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### Virtual Currencies & Federal Law

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**Virtual Currencies & Federal Law**

Julie Andersen Hill

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Virtual currencies are growing in popularity and expanding in number.



# Virtual Currencies & Federal Law

**V**irtual currencies are growing in popularity and expanding in number.<sup>1</sup> People can use them to buy everything from a sandwich at Subway to a trip to space with Virgin Galactic. Some attorneys even accept virtual currencies as payment for legal services.

The rise of virtual currencies, like many innovations, poses legal questions. Most existing laws do not contemplate the existence of virtual currencies. Can existing U.S. criminal law, tax law, banking law, securities law, and consumer protection law nevertheless be applied to virtual currencies? This article provides an update on federal regulators' recent attempts to tackle these questions. Because virtual currencies are new, the law is still developing. There are unanswered questions and the current answers are subject to change. Nevertheless, we must start somewhere.

### I. What Are Virtual Currencies and How Do They Work?

First, some background on virtual currencies is helpful. A virtual currency is "a medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency. In particular, virtual currency does not have legal tender status in any jurisdiction."<sup>2</sup> The first virtual currencies were created as part of massive multiplayer online games. In these games, participants "earn" virtual currency by performing tasks within the game (for example, killing monsters or selling virtual land). Although the game rules often provide that the virtual currency has no value outside the game, players sometimes ignore this instruction and exchange it for dollars or goods and services outside the game.<sup>3</sup>

Next came cryptocurrencies operating outside of online gaming. Of the cryptocurrencies, Bitcoin is the pioneer and most prominent example. In 2008, "Satoshi Nakamoto" posted a white paper online entitled *Bitcoin: A Peer-to-Peer Electronic Cash System*.<sup>4</sup> The paper explained how Bitcoin works and within a few months, the payment system was up and running. Since then, many cryptocurrencies have been born, and each is trying to attract a sustainable group of users.<sup>5</sup> So far though, Bitcoin (with a market capitalization of more than \$5 billion) is the undisputed market leader.<sup>6</sup>

So how does Bitcoin work? A webpage maintained by Bitcoin's core developers describes it this way: "From a user perspective, Bitcoin is nothing more than a mobile app or computer program that provides a personal Bitcoin wallet and allows a user to send and receive bitcoins with them."<sup>7</sup> Unlike other payment systems that typically involved at least one financial institution, virtual currencies are often described as "peer-to-peer"—that is, they allow direct payments from one person to another without any middle-men taking their cuts. Instead of trusted middlemen, Bitcoin uses an encrypted network to verify and process each transaction. As Bitcoin's core developers explain:

Behind the scenes, the Bitcoin network is sharing a public ledger called the "block chain". This ledger contains every transaction ever processed, allowing a user's computer to verify the validity of each transaction. The authenticity of each transaction is protected by digital signatures corresponding to the sending addresses, allowing all users to have full control over sending bitcoins from their own Bitcoin addresses. In addition, anyone can process transactions using the computing power of specialized hardware and earn a reward in bit-

coins for this service. This is often called "mining".<sup>8</sup> In sum, Bitcoin is a system that allows users to transfer money directly to other users. While traditional payment systems rely on banks or other financial intermediaries to process transactions and prevent double spending, Bitcoin instead depends on authentication by a network of unaffiliated "miners."

People sometimes describe Bitcoin as an anonymous payment system, but it is more accurately described as a pseudonymous payment system. As just explained, all transactions are recorded on the public block chain.<sup>9</sup> If a user makes her Bitcoin address public or repeatedly uses the same address, it can be relatively easy to discover a user's transactions. Newer cryptocurrencies may promise greater anonymity,<sup>10</sup> but in a world where the National Security Agency (NSA) conducts widespread online surveillance, it is questionable whether any online transactions are beyond government discovery.<sup>11</sup>

Miners aren't the only third parties that facilitate Bitcoin transactions. Virtual currencies would have limited utility if users were unable to trade bitcoins for other currencies. Many users want to purchase bitcoins with U.S. dollars, or convert bitcoins into Japanese yen. The aptly named Bitcoin exchanges match buyers and sellers.<sup>12</sup>

With this basic understanding of virtual currencies we turn to the legal issues raised by virtual currencies.

### II. Criminal Law

Perhaps the first legal question to be answered is whether virtual currencies are legal at all. Some commentators wondered whether virtual currencies run afoul of counterfeiting laws.<sup>13</sup> In 2009, federal prosecutors indicted Bernard von NotHaus for creating "Liberty Dollars." The press releases announcing the von NotHaus indictment and subsequent conviction seemed hostile to all alternative currencies that might "compete" with the U.S. dollar,<sup>14</sup> leading to speculation that virtual currencies were also illegal counterfeits. But the Liberty Dollars case is not directly analogous to virtual currencies for two reasons. First, Liberty Dollars were not virtual; they consisted of actual coins and paper notes.<sup>15</sup> Second, there was evidence that von NotHaus attempted to pass off Liberty Dollars as U.S. dollars.<sup>16</sup> It seems unlikely that virtual currencies would be similarly confused with official U.S. currency. At any rate, prosecutors brought no counterfeited actions against virtual currency users, and in November 2013 the Department of Justice (DOJ) acknowledged that "many virtual currency systems offer legitimate financial services and have the potential to promote more efficient global commerce."<sup>17</sup> Thus, it seems the DOJ does not believe counterfeiting laws completely preclude virtual currencies.

Instead, law enforcement officials have turned their attention to virtual currencies' facilitation of other crimes. In 2012, a Federal Bureau of Investigation (FBI) report noted that the pseudonymous nature of Bitcoin could attract criminals seeking to launder money from criminal enterprises or direct clean money to illicit enterprises (for example, purchasing illegal drugs or financing terrorism).<sup>18</sup> The FBI noted that its ability to track such payments depended in part on Bitcoin users' efforts to keep transactions confidential.<sup>19</sup>

**Perhaps the first legal question to be answered is whether virtual currencies are legal at all.**



But even when Bitcoin users are sneaky, law enforcement officials have tools to track down criminals. Federal authorities regulate Bitcoin exchanges (businesses that exchange bitcoins for non-virtual currencies) as “money services businesses” under the Bank Secrecy Act.<sup>20</sup> Under the Act and its implementing regulations, money services businesses like check cashers, money transmitters, and currency exchanges, must register with the Department of the Treasury.<sup>21</sup> Failure to register can result in civil<sup>22</sup> and criminal<sup>23</sup> penalties. Once registered, money services businesses must maintain anti-money laundering programs.<sup>24</sup> They also have specific reporting and recordkeeping requirements that are designed to help law enforcement officials detect criminal activity and determine the identity of the criminals.<sup>25</sup>

Because the Bank Secrecy Act and its regulations do not mention virtual currencies, there was confusion about whether virtual currency activities fell under their purview. The Financial Crimes Enforcement Network (FinCEN) issued guidance explaining that “[a] user of virtual currency is not [a money services business] . . . and therefore is not subject to . . . registration, reporting, and recordkeeping regulations.”<sup>26</sup> Those who simply buy and sell goods or services with virtual currency do not have specific Bank Secrecy Act responsibilities. On the other hand, “exchangers” are considered money services businesses. “An exchanger is a person engaged as a business in the exchange of virtual currency for real currency, funds, or other virtual currency.”<sup>27</sup> The key factor as to whether a person or entity is a “user” or an “exchanger” is whether that party is engaging in virtual currency transactions for its own account or whether it is engaging in trades on behalf of counterparties, creditors, or other third-parties. Those who trade on their own behalf or for their own account are “users.” For example, those who mine Bitcoin or other virtual currency and then exchange it or spend it for their own benefit are likewise “users” and not obligated under the Bank Secrecy Act. But if exchange services are provided to others, the person or entity is an “exchanger” and is subject to the registration, reporting, and recordkeeping requirement.<sup>28</sup>

If there was any doubt about whether federal law enforcement officials would use the Bank Secrecy Act against virtual currency exchangers, it ended with the arrest and conviction of prominent Bitcoin entrepreneur Charlie Shrem.<sup>29</sup> At the time of his arrest, Shrem was the Vice President of the Bitcoin Foundation and founder of BitInstant, a New York-based Bitcoin exchange.<sup>30</sup> Shrem was accused of using BitInstant to funnel more than a million dollars in bitcoins to those purchasing illegal drugs in the online market known as Silk Road. Shrem and a co-defendant were indicted for operating an unlicensed money transmitting business, conspiracy to launder money, and willful failure to file a suspicious activity report.<sup>31</sup> Ultimately, Shrem pled guilty to operating an unlicensed money transmission business.<sup>32</sup> Shrem’s prosecution put exchanges on notice that they may end up in trouble for facilitating payments to or from illicit enterprises.

Of course, Bank Secrecy Act prosecutions are unlikely to stamp out all virtual money laundering and other crimes. Just as money laundering persists in the non-virtual world, some online laundering and criminal activity is likely to escape detection.<sup>33</sup> Indeed, Bitcoin’s peer-to-peer design may be uniquely suited to avoid anti-money laundering measures that have “focused upon the use of key professions as de facto policemen, guarding entry points into the financial system and limiting the ability of criminals to transfer value without scrutiny.”<sup>34</sup> As law enforcement gains experience in dealing with virtual currencies and as currencies evolve, legal changes in this area seem likely.

### III. Tax Law

Criminal is not the only law with widespread implications for virtual currencies. As Supreme Court Chief Justice John Marshall famously noted in *McCulloch v. Maryland*, “the power to tax involves the power to destroy.”<sup>35</sup> If virtual currency users thought they would avoid the scrutiny of U.S. taxing authorities, they underestimated Uncle Sam’s interest in boosting government revenues. For the Internal Revenue Service (IRS) the threshold question was not whether to tax virtual currencies, but how. Are virtual currencies “property” or are they a foreign “currency”?

The IRS issued a notice just this year concluding that “[f]or federal tax purposes virtual currency is treated as property.”<sup>36</sup> It further stated that “[g]eneral tax principles applicable to property transactions apply to transactions using virtual currency.”<sup>37</sup>

Figuring out taxable income from bitcoin appreciation is not conceptually difficult. Suppose you bought 250 bitcoins for \$.05 each. Your basis in the bitcoins would be \$12.50. Now assume that bitcoins appreciated substantially, so that one bitcoin is now worth \$1000. Feeling happy, you buy a Lamborghini with your 250 bitcoins. Your gain would be the value of the bitcoins at the time you purchased the Lamborghini (\$250,000) minus the basis (\$12.50): \$249,987.50.<sup>38</sup>

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But even if every transaction is conceptually simple, it is possible that tax issues could quickly become a nightmare for virtual currency users. Suppose instead of spending your bitcoins on a Lamborghini, you use them more like a regular currency. Several times a day you buy relatively inexpensive items, like your morning coffee. Every transaction requires the same analysis. Transacting life in bitcoins requires better recordkeeping that most people maintain for their checking accounts.

And there are still a number of questions. For example, when you spend bitcoins from your wallet which ones are you spending? If you acquired bitcoins at different times, some bitcoins might have a different basis. Thus, spending them might result in different amounts of gain (or loss). Can you pick which ones you are spending first or instead apply some standard accounting rule?<sup>39</sup> What about international transactions?<sup>40</sup> Where are they taxed?<sup>41</sup>

The bottom line is that there is not currently an easy mechanism for assessing and collecting taxes on virtual currencies. As payment systems evolve so may tax laws.

### IV. Banking Law

Because traditional payment systems often involve banks acting as intermediaries, traditional payments systems are regulated by banking law. So where do banks, the traditional payment systems facilitators, fit into the virtual currency legal framework? According to Federal Reserve Chair Janet Yellen, Bitcoin is “a payment innovation that is taking place entirely outside the banking industry.”<sup>42</sup> “To the best” of Yellen’s “knowledge, there is no intersection at all” between Bitcoin and banks that are regulated by the Federal Reserve.<sup>43</sup> Thus, Yellen concludes that “[t]he Federal Reserve simply does not have authority to supervise or regulate Bitcoin in any way.”<sup>44</sup> Among other things, this means that consumer bitcoin accounts are not protected by federal deposit insurance.

But if Bitcoin and other virtual currencies gain significant traction, it seems unlikely that banks will be content to stand on the sidelines.<sup>45</sup> If banks want to embrace virtual currencies, can they?

At present, banks are reluctant to even provide bank accounts denominated entirely in U.S. dollars to virtual currency exchangers.<sup>46</sup> In 2011, the Federal Deposit Insurance Corporation (FDIC) issued a report warning banks about the risks associated with third-party payment processor relationships. The report contained a list of “merchant categories that have been associated with high-risk activities,” including payday loans, money transfer networks, on-line gambling, and pornography.<sup>47</sup> The FDIC warned banks to conduct extra due diligence and implement “a program of ongoing monitoring for suspicious activity” when dealing with these merchants.<sup>48</sup> Responding to this guidance, banks were reluctant to offer account services to Bitcoin-related businesses.<sup>49</sup>

After the FDIC’s high risk list attracted complaints that it unfairly targeted lawful businesses, the FDIC eliminated the list.<sup>50</sup> However, the FDIC reiterated that banks must “properly manage customer relationships.”<sup>51</sup> “Financial institutions that fail to adequately manage [third-party] relationships may be viewed as facilitating a payment processor’s or merchant client’s . . . unlawful activity and, thus, may be liable for such acts or practices.”<sup>52</sup> Given the pseudonymous nature of Bitcoin payments<sup>53</sup> it is difficult for banks to determine whether any of the payments made by its Bitcoin customers are illegal. Thus, in the near-term, it seems likely that banks will continue to avoid Bitcoin.

## V. Investment Law

The most frequently asked question about Bitcoin is probably whether buying bitcoins will make you rich.<sup>54</sup> The price volatility of bitcoins offers the potential for both massive returns and massive losses. In January 2013, a single bitcoin traded for less than \$20. At some points, a single bitcoin has traded for more than \$1,000. Now (December 2014), that bitcoin is worth around \$375.<sup>55</sup>

The Securities and Exchanges Commission (SEC) warns would-be investors that Bitcoin is risky. Investments related to Bitcoin “may have a heightened risk of fraud.”<sup>56</sup> The SEC has already charged one person for running a Ponzi scheme that purported to be investing in bitcoins.<sup>57</sup> The SEC also warns that “fraudsters and promoters of high-risk investment schemes may target Bitcoin users.”<sup>58</sup> In one instance “the SEC suspended trading in the securities of Imogo Mobile Technologies because of questions about the accuracy and adequacy of publicly disseminated information about the company’s business, revenue and assets.”<sup>59</sup> Some of Imogo’s information related to its reported development of a mobile Bitcoin platform. Finally, the SEC warns that “[i]f fraud or theft results in you or your investment losing bitcoins, you may have limited recovery options. Third-party wallet services, payment processors and Bitcoin exchanges that play important roles in the use of bitcoins may be unregulated or operating unlawfully.”<sup>60</sup>

So far the SEC’s Bitcoin-related warnings and actions involve rather straightforward application of securities laws: if you create an investment product or company that involves bitcoins or Bitcoin-related products, you cannot entice investors by lying



about what you are doing. The SEC’s enforcement has not focused on the agency’s authority to regulate Bitcoin directly.

Could the SEC directly regulate Bitcoin as a “security”? The answer, according to SEC Chairman Mary Jo White, is a definite maybe. She has stated that “[w]hether a virtual currency is a security under the federal securities laws, and therefore subject to our regulation, is dependent on the particular facts and circumstances at issue.”<sup>61</sup>

Perhaps the strongest regulatory hook for the SEC is a category of securities called “investment contracts.” The Securities Act of 1933 gives the SEC regulatory authority over “investment contracts”<sup>62</sup> —a phrase that is both “vague and broad.”<sup>63</sup> In *SEC v. W.J. Howey Company*, the Supreme Court established a three part test for investment contracts.<sup>64</sup> According to *Howey* an investment contract is any contract, transaction, or scheme involving (1) an investment of money, (2) in a common enterprise, (3) with the expectation that profits will be derived from the efforts of another person.<sup>65</sup> Commentary is mixed as to whether virtual currencies satisfy the *Howey* factors.<sup>66</sup>

Like the SEC, the Commodity Futures Trading Commission (CFTC) views Bitcoin as risky. CFTC Commissioner Bart Chilton called Bitcoin a “shadow currency” and potential “house of cards.”<sup>67</sup> CFTC is exploring the extent of its jurisdiction over Bitcoin.<sup>68</sup> So far, the only items the CFTC has clearly declared within its realm of authority are derivatives of bitcoins, like futures and swaps. TeraExchange recently launched the first CFTC-registered swap execution facility for bitcoins.<sup>69</sup>

Thus, while it is clear that the SEC and CFTC believe that Bitcoin is risky, it is not clear whether securities or futures laws apply directly to bitcoins or other virtual currencies.

## VI. Consumer Protection

What about other consumer protections for users of virtual currency? Federal law protects consumers who make payments electronically, by debit card, and by credit card. If a consumer’s payment information is stolen and used by a thief to make unauthorized payments, the consumer is typically on the hook for at most fifty dollars.<sup>70</sup> This is true even if the customer’s own negligence caused the payment information to be stolen in the first place. Furthermore, in some circumstances, a consumer who pays by credit card can have charges removed from her account simply because a seller did not deliver goods or services as promised.<sup>71</sup> In sum, electronic payments, debit cards, and credit cards all use systems that allow charges to be reversed, and federal law protects consumers by specifying when banks must grant reversals.

It is unlikely that any of the existing federal payment protections apply to Bitcoin payments. The Truth in Lending Act’s protections extend only to credit card payments.<sup>72</sup> Credit cards are defined as “any card, plate, coupon book or other credit device existing for the purpose of obtaining money, property, labor, or services on credit.”<sup>73</sup> But bitcoins are not credit devices.<sup>74</sup> Payment in bitcoins satisfies the obligation immediately; the buyer is not promising to pay later.

The Electronic Fund Transfers Act is similarly inapplicable to Bitcoin payments. The Act protects “any transfer of funds . . . which is initiated through an electronic terminal, telephonic instrument, or computer or magnetic tape so as to order, instruct, or authorize a *financial institution* to debit or credit an account.”<sup>75</sup>



But payment in bitcoins (or other virtual currencies) is not made through financial institutions.<sup>76</sup> Thus, the Electronic Fund Transfers Act does not apply.

Moreover, Bitcoin was created specifically with the idea that payments cannot be reversed. On the topic of consumer protection, Bitcoin's core developers note that "Bitcoin is freeing people to transact on their own terms."<sup>77</sup> They explain:

[W]hile merchants usually depend on their public reputation to remain in businesses and pay their employees, they don't have access to the same level of information when dealing with new consumers. The way Bitcoin works allows both individuals and business to be protected against fraudulent chargebacks . . .<sup>78</sup>

In other words, Bitcoin does not contain a mechanism for reversing wholly fraudulent transactions. In the event a seller does not deliver the promised goods or services, the payment cannot ordinarily be reversed without the seller's cooperation. Bitcoin does leave "public proof that a transaction [took] place, which can potentially be used in a recourse against businesses with fraudulent practices."<sup>79</sup> But any such recourse, is likely more difficult than the current procedures for reversing credit card payments.

It is possible the technological innovations could provide Bitcoin users some or all of the protections currently offered credit and debit card users. Bitcoin's protocol can allow transactions to be processed only after authorized by multiple signatures. This allows for the possibility of a third party provided escrow-like service. "Such services could allow a third party to approve or

reject a transaction in case of disagreement between the other parties without having control on [sic] their money."<sup>80</sup> But buyers and sellers would have to opt into any escrow service. Unlike the protections offered by the Truth in Lending Act and the Electronic

Fund Transfers Act,

## **While federal regulations do not currently provide significant protections for virtual currency users, federal consumer watchdogs are eyeing Bitcoin suspiciously.**

multiple signature authentication would not be an automatic part of any transaction.

While federal regulations do not currently provide significant protections for virtual currency users, federal consumer watchdogs are eyeing Bitcoin suspiciously. A Government Accountability Office Report in June 2014 noted "emerging consumer protection issues" in virtual currencies, and recommended the Consumer Financial Protection Bureau (CFPB) collaborate with other federal regulators in devising ways to regulate virtual currencies.<sup>81</sup> The report noted that the CFPB "has authority to issue and revise regulations that implement federal consumer financial protection laws, including the Electronic Fund Transfer Act."<sup>82</sup> In August 2014, the CFPB issued a consumer advisory warning of the dangers of virtual currencies. Among other things, the CFPB warns that "[i]f you trust someone else to hold your virtual currencies and something goes wrong, that company may not offer you the kind of help you expect from a bank or debit or credit card provider."<sup>83</sup> The CFPB encourages consumers who "encounter a problem with virtual currency or a virtual currency company" to submit an online complaint to the CFPB.<sup>84</sup> What exactly the CFPB will do with virtual currency complaints, remains to be seen.

Finally, to the extent that Bitcoin is just a new-fangled hook for old-fashioned fraud, existing consumer protection laws apply. For example, a federal district court, at the request of the Federal Trade Commission (FTC), issued a temporary restraining order

against Butterfly Labs, a business that purportedly built computers for bitcoin mining.<sup>85</sup> The FTC complained that Butterfly Labs collected customer money, but failed to produce the computers as promised.<sup>86</sup> Regardless of the technology or product being sold, deceptive or misleading practices are punishable.

## **VII. Conclusion**

This discussion of virtual currencies is meant as an introduction. Additional legal questions involving virtual currencies are already percolating,<sup>87</sup> and new questions are likely to arise.

In spite of legal uncertainty, Bitcoin enthusiasts claim the currency is less costly and less vulnerable to inflationary pressures.<sup>88</sup> But not everyone is a fan. Warren Buffet's business partner, Charles Munger, once described Bitcoin as "rat poison."<sup>89</sup>

One thing, however, is clear: virtual currencies are on the frontier of current payment systems technology. Most existing law did not contemplate the existence of virtual currencies. As consumers explore virtual currencies, the law will have to adjust and adapt.

\* © 2014 Julie Andersen Hill. Julie Andersen Hill is a tenured associate professor at the University of Alabama School of Law, where she teaches and writes about banking and commercial law. She was previously a faculty member at the University of Houston Law Center. Before entering the legal academy, Professor Hill practiced law in the Washington, D.C. office of Skadden, Arps, Slate, Meagher, & Flom LLP. As part of the litigation group, she represented large financial institutions under government investigation. She was a law clerk for Judge Wade Brorby on the U.S. Court of Appeals for the Tenth Circuit. Before practicing law, Professor Hill worked at two small community banks. She received her B.S. in economics from Southern Utah University and her J.D. from Brigham Young University.

<sup>1</sup> This article was presented at the *Teaching Consumer Law in a Virtual World Conference*, May 2014.

<sup>2</sup> FIN. CRIMES ENFORCEMENT NETWORK, DEPT OF TREASURY, FIN-2013-G001, GUIDANCE: APPLICATION OF FINCEN'S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES I (Mar. 18, 2013), 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) [hereinafter FINCEN GUIDANCE].

<sup>3</sup> Steven Chung, Note, *Real Taxation of Virtual Commerce*, 28 VA. TAX REV. 733, 740-44 (2009).

<sup>4</sup> Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, <https://bitcoin.org/bitcoin.pdf> (2008). Satoshi Nakamoto's true identity is still a mystery.

<sup>5</sup> They include Dogecoin (which sponsored NASCAR driver Josh Wise's car at the Aaron's 499 at Talladega Superspeedway), RonPaulCoin (named in honor of the libertarian congressman from Texas), and Coinye (a humorous currency named after rapper Kanye West that appears to have folded after West was un-amused). See *NASCAR Digest*, THE HAWK EYE, July 6, 2014, at 5B; Britt Peterson, *That'll Be Three RonPaulCoins: In Bitcoin's Wake, a Wild World of Cryptocurrency Names*, BOSTON GLOBE, Sept. 21, 2014, at K2.

<sup>6</sup> CRYPTO-CURRENCY MARKET CAPITALIZATIONS, <https://coinmarketcap.com/> (last visited Dec. 4, 2014).

<sup>7</sup> *Frequently Asked Questions: How Does Bitcoin Work?*, BITCOIN.ORG, <https://bitcoin.org/en/faq#how-does-bitcoin-work> (last visited Sept. 27, 2014). "Bitcoin – with capitalization, is used when describing the concept of Bitcoin, or the entire network itself. . . . bitcoin – without capitalization, is used to describe bitcoins as a unit of account." *Some Bitcoin Words You Might Hear*, BITCOIN.ORG, <https://bitcoin.org/en/vocabulary> (last visited Sept. 27, 2014).

<sup>8</sup> *Id.* For more fulsome descriptions of the Bitcoin protocol see Nakamoto, *supra* note 4.

<sup>9</sup> *Some Things You Need to Know*, BITCOIN.ORG, <https://bitcoin.org/en/you-need-to-know> (last visited Sept. 27, 2014) (“All Bitcoin transactions are stored publicly and permanently on the network, which means anyone can see the balance and transactions of any Bitcoin address. However, the identity of the user behind an address remains unknown until information is revealed during a purchase or in other circumstances.”).

<sup>10</sup> Andy Greenberg, *Darkcoin, the Shadowy Cousin of Bitcoin, Is Booming*, WIRED (May 21, 2014, 6:30 AM), <http://www.wired.com/2014/05/darkcoin-is-booming/>.

<sup>11</sup> See, e.g., G. Alex Sinha, *NSA Surveillance Since 9/11 and the Human Right to Privacy*, 59 LOY. L. REV. 861 (2013) (discussing NSA online surveillance).

<sup>12</sup> See Nikolei M. Kaplanov, Student Article, *Nerdy Money: Bitcoin, the Private Digital Currency, and the Case Against Its Regulation*, 25 LOY. CONSUMER L. REV. 111, 121-23 (2012).

<sup>13</sup> See Reuben Grinberg, *Bitcoin: An Innovative Alternative Digital Currency*, 4 HASTINGS SCIENCE & TECH. L.J. 159, 182-94 (2011); Paul H. Farmer, Jr., Note and Comment, *Speculative Tech: The Bitcoin Legal Quagmire & the Need for Legal Innovation*, 9 J. BUS. & TECH. L. 85, 94-98 (2014). In particular, the Stamp Payments Act of 1862 states that:

Whoever makes, issues, circulates, or pays out any note, check, memorandum, token, or other obligation for a less sum than \$1, intended to circulate as money or to be received or used in lieu of lawful money of the United States, shall be fined under this title or imprisoned not more than six months, or both.

18 U.S.C. § 336.

<sup>14</sup> Press Release, U.S. Attorney’s Office, Western District of North Carolina, Four Defendants Indicted in Unlawful Coin Operation (June 3, 2009), available at <http://www.fbi.gov/charlotte/press-releases/2009/ce060309.htm> (“People understand that there is only one legal currency in the United States. When groups try to replace the U.S. dollar with coins and bills that don’t hold the same value, it affects the economy.”); Press Release, U.S. Attorney’s Office, Western District of North Carolina, Defendant Convicted of Minting His Own Currency (Mar. 18, 2011), available at <http://www.fbi.gov/charlotte/press-releases/2011/defendant-convicted-of-minting-his-own-currency> (“Along with the power to coin money, Congress has the concurrent power to restrain the circulation of money which is not issued under its own authority in order to protect and preserve the constitutional currency for the benefit of all citizens of the nation. It is a violation of federal law for individuals . . . to create private coin or currency systems to compete with the official coin and currency of the United States.”).

<sup>15</sup> Grinberg, *supra* note 13, at 192-94

<sup>16</sup> *Id.*

<sup>17</sup> *Beyond the Silk Road: Potential Risks, Threats and Promises of Virtual Currencies: Hearing Before the S. Comm. on Homeland Security & Governmental Affairs*, 113th Cong. \_\_\_\_ (2013), (written statement of Mythili Raman, Acting Assistant Att’y General, U.S. Dep’t of Justice Criminal Division), available at <http://www.hsgac.senate.gov/download/?id=ac50a1af-cc98-4b04-be13-a7522ea7a70d>.

<sup>18</sup> FEDERAL BUREAU OF INVESTIGATION, INTELLIGENCE ASSESSMENT: BITCOIN VIRTUAL CURRENCY: UNIQUE FEATURES PRESENT DISTINCT CHALLENGES FOR DETERRING ILLICIT ACTIVITY (Apr. 24, 2012), available at <http://cryptome.org/2012/05/fbi-bitcoin.pdf>.

<sup>19</sup> For example, to increase privacy, users can create a new Bitcoin address for each incoming payment and use services that anonymize the Internet Protocol (IP) address associated with payments. See *id.* at 5.

<sup>20</sup> See *id.* at 8.

<sup>21</sup> 31 U.S.C. § 5330 (2014); 31 C.F.R. § 1022.380 (2014). The statute uses the term “money transmitting business,” but the regulations use the term “money services businesses.”

<sup>22</sup> 31 U.S.C. § 5330(e).

<sup>23</sup> 18 U.S.C. § 1960 (2014).

<sup>24</sup> 31 C.F.R. § 1022.210.

<sup>25</sup> 31 U.S.C. § 5313; 31 C.F.R. §§ 1010.311 to .315, 1022.300 to 3320, 1022.400, and 1022.410.

<sup>26</sup> FINCEN GUIDANCE, *supra* note 2, at 1.

<sup>27</sup> *Id.* at 2 (emphasis omitted).

<sup>28</sup> See *id.* 2-3. Similarly, “administrators” are money services businesses under the Act. “An administrator is 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.” *Id.* at 2 (emphasis omitted).

<sup>29</sup> While Shrem is the most high-profile person charged, he is not the only virtual currency exchanger to face criminal prosecution. See, e.g., Press Release, U.S. Dep’t of Justice, Digital Currency Business E-Gold Pleads Guilty to Money Laundering and Illegal Money Transmitting Charges (July 21, 2008), available at <http://www.justice.gov/opa/pr/2008/July/08-crm-635.html>; Press Release, U.S. Attorney’s Office, Southern District of New York, Manhattan U.S. Attorney Announces Charges Against Liberty Reserve, One Of World’s Largest Digital Currency Companies, And Seven Of Its Principals And Employees For Allegedly Running A \$6 Billion Money Laundering Scheme, May 28, 2013, available at <http://www.justice.gov/usao/nys/pressreleases/May13/LibertyReservePR.php>.

<sup>30</sup> *The Coin Prince: Inside Bitcoin’s First Big Money-Laundering Scandal*, THE VERGE (Feb. 4, 2014), <http://www.theverge.com/2014/2/4/5374172/the-coin-prince-charlie-shrem-bitinstant-bitcoin-money-laundering-scandal>.

<sup>31</sup> Indictment, U.S. v. Faiella, 14-CRIM-243 (S.D.N.Y. Apr. 10, 2014).

<sup>32</sup> Press Release, U.S. Attorney’s Office, Southern District of New York, Bitcoin Exchanges Plead Guilty in Manhattan Federal Court In Connection with the Sale of Approximately \$1 Million in Bitcoins for Use on the Silk Road Website (Sept. 4, 2014), <http://www.justice.gov/usao/nys/pressreleases/September14/FaiellaShremPleasPR.php>.

<sup>33</sup> See Catherine Martin Christopher, *Whack-A-Mole: Why Prosecuting Digital Currency Exchanges Won’t Stop Online Money Laundering*, 18 LEWIS & CLARK L. REV. 1 (2014); Danton Bryans, Comment, *Bitcoin and Money Laundering: Mining for an Effective Solution*, 89 IND. L.J. 441 (2014).

<sup>34</sup> Robert Stokes, *Anti-Money Laundering Regulation and Emerging Payment Technologies*, 32 NO. 5 BANKING & FIN. SERVICES POL’Y REP. 1, 3-4 (2013).

<sup>35</sup> 17 U.S. 316, 431 (1819).

<sup>36</sup> I.R.S. Notice 2014-21, 2014-16 I.R.B. 938, available at <http://www.irs.gov/pub/irs-drop/n-14-21.pdf>

<sup>37</sup> *Id.*

<sup>38</sup> Nickolas Argy, *IRS Denies Bitcoin Exalted Currency Status*, COINTELEGRAPH (May 14, 2014, 4:35 PM), <http://cointelegraph.com/news/111446/irs-denies-bitcoin-exalted-currency-status>.

<sup>39</sup> Christopher Rajotte et al., *Bitcoin Taxation: Understanding IRS Notice 2014-21*, BITCOIN MAG. (Apr. 4, 2014), <http://bitcoinmagazine.com/11942/bitcoin-tax-understanding-irs-notice-2014-21/>.

<sup>40</sup> See, e.g., Omri Y. Marin, *Are Cryptocurrencies ‘Super’ Tax Havens?*, 12 MICH. L. REV. FIRST IMPRESSIONS 38 (2013).

<sup>41</sup> See Benjamin W. Akins et al., *A Whole New World: Income Tax Consideration of the Bitcoin Economy*, \_\_\_\_ PR. TAX REV. \_\_\_\_ (2014), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2305863](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2305863).

<sup>42</sup> Steven Russolillo, *Yellen on Bitcoin: Fed Doesn’t Have Authority to Regulate It in Any Way*, WALL ST. J. BLOG (Feb. 27, 2014, 12:43 PM), <http://blogs.wsj.com/moneybeat/2014/02/27/yellen-on-bitcoin-fed-doesnt-have-authority-to-regulate-it-in-any-way/>.

<sup>43</sup> *Id.*

<sup>44</sup> *Id.*

<sup>45</sup> Marc Hochstein, *Wells Fargo Meets with Bitcoin Experts to ‘Learn More’*, AM. BANKER, Jan. 15, 2014, available at 2014 WLNR 1139598 (reporting that Wells Fargo executives met with Bitcoin experts because the Bank has “invested in payment systems we want to understand everything that’s relevant about it”).



- <sup>46</sup> Marc Hochstein, *Why Bitcoin Matters For Bankers*, AM. BANKER MAG., Mar. 2014, at 18; Kashmir Hill, *Bitcoin Companies and Entrepreneurs Can't Get Bank Accounts*, FORBES.COM, (Nov. 15, 2013) <http://www.forbes.com/sites/kashmirhill/2013/11/15/bitcoin-companies-and-entrepreneurs-cant-get-bank-accounts/>.
- <sup>47</sup> FDIC, *Managing Risks in Third-Party Payment Processor Relationships*, SUPERVISORY INSIGHTS, Summer 2011, at 3-12, available at <http://www.fdic.gov/regulations/examinations/supervisory/insights/sisum11/managing.html>.
- <sup>48</sup> *Id.*
- <sup>49</sup> Hochstein, *supra* note 46; Hill, *supra* note 47.
- <sup>50</sup> Rob Blackwell, *FDIC Withdraws Alleged 'Hit List' of High-Risk Merchants*, AM. BANKER, July 29, 2014, available at 2014 WLNR 20615636.
- <sup>51</sup> *Id.*
- <sup>52</sup> FDIC, Financial Institution Letter, FIL-3-2012, Payment Processor Relationships (Jan. 31, 2012), available at <http://www.fdic.gov/news/news/financial/2012/fil12003.pdf> (emphasis omitted). See also FDIC, Financial Institution Letter, FIL-43-2013, FDIC Supervisory Approach to Payment Processing Relationships With Merchant Customers that Engage in Higher-Risk Activities (Sept. 27, 2013), available at <http://www.fdic.gov/news/news/financial/2013/fil13043.pdf> (“Financial Institutions need to assure themselves that they are not facilitating fraudulent or other illegal activity.”).
- <sup>53</sup> See *supra* notes 9-11 and accompanying text.
- <sup>54</sup> Cf. Catherine Martin Christopher, *Why On Earth Do People Use Bitcoin?*, \_\_\_ BUS. & BANKR. L.J. \_\_\_ (2014), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2470628](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2470628) (noting that “[t]he old standby of ‘buy low, sell high,’ applies to Bitcoin as well as it does to anything else, and plenty of people buy bitcoins because they believe that the current price is less than the price will be in the future”).
- <sup>55</sup> *Market Price (USD)*, BLOCKCHAIN.INFO, [http://blockchain.info/charts/market-price?timespan=2year&showDataPoints=false&daysAverageString=1&show\\_header=true&scale=0&address=](http://blockchain.info/charts/market-price?timespan=2year&showDataPoints=false&daysAverageString=1&show_header=true&scale=0&address=) (last visited Dec. 4, 2014).
- <sup>56</sup> SEC OFFICE OF INVESTOR EDUCATION AND ADVOCACY, INVESTOR ALERT: BITCOIN AND OTHER VIRTUAL CURRENCY-RELATED INVESTMENTS (2014), available at <http://investor.gov/news-alerts/investor-alerts/investor-alert-bitcoin-other-virtual-currency-related-investments#.U2qKkqxOXcs> [hereinafter SEC BITCOIN INVESTOR ALERT].
- <sup>57</sup> SEC v. Shavers, Case No.: 4:13-CV-416 (E.D. Tex. Aug. 6, 2013), available at 2013 WL 4028182. The SEC had earlier issued an Investor Alert related specifically to virtual currencies and Ponzi schemes. SEC OFFICE OF INVESTOR EDUCATION AND ADVOCACY, INVESTOR ALERT: PONZI SCHEMES USING VIRTUAL CURRENCIES (2013), available at [http://www.sec.gov/investor/alerts/ia\\_virtualcurrencies.pdf](http://www.sec.gov/investor/alerts/ia_virtualcurrencies.pdf).
- <sup>58</sup> SEC BITCOIN INVESTOR ALERT, *supra* note 56.
- <sup>59</sup> *Id.*
- <sup>60</sup> *Id.*
- <sup>61</sup> Letter from Mary Jo White, Chairman, SEC to Senator Thomas R. Carper, Chairman, Committee on Homeland Security and Government Affairs (Aug. 30, 2013), available at <http://online.wsj.com/public/resources/documents/VCurrenty111813.pdf>.
- <sup>62</sup> 15 U.S.C. § 77b(a)(1) (2014).
- <sup>63</sup> Grinberg, *supra* note 13, at 196. See also Ruoque Yang, *When is Bitcoin a Security Under U.S. Securities Law?*, 18 J. TECH. L. & POL’Y 99, 111 (2013) (noting that “courts have been quite inconsistent in their approaches in interpreting ‘common enterprise’”).
- <sup>64</sup> 328 U.S. 293, 298-99 (1946).
- <sup>65</sup> *Id.*
- <sup>66</sup> Compare Grinberg, *supra* note 13, at 199 (concluding that “because there is likely no common enterprise, Bitcoin is unlikely to be an investment contract”) with Farmer, *supra* note 13, at 103 (“Bitcoins can satisfy the requirements of Howey [for being an “investment contract] . . . ; therefore, Bitcoins could be defined as securities through the broad stroke of the securities acts . . .”).
- <sup>67</sup> *Squawk Box* (CNBC television broadcast May 7, 2013), available at <http://video.cnbc.com/gallery/?video=3000166533&play=1>.
- <sup>68</sup> Ryan Tracy & Scott Patterson, *Bitcoin Oversight Is Beyond the Purview of Central Bank*, WALL ST. J., Feb. 28, 2014, at A2.
- <sup>69</sup> Helen Bartholomew, *Tera Launches Regulated Bitcoin Swap Platform*, INT’L FIN. REV., Sept. 12, 2014, available at 2014 WLNR 25326697.
- <sup>70</sup> 15 U.S.C. §§ 1643, 1693g (2014).
- <sup>71</sup> *Id.* § 1666.
- <sup>72</sup> *Id.* §§ 1643, 1666.
- <sup>73</sup> *Id.* § 1602(m).
- <sup>74</sup> “Credit” is defined as “the right granted by a creditor to a debtor to defer payment of debt or to incur debt and defer its payment.” *Id.* § 1602(f).
- <sup>75</sup> *Id.* § 1693a(7).
- <sup>76</sup> “[T]he term ‘financial institution’ means a State or National bank, a State or Federal savings and loan association, a mutual savings bank, a State or Federal credit union, or any other person who, directly or indirectly, holds an account belonging to a consumer.” *Id.* § 1693a(9). As explained in Parts I and IV, financial institutions do not process bitcoin transactions.
- <sup>77</sup> *Frequently Asked Questions: What about Bitcoin and consumer protection?*, BITCOIN.ORG, <https://bitcoin.org/en/faq#what-about-bitcoin-and-consumer-protection> (last visited Sept. 27, 2014).
- <sup>78</sup> *Id.*
- <sup>79</sup> *Id.*
- <sup>80</sup> *Id.* See also John Villasenor, *Could ‘Multisig’ Help Bring Consumer Protection to Bitcoin Transactions?*, FORBES.COM, (Mar. 3, 2014) <http://www.forbes.com/sites/johnvillasenor/2014/03/28/could-multisig-help-bring-consumer-protection-to-bitcoin-transactions/> (describing the potential of multiple signature protocols for consumer protection).
- <sup>81</sup> GOVERNMENT ACCOUNTABILITY OFFICE REPORT, VIRTUAL CURRENCIES: EMERGING REGULATORY, LAW ENFORCEMENT, AND CONSUMER PROTECTION CHALLENGES (May 2014).
- <sup>82</sup> *Id.* at 16.
- <sup>83</sup> CFPB, CONSUMER ADVISORY: RISKS TO CONSUMERS POSED BY VIRTUAL CURRENCIES (Aug. 2014), available at [http://files.consumerfinance.gov/f/201408\\_cfpb\\_consumer-advisory\\_virtual-currencies.pdf](http://files.consumerfinance.gov/f/201408_cfpb_consumer-advisory_virtual-currencies.pdf).
- <sup>84</sup> *Id.*
- <sup>85</sup> FTC v. BF Labs, Inc., Case No. 4:14-cv-00815-BCW (W. Dist. Mo. Sept. 18, 2014) (Ex Parte Order), available at <http://www.ftc.gov/system/files/documents/cases/140923utterflylabstro.pdf>.
- <sup>86</sup> *Id.*
- <sup>87</sup> For example: Can campaign contributions be made using bitcoins? Does intellectual property law apply to Bitcoin? How will U.S. law interact with international efforts to regulate virtual currencies?
- <sup>88</sup> *What Are the Advantages of Bitcoin?*, BITCOIN.ORG, <https://bitcoin.org/en/faq#what-are-the-advantages-of-bitcoin> (last visited Sept. 27, 2014).
- <sup>89</sup> *Banks May Take Lessons from Bitcoin*, DENVER POST, May 12, 2014, at 3C.