB Registration Number/DCN: 31000005224108; BitInstant registered as MSB Registration Number/DCN: 31000005031107).