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Bitcoin: Currency of the Future or Investment Property

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Bitcoin: Currency of the Future or Investment Property

A Thesis
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The Faculty and the Honors Program
Of the University of San Diego

By
Kelly Yu
Accounting
2015

Introduction to Bitcoin

In 2009, Satoshi Nakamoto, who continues to remain anonymous, introduced Bitcoin as a new currency. Wei Dai¹ first introduced the concept of crypto-currency in 1998 as a new form of currency that depends on cryptography, and Bitcoin has been the first implementation of the concept.² Bitcoin is a “decentralized peer-to-peer payment network that is powered by its users with no central authority or middlemen.”³ While Bitcoin users can choose the software and version they use, they must use software that adheres to the same set of rules for compatibility reasons. Bitcoin is convenient for most users because it is simply a virtual currency in a digital wallet, which typically exists either in a cloud or on a computer and is not insured by the Federal Deposit Insurance Corporation (FDIC).⁴ Transactions are recorded on a public ledger, called the “block chain,” that “contains every transaction ever processed, allowing a user’s computer to verify the validity of each transaction.”⁵ Individuals have several options for acquiring bitcoins, including purchasing bitcoins at a Bitcoin exchange, transferring bitcoins to other users using mobile apps or computers, and solving complex math puzzles on computers, also known as mining.⁶ Bitcoin payments are made from an application, either on a computer or a smartphone, by sending a specific amount to a recipient’s address through near field communication (NFC) technology, scanning a quick response (QR) code, or manual entry.

Bitcoins are created through a process called mining, which involves individuals using specialized software in a competition to solve complex math puzzles. Mining is a competitive

1 Published a description of an anonymous, electronic cash system called “b-money.”

2 “Frequently Asked Questions,” *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

3 *Ibid.*

4 Yellin, Tal, Dominic Aratari, and Jose Pagliery, “What Is Bitcoin?” *CNNMoney*, accessed October 11, 2014, <http://money.cnn.com/infographic/technology/what-is-bitcoin/>.

5 “Frequently Asked Questions,” *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

6 Yellin, Tal, Dominic Aratari, and Jose Pagliery, “What Is Bitcoin?” *CNNMoney*, accessed October 11, 2014, <http://money.cnn.com/infographic/technology/what-is-bitcoin/>.

and decentralized process that processes transactions, secures the network, and keeps the system in sync using computer power.⁷ Bitcoin miners possess specialized mining hardware that detects transactions in the peer-to-peer network and processes and confirms these transactions. To confirm new transactions, billions of calculations per second are performed to generate mathematical proof of work, which is included in the blocks that must be accepted by the network before new bitcoins are issued.⁸ In return for their service, Bitcoin miners are rewarded with transaction fees from users and new bitcoins that are released into circulation. Bitcoin mining is competitive because the system is designed so that new bitcoins are created at a fixed rate.⁹

In 2013, a federal judge issued an opinion in a controversial court case, Securities and Exchange Commission v. Trendon T. Shavers and Bitcoin Savings and Trust (SEC v. Shavers), recognizing Bitcoin as a legitimate form of money.¹⁰ According to the court, Bitcoin is considered money because it meets the six characteristics of money: durability, portability, fungibility, divisibility, recognizability, and scarcity. While conventional currency has been based on gold or silver, Bitcoin is backed by mathematics. Since Bitcoin is characterized as money, it has value and the law of supply and demand determines its price. For example, when the demand for bitcoins increases, the price proportionately increases. “There is only a limited number of bitcoins in circulation and new bitcoins are created at a predictable and decreasing rate, which means that demand must follow this level of inflation to keep the price stable.”¹¹

7 “Frequently Asked Questions,” *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

8 *Ibid.*

9 *Ibid.*

10 “Securities and Exchange Commission v. Trendon T. Shavers and Bitcoin Savings and Trust,” *United States District Court*, August 6, 2013, accessed November 3, 2014, <https://ia600904.us.archive.org/35/items/gov.uscourts.txed.146063/gov.uscourts.txed.146063.23.0.pdf>.

11 “Frequently Asked Questions,” *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

Since “there is no way for anybody to find the private key(s) that would allow them to be spent again,”¹² lost Bitcoins cannot be retrieved. As a result, the remaining bitcoins in circulation are in higher demand and increase in value.

Advantages and Disadvantages of Bitcoin

Bitcoin is different from the conventional currencies we use because it offers users many advantages that conventional currencies do not. Since Bitcoin is not tied to any country, there is freedom and anonymity. Even though all transactions are recorded in a public log, Bitcoin does not extract sensitive and personal information from users. Instead, all users are identified through unique, specific, and anonymous Bitcoin addresses, also known as wallet IDs.¹³ Due to the secure, irreversible, and anonymous nature of Bitcoin transactions, merchants are protected from losses related to fraud. Bitcoin makes it possible for merchants to expand into markets where fraud and crime rates are high, since transactions are transparent. All confirmed transactions are available to the public on the block chain, and the Bitcoin protocol cannot be manipulated because it is cryptographically secure. Bitcoin also allows users to be in complete control of their transactions. Users are not limited by bank holidays, borders, etc. when sending and receiving money. Unlike other payment methods, Bitcoin prevents merchants from charging unwanted or unnoticed charges and makes and finalizes payments without tying personal information to the transactions.¹⁴ Because Bitcoin is digital and based on mathematics, users can keep their money safe with backup and encryption.

12 “Frequently Asked Questions,” *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

13 Yellin, Tal, Dominic Aratari, and Jose Pagliery, “What Is Bitcoin?” *CNNMoney*, accessed October 11, 2014, <http://money.cnn.com/infographic/technology/what-is-bitcoin/>.

14 “Frequently Asked Questions,” *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

Another great advantage of Bitcoin over conventional currencies is the low fees associated with transactions. Currently, Bitcoin payments are associated with little or no fees. Merchant processors that help merchants in processing transactions by converting Bitcoins to fiat currency are offered at lower fees than PayPal and credit card networks.¹⁵ Also, unlike credit cards, Bitcoin does not risk “late fees, interested [sic] charges, foreign transaction fees and effects on [a user’s] credit score.”¹⁶ Additionally, Bitcoin is great for merchants because it saves money. Coinbase, a transaction process service provider, allows the first \$1 million to be free, followed by a 1% fee on all transactions thereafter, compared to the 3-4% transaction fee for credit cards.¹⁷

While Bitcoin offers many advantages, the digital currency also has several noteworthy disadvantages. The irreversibility of bitcoins provides no recourse for victims and there is no liability protection available for users.¹⁸ If a server has been hacked, a user accidentally deleted bitcoins, or a virus destroyed bitcoins, then the user would most likely have to absorb the loss. Furthermore, the total value of bitcoins is still very volatile, due to the fact that Bitcoin is currently a relatively small market and it does not take “significant amounts of money to move the market price up or down.”¹⁹ Since Bitcoin does not have a central bank, its value cannot be stabilized. Please see the graph on the next page for the change in Bitcoin price from 2013 to 2014.

15 “Frequently Asked Questions,” *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

16 Adamowsky, Eric, “Bitcoin: The Pros and Cons for Consumers and Merchants,” *Yahoo Finance*, March 2, 2014, accessed October 23, 2014, <http://finance.yahoo.com/news/bitcoin-pros-cons-consumers-merchants-140041526.html>.

17 *Ibid.*

18 *Ibid.*

19 “Frequently Asked Questions,” *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.



Source: [Bitcoin](#)

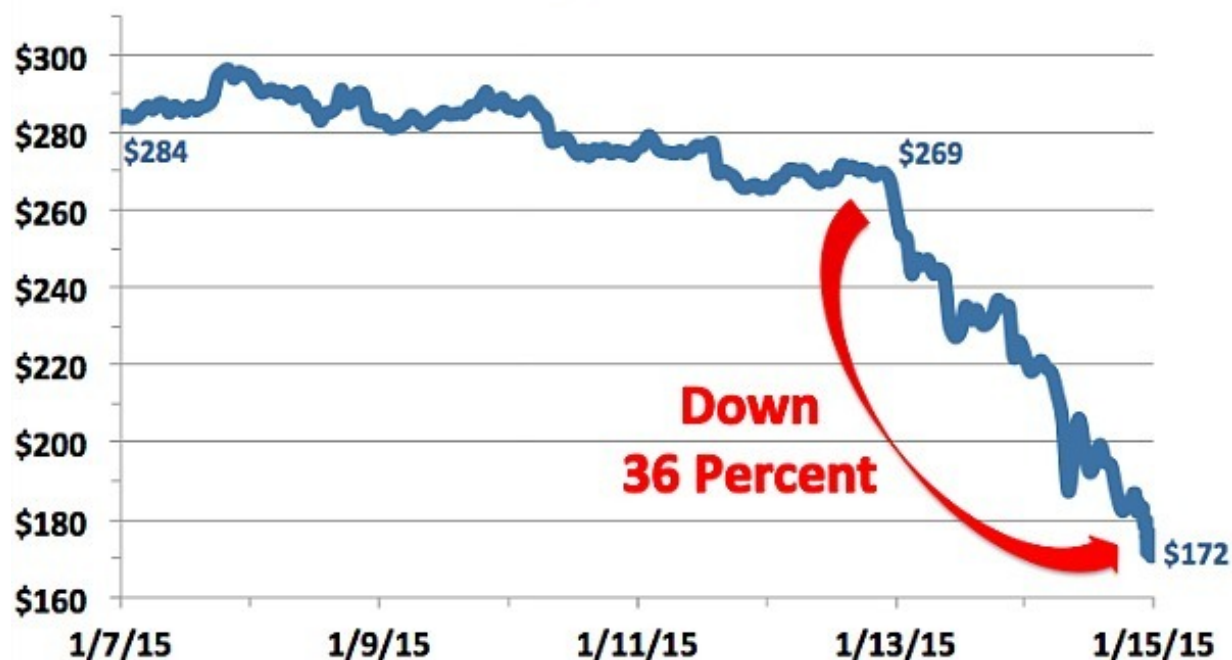
As more businesses and customers accept and use Bitcoin, the volatility of Bitcoin's price will stabilize. Currently, many people are still unaware of Bitcoin, and people who are aware of Bitcoin do not necessarily understand it enough to use it. While the number of businesses accepting bitcoins is growing, it is still small compared to the number of businesses accepting physical currencies, thus not completely benefitting from network effects yet.²⁰ Currently, Bitcoin has no inherent value because no one really uses it as a replacement for cash to purchase products.²¹ However, Bitcoin is still in its infancy and in active development, so it possesses risk. This is another major disadvantage because there are vulnerabilities in the system and no insurance coverage is offered. In the first few weeks of 2015, the value of Bitcoin plummeted. As demonstrated in the graph on the next page, the value of Bitcoin dropped 36% over a two-day period.²²

20 "Frequently Asked Questions," *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

21 O'Brien, Matt, "Bitcoin Revealed: A Ponzi Scheme for Redistributing Wealth from One Libertarian to Another," *Washington Post*, January 14, 2015, accessed February 1, 2015, <http://www.washingtonpost.com/blogs/wonkblog/wp/2015/01/14/bitcoin-is-revealed-a-ponzi-scheme-for-redistributing-wealth-from-one-libertarian-to-another/>.

22 Ibid.

Bitcoin Isn't Exactly A Good Store of Value...



Source: [Coindesk](#)

One of the most dangerous and growing disadvantages of Bitcoin is the use of this virtual currency for illegal activities, contrary to the original belief that Bitcoin would prevent such activities. Since user transactions are anonymous and not tied to any specific regulation, Bitcoin has increasingly become the preferred currency for criminals, drug addicts, terrorist groups, and other groups or individuals seeking to avoid “traditional financial systems by using the Internet to conduct global monetary transfers.”²³ Illegal activities that are already accepting Bitcoin payments include the online market for illegal drugs, child pornography, and Internet gambling. Despite the obstacles law enforcement face as the acceptance of Bitcoin on illegal platforms grows, in 2013, U.S. law enforcement authorities shut down Silk Road, an online marketplace

²³ Zetter, Kim, "FBI Fears Bitcoin's Popularity with Criminals," *Wired*, May 9, 2012, accessed October 23, 2014, <http://www.wired.com/2012/05/fbi-fears-bitcoin/>.

that sold illegal drugs for Bitcoins.²⁴ In 2014, the Islamic State of Iraq and Syria (ISIS), a terrorist group, began to encourage donations in the form of crypto currencies such as Bitcoin, since global governments have been actively tracking and blocking “all funding efforts through banking channels.”²⁵ While no government or central authority to date has the resources to pursue terrorist activities involving Bitcoin, the U.S. military is analyzing digital currencies like Bitcoin to understand and trace the use of them by terrorist groups.²⁶

Fraud, hacking, and theft are other crimes that have an increasing presence in the world of virtual currency. The legitimacy of Bitcoin as a form of money has been questioned since 2009. In fact, some experts have suspicions that Bitcoin is a Ponzi scheme. As defined by the Securities and Exchange Commission (SEC), a Ponzi scheme is “an investment fraud that involves the payment of purported returns to existing investors from funds contributed by new investors.”²⁷ Organizers of Ponzi schemes generally attract investors by advertising high investment returns with little or no risk. Ponzi schemes develop into pyramids, with the organizers at the top and the layers of investors at the bottom. For the schemes to work, there must be a consistent flow of cash from new investors since the cash contributed from new investors, rather than from profit earned, pays early investors.

The SEC has published seven common characteristics of Ponzi schemes: high investment returns with little or no risk, overly consistent returns, unregistered investments, unlicensed sellers, secretive and/or complex strategies, issues with paperwork, and difficulty receiving

24 Randewich, Noel, "Bitcoin Sinks in Value after FBI Busts Silk Road Drug Market," *Reuters*, October 8, 2013, accessed October 15, 2014, <http://www.reuters.com/article/2013/10/08/net-us-crime-silkroad-bitcoin-idUSBRE99113A20131008>.

25 Satti, Brooke, "ISIS Using Bitcoins to Fund Criminal Activities," *Security Intelligence*, October 29, 2014, accessed December 2, 2014, http://securityintelligence.com/isis-are-they-using-bitcoins-to-fund-criminal-activities/#.VKsfsCeLJ_8.

26 Javers, Eamon, "U.S. Military Probing Digital Currencies in Terror Fight," *NBC News*, September 26, 2014, accessed October 29, 2014, <http://www.nbcnews.com/storyline/isis-terror/u-s-military-probing-digital-currencies-terror-fight-n212371>.

27 "Ponzi Schemes," *U.S. Securities and Exchange Commission*, accessed January 30, 2015, <http://www.sec.gov/answers/ponzi.htm>.

payments.²⁸ Those who believe that Bitcoin is a Ponzi scheme argue that Bitcoin possesses some of these characteristics. First, Bitcoin miners borrowed money, in dollars, from investors in the form of investments that can only be paid back if Bitcoin prices keep rising.²⁹ Bitcoin also has unlicensed sellers since anyone with the correct software can mine and sell bitcoins.

Additionally, the mining process involves solving complex math equations, which is most likely difficult for investors to understand. As a matter of fact, the SEC has published several investor alerts on their website warning investors against investing and becoming involved in Bitcoin, and the North American Securities Administrators Association (NASAA) “included digital currency in its list of the top 10 threats to investors for 2013.”³⁰

Specifically, the SEC has advised investors that Bitcoin investments are more vulnerable to fraudulent investment schemes and have limited recovery options. Bitcoin users and enthusiasts are attractive targets for fraudsters because they are a receptive audience for investment opportunities. The fact that early adopters of Bitcoin have received unexpectedly high amounts of returns makes fraudulent schemes easier to market.³¹ With that said, the risk for investing in Bitcoins is very high. In *SEC v. Shavers*, the SEC charged the defendant for creating a Bitcoin-related Ponzi scheme; the defendant advertised a Bitcoin investment opportunity but used bitcoins from new investors to pay existing investors.³² In the event of

28 Ibid.

29 O'Brien, Matt, "Bitcoin Revealed: A Ponzi Scheme for Redistributing Wealth from One Libertarian to Another," *Washington Post*, January 14, 2015, accessed February 1, 2015, <http://www.washingtonpost.com/blogs/wonkblog/wp/2015/01/14/bitcoin-is-revealed-a-ponzi-scheme-for-redistributing-wealth-from-one-libertarian-to-another/>.

30 "INVESTOR ALERT: BITCOIN AND OTHER VIRTUAL CURRENCY-RELATED INVESTMENTS," *U.S. Securities and Exchange Commission*, accessed February 2, 2015, http://www.sec.gov/oiea/investor-alerts-bulletins/investoralertsia_bitcoin.html#.VNGn0MaLJ_8.

31 "INVESTOR ALERT: BITCOIN AND OTHER VIRTUAL CURRENCY-RELATED INVESTMENTS," *U.S. Securities and Exchange Commission*, accessed February 2, 2015, http://www.sec.gov/oiea/investor-alerts-bulletins/investoralertsia_bitcoin.html#.VNGn0MaLJ_8.

32 "Securities and Exchange Commission v. Trendon T. Shavers and Bitcoin Savings and Trust," *United States District Court*, August 6, 2013, accessed November 3, 2014, <https://ia600904.us.archive.org/35/items/gov.uscourts.txed.146063/gov.uscourts.txed.146063.23.0.pdf>.

fraud or theft, investors may have limited or no recovery options because law enforcement and the SEC face many challenges when their investigations involve Bitcoin. Some obstacles include money tracing, cross-border agreements, lack of central authority, and seizing bitcoins.³³ Money tracing is especially difficult in cyberspace because no financial institution facilitates transactions and no central authority collects user information, leaving digital currency to mysteriously travel from user to user. Not only do law enforcement and the SEC have weak control over any illegal use of virtual currency, investors are not insured at all. The price of Bitcoin is volatile and unpredictable; if something happens to Bitcoin, then investors and users are left with lost Bitcoins and physical cash that they will never get back.

While some are suspicious of Bitcoin as a Ponzi scheme, others defend Bitcoin and deny that it is a Ponzi scheme. The main argument is that “Bitcoin is a free software project with no central authority.”³⁴ Since there is a lack of central authority, no one is in a position to deceive investors and organize the Ponzi scheme. Supporters of Bitcoin also believe that Bitcoin is similar to other major currencies in that its value changes freely, resulting in volatility. The only difference, according to Bitcoin supporters, is that Bitcoin is based on mathematics.

Legal Regulation of Bitcoin

Whether or not Bitcoin is a Ponzi scheme, Bitcoin is currently a currency option and is being used by many people. Bitcoin transactions generally operate outside of the traditional banking system and are not associated with any government, thus challenging authorities to “use

33 "INVESTOR ALERT: BITCOIN AND OTHER VIRTUAL CURRENCY-RELATED INVESTMENTS," *U.S. Securities and Exchange Commission*, accessed February 2, 2015, http://www.sec.gov/oiea/investor-alerts-bulletins/investoralertsia_bitcoin.html#.VNGn0MaLJ_8.

34 "Frequently Asked Questions," *Bitcoin*, accessed September 7, 2014, <https://bitcoin.org/en/faq#what-is-bitcoin>.

laws that were not designed for the digital world to combat illegal conduct,”³⁵ and making it “harder to prosecute violations.”³⁶ For instance, the common law of larceny does not apply to reports of bitcoins being stolen from digital wallets since “the law applies only to the removal of physical items.”³⁷ On the other hand, theft statutes in the U.S. currently include intangible property. Even though stealing Bitcoins may be a crime punishable through theft statutes, authorities do not have the resources yet to track such crimes in cyberspace and beyond American soil.

The influence of virtual currencies, like Bitcoin, on fraud and theft crimes has made it necessary to redefine criminal laws and to include virtual currency in regulations. Currently, there are several laws that potentially include fraud and theft crimes involving Bitcoin. There is a federal law that makes the interstate transportation of stolen, converted, or fraudulent property a crime. However, in 1985, the Supreme Court limited the law to tangible property and “money” in *Dowling v. United States*.³⁸ The definition of “money” is open to interpretation and may include bitcoins. There is also the Computer Fraud and Abuse Act (1986), which criminalizes the use of a computer when there is the intent to defraud a victim of anything valuable.³⁹ Since bitcoins are valuable and any fraud or theft would be through a computer, this Act could apply to bitcoins. Additionally, one of the most appropriate laws for fraud and theft involving Bitcoins is 18 U.S. Code § 1343, which covers fraud by wire, radio, or television. Specifically, the federal wire fraud statute covers fraud and the intent to defraud a victim of either tangible or intangible

35 Henning, Peter, "For Bitcoin, Square Peg Meets Round Hole Under the Law," *The New York Times*, December 9, 2013, accessed October 12, 2014, <http://dealbook.nytimes.com/2013/12/09/for-bitcoin-square-peg-meets-round-hole-under-the-law/>.

36 Ibid.

37 Ibid.

38 Ibid.

39 Henning, Peter, "For Bitcoin, Square Peg Meets Round Hole Under the Law," *The New York Times*, December 9, 2013, accessed October 12, 2014, <http://dealbook.nytimes.com/2013/12/09/for-bitcoin-square-peg-meets-round-hole-under-the-law/>.

property by means of wire, radio, or television communication.⁴⁰ However, a potential issue with this statute is that it only applies to financial transactions involving monetary instruments, and Bitcoin is not a monetary instrument because no government backs the virtual currency.

Tax Treatment of Bitcoin

Since Bitcoin's debut in 2009, there are a growing number and variety of businesses and individuals using Bitcoin. The increasing popularity of the new virtual currency has puzzled U.S. government agencies and federal regulators regarding regulation and enforcement of current laws on Bitcoin. While government agencies have been focused on dealing with the increasing criminal activity related to Bitcoin, the Internal Revenue Service (IRS) has been debating for years whether to treat Bitcoin transactions as currency or property. On March 25, 2014, the IRS issued Notice 2014-21, providing guidance and information on the application of existing U.S. federal tax principles to transactions using virtual currency, including Bitcoin. For U.S. federal tax purposes, virtual currency is treated as property and "[g]eneral tax principles applicable to property transactions apply to transactions using virtual currency."⁴¹

The IRS defines virtual currency as "a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value."⁴² While virtual currency is recognized as a digital representation of value and operates like "real" currency (such as traditional coin and paper money, which can be used as a medium of exchange) it does not have

40 Ibid.

41 "Notice 2014-21," *The Internal Revenue Service*, March 21, 2014, accessed August 31, 2014, <http://www.irs.gov/pub/irs-drop/n-14-21.pdf>.

42 "Notice 2014-21," *The Internal Revenue Service*, March 21, 2014, accessed August 31, 2014, <http://www.irs.gov/pub/irs-drop/n-14-21.pdf>.

legal tender status in any jurisdiction.⁴³ Bitcoin is classified as a convertible virtual currency. A virtual currency is a substitute for real currency or has an equivalent value in real currency.⁴⁴ Since Bitcoin and other convertible virtual currencies are used in real-world economic transactions, the IRS has stated that transactions involving convertible virtual currencies have U.S. federal tax consequences that may result in tax liabilities.

The tax principles applied to property transactions can be complex. Before analyzing the effect of the IRS decision to treat convertible virtual currencies like Bitcoin as property, it is important to understand the tax treatment of property. Investment property is property that produces investment income. Common examples include stocks and bonds. The essence of the tax liability created by selling investment property is captured by calculating and reporting gains and losses. To calculate gains or losses on the sale of property, it is important to follow the three steps to reporting gains and losses. These steps are to calculate the realized gain or loss, figure out the recognized portion of the gain or loss, and characterize the recognized gain or loss as ordinary, capital, or IRC section 1231 property.

Calculating Realized Gain or Loss

Before calculating the amount realized from the sale of property, it is important to know the basis and fair market value (FMV). Generally, the basis of the property is equal to its cost, or the amount an individual pays in cash, debt obligations, or other property or services to purchase the property.⁴⁵ Under certain circumstances outlined by the IRS, individuals must use the FMV

43 Ibid.

44 Ibid.

45 "Publication 550 (2013), Investment Income and Expenses," *The Internal Revenue Service*, accessed October 12, 2014, http://www.irs.gov/publications/p550/ch04.html#en_US_2013_publink100010476.

at the time the property is acquired as the tax basis. Such circumstances include when property is received for services, property is received in taxable trades, and property received as an inheritance. Of course, exceptions exist such as when “the executor of the decedent’s estate elect[s] not to file Form 8939, Allocation of Increase in Basis for Property Acquired From a Decedent.”⁴⁶ Another common exception is when property is received as a gift. In this case, the basis for gains is the “donor’s adjusted basis plus or minus any required adjustments to basis during the period [the donee] hold[s] the property.”⁴⁷ The basis for a loss when property is received as a gift is the FMV at the time of the gift plus or minus any adjustments during the donee’s holding period.

Adjustments are usually made after the basis of the property is determined, resulting in an adjusted basis. For example, the basis of stocks or bonds is usually the purchase price plus any costs and fees associated with the purchase. After a stock purchase, the basis must be adjusted for certain events, including the receipt of more stock from nontaxable stock dividends or stock splits and the receipt of nondividend distributions.⁴⁸

Once the basis is determined and adjustments have been made, gain or loss on the sale of investment property is calculated by comparing the adjusted basis of the property with the amount realized from sale of the property. The amount realized is the amount received for the property less any sales expenses, including redemption fees and sales commissions.⁴⁹ Gains occur when the amount realized from a sale is greater than the adjusted basis of the property. When the adjusted basis is greater than the amount realized, the difference is a loss.

46 "Publication 550 (2013), Investment Income and Expenses," *The Internal Revenue Service*, accessed October 12, 2014, http://www.irs.gov/publications/p550/ch04.html#en_US_2013_publink100010476.

47 *Ibid.*

48 *Ibid.*

49 *Ibid.*

Determining Recognized Gain or Loss

Now that we have a realized gain or loss, we must determine if any portion of the realized gain or loss is recognized. Generally, gains or losses realized from sales are recognized for tax purposes. However, certain exchanges are not recognized, or nontaxable. A common example of this exception is a like-kind exchange, which is an exchange of property for the same kind of property.

Characterizing Recognized Gain or Loss

Finally, the third and last step to reporting gains and losses is to characterize the recognized gain or loss. The character of the gain or loss is important because it affects the taxpayer's tax liability. Recognized gains and losses must be classified as ordinary, capital, or section 1231 gains or losses. The treatment of a gain or loss may be classified as strictly capital or ordinary, or a combination of capital and ordinary, depending on the situation. The character of the gain or loss recognized depends on the character of the assets sold, the length of time the asset was used, and the holding period. Generally, a sale or trade of noncapital assets, or any assets created and used in a taxpayer's trade or business, results in ordinary gains or losses.⁵⁰ Common examples of ordinary assets, also known as noncapital assets, include inventory, accounts or notes receivable, and copyrights. Ordinary gains are taxed at ordinary tax rates while ordinary losses are deducted against ordinary income.

Capital gains or losses result from sales of capital assets, which are assets held for investment and personal-use purposes. Examples of capital assets are stocks and bonds, cars, houses, household furnishings, gems and jewelry, coin or stamp collections, and gold, silver, and

⁵⁰ "Publication 550 (2013), Investment Income and Expenses," *The Internal Revenue Service*, accessed October 12, 2014, http://www.irs.gov/publications/p550/ch04.html#en_US_2013_publink100010476.

other metals.⁵¹ Capital gains and losses must also be identified as either short-term or long-term, which is determined by a taxpayer's holding period for the property. The holding period of an investment property is the time between the date after the day the property was acquired and the day the property was disposed.⁵² A holding period of more than one year indicates a long-term capital gain or loss, and a holding period of one year or less signifies a short-term capital gain or loss. For instance, if a taxpayer bought investment property on April 28, 2013 and sold it on April 28, 2014, then he has a short-term capital gain or loss since his holding period was not more than one year. If the taxpayer had sold his investment property on April 29, 2014, then he would report a long-term capital gain or loss since his holding period is more than one year.

Reporting capital gains and losses is different from reporting ordinary gains and losses. The net short-term capital gain or loss is calculated by combining a taxpayer's total share of short-term capital gains or losses from "partnerships, S corporations, and fiduciaries, and any short-term capital loss carryover".⁵³ A taxpayer's total share of long-term capital gains or losses is also combined to generate the net long-term capital gain or loss. The net short-term capital gain or loss with the net long-term capital gain or loss determines the total net gain or loss. Net long-term capital gains are generally taxed at lower rates than that of other income. As of 2014, the maximum capital gain rates are 0%, 15%, 20%, 25%, and 28% (depending on the type of long-term capital gain property).⁵⁴

51 "Publication 544 (2014), Sales and Other Dispositions of Assets," *The Internal Revenue Service*, accessed October 17, 2014, <http://www.irs.gov/publications/p544/ch02.html>.

52 "Publication 550 (2013), Investment Income and Expenses," *The Internal Revenue Service*, accessed October 12, 2014, http://www.irs.gov/publications/p550/ch04.html#en_US_2013_publink100010476.

53 "Publication 550 (2013), Investment Income and Expenses," *The Internal Revenue Service*, accessed October 12, 2014, http://www.irs.gov/publications/p550/ch04.html#en_US_2013_publink100010476.

54 "Publication 17 (2014), Your Federal Income Tax," *The Internal Revenue Service*, accessed October 18, 2014, <http://www.irs.gov/publications/p17/ch16.html>.

On the other hand, if capital losses exceed capital gains, then a taxpayer would claim a capital loss deduction. Net capital losses are limited to a \$3,000 deduction, or \$1,500 for married filing separately returns. Any unused amount that is more than the annual \$3,000 limit on capital loss deductions can be carried over to the next year and be treated as if it had been incurred in that next year.⁵⁵ Losses that are unused continue to be carried forward until they are completely used up. Corporations (as opposed to individuals) can only deduct capital losses to the extent of its capital gains. Any excess capital loss is carried back three years and forward five years.⁵⁶

Gains or losses are subject to Internal Revenue Code (IRC) Section 1231 treatment when the transaction involves a sale or exchange of property that is held for more than one year and “either used in a trade or business or held for the production of rents or royalties”.⁵⁷ Section 1231 transactions include sales or exchanges of real property or depreciable personal property, leaseholds, cattle, horses, and other livestock, and unharvested crops.⁵⁸ Section 1231 gains or losses are ultimately characterized as ordinary or capital depending on whether a taxpayer has a net gain or a net loss from all of his section 1231 transactions.⁵⁹ Gains from 1231 transactions are subject to the depreciation recapture rules, which determine if any portion of the gain is recognized as ordinary income due to prior deductible depreciation expense.

55 "Publication 550 (2013), Investment Income and Expenses," *The Internal Revenue Service*, accessed October 12, 2014, http://www.irs.gov/publications/p550/ch04.html#en_US_2013_publink100010476.

56 "Publication 542 (03/2012), Corporations," *The Internal Revenue Service*, accessed October 17, 2014, http://www.irs.gov/publications/p542/ar02.html#en_US_2011_publink1000257861.

57 "Publication 544 (2014), Sales and Other Dispositions of Assets," *The Internal Revenue Service*, accessed October 17, 2014, <http://www.irs.gov/publications/p544/ch02.html>.

58 "Publication 544 (2014), Sales and Other Dispositions of Assets," *The Internal Revenue Service*, accessed October 12, 2014, <http://www.irs.gov/publications/p544/ch03.html>.

59 Ibid.

Consequences of Notice 2014-21

Clearly, the tax treatment of property is complicated and regulated by many strict rules and exceptions. The IRS decision to treat convertible virtual currencies like Bitcoin as property will generate taxable gains or losses, depending on what the Bitcoin user paid, for every Bitcoin transaction. For example, Bitcoin users must consider and record any capital gains or losses, for tax purposes, before buying a cup of coffee. Essentially, the IRS ruling treats Bitcoin users as stock investors who must keep track of their basis in the Bitcoin (the FMV of Bitcoin in U.S. dollars on the date of receipt), holding period of the Bitcoin, and the circumstances of the sale of the Bitcoin every time bitcoins are exchanged for goods, services, or dollars. Similar to stocks, Bitcoin owners are allowed a capital loss deduction of up to \$3,000 of capital losses from ordinary income annually.

Additionally, the IRS states that normal compensation reporting rules apply to anyone receiving Bitcoin in return for services, including but not limited to independent contractors and Bitcoin miners. Bitcoin miners must report their earnings as taxable income and pay self-employment tax, and those who mine as part of a business must pay payroll taxes. Furthermore, any “Bitcoin payments made by a business exceeding \$600 in value- such as for rent, salaries, and wages- [is] subject to information reporting to the IRS and to the payee.”⁶⁰ Notice 2014-21 makes it clear that taxpayers are subject to penalties for failure to comply with tax laws and that the notice applies to prior years.⁶¹

The IRS determination to treat bitcoins like property rather than currency has resulted in numerous issues, including a reduction in the liquidity of bitcoins and in the number of

60 McKinnon, John, and Ryan Tracy, "IRS Says Bitcoin Is Property, Not Currency," *The Wall Street Journal*, March 25, 2014, accessed September 28, 2014, <http://www.wsj.com/articles/SB10001424052702303949704579461502538024502>.

61 Ibid.

transactions involving bitcoins. The record-keeping aspect of treating bitcoins like property makes reporting gains and losses on Bitcoin transactions complicated for the average taxpayer, especially for those who treat bitcoins like cash and purchase multiple products and services with the virtual currency from different merchants. Those who use bitcoins like cash must face the difficulty of determining cost basis or holding period.⁶² Bitcoin users have to maintain a clear and strict record of all purchases made with bitcoins and “perform difficult calculations to account for the changing value of a Bitcoin.”⁶³ The value of a Bitcoin fluctuates constantly and the IRS decision burdens taxpayers to record the value of a Bitcoin at every purchase.

Beyond ordinary taxpayers who use bitcoins, Bitcoin traders and companies accepting bitcoins are also negatively affected by the IRS guidance. Bitcoin miners and traders are considered by the IRS to be employers and are therefore required to identify any participants by name for tax withholding purposes. This eliminates the anonymity of Bitcoin transactions. For companies accepting bitcoins as payment and holding them for a long period of time, “[a]ny drop in Bitcoin value could shrink their revenue but leave them on the hook for a fixed amount in sales taxes.”⁶⁴

The IRS position that Notice 2014-21 applies to past returns has also created difficulties for taxpayers who have been using bitcoins for several years. There are several Bitcoin Exchanges that users can use as Bitcoin wallets and track transactions: Coinbase, Blockchain, and Mt. Gox. In 2014, Mt. Gox suspended its services and eventually liquidated, resulting in a multitude of users who were unable to access their trade records. While Coinbase and

62 Phillips Erb, Kelly, "IRS Says Bitcoin, Other Convertible Virtual Currency To Be Taxed Like Stock," *Forbes*, March 25, 2014, accessed September 20, 2014, <http://www.forbes.com/sites/kellyphillipserb/2014/03/25/irs-says-bitcoin-other-convertible-virtual-currency-to-be-taxed-like-stock/>.

63 Pagliery, Jose, "New IRS Rules Make Using Bitcoins a Fiasco," *CNNMoney*, March 31, 2014, accessed October 5, 2014, <http://money.cnn.com/2014/03/31/technology/irs-bitcoin/>.

64 *Ibid.*

Blockchain are still in business, there is the risk that one or both exchanges will follow the same path as Mt. Gox. Additionally, Coinbase does not track the value of Bitcoin at the time of transfer. The IRS decision has made dependable record-keeping services necessary for Bitcoin users, especially those who have not kept and do not keep detailed transaction records.

The lack of clarity for Bitcoin reporting may encourage tax avoidance. The IRS has issued guidance and welcomes questions regarding Notice 2014-21, but there is still confusion and complicated record-keeping habits that users have to become accustomed to. Average Bitcoin users, who have no background in accounting or finance, must learn the rules associated with tax reporting for investment property.

In reality, the IRS will most likely have a difficult time enforcing their ruling on the Bitcoin community. Since Bitcoin is currency of the virtual world, it will be a challenge for the IRS to track down the identities of owners of digital wallets that exist in cyberspace. If the IRS cannot tie digital wallets to their owners in the physical world, then they will not be able to tax or impose penalties on individuals who owe Bitcoin taxes. Government agencies could force online Bitcoin exchanges to follow the tax rule that brokerages currently must follow, which is to submit information about clients to the IRS.⁶⁵ However, this is not likely because the IRS is already facing budget cuts and has limited resources. The real purpose of Notice 2014-21 is to warn businesses and large traders about income tax evasion. There are many wealthy individuals who are constantly seeking ways to dodge income tax, and Bitcoin is the latest creation that seemingly avoids taxes. To combat this assumption, the IRS has taken a public position that any means of income tax evasion has consequences.

⁶⁵ Pagliery, Jose, "New IRS Rules Make Using Bitcoins a Fiasco," *CNNMoney*, March 31, 2014, accessed October 5, 2014, <http://money.cnn.com/2014/03/31/technology/irs-bitcoin/>.

While it appears that the IRS decision only casts negative shadows on the economy and the network of Bitcoin users, the ruling actually creates some advantages for taxpayers and businesses. Since Bitcoin is classified as investment property, taxpayers would treat any gains as capital gains, subjecting them to lower tax rates. For businesses, there are many opportunities to capitalize on Bitcoin users who do not want to hire accountants or record the value of Bitcoin transactions every day. There is potential for a new market in Bitcoin applications that keep track of a user's basis and records gains and losses against the market value. A few services are already available for this purpose, including CoinReporting and BitcoinTaxes.⁶⁶ Additionally, “[b]y declaring bitcoins and virtual currencies as property, the latest IRS guidance also opens the door for states and cities to apply sales taxes anytime someone acquires a bitcoin.”⁶⁷

Bitcoin as Currency

The question still remains in whether or not the IRS has correctly deemed Bitcoin as property. The fact that Bitcoin is classified as property makes Bitcoin an unappealing option of currency since all of the complicated rules associated with investment property apply. If the IRS chose to label Bitcoin as currency, then there would not be any intricate rules that users would have to learn and follow. The complexities of tracking gains and losses at the fluctuating value of Bitcoin on every purchase would disappear. Instead, Bitcoin users would simply treat Bitcoin transactions like transactions involving foreign currencies, such as euros or yen. The disadvantage of treating Bitcoin as currency is that any gains or losses resulting from the fluctuating value of Bitcoin would be taxed at ordinary rates, which are higher than capital gains

66 Hill, Kashmir, "How I Paid My Bitcoin Taxes," *Forbes*, April 15, 2014, accessed September 12, 2014, <http://www.forbes.com/sites/kashmirhill/2014/04/15/how-i-paid-my-bitcoin-taxes/>.

67 Pagliery, Jose, "New IRS Rules Make Using Bitcoins a Fiasco," *CNNMoney*, March 31, 2014, accessed October 5, 2014, <http://money.cnn.com/2014/03/31/technology/irs-bitcoin/>.

tax rates. There appears to be no harm to the IRS if they had decided to treat Bitcoin as currency. However, treating Bitcoin as currency would open up opportunities for all kinds of nontraditional forms of money to be considered currency, mocking existing currencies.

Bitcoin Around the World

While the U.S. treatment of Bitcoin may seem unfair and delayed, it is actually not that far behind the decisions of other countries. The majority of countries “chose not to define bitcoin or reaffirmed the definition of legal tender, which bitcoin mostly doesn’t fit.”⁶⁸

However, there are several countries that have taken a clear stance on Bitcoin. Singapore currently applies its goods and services tax on Bitcoin, treating the digital currency as a product rather than currency or capital gains.⁶⁹ Similar to the U.S., the United Kingdom, Canada, and Finland have decided to apply capital gains taxes on Bitcoin gains.⁷⁰ Brazil has also acknowledged the concept of virtual currencies and enacted Law No. 12,865 in 2013, which “allows Brazil to regulate bitcoin, other cryptocurrencies and any future electronic currency.”⁷¹

On the other hand, countries like China and France have criticized the validity of Bitcoin.

China’s national bank issued a “Notice on Precautions Against the Risks of Bitcoins,” which

68 Fuller, Cameron, "Bitcoin Around The World: How Virtual Currencies Are Treated In 40 Different Countries," *International Business Times*, February 5, 2014, accessed January 25, 2015, <http://www.ibtimes.com/bitcoin-around-world-how-virtual-currencies-are-treated-40-different-countries-1553532>.

69 Phillips Erb, Kelly, "IRS Says Bitcoin, Other Convertible Virtual Currency To Be Taxed Like Stock," *Forbes*, March 25, 2014, accessed September 20, 2014, <http://www.forbes.com/sites/kellyphillipserb/2014/03/25/irs-says-bitcoin-other-convertible-virtual-currency-to-be-taxed-like-stock/>.

70 McKinnon, John, and Ryan Tracy, "IRS Says Bitcoin Is Property, Not Currency," *The Wall Street Journal*, March 25, 2014, accessed September 28, 2014, <http://www.wsj.com/articles/SB10001424052702303949704579461502538024502>.

71 Fuller, Cameron, "Bitcoin Around The World: How Virtual Currencies Are Treated In 40 Different Countries," *International Business Times*, February 5, 2014, accessed January 25, 2015, <http://www.ibtimes.com/bitcoin-around-world-how-virtual-currencies-are-treated-40-different-countries-1553532>.

warned financial institutions to not circulate and use Bitcoin in the market as a currency.⁷²

France's central bank also issued a report denying Bitcoin as a "real currency or means of payment under current French laws"⁷³ and criticizing Bitcoin as a tool for illegal activities.

Conclusion

Now that we have analyzed the various dimensions of Bitcoin, we conclude that it is more likely than not that the Supreme Court will rule that Bitcoin is investment property in cases involving Bitcoin. This conclusion is a result of analyzing all aspects of Bitcoin, weighing the pros and cons of treating Bitcoin as currency or as investment property, and looking at the treatment of Bitcoin in countries around the world. While Bitcoin's main selling point is its anonymity, it attracts fraud, theft, and other illegal activities. Despite the risky nature of Bitcoin, it is still being used as a form of currency. Consequentially, there must be regulation and the IRS's ruling provides initial guidance to taxpayers.

Deeming Bitcoin as investment property is most likely the correct choice because it is not "real currency" in the sense that it is a floating solution to a math equation in the unknown world of cyberspace. More importantly, there are no legitimate financial intermediaries that facilitate transactions and no government backs Bitcoin. The only advantage of identifying Bitcoin as currency is that transactions and tax reporting are easy processes for Bitcoin users. Labeling Bitcoin, which has no legal tender status in any jurisdiction, as a foreign currency would mock existing currencies. In fact, if Bitcoin were classified as currency, then we would expect to accept all other nontraditional types of money as currency in the future. Bitcoin is more appropriately identified as investment property, comparable to stocks and bonds. While

72 Ibid.

73 Ibid.

recording and reporting gains and losses daily on Bitcoin transactions are complicated and confusing for users, the capital gains tax rate is lower than the ordinary rate for taxpayers. The complexities of record keeping are easy and likely to be solved as long as there is demand for businesses to create applications assisting in tracking gains and losses on Bitcoin transactions. Furthermore, the tax rules for investment property consider price volatility, which is a characteristic of Bitcoin.

Essentially, the issue with Bitcoin is that it is unprecedented and challenges the rules and regulations our society has already established. The IRS's initiative to recognize and begin regulation of Bitcoin is a response to one of many obstacles that Bitcoin has posed in our society. As in many IRS decisions, we may not completely agree or like Notice 2014-21. However, the IRS considers many factors and possibilities before making these pronouncements. The IRS enforces decisions and imposes penalties for violations. As a society, we respect the tax rules that are in place. The IRS has made a decision regarding Bitcoin and we are expected to follow that ruling or challenge the ruling through the legal process. Bitcoin may change and other factors in our environment may affect Bitcoin, but for now, Bitcoin does not appear to be the currency of the future.

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