2015

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Robert Bernard

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Bitcoin: How Government Regulation Will Lead to a Brighter Future for the Online Currency

By: Robert Bernard

Since its inception in 2008, Bitcoin has become an increasingly hot button issue. Everyday there is a new story involving the popular virtual currency. Part of this is because the notion of an online currency not backed or regulated by any government is a fascinating evolution of the internet. The larger reason is because Bitcoins connection to drug trafficking and money laundering. The recent shutdown of the site Silk Road exemplifies this.

The FBI’s shutdown of Silk Road reads more like a movie script than an actual news story. Silk Road was a secret marketplace for illegal merchandise operating in the “deep web.” The site has been described as an anonymous Amazon.com.¹ One could purchase anything from drugs like marijuana and heroin, to illegal firearms and even books on how to make one arrest proof². Access to Silk Road was only possible by using the Onion or Tor network.³ These are programs that encrypt the users IP address, and then bounce that encryption through a network of routers so that the users’ browsing is virtually untraceable.⁴

³ Id.
Bitcoins were the only accepted payment on Silk Road. When the FBI arrested the sites operator, Ross Ulbricht, they shut the site down and seized approximately 26,000 Silk Road users’ Bitcoins, and 144,000 of Mr. Ulbricht’s. Mr. Ulbricht was charged with drug trafficking, conspiracy to commit computer hacking, and conspiracy to commit money laundering.

Stories like Silk Road create an association between Bitcoin and illegal activity. Some think this association is the end of Bitcoin, however, there are number of venture capitalists still showing strong interest in the currency. Most notably, the Winklevoss twins have registered an ETF focused on Bitcoin. Other uses involve currency exchanges such as Mt. Gox, and an alternative to credit cards or PayPal for online purchases. Due to the low transaction costs, micropayments and e-commerce are the most interesting area in which Bitcoin could have a major impact. Whether people see Bitcoin as legal or illegal, there is no doubt that Bitcoin has grabbed the public’s attention. When the public becomes fascinated with something as novel as Bitcoin, the government starts to pay attention, too.

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So, the question is: How will the federal government act towards Bitcoin? Will the government try to kill Bitcoin, or will the government try to regulate it? Current events suggest the government will attempt to regulate the markets where Bitcoins are used. Government regulation of Bitcoin should be viewed as a welcomed symbol of confidence, as opposed an attack on the virtual currency; because regulation of the Bitcoin markets imply that the government sees the legitimate value of Bitcoin, and not just as an instrument for criminal activity.

**What is Bitcoin?**

A Bitcoin is a virtual currency unregulated by any central authority.\(^{10}\) Instead, Bitcoins are created through mining.\(^{11}\) Miners use their computer(s) to create solutions to a problem.\(^{12}\) The problem is designed to create integrity and security in the network.\(^{13}\) As the number of miners increases, so does the difficulty in the problem. The reason for this is because the rate at which Bitcoins are mined is fixed. As of this writing, a solution will generate 25 Bitcoins every ten minutes or so.\(^{14}\) The rate will halve around every four years, and never reach more than 21 million in circulation.\(^{15}\)

For one to own or transact in Bitcoin, one has to either own a computer capable of implementing the Bitcoin protocol—also called a Bitcoin client—, or make an account on

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\(^{12}\) Id.

\(^{13}\) Id.


\(^{15}\) Grinberg, supra note 11.
a website that runs the software for the user.\textsuperscript{16} The Bitcoin client saves the user’s Bitcoin’s in a virtual wallet called an e-wallet, which the user makes secure and backs up.\textsuperscript{17} All these programs link to each other over the Internet.\textsuperscript{18} Together, they make up a peer-to-peer network that works together to validate each Bitcoin transaction.\textsuperscript{19} This design is used to cut down on transaction costs, prevent double spending, and thwart an attack on the network.\textsuperscript{20}

The network operates in partial anonymity.\textsuperscript{21} Every wallet has both a public and private key.\textsuperscript{22} When a transaction occurs the public key generates a string of numbers and letters, about twenty-seven to thirty-four characters long, called an address.\textsuperscript{23} The private key is used to authorize a transaction—almost like a signature.\textsuperscript{24} The public keys contain no information about the user; however, the public key can be used to trace the transaction.\textsuperscript{25} This means that one can track the transactions, but gain no information about who was involved.\textsuperscript{26}

When a transaction occurs it is time stamped.\textsuperscript{27} Once the transaction is time stamped it cannot be modified, which prevents double spending.\textsuperscript{28} Time stamps are a

\textsuperscript{16} Id. \\
\textsuperscript{17} Id. \\
\textsuperscript{18} Id. \\
\textsuperscript{19} Nakamoto supra note 10. \\
\textsuperscript{20} Id. (claiming that the peer-to-peer Bitcoin network and proof of work to record transactions make it computationally impractical for an attacker to double spend). \\
\textsuperscript{22} Id. \\
\textsuperscript{23} Id. \\
\textsuperscript{24} Id. \\
\textsuperscript{25} Id. \\
\textsuperscript{26} Id. \\
\textsuperscript{27} Nakamoto, supra note 10.
notarization of the transaction and create a “block chain.”

These “block chains” are a history of every transaction a Bitcoin has been involved in. Through a “block chain,” one can trace every address a Bitcoin has moved from. But as noted earlier, tracing the addresses does not mean one can trace who that address belongs to.

**Legal Issues**

A number of law review articles have addressed the legality of Bitcoin. Due to how novel Bitcoin is, it truly falls into a legal grey area. There are, however, a few laws the United States could possibly use to regulate Bitcoin. The most obvious argument would be to regulate Bitcoin through Congress’ constitutional right to control currency. Even though this seems obvious, the Constitution says nothing about private parties making money. However, two federal statutes affect a private party from creating a currency: the Stamp Payments Act of 1862 and federal counterfeiting statutes.

The purpose of the Stamp Payments Act of 1862 is to curb competition with federal currency. It states in part, “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.”

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28 Dion, supra note 21.
29 Id.
30 Id.
31 Id.
33 Grinberg, supra note 32, at 182.
34 Id.
35 Id.
36 Id.
States,” will be fined and/or jailed not more than six months.\textsuperscript{37} Bitcoin does not limit transactions to more than $1, and some argue that it is intended to compete with official currency.\textsuperscript{38} The stronger argument is that Bitcoins do not fall within the Stamp Payments Act.\textsuperscript{39} Congress goal of the Stamp Payment Act was to prevent competition with federal currency, and challenging Bitcoin would not further this goal.\textsuperscript{40} Bitcoin is only used over the internet where it competes with the likes of credit cards and PayPal.\textsuperscript{41} Secondly, the Stamp Payment Act was written long ago, and the instruments described were all physical, tangible instruments.\textsuperscript{42} A court would be cautious to apply the act to digital currency that Congress could not have envisioned.\textsuperscript{43} Even though one could argue that Congress need not have envisioned digital currency, the text reads, “or other obligations,” and thus implies a textual reading that the Stamp Payment Act targets obligations.\textsuperscript{44} Most of the cases brought under the Act further this view.\textsuperscript{45} Bitcoin is not an obligation. It only has value due to individuals giving it value, not because anyone promised to give

\textsuperscript{37} Id. (citing 18 U.S.C §336).
\textsuperscript{38} Id. at 186-187 (noting that many merchants do accept Bitcoins in lieu of official currency, Bitcoins are accepted in the U.S., and could thus argue that Bitcoins are a “token…for less sum than $1, intended to circulate as money or to be received or used in lieu of lawful money of the United States.”)
\textsuperscript{39} Id.
\textsuperscript{40} Id.
\textsuperscript{41} Id. at 187.
\textsuperscript{42} Id.
\textsuperscript{43} Id.
\textsuperscript{44} Id. at 189 (noting that Professor Ronald Mann of Columbia Law School, who researches payment systems and electronic commerce, disagrees with a narrow interpretation of “obligations” because he believes the Act would covera private coin based solely on it’s metallic content. Furthermore, he thinks that Bitcoins are a “token” and would argue falls within the Act. The author disagrees based on the definition of a “token” and no evidence indicating the Act was aimed at specie).
\textsuperscript{45} Id.
something in return for it.\textsuperscript{46} Furthermore, the Stamp Payments Act is 150 years old, courts began limiting its application right after it was passed and have not interpreted since 1899, and the availability of statutes that are a better fit to attack Bitcoin would discourage federal prosecutors from trying to use the Act against Bitcoin.\textsuperscript{47}

Counterfeiting laws are another area people believe Bitcoin could face liability. A lot of this belief is based off the Liberty Dollar case.\textsuperscript{48} The basis for this opinion is grounded in common ideology that the Liberty Dollar’s creator and many Bitcoin users share: fear of the Federal Reserve and belief that an inflation resistant currency would be better for the economy.\textsuperscript{49} This reasoning, however, is flawed because federal counterfeiting laws deal with coins and paper money resembling United States or foreign currency.\textsuperscript{50}

Liberty Dollars were metal and paper currency backed by precious metals with the intention to be immune from inflation.\textsuperscript{51} The federal prosecutor focused on the similarity between the Liberty Dollar and official U.S. currency, which could confuse consumers.\textsuperscript{52} The government noted that the creator encouraged users to spend them, and encouraged business to issue them as change to unsuspecting customers.\textsuperscript{53} Additionally, the organization profited from this because the face value of the Liberty Dollar was higher than the value of their metal content.\textsuperscript{54} Rather than a political attack on their

\textsuperscript{46} Id.
\textsuperscript{47} Id. at 190-191.
\textsuperscript{48} Id. at 191.
\textsuperscript{49} Id. at 192
\textsuperscript{50} Id.
\textsuperscript{51} id. at 191.
\textsuperscript{52} Id. at 193.
\textsuperscript{53} Id.
\textsuperscript{54} Id.
beliefs, it was a prosecution of fraud just like any regular counterfeiting operation.\textsuperscript{55} For that reason the case bears no bearing on Bitcoins. They in no way resemble U.S. currency, and are no threat to unsuspecting individuals.\textsuperscript{56}

The Securities and Exchange Acts of 1933 and 1934 are a viable option to apply to Bitcoin. Congress passed these acts in wake of the Great Depression.\textsuperscript{57} As a result of the Depression it exposed the vast fluctuation in the price of securities due to market manipulation.\textsuperscript{58} Congress aim was to force conservative valuations, increase disclosure, and promote surveillance of fraud.\textsuperscript{59}

Stocks, notes, commodities, and investment contracts are subject to the Securities and Exchange Acts.\textsuperscript{60} How these instruments are defined is important in determining whether or not Bitcoin will fall within the scope of the Securities and Exchange Acts. It is important to note that the definitions are supposed to be construed broadly to focus on real-world implications.\textsuperscript{61}

A stock is “a proportional part of a corporation’s capital represented by the number of equal units owned, and granting the holder the right to participate in the company’s general management and to share in its net profits or earnings.”\textsuperscript{62} A note is “a written promise by one party to pay a money to another party or to bearer.”\textsuperscript{63} A

\textsuperscript{55} Id. at 194.  
\textsuperscript{56} Id.  
\textsuperscript{57} Dion, supra note 21, at 176.  
\textsuperscript{58} Id.  
\textsuperscript{59} Id.  
\textsuperscript{60} Id.  
\textsuperscript{61} Id.  
\textsuperscript{62} Blacks Law Dictionary 1551 (9th ed. 2009).  
\textsuperscript{63} Id. at 1162.
commodity is defined as “an article of trade or commerce...The term embraces only tangible goods, such as products or merchandise, as distinguished from services.”

A Bitcoin does not meet the definition of a “stock,” “note,” or “commodity.” Unlike a “stock,” an owner of a Bitcoin does not receive dividends or a right to share in profits. Furthermore, a Bitcoin owner does not hold voting rights. Although one may argue a Bitcoin represents a promise to pay, it is a settled amount, and thus does not meet the definition of a “note.” Additionally, Bitcoin does not seem to meet the definition of a “commodity,” because it is not a tangible good. Even though a further examination of a “commodity” may open an argument that Bitcoins act like a “commodity,” because one can use it, sell it, or make contracts involving it like many other commodities, an analysis of an “investment contract” shows that Bitcoin has more features of an “investment contract” than a “commodity.” Due to a better categorization as an “investment contract,” it is unlikely Bitcoin would be categorized as a commodity.

The broad phrase “investment contract” is the most likely category that would encompass a Bitcoin. In SEC v. W.J. Howey Co., the Supreme court interpreted an “investment contract” as “a contract, transaction or scheme whereby a person 1) invests

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64 Id at 310.
65 Grinberg, supra note 11, at 195 (citing United Housing Foundation, Inc. v. Forman, 42 U.S. 837, 851 (1975)) (noting that something is a “stock” and thus a “security” if it has “significant characteristics typically associated with a stock.”).
66 Id.
67 Id. at 196 (noting that the Supreme Court’s definition of a note in Reeves v. Ernst & Young, 494 U.S. 56, 63-65 (1990) seems circular because it would require a court to determine if something is a “note” prior to applying a test to determine if it is “note.” He further posits that the Court uses the word “note” in two different ways: 1) whether it is something the commercial world commonly considers a “note;” and 2) if it is, whether it should fall within the securities laws definition of “note.”).
68 Id. at 199-200.
69 Id.
70 Id.
his money in 2) a common enterprise and 3) is led to expect profits 4) soley from the efforts of the promoter or third party…”71 First, most people do purchase Bitcoins with money, rather than mine them.72 Second, the common enterprise could be the network of people who use their computer power to mine, update the ledger, and thus ensure the value of Bitcoins.73 This argument is furthered by pointing out that the as the value of Bitcoins increase, each person who holds them is better off.74 There is also a strong counter argument in the sense that the exchanges, current investment projects, and individuals holding Bitcoins in e-wallets, act independently of one another, rather than in a single profit-seeking investment scheme.75 Third, a strong argument exists that people do expect profits due to many Bitcoin holders belief that Bitcoin is inflation-resistant.76 There is a counter argument that some hold Bitcoins for fun; however, the stronger argument is that they are held for profit.77 Lastly, whether or not this profit is based solely on the efforts of the promoter could go either way.78 One could argue that the Bitcoin community relies on the efforts of miners.79 They could also argue that they do not because of Bitcoin’s inherent value due to the limited supply.80

The broad scope of an “investment contract” is the best vehicle to bring Bitcoins into the jurisdiction of the Securities and Exchange Acts. As analyzed above, applying the definition to Bitcoins in the general poses problems. Recently, however, a federal

72 Grinberg, supra note 11, at 197.
73 Id.
74 Id.
75 Id. at 197-198.
76 Id. at 198.
77 Id.
78 Id. at 199.
79 Id. at 198-199.
80 Id.
court has shown how it is easier to categorize Bitcoins as an “investment contract” in the context of a specific investment scheme.

In November 2011 Trendon Shavers advertised that he was in the business of selling Bitcoins through his Bitcoins Savings and Trust.\(^81\) He promised investors a 1% daily return on investment until the investor either withdrew their funds, or Shavers was no longer profitable.\(^82\) Shavers collected 700,467 Bitcoins from investors—approximately $4.5 million during that time period.\(^83\) Investors who suffered losses lost around 263,104 Bitcoins—approximately $1.8 million at that time.\(^84\) The SEC asserted that Shavers defrauded and made misrepresentations to his investors.\(^85\)

The question before the United States District Court for the Eastern District of Texas was whether Bitcoins were a security.\(^86\) By following the four part definition laid out in *SEC v. W.J. Howey Co.*, the court found that Bitcoins met the definition of an “investment contract” and thus a security.\(^87\) The magistrate judge opined that because Bitcoin can be used as money, that an investment of Bitcoin into Shavers fund was an investment of money.\(^88\) Next, the court examined whether there was a common enterprise.\(^89\) For a common enterprise, the Fifth Circuit requires some interdependence between the investors and promoter.\(^90\) This can be shown by a reliance on the promoter’s

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\(^82\) Id.
\(^83\) Id.
\(^84\) Id.
\(^85\) Id.
\(^86\) Id.
\(^87\) Id.
\(^88\) Id.
\(^89\) Id.
\(^90\) Id.
The magistrate judge found a common enterprise because the investors relied on Shavers expertise in Bitcoin markets and local connections. Lastly, the court found that profits were expected from Shavers efforts.

This case is important for a few reasons. As explained earlier, in general, it is hard to categorize Bitcoins as a stock, note, or investment contract. The broad definition of an investment contract is the best option, but there are strong arguments against that categorization when applying it to the overall Bitcoin economy. The Shavers court found that Bitcoins were an investment contract in Shavers’ investment fund, not that Bitcoins in general are investment contracts. This shows that the context in which Bitcoins are important. It allows the government to regulate them based on the context in which they are used. The argument for Bitcoins as an investment contract was much stronger when applied to an investment fund. This is one option for the government as the popularity of Bitcoin grows and more funds, such as the Winkelvoss twin’s current endeavor, are created. This still, however, leaves unregulated the vast majority of Bitcoins.

Most Bitcoins are purchased through exchanges. If the government wants to curb the illegal activity and money laundering associated with Bitcoin, regulating the exchanges is the best place to start. The best mechanism to regulate this market is the Bank Secrecy Act and Money Laundering Control Act. The Bank Secrecy Act (“BSA”) requires a “money services business” to register with FinCEN. The regulations stipulate that a “money services business” includes—but not limited to—check cashier,

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91 Id.
92 Id.
93 Id.
94 Id.
95 Grinberg, supra note 11, at 197.
dealers in foreign exchange, one who deals in travelers checks or money orders, money transmitter, and the United States Postal Service.\textsuperscript{97} The Money Laundering Control Act criminalizes money laundering.\textsuperscript{98} One who uses “dirty” money to conduct a financial transaction knowing the money is “dirty” and with the intent to promote illegal activity, and profit from the activity is in violation of the Act.\textsuperscript{99}

Every law review article on the topic of Bitcoin addresses E-Gold’s collapse at the hands of these laws.\textsuperscript{100} The site was charged under both laws.\textsuperscript{101} The charge against E-Gold shows how these laws often apply simultaneously:

[T]he E-Gold operation provided digital currency services over the Internet through two sites: www.e-gold.com and www.Omnipay.com. Several characteristics of the E-Gold operation made it attractive to users engaged in criminal activity, such as not requiring users to provide their true identity, or any specific identity. The E-Gold operation continued to allow accounts to be opened without verification of user identity, despite knowing that “e-gold” was being used for criminal activity, including child exploitation, investment scams, credit card fraud and identity theft. In addition, E-Gold assigned employees with no prior relevant experience to monitor hundreds of thousands of accounts for criminal activity. They also participated in designing a system that expressly encouraged users whose criminal activity had been discovered to transfer their criminal proceeds among other “e-gold” accounts. Unlike other Internet payment systems, the E-Gold operation did not include any statement in its user agreement prohibiting the use of “e-gold” for criminal activity.\textsuperscript{102}

E-Gold attempted to argue that a “money transmitting business” under the BSA only applied to a business that engages in a physical transfer of currency.\textsuperscript{103} The

\textsuperscript{97} 31 C.F.R. §1010.100(ff).
\textsuperscript{99} Id.
\textsuperscript{100} Dion, supra note 21, at 179; Grinberg, supra note 11, at 205; Gruber, supra note 79, at 136; Kaplanov, supra note 32, at 154.
\textsuperscript{101} Grinberg, supra note 11, at 205.
\textsuperscript{102} Id.
\textsuperscript{103} Gruber, supra note 79, at 136 (citing U.S. v. E-Gold Ltd., 550 F. Supp. 2d 82, 88 (D.D.C. 2008)).
court disagreed.\textsuperscript{104} By referring to the plain language of statute it held that a “money transmitting service” is one that transacts not just actual currency, but also the value of that currency through a medium of exchange.\textsuperscript{105}

Recently, FinCEN issued guidelines applying to virtual currency to clarify where they fall under the BSA.\textsuperscript{106} With regards to virtual currency, a “money services business” is: (1) administrator or exchanger that accepts and transmits virtual currency, or buys or sells virtual currency; (2) brokers and dealers of virtual currency; (3) mine and sell virtual currency for money or its equivalent.\textsuperscript{107} The definitions seem to be an attempt to cast a large web over the Bitcoin community including e-wallets, exchanges like Mt. Gox, and miners.\textsuperscript{108} This would require them to implement anti-money laundering procedures, keep records, and report suspicious transactions.\textsuperscript{109}

FinCEN’s guidance—in terms of legal authority—is, at most, persuasive. An agency’s substantive rules create legal rights and obligations, and as such require notice and comment.\textsuperscript{110} Interpretive rules differ because they “merely advise the public of a statute’s meaning or the manner in which it is to be applied.”\textsuperscript{111} As part of the Guidance,

\begin{footnotes}
\item[104] Id.
\item[105] Id. at 137
\item[107] Id.
\item[108] Gruber, supra note 102, at 141-142
\item[109] Id. at 204.
\item[110] Id. (citing \textit{Exceptions to Notice and Comment Requirements}, 3-15 Admin. Law §15.05 (2013) (citing 5 U.S.C. §553(b))).
\item[111] Id.
\end{footnotes}
FinCEN explicitly stated that the guidance is interpretive.\textsuperscript{112} To further clarify, FinCEN noted at the bottom of the guidance, “This guidance explains only how FinCEN characterizes certain activities involving virtual currencies under the Bank Secrecy Act and FinCEN regulations. It should not be interpreted as a statement by FinCEN about the extent to which those activities comport with other federal or state statutes, rules, regulations, or orders.”\textsuperscript{113}

The deference a court gives to an agency’s interpretive rule varies greatly.\textsuperscript{114} The court’s will look at the agency’s care, consistency, expertise, and persuasiveness of their opinion.\textsuperscript{115} These considerations have resulted in the court’s giving the agency’s interpretation great respect, but in other instances giving it nothing more than near indifference.\textsuperscript{116} Law enforcement already follows these guidelines.\textsuperscript{117} Homeland Security seized a company’s bank account that was transacting with Dwolla and Mt. Gox.\textsuperscript{118} The affidavit in support of the seizure alleged that the company was a money transmitting business unregistered with FinCEN.\textsuperscript{119} If law enforcement chooses to continue to enforce in this manner, exchanges and e-wallet providers will have to follow suit; because, as exemplified by E-Gold, if they do not register and knowingly process dirty money, make a profit from the transaction, and do nothing to stop the transaction, they are guilty under both the Bank Secrecy Act and the Money Laundering Control Act.

\textsuperscript{112} Application of FinCEN’s Regulations to Persons Administering, Exchanging, or Using Virtual Currencies, supra note 106.
\textsuperscript{113} Id.
\textsuperscript{114} Id. (citing U.S. v. Mead Corp., U.S. 218, 228 (2001)).
\textsuperscript{115} Id.
\textsuperscript{116} Id.
\textsuperscript{117} Id. (citing Affidavit in Support of Seizure Warrant, USA v. The Contents of one Dwolla account, No. 13-MJ-01162 (D. Md. May 14, 2013)).
\textsuperscript{118} Id.
Exchanges have heeded FinCEN’s advice. On June 27th, 2013 Mt. Gox officially registered with FinCEN. In May of that year announced that they would require users to verify their accounts in order to make currency deposits or withdrawals. More intriguing is that rather than enforce the regulations, FinCEN has reached out to about a dozen Bitcoin firms. These letters were sent to warn the firms that they may have to comply with anti-money laundering compliance regulations as money transmitters. The letters acknowledged that they operate in a “legal grey area,” but should err on the side of caution and comply. Some have complied, while others suspended business out of the fear of civil and criminal sanctions. One legal expert believes this is a sign that FinCEN is moving towards a new enforcement precedent of warning before taking action.

Based on the legal options at the hands of the United States government, it seems clear that the BSA is the major means to regulate Bitcoin. The Security and Exchange Acts are viable options with regards to specific investment schemes, but the majority of Bitcoin use occurs at exchanges. FinCEN’s regulations are clear that they are attempting to regulate these mediums.

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121 Id.
123 Id.
124 Id.
125 Id.
126 Id.
Future of Bitcoin

The future of Bitcoin is bright. At its inception it was a currency that was designed for individuals who wanted to operate outside the control of a central authority, a motive largely caused by the 2008 financial crisis. Individuals were attracted to the novel currency because a decentralized monetary unit would eliminate having to trust a central banking authority. This is why many of the initial users were libertarians, gold bugs, and criminals. Even today’s Bitcoin business operators believe FinCEN involvement strikes at these principles. They believe Bitcoin does not exist because a government allows it to. The success of Bitcoin depends on the growth of Bitcoin users. This is true in part, but the government can play a major role in the growth of Bitcoin.

The value of a Bitcoin is what one is willing to pay for it. Confidence is crucial for the future of Bitcoin. Any irrational or rational loss of confidence would collapse demand relative to supply. There are many ways that this could occur. Developers could exercise authority and alter Bitcoins inflation rate enough to cause Bitcoin holders to panic and sell off their holdings, or create hyperinflation. A superior virtual currency could cause a crisis in confidence

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128 Id.  
129 Id.  
131 Id.  
132 Id.  
133 Id. supra note 11, at 175.  
134 Id. at 176.
that results in a collapse in the value of Bitcoin.\textsuperscript{135} Bitcoin’s supply is fixed at 21 million. Any fall in confidence could result in a fall in demand causing a deflationary spiral due to individuals and business abandoning Bitcoin.\textsuperscript{136} A government crackdown could cause a loss in confidence as well.\textsuperscript{137}

China’s recent stance on Bitcoin paints a very real picture of this scenario.\textsuperscript{138} China’s deputy director of payment clearance at the People’s Bank of China alerted third party providers that they could no longer work with Bitcoin exchanges.\textsuperscript{139} This means that people have no way to turn their Bitcoins into Chinese Yuan.\textsuperscript{140} The price of Bitcoin dropped $400 in response. China’s stance in nowhere near how the United States has been acting towards Bitcoin. FinCEN and \textit{Shavers} illustrate that the United States is attacking criminal use of Bitcoin, not the Bitcoin community.

FinCEN is focused on compliance to curb fraud and money laundering by. PayPal went through a similar dilemma at the company’s inception.\textsuperscript{141} Small business could not accept credit card payments online, and PayPal offered a solution by acting as an intermediary for peer-to-peer transactions.\textsuperscript{142} PayPal

\begin{enumerate}
\item Id.
\item Id. at 178
\item Id. at 177
\item Id.
\item Id.
\item Dion, supra note 21, at 180.
\item Id.
\end{enumerate}
faced government investigation as a bank operating with out a licensee. The Federal Deposit Insurance Corporation issued an opinion that they were not; however, PayPal was advised to register as a money transmitter. Subsequently, PayPal registered with FinCEN and enacted various procedures to detect fraud and money laundering.

Bitcoin businesses should take a similar path as PayPal. FinCEN’s intent is to verify where the Bitcoins are going to curb criminal activity. Bitcoin’s anonymity poses a problem that other currencies do not. The truth is that the transactions are not as anonymous as users believe. One part of the Snowden fallout was the realization that the National Security Agency is far more advanced at decrypting codes of data sent over the internet than the public believes. Additionally, A University of California, San Diego research study revealed a rather simple way to trace an illegal transaction to the user involved. The study mapped block chain transactions of about 12 million addresses and 16 million transactions. The initial map of the addresses was based on transactions

143 Id.
144 Id.
145 Id.
146 Jon Matonis, supra note 128.
147 Id.
149 Ellen Nakashima, NSA has made strides in thwarting encryption used to protect Internet communication, Washington Post, (September 5, 2013) http://articles.washingtonpost.com/2013-09-05/world/41798759_1_encryption-nsa-internet.
150 Id.
151 Id.
between them. Addresses clustered around one group suggested that they belong to individuals or organization. Next, the researchers enhanced the map by labeling addresses linked to known people or organizations. A government agency could use the map to track and illegal transaction back to an exchange, and subpoena that exchange. It is incredibly difficult to obtain Bitcoins, or realize any gain from Bitcoins, without the use of an exchange. Exchanges handle millions of dollars in Bitcoin transactions, which creates a major incentive to register with FinCEN and cooperate with authorities.

Compliance should not be seen as a surrender to government authority, rather it should be seen a step to legitimacy. The government warned PayPal before taking action, just as they have done to with Bitcoin businesses. This should be viewed as a sign that the government views Bitcoins as legitimate, and they do. Government officials testified before the Senate that Bitcoin offers real benefits to the financial system. Regulators believe that there are plenty of opportunities for virtual currency to operate within the laws and regulations of the federal government. This is a sign that the government will not step in the way

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152 Id.
153 Id.
154 Id.
155 Id.
156 Id.
157 Id.
158 Id.
159 Brett Wolf, supra note 120.
161 Id.
of Bitcoin.\textsuperscript{162} This acceptance of Bitcoin was viewed as a positive step.\textsuperscript{163} Bitcoin supporters at the hearing felt that cooperation with the federal government is a step towards further growth.\textsuperscript{164}

As more people see the government recognize Bitcoin as legitimate, the more people will buy into Bitcoin due to increased confidence. When confidence increases, the results are the exact opposite of when confidence decreases: value goes up. This was exactly what happened after the Senate hearing.\textsuperscript{165} The price of Bitcoin soared.\textsuperscript{166} Since the Senate hearing in November the price of Bitcoin has rose from around $200 to $1200 until it dropped in response to China’s report.\textsuperscript{167} Everyone in the Bitcoin community, regardless of political belief, can agree they want their Bitcoins to have the highest value possible. These numbers alone show how confidence gained from the government’s stance is a real positive.

The government’s stance towards Bitcoin has also resulted in investment in Bitcoin business ventures. One business commentator has called Bitcoin “the hottest investment in 2014.”\textsuperscript{168} As a decentralized currency, there are very minimal transaction costs when dealing in Bitcoin.\textsuperscript{169} One excellent example of this is BitPesa, a Kenyan startup company to help Africans send money to their

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\begin{footnotes}
\item[162] Id.
\item[163] Id.
\item[164] Id.
\item[165] Id.
\item[166] Id.
\item[167] See Charts at Blockchain.info
\end{footnotes}
families.\textsuperscript{170} The World Bank estimates that about $1.3 billion dollars are sent to Kenya per year.\textsuperscript{171} The transaction costs on that $1.3 billion results in about $110 million in fees.\textsuperscript{172} BitPesa will use Bitcoins instead of banks and wire-transfer companies to cut transaction fees by a third and saving African families $74 million annually.\textsuperscript{173}

Bitcoins minimal transaction fees also make micropayments possible. Many businesses require customers to make a minimum payment of $10 on credit card transactions because processors charge more for smaller amounts in order to make a profit.\textsuperscript{174} PayPal operates similarly.\textsuperscript{175} They raise transaction fees for payments less than $12.\textsuperscript{176} Bitcoin can eliminate this problem, and companies like Coinbase and BitWall are making micropayments a reality.\textsuperscript{177} Major investment firms see the potential, too. Andreessen Horowitz, a major Silicon Valley venture capital firm, recently raised $25 million dollars to invest in Coinbase based on their confidence in the future of this market.\textsuperscript{178} Part of their confidence is due in part to the government’s stance towards Bitcoin.\textsuperscript{179}

\begin{thebibliography}{17}
\bibitem{170} Alan Feuer, supra note 125.
\bibitem{171} Id.
\bibitem{172} Id.
\bibitem{173} Id.
\bibitem{174} Drew Cawrey, supra note 9.
\bibitem{175} Id.
\bibitem{176} Id.
\bibitem{177} Id.
\bibitem{178} Nathaniel Popper, \textit{$25 Million in Financing for Coinbase}, DealBook, (December 12, 2013 7:24 AM) \url{http://dealbook.nytimes.com/2013/12/12/venture-capital-bets-big-on-bitcoin/}.
\end{thebibliography}
Conclusion

Bitcoin started in 2008 and has since grown into a worldwide phenomenon. The initial motive was to create a currency free from government regulation. As Bitcoin came into the mainstream it has garnered the attention of the United States government. Federal authorities, specifically FinCEN, have acknowledged that Bitcoin services are subject to its regulation. Additionally, a federal court has applied securities law to Bitcoin investment projects. This regulation, however, should be seen as a positive for the future of Bitcoin. The federal government’s regulation is a sign that Bitcoin is legitimate. This acknowledgement is a positive sign. It increases confidence in Bitcoin, which leads the growth of the Bitcoin community.