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Debugging IRS Notice 2014-21

CREATING A VIABLE CRYPTOCURRENCY TAXATION PLAN

INTRODUCTION

Cryptocurrency's entrance into the market represents the next stage in efficient transacting. With cryptocurrency, consumers enter into transactions that contain similar attributes to cash transactions with fewer parties involved in facilitating those transactions.¹ Consequently, businesses, consumers, and investors have picked up on these efficiencies, resulting in over two thousand different active digital currencies with a market capitalization exceeding \$227 billion.² In the past year, Bitcoin, which is the most well-known cryptocurrency,³ averaged approximately \$1 billion in transaction volume subject to a high level of variability.⁴ Based on the previous figures, society appears to be embracing cryptocurrency as a viable new form of currency.⁵

When a technological evolution occurs, some regulators do not react in a manner commensurate with the best interests of all the vested stakeholders. On April 14, 2014, the Internal Revenue Service (IRS) issued Notice 2014-21 in an attempt to clarify taxation issues surrounding virtual currency.⁶ According to the administrative pronouncement, virtual currency must be treated as “property” for purposes of taxation despite an acknowledgment that virtual currency can be used as an alternative to “real”

¹ See *infra* Section II.B.

² See *Cryptocurrency Market Capitalizations: All Coins*, COINMARKETCAP, <https://coinmarketcap.com> [<https://perma.cc/2PYM-WUDV>].

³ Cryptocurrency represents a subset of virtual currency, which in turn is a subset of digital currency. However, many of the issues surrounding cryptocurrency stem from the anonymity of cryptocurrency. Jake Frankenfield, *Virtual Currency*, INVESTOPEDIA (Oct. 3, 2019), <https://www.investopedia.com/terms/v/virtual-currency.asp> [<https://perma.cc/3FQ5-5HX7>].

⁴ In three separate instances, the daily value of Bitcoin traded surpassed \$5 billion. *Bitcoin Estimated Transaction Volume USD*, QUANDL, <https://www.quandl.com/data/BCHAIN/ETRVU-Bitcoin-Estimated-Transaction-Volume-USD> [<https://perma.cc/A77W-JSQG>].

⁵ See Tina Mulqueen, *Now Accepting Bitcoin: A Retailer's Guide to Digital Currencies*, FORBES (Feb. 23, 2018), <https://www.forbes.com/sites/tinamulqueen/2018/02/23/now-accepting-bitcoin-a-retailers-guide-to-digital-currencies/#287a4a501ed4> [<https://perma.cc/AP6X-GF94>].

⁶ I.R.S. Notice 2014-21 § 1 (2014).

currency.⁷ Although the regulatory treatment might not seem that drastic on its face, the IRS pronouncement may stifle the commercial usage of digital currency.⁸

This note argues that the property treatment position taken in Notice 2014-21 inadequately addresses how virtual currency should be taxed because the IRS adopts a narrow view of the downsides of cryptocurrency.⁹ By using the property treatment in Notice 2014-21, the IRS missed a tremendous opportunity to be at the regulatory forefront of an industry that has the potential to revolutionize the world. The unique nature of cryptocurrency requires a tax plan that appropriately accounts for the multitude of uses of cryptocurrency and could address policy objectives outside of tax. Through the Internal Revenue Code (IRC), the government could play an important role in developing measures that maximize the beneficial traits of cryptocurrency, while combatting the issues plaguing cryptocurrency.¹⁰

Part I of this note defines cryptocurrency, explains how it operates, and elaborates on its benefits and challenges. Part II examines the current property treatment for taxation of cryptocurrency and looks at the suitability of adopting the currency treatment. Part IV proposes a new three-tiered tax approach that takes elements of both the currency and property treatment and blends them together in a manner that results in a higher net utility than adopting the wholesale stances of each approach individually. Additionally, the proposal in Part IV includes several other provisions, such as addressing the treatment of miners, that will help accomplish a litany of policy objectives essential to ensuring a viable future for cryptocurrency.

I. DECIPHERING THE CODE: AN EXPLANATION OF CRYPTOCURRENCY

Formulating an optimal tax structure for cryptocurrency requires a comprehensive understanding of what cryptocurrency is, how it will benefit consumers, businesses, and society, and the roadblocks that are currently hampering its growth. By providing context, a clear pattern will arise demonstrating that regulation is

⁷ *Id.*

⁸ See WeislerMazars LLP Tax Group, *IRS Issues Guidance on the Tax Treatment of Electronic Currency, Bitcoin*, MAZARSLEDGER.COM, <https://mazarsledger.com/irs-issues-guidance-e-on-the-tax-treatment-of-bitcoin-2/> [<https://perma.cc/5QRQ-NM47>]; see also *infra* Section I.B.

⁹ See I.R.S. Notice 2014-21, 2014-16 I.R.B. 938 (Apr. 14, 2014) [hereinafter Notice 2014-21].

¹⁰ Stephen J. Obie & Mark W. Rasmussen, *How Regulations Could Help Cryptocurrencies Grow*, HARV. BUS. REV. (July 17, 2018), <https://hbr.org/2018/07/how-regulation-could-help-cryptocurrencies-grow> [<https://perma.cc/Q876-TA4B>].

required in order to overcome skepticism by the government. A tax plan that provides preferential treatment to regulated funds will augment the benefits and drastically minimize the problems associated with cryptocurrency. Additionally, enhanced specification will further incentivize miners to monitor the system and reward them for their vital role ensuring system continuity.

A. *Defining Cryptocurrency and Blockchain*

In 2009, “Satoshi Nakamoto”¹¹ introduced the world to blockchain technology, which is a broader class of technology that cryptocurrency falls under, by inventing Bitcoin.¹² At its core, blockchain technology is a database that is referred to as the public ledger and is comprised of smaller subsets of information, also known as blocks or distributed ledgers.¹³ Every time the database receives new information, an individual obtains a new distributed ledger, which contains information related to both the new block and the previous block.¹⁴ Since each block has a relationship to the preceding block, a blockchain data repository creates a permanent record of information that cannot be erased.¹⁵ The relationship between the blocks allows users to verify the authenticity of the transaction by cross-referencing information from one block against another.¹⁶ Since all of the data is presented on the public ledger, anyone who accesses the database can essentially audit a transaction.¹⁷ This allows users to have a role in authenticating transactions.¹⁸ Cryptocurrency adds an additional layer of security by providing a high level of

¹¹ Nathaniel Popper, *Decoding the Enigma of Satoshi Nakamoto and the Birth of Bitcoin*, N.Y. TIMES (May 15, 2015), <https://www.nytimes.com/2015/05/17/business/decoding-the-enigma-of-satoshi-nakamoto-and-the-birth-of-bitcoin.html> [<https://perma.cc/5A29-V4DF>] (stating that “Satoshi Nakamoto’s” identity is unknown, and could either be an alias for an individual or an entity).

¹² *Id.*

¹³ Mark Popielarski, *Blockchain Research: Bitcoins, Cryptocurrency, and Distributed Ledgers*, COLO. LAW., June 2018, at 10, 11.

¹⁴ Lucas Mearian, *What Is Blockchain? The Complete Guide*, COMPUTER WORLD (Jan. 29, 2019), <https://www.computerworld.com/article/3191077/what-is-blockchain-the-complete-guide.html> [<https://perma.cc/7LX5-E6LG>] (blocks refer to a smaller subset of information contained within the larger distributed ledger. In a cryptocurrency context, the block is a whole unit of the cryptocurrency).

¹⁵ Shaan Ray, *Blockchains: The Technology of Transactions*, TOWARDS DATA SCI. (Mar. 26, 2018), <https://towardsdatascience.com/blockchains-the-technology-of-transaction-s-9d40e8e41216> [<https://perma.cc/E773-WJE4>]. When an alteration is made to the data, the system automatically generates a new block. Thus, once a transaction is entered into, the entry cannot be reversed due to the interconnection with all the other blocks.

¹⁶ Bernard Marr, *A Complete Beginners Guide to Blockchain*, FORBES (Jan. 24, 2017), <https://www.forbes.com/sites/bernardmarr/2017/01/24/a-complete-beginners-guide-to-blockchain/#e1413e16e607> [<https://perma.cc/8HHT-D23N>].

¹⁷ *See id.*

¹⁸ Popielarski, *supra* note 13, at 10.

encryption that makes the virtual currency highly resistant to hacking attempts.¹⁹ By increasing transparency, cryptocurrency allows market participants to be fully apprised of the price of an object.²⁰ Allowing everyone to make more well-informed decisions consistent with the notion of a free market economy.²¹

The revolutionary nature of Blockchain technology stems from the ability to allow every user in the system to simultaneously substantiate the validity of a given transaction, whether or not the underlying event has an economic nature.²² By replacing a centralized authority, problems associated with centralized control, such as a lack of transparency and significant control of the market by a few key players, will be eliminated.²³ As a result, any form of malfeasance can be scrutinized and easily detected by anyone with access to the system.²⁴ Consequently, blockchain technology usage could be limitless. Presently, the technology is being used to monitor supply chains, to track real estate and auto title transfers, to verify the accuracy of news articles, and to even oversee the voting process.²⁵

Bitcoin, as well as other cryptocurrencies, replicate this form of record keeping for monetary transactions.²⁶ To obtain a unit of Bitcoin, which is essentially information on the distributed ledger, a person would either purchase the Bitcoin from another person or, alternatively, they could “mine” the Bitcoin.²⁷ The first option operates similarly to a regular exchange of money; one person transfers the Bitcoin to another person and that person obtains the subsequent right to transfer the Bitcoin.²⁸ To help effectuate a secure transfer, cryptocurrencies utilize public-key cryptography, which means that each user has both a public key

¹⁹ *Id.* at 11.

²⁰ Steven Krohn, *Cryptocurrency Transparency Is Essential in Marketing a Coin*, MEDIUM (July 28, 2018), <https://medium.com/@stevekrohn/cryptocurrency-transparency-is-essential-in-marketing-a-coin-e1efda390ebf> [<https://perma.cc/A6JN-N6KJ>].

²¹ *See id.*

²² *See* Mohit Kaushal & Sheel Tyle, *The Blockchain: What It Is and Why It Matters*, BROOKINGS INST. (Jan. 13, 2015), <https://www.brookings.edu/blog/techtank/2015/01/13/the-blockchain-what-it-is-and-why-it-matters/> [<https://perma.cc/T6NB-25PW>].

²³ *See id.*

²⁴ *See id.*

²⁵ *See* Sean Williams, *20 Real-World Uses for Blockchain Technology*, MOTLEY FOOL (Apr. 11, 2018), <https://www.fool.com/investing/2018/04/11/20-real-world-uses-for-blockchain-technology.aspx> [<https://perma.cc/R7UH-NUZB>]; PO.ET, <https://www.po.et> [<https://perma.cc/UQP7-UBEL>].

²⁶ David Houck, *Bitcoin: Reacting to Money with Non-Money Attributes*, 1 GEO. L. TECH. REV. 371, 374 (2017).

²⁷ *See infra* notes 38–39 and accompanying text.

²⁸ *How Does Cryptocurrency Work? (For Beginners)*, CRYPTOCURRENCY FACTS, <https://cryptocurrencyfacts.com/how-does-cryptocurrency-work-for-beginners/> [<https://perma.cc/LQH3-MX8R>].

and a private key.²⁹ The sender initiates a transfer of the cryptocurrency by entering in their own private key, transaction number, and the receiver's public key.³⁰ Once the transaction is finalized, the transfer will appear on the public ledger for everyone on the system to note that a valid exchange has occurred.³¹ The publicity of a verified transaction eliminates the problem of double-spending without involving an intermediary.³²

Alternatively, "mining" involves a process of solving a "complex computer logic puzzle" that essentially verifies a series of transactions.³³ To incentivize "miners," the system rewards them by creating an additional unit of cryptocurrency that they receive.³⁴ In effect, the miners, who are "network participants that perform extra tasks," are creating a new block that will be placed on the network and become part of the public ledger.³⁵ The miner typically obtains the right to transfer the Bitcoin they created.³⁶ Yet as more coins are mined the problems increase in difficulty, providing a mechanism for limiting the circulation of cryptocurrency on the internet.³⁷ Moreover, Bitcoin imposed a cap on the number of coins that could enter circulation at twenty-one million bitcoins.³⁸ As the number of bitcoins reaches the established maximum, miners will have an increasingly difficult time in trying to mine that final bitcoin.³⁹

B. Benefits of Cryptocurrency

Cryptocurrency's ability to remove the middleman—such as banks and credit card companies—from transactions presents

²⁹ Marr, *supra* note 16.

³⁰ JERRY BRITO & ANDREA CASTILLO, BITCOIN: A PRIMER FOR POLICYMAKERS 7 (2016), https://www.mercatus.org/system/files/gmu_bitcoin_042516_webv3_0.pdf [<https://perma.cc/56M9-58BW>].

³¹ *Id.*

³² *Id.* at 6–7 (elaborating on the notion that the double-spending problem arises when a person sends money in the form of a file to another). Typically, people employ third-party intermediaries to combat the problem and ensure the veracity of the transaction.

³³ *Id.* at 6.

³⁴ Luke Fortney, *Bitcoin Mining, Explained*, INVESTOPEDIA (Nov. 6, 2019), <https://www.investopedia.com/terms/b/bitcoin-mining.asp> [<https://perma.cc/FSQ9-VN4T>].

³⁵ *What Is Bitcoin Mining?*, BITCOIN MAG., <https://bitcoinmagazine.com/guides/what-bitcoin-mining/> [<https://perma.cc/GF9X-GD7Q>].

³⁶ BRITO & CASTILLO, *supra* note 30, at 9.

³⁷ *Id.*

³⁸ Molly Jane Zuckerman, *80% of All Bitcoins Already Mined, Only 4.2 Million Coins Left Until Supply Cap*, COINTELEGRAPH (Jan. 15, 2018), <https://cointelegraph.com/news/80-of-all-bitcoins-already-mined-only-42-million-coins-left-until-supply-cap> [<https://perma.cc/8ZFA-85LL>].

³⁹ See BRITO & CASTILLO, *supra* note 30, at 9; see also Rakesh Sharma, *Only 20% of Remaining Bitcoins Remain to Be Mined*, INVESTOPEDIA (Jan. 15, 2018), <https://www.investopedia.com/news/only-20-percent-total-bitcoins-remain-be-mined/> [<https://perma.cc/84L7-MTZQ>] (estimating that the final bitcoin will be mined in the year 2140).

the single greatest benefit to the marketplace for both consumers and merchants.⁴⁰ By eliminating third-party intermediaries, cryptocurrency effectively eliminates a significant number of fees associated with engaging in a credit transaction.⁴¹ In a routine transaction involving a bank or credit card company, a person makes a purchase through the agency that remits the payment on behalf of the individual. In this type of transaction, a person would typically enter into two contemporaneous transactions.⁴² The justification for entering into such a cumbersome relationship stems from the notion that banks and credit card companies provide a lower risk of default than the average individual consumer.⁴³ However, these transactions come with an added cost; utilizing a third-party to facilitate a credit transaction results in fees being imposed upon both the vendor and purchaser.⁴⁴ Given the pervasive usage of credit cards, these fees result in considerable costs imposed on the transacting market.⁴⁵

To combat the exorbitant costs borne by consumers and businesses, “Satoshi Nakamoto” developed Bitcoin as a way to eliminate the middleman and allow the market to save on these costs.⁴⁶ Unlike a transaction with the financial institutions, cryptocurrency functions in a manner similar to making a cash payment.⁴⁷ In a cryptocurrency transaction, a person or entity merely transfers over the cryptocurrency to another without any intervention from a third-party.⁴⁸ If the new holder of the cryptocurrency wanted government-issued currency, then they would have to have to find another party willing to exchange

⁴⁰ See Lloyd Marino, *Blockchain – The End of the Middleman*, MEDIUM (June 12, 2016), <https://medium.com/@LloydMarino/blockchain-the-end-of-the-middleman-37d97a67d7f> [<https://perma.cc/JR3F-2EWT>]. A fundamental lack of trust in the banking system as a whole spawned the advent of Bitcoin. Cryptocurrency presents an alternative to the mainstream financial institutions that caused the 2008 economic crisis. See Noogin, *The Financial Crisis and History of Bitcoin*, MEDIUM (May 15, 2018), <https://medium.com/@noogin/the-financial-crisis-and-history-of-bitcoin-27ebdb932b99> [<https://perma.cc/VW3M-9QM9>].

⁴¹ Marino, *supra* note 40.

⁴² Ben Dwyer, *Credit Card Processing: How it Works*, CARDFELLOW (Sept. 19, 2019), <https://www.cardfellow.com/blog/how-credit-card-processing-works/> [<https://perma.cc/UJJ8-HYHK>].

⁴³ Michael L. Starzec, *The Legal History of Credit in Four Thousand Years (or Less)*, 26 LOY. CONSUMER L. REV. 107, 115 (2013).

⁴⁴ *Id.*

⁴⁵ Tim Chen, *Credit Card Transaction Volume Statistics, 2010*, NERDWALLET (2010), <https://www.nerdwallet.com/blog/credit-card-data/credit-card-transaction-volume-statistics/> [<https://perma.cc/8T87-WZHD>] (explaining that in 2010, American Express credit card purchases alone were approximately \$7.74 trillion).

⁴⁶ See Popierlarski, *supra* note 13, at 11.

⁴⁷ Nicole Mirjanich, Comment, *Digital Money: Bitcoin’s Financial and Tax Future Despite Regulatory Uncertainty*, 64 DEPAUL L. REV. 213, 215 (2014) (claiming that Bitcoin’s original system operated as a “peer-to-peer electric cash system”).

⁴⁸ *Id.*

with them in that denomination, which is \$7,894.60 per bitcoin.⁴⁹ However, the exchange replaces the function of a business depositing into their bank accounts.⁵⁰

Cost savings could also arise out of cryptocurrency replacing legal tender in the market. The U.S. government currently incurs a cost of \$0.10267 for every time they generate a new currency note.⁵¹ Numerous other costs not directly correlated to currency notes augment the cost associated with printing tangible currency.⁵² Cryptocurrency's potential to dramatically reduce the supply of tangible currency will pass on significant cost saving to the rest of the economy.⁵³

As the world becomes more global, cryptocurrency holds the potential to eliminate a significant number of the extraneous costs associated with currency conversion.⁵⁴ Suppose a person wants to buy a product from Mexico. Either at the initiation or at the close of the transaction, one party must exchange the currency to get the legal tender of their country. When the exchange occurs, the party would utilize a broker to facilitate the foreign currency exchange.⁵⁵ Since a broker charges a fee, the economic utility derived from the transaction will be less than what it should be due to the presence of a third-party.⁵⁶ Cryptocurrency could eliminate those fees by allowing parties to freely transfer the currency without having to go through a broker to help facilitate the transaction.⁵⁷

Cryptocurrency's pseudonymity presents another alluring aspect of the cash alternative driving consumers and

⁴⁹ This is the price as of trading on March 10, 2020. See COINBASE, <https://www.coinbase.com/charts?locale=en-US> [<https://perma.cc/X9S8-A8XX>].

⁵⁰ However, exchange trading cryptocurrency could become irrelevant if governments decide to produce their own form of digital currency to replace tangible currency. Toju Omet, *Could Government Issued Cryptocurrency Be the Future*, BITCOINIST (May 31, 2018), <https://bitcoinist.com/government-issued-cryptocurrencies-future/> [<https://perma.cc/VH4F-8PJR>].

⁵¹ Deidre A. Liedel, *The Taxation of Bitcoin: How the IRS Views Cryptocurrencies*, 66 DRAKE L. REV. 107, 113–14 (2018).

⁵² *Id.* (stating that additional costs include “environmental costs, socioeconomic costs, corruption, institutional fraud, and transactional fraud, among others”).

⁵³ See Jacob Davidson, *Why Killing Cash Makes Sense*, TIME (Apr. 27, 2016), <http://time.com/money/4307717/getting-rid-of-cash/> [<https://perma.cc/K8CE-Q4ZW>].

⁵⁴ *Currency Conversion*, INVESTORGUIDE.COM, <http://www.investorguide.com/definition/currency-conversion.html> [<https://perma.cc/5GNW-8BSA>] (defining a currency conversion as “[t]he exchange of one currency for another based on the rate of exchange between the two”).

⁵⁵ See Rob Rawson, *Crazy High Currency Exchange Fees: How to Stop the Banks from Taking Advantage of You*, TIME DOCTOR, <https://biz30.timedoctor.com/crazy-high-currency-exchange-fees-how-to-stop-the-banks-from-taking-advantage-of-you/> [<https://perma.cc/M2ZP-ZY2J>].

⁵⁶ See *id.* (citing that in some instances banks charge up to 13 percent on consumer exchange fees).

⁵⁷ BRITO & CASTILLO, *supra* note 30, at 14.

merchants towards widespread adoption.⁵⁸ Unlike transactions that involve third-party intermediaries, cryptocurrency allows a consumer to enter into a transaction with anonymity.⁵⁹ Recently, significant data breaches have created an enhanced need for increased data protection of personal information.⁶⁰ The Equifax hack especially exposed a need for more anonymity in economic transactions because it was revealed just how much information is exchanged with each transaction an individual engages in.⁶¹ Using cryptocurrency, however, does not completely immunize one from having their identity traced.⁶² Technology, such as Tor,⁶³ helps combat this problem by allowing people to mask their digital identity.⁶⁴ Accordingly, a person could enter into a transaction with a reduced risk of their identity being exposed.⁶⁵

At the same time, the blockchain technology also allows for complete transparency within the entire stream of transactions occurring for a particular unit of digital currency.⁶⁶ In most cases, the average person will not have the technical knowledge to be able to mask their identities.⁶⁷ A vast majority of the transactions involving cryptocurrency could be clearly traced through the blockchain.⁶⁸ Yet even with complete transparency, the amount of information presented on the public ledger is very minimal.⁶⁹ This

⁵⁸ *Id.* at 10.

⁵⁹ *See id.* (highlighting that every time a person uses a credit card a host of information is transmitted over to credit card issuer about the individual's purchase and identities).

⁶⁰ *See* Andrew Rossow, *In Wake of Data Breaches, Blockchain Technology Can Minimize Financial Fraud*, FORBES (June 6, 2018), <https://www.forbes.com/sites/andrewrossow/2018/06/06/in-wake-of-data-breaches-blockchain-technology-can-minimize-financial-fraud/#2f978cae6337> [<https://perma.cc/4J3C-FSKV>]; Liedel, *supra* note 51, at 114.

⁶¹ *See* Donna Borak & Kathryn Vasel, *The Equifax Hack Could Be Worse Than We Thought*, CNN: MONEY (Feb. 10, 2018), <https://money.cnn.com/2018/02/09/pf/equifax-hack-senate-disclosure/index.html> [<https://perma.cc/LSR3-EFEE>] (stating that approximately 145.5 million individual's personal information could have been breached); *see also* BRITO & CASTILLO, *supra* note 30, at 12.

⁶² BRITO & CASTILLO, *supra* note 30, at 11 (stating that people can have their identities tracked through their IP address or personal information that they enter on various websites).

⁶³ J.M. Porup, *What Is the Tor Browser? And How It Can Help Protect Your Identity*, CSO (Oct. 15, 2019), <https://www.csoonline.com/article/3287653/what-is-the-tor-browser-how-it-works-and-how-it-can-help-you-protect-your-identity-online.html> [<https://perma.cc/4E45-2F36>] (discussing how Tor technology conceals a person's web movements, thus making it more difficult to be tracked over the internet).

⁶⁴ Andrew Norry, *The History of Silk Road: A Tale of Drugs, Extortion & Bitcoin*, BLOCKONOMI (Nov. 20, 2018), <https://blockonomi.com/history-of-silk-road/> [<https://perma.cc/Q92U-MDG2>].

⁶⁵ BRITO & CASTILLO, *supra* note 30, at 11.

⁶⁶ *See* Marino, *supra* note 40.

⁶⁷ *See* Norry, *supra* note 64.

⁶⁸ *See* Marino, *supra* note 40.

⁶⁹ *See* BRITO & CASTILLO, *supra* note 30, at 12 (stating that users are not identified by detailed information).

mitigates the fear of a data breach exposing information that could lead to the various forms of theft associated with credit cards.⁷⁰

C. *Cryptocurrency Malware: The Issues Surrounding Cryptocurrency*

Despite the potential revolutionary nature of cryptocurrency, there have been several prominent issues casting a dark cloud around it. Understanding these issues will help formulate a tax strategy that facilitates an arrangement that yields the highest utility for all vested parties.

Cryptocurrency's near synonymous association with criminal enterprises presents a significant hurdle. From 2011 to 2013, a website known as the Silk Road introduced a significant number of people to cryptocurrency and, at the same time, stigmatized the technology in the eyes of lawmakers.⁷¹ On the darknet market,⁷² people leverage the pseudonymity of cryptocurrency to purchase illegal narcotics.⁷³ Masking technology allows for people to hide their IP addresses, which adds an extra layer of anonymity to further insulate themselves from criminal prosecution.⁷⁴ Cryptocurrencies' anonymity tends to lend itself toward other criminal activities, such as money laundering, because criminal organizations could trade their illegally acquired funds for cryptocurrency.⁷⁵ Included within this sect of criminals are terrorist organizations like ISIS that use cryptocurrency to finance their operations.⁷⁶ To combat this problem, law enforcement agencies

⁷⁰ Liedel, *supra* note 51, at 115.

⁷¹ See Norry, *supra* note 64; see also Alex Hern, *FBI Struggles to Seize 600,000 Bitcoins from Alleged Silk Road Founder*, GUARDIAN (Oct. 7, 2013), <https://www.theguardian.com/technology/2013/oct/07/fbi-bitcoin-silk-road-ross-ulbricht> [<https://perma.cc/XY87-GAZF>] (suggesting that the approximate valuation of the remaining unseized bitcoins was approximately \$80 million; therefore, only an infinitesimally small portion of the illegal drug market utilized cryptocurrency).

⁷² Cadie Thompson, *Beyond Google: Everything You Need to Know About the Hidden Internet*, BUS. INSIDER (Dec. 16, 2015), <https://www.businessinsider.com/difference-between-dark-web-and-deep-web-2015-11> [<https://perma.cc/25YP-49AA>] (referring to anonymous marketplaces that thrive on the anonymity of the dark web, which is a "set of accessible, albeit anonymously hosted, websites").

⁷³ See Carmine DiPiero, Note, *Deciphering Cryptocurrency: Shining a Light on the Deep Dark Web*, 2017 U. ILL. L. REV. 1267, 1273 (2017).

⁷⁴ BRITO & CASTILLO, *supra* note 30, at 37.

⁷⁵ See *id.* at 37–39 (noting that several politicians explicitly attacked Bitcoin and Tor due to their role in facilitating the drug trade).

⁷⁶ ZACHARY K. GOLDMAN ET AL., CTR. FOR NEW AM. SECURITY, TERRORISTS USE OF VIRTUAL CURRENCY: CONTAINING THE POTENTIAL THREAT 4 (2017), <https://www.cnas.org/publications/reports/terrorist-use-of-virtual-currencies> [<https://perma.cc/LEV6-3QQX>]; see also Richard Allen Greene & Nick Thompson, *ISIS: Everything You Need to Know*, CNN (Aug. 11, 2016), <https://www.cnn.com/2015/01/14/world/isis-everything-you-need-to-know/index.html> [<https://perma.cc/XF6A-QKBY>] (stating that ISIS, which stands for Islamic

have increased their monitoring of cryptocurrency and are increasingly bringing criminal charges for individuals who use cryptocurrency to engage in money laundering.⁷⁷ Unfortunately, cryptocurrency's pseudonymous feature creates a perception that virtual currency will exacerbate criminal activity.⁷⁸

A misconception exists about how much cryptocurrency actually impacts criminal activity because tangible currency still facilitates an overwhelming majority of illegal transactions.⁷⁹ Indeed, the inability to trace a person's identity in illegal transactions existed well before the advent of cryptocurrency.⁸⁰ Against this backdrop, cryptocurrency exchanges have been trying to distance themselves from criminal enterprises, including "several bitcoin exchanges . . . tak[ing] steps to comply with anti-money laundering (AML) record-keeping and reporting requirements."⁸¹

Volatility poses another obstacle standing in the way of widespread acceptance of cryptocurrency.⁸² A lack of pricing stability frightens people from accepting cryptocurrency because a party will not want to acquire something that may experience a significant reduction in value.⁸³ Furthermore, the notion that cryptocurrency derives value from "the value that people assign to it" augments the volatility problem because rogue entities can enter the cryptocurrency market and manipulate the pricing.⁸⁴ Even though currency in the United States is backed by the same notion, numerous mechanisms exist to ensure that the

State in Iraq and Syria, is an anti-western militant group that strives for an independent Islamic state in the Middle East).

⁷⁷ See, e.g., *Commodity Futures Trading Comm'n v. McDonnell*, 287 F. Supp. 3d 213, 215–17 (E.D.N.Y. 2018) (involving a federal governmental agency bringing an action against an individual being tied to a money laundering scheme involving cryptocurrency); see also *United States v. Faiella*, 39 F. Supp. 3d 544, 545 (S.D.N.Y. 2014) (involving another criminal action brought against someone using cryptocurrency to launder money).

⁷⁸ See Lauren Orsini, *Bitcoin and the Black Market: The Ties that Bind*, READWRITE (Oct. 8, 2013), <https://readwrite.com/2013/10/08/bitcoin-probably-gets-its-value-from-illicit-use/> [<https://perma.cc/V7PW-YYQZ>].

⁷⁹ RAND CORP., *HOW BIG IS THE U.S. MARKET FOR ILLEGAL DRUGS?* (2014) (stating, in 2010, the drug market for four illicit drugs (cocaine, heroin, marijuana, and methamphetamine) exceeded \$100 billion).

⁸⁰ See Jim Chappelow, *Black Economy*, INVESTOPEDIA (Apr. 20, 2018), <https://www.investopedia.com/terms/b/black-economy.asp> [<https://perma.cc/B2SB-GWP4>] (emphasizing that cash does not leave a trace for the government to see whether an illegal transaction is occurring).

⁸¹ BRITO & CASTILLO, *supra* note 30, at 39.

⁸² Darryn Pollock, *Volatility: The Necessary Evil of Cryptocurrency and How We Can Handle It*, COINTELEGRAPH (May 21, 2018), <https://cointelegraph.com/news/volatility-the-necessary-evil-of-cryptocurrency-and-how-to-handle-it> [<https://perma.cc/W5CF-W8JU>].

⁸³ Siraj Sarwar, *Cryptocurrency Market Volatility Is Dangerous for Its Future Prospects*, CRYPTO CURRENCY NEWS (May 22, 2018), <https://cryptocurrencynews.com/daily-news/crypto-news/cryptocurrency-market-volatility/> [<https://perma.cc/8N6A-8VST>].

⁸⁴ BRITO & CASTILLO, *supra* note 30, at 6; see Sarwar, *supra* note 83.

market for the U.S. dollar remains stable.⁸⁵ Cryptocurrencies do not yet have the luxury of these same protections to help reduce volatility.⁸⁶ However, pricing fluctuations could be combatted by utilizing several mechanisms,⁸⁷ such as the formation of a regulated derivative market.⁸⁸ By tying the cryptocurrency to a regulated derivative market, various market controls will ensure that speculative trading decreases.⁸⁹

The potential of a complete loss of the currency through hacking schemes has led some commentators to question the viability of cryptocurrency.⁹⁰ In September of 2018, a cryptocurrency exchange named Zaif became the latest victim of a hacking scheme that resulted in the theft of approximately \$60 million worth of several forms of digital currency, including Bitcoin, Monacoin, and Bitcoin Cash.⁹¹ Unfortunately, the theft from Zaif just happens to be

⁸⁵ See MARC LABONTE & MARTIN A. WEISS, CONG. RESEARCH SERV., IF11296, U.S. DOLLAR INTERVENTION: OPTIONS AND ISSUES FOR CONGRESS (2019), <https://fas.org/sgp/crs/misc/IF11296.pdf> [<https://perma.cc/AZ6G-7BSE>] (discussing several options available to the federal government used to stabilize dollar currency fluctuations); Nick Lioudis, *Currency Swap Basics*, INVESTOPEDIA (Jan. 16, 2020), <https://www.investopedia.com/articles/forex/11/introduction-currency-swaps.asp> [<https://perma.cc/3PJ8-HQJB>] (demonstrating one of the ways the private sector can hedge against currency volatility).

⁸⁶ Chloe Cornish & Hannah Murphy, *What Next After the Cryptocurrency Bubble Bursts?*, FIN. TIMES (Aug. 19, 2018), <https://www.ft.com/content/7ed0c3b8-a1f3-11e8-85da-eeb7a9ce36e4> [<https://perma.cc/J9W8-UXMY>] (opining that the volatility of cryptocurrency has already led to the economic bubble to burst due to a sharp decline in the prices of the cryptocurrency).

⁸⁷ See Matthew Allen, *Smart Valor Tackles Cryptocurrency Volatility Problem*, SWISSINFO.CH (Oct. 29, 2018), https://www.swissinfo.ch/eng/stable-coin_smart-valor-tackles-cryptocurrency-volatility-problem/44505996 [<https://perma.cc/W2M3-VLWU>] (highlighting a strategy of tying the value of one cryptocurrency to the Swiss Franc); see also Michael Del Castillo, *3 Clever Ways to Reach Crypto Price Stability, and One Giant Leap of Faith*, FORBES (Sept. 17, 2018), <https://www.forbes.com/sites/michaeldelcastillo/2018/09/17/3-clever-ways-to-reach-crypto-price-stability-and-one-giant-leap-of-faith/#22efdd7237cd> [<https://perma.cc/PWN6-KHLB>] (providing several measures including relying on third-party auditors, having a centralized agency issue cryptocurrency and using derivatives to help securitize the digital currency).

⁸⁸ See BRITO & CASTILLO, *supra* note 30, at 31–32; see also Sam Bourgi, *Taming Volatility: Saga Aims to Fix the Boom and Bust Nature of Cryptocurrency*, HACKED (Mar. 23, 2018), <https://hacked.com/taming-volatility-saga-aims-to-fix-the-boom-and-bust-nature-of-cryptocurrency/> [<https://perma.cc/5XL5-2CML>] (stating that a reserve-back cryptocurrency might be another viable solution to curbing price volatility).

⁸⁹ See Aaron Brown, *Bitcoin Enters Awkward Adolescence*, BLOOMBERG (Feb. 28, 2018, 1:00 PM), <https://www.bloomberg.com/opinion/articles/2018-02-28/bitcoin-cryptocurrency-derivatives-have-slow-uneventful-launch> [<https://perma.cc/8HHZ-9KLQ>] (explaining that derivative markets will significantly increase the amount of data available to provide more accurate financial forecasts that will help better predict the value of cryptocurrency).

⁹⁰ See, e.g., WILLIAM WU, KNOWLEDGE@WHARTON, WHY BITCOIN IS NOT A VIABLE CURRENCY OPTION (2018), <https://kw.wharton.upenn.edu/kwfellows/files/2018/06/2018-08-30-Bitcoin-Student-Series.pdf> [<https://perma.cc/MA27-CZDC>].

⁹¹ Bloomberg, *The Latest Cryptocurrency Exchange Hack Is a \$60 Million Theft at Japan's Zaif*, FORTUNE (Sept. 20, 2018), <http://fortune.com/2018/09/20/cryptocurrency-exchange-hack-zaif-japan-60-million/> [<https://perma.cc/4F2W-VFVB>].

one of many in a line of cryptocurrency exchange thefts.⁹² As a result of these breaches, digital currency exchanges have responded by placing a growing emphasis on promoting trustworthiness and accountability to their customers.⁹³ For example, Coinbase and Bitgo offer insurance policies to prospective customers to minimize the potential risk that they will not be able to recover their property in the event of a hack.⁹⁴ One virtual currency exchange even started to utilize a third-party audit to offer assurances to users that they can cover their balances.⁹⁵ As the cryptocurrency market becomes more developed and regulated, a wide variety of methods will become standardized and potentially mandated to protect users from internal and external threats.⁹⁶ To ensure the regulation works appropriately, the government must step in to impose significant liability on those digital currency exchanges that do not comply.⁹⁷ Adding government regulation will supplement one of “the most secure technologies in operation today” and further assure the public of the efficacy of cryptocurrency.⁹⁸

Finally, the government has increasingly tied cryptocurrency to unnecessary economic waste in the form of

⁹² See Devin Coldewey, *\$250,000 Worth of Bitcoin Stolen in Net Heist*, NBC NEWS (Sept. 5, 2012), <https://www.nbcnews.com/technology/250-000-worth-bitcoins-stolen-net-heist-980871> [<https://perma.cc/7YH2-67R2>] (providing an instance of an exchange being compromised resulting in the theft of a significant amount of Bitcoins); Jen Wiczner, *\$1 Billion Bitcoins Lost in Mt. Gox Hack to Be Returned to Victims*, FORTUNE (June 22, 2018), <http://fortune.com/2018/06/22/bitcoin-price-mt-gox-trustee/> [<https://perma.cc/A2CV-Y3HJ>] (noting, in 2014, approximately 850,000 Bitcoins with a value of about \$473 million were hacked from the cryptocurrency exchange Mt. Gox, which at the time was the world’s largest digital currency exchange).

⁹³ See BRITO & CASTILLO, *supra* note 30, at 36.

⁹⁴ *Id.* The typical form of insurance for cryptocurrency provides security in the event that an exchange is hacked. These policies typically cover the theft of the cryptocurrency on the exchanges. However, based on past events, the coverage may not extend to the whole value of the lost currency. Thus, the exchange is liable for the difference between the values. See Delton Rhodes, *Bitcoin Insurance Policies – What are They and Do You Need Them*, COIN CENT. (Aug. 6, 2018), <https://coincentral.com/bitcoin-insurance-policies> [<https://perma.cc/S24B-VFLL>]; see also Michael del Castillo, *3 Clever Ways to Reach Crypto Price Stability, and One Giant Leap of Faith*, FORBES (Sept. 17, 2018), <https://www.forbes.com/sites/michaeldelcastillo/2018/09/17/3-clever-ways-to-reach-crypto-price-stability-and-one-giant-leap-of-faith/#22efdd7237cd> [<https://perma.cc/7JKL-ACRU>].

⁹⁵ See Hannah Murphy, *Auditors Grapple with Crypto and Blockchain*, FIN. TIMES (Oct. 29, 2018), <https://www.ft.com/content/62dbb0ae-d822-11e8-a854-33d6f82e62f8> [<https://perma.cc/6M22-6TV3>] (noting that, given the relative novelty of the industry, accountants have not formulated a clear set of auditing procedures on how to appropriately monitor the cryptocurrency exchanges).

⁹⁶ See Roger Atkins, *U.S. CFTC Commissioner Says Cryptocurrency Exchanges Adopting ‘Self-Regulation’ Could Spur Standards*, FORBES (Feb. 15, 2018), <https://www.forbes.com/sites/rogeraitken/2018/02/15/u-s-cftc-commissioner-says-cryptocurrency-exchanges-adopting-self-regulation-could-spur-standards/#9607b1545e12> [<https://perma.cc/9ZBN-GEZN>].

⁹⁷ See BRITO & CASTILLO, *supra* note 30, at 36.

⁹⁸ *Id.* at 34.

forgotten user information.⁹⁹ Yet the problem of losing money because of forgotten user information is an ongoing problem that is not unique to cryptocurrency.¹⁰⁰ Losing a password to access cryptocurrency is no different than “dropping a \$20 bill on the sidewalk without noticing.”¹⁰¹

For cryptocurrency to reach its enormous potential, regulations must be implemented that drastically reduce the presence of the issues that are hampering widespread acceptance.¹⁰² Fortunately, several measures, such as requiring third-party audits, removal of IP blocking technology on the currency, and establishing a parallel derivative market, exist and will aid regulators in these tasks.¹⁰³ To help jump start the process, the IRS can implement several preferential regulations that incentivize taxpayers to use cryptocurrencies that have all of these measures in place.¹⁰⁴ The IRS plan must be comprehensive because any method that provides wholesale treatment will be too simplistic to adequately address the complexity of cryptocurrency.

II. UNDERINCLUSIVE METHODS OF TAXING CRYPTOCURRENCY

Existing cryptocurrency taxation methodology fails to thoroughly evaluate all of the various components of cryptocurrency. IRS Notice 2014-21 treatment of virtual currency as property took a very near-sighted stance on how to tax a highly complex, emerging industry.¹⁰⁵ Shifting in the opposite direction and advocating for currency treatment, however, presents an array of equally troubling problems for the IRS.¹⁰⁶ A wholesale adoption of the currency method means that the IRS would take the position that formulating a plan to tax cryptocurrency would be too difficult, which could result in a significant loss of tax revenue on people that hold cryptocurrency as an investment.¹⁰⁷ Therefore, a flexible approach will allow for the implementation

⁹⁹ See April Glaser, *People Who Can't Remember Their Bitcoin Passwords Are Really Freaking Out Now*, SLATE (Dec. 8, 2018, 3:37 PM), <https://slate.com/technology/2017/12/people-who-cant-remember-their-bitcoin-passwords-are-really-freaking-out.html> [<https://perma.cc/9R9B-PNYM>].

¹⁰⁰ Aimee Picchi, *Americans Throw Away \$62 Million in Coins Each Year*, CBS NEWS (Oct. 18, 2016), <https://www.cbsnews.com/news/americans-throw-away-62-million-in-coins-each-year/> [<https://perma.cc/E8RL-JQ9L>] (noting, that according to one study Americans lose an estimated \$62 million in coins each year “by tossing coins in the trash”).

¹⁰¹ Liedel, *supra* note 51, at 114.

¹⁰² See Obie & Rasmussen, *supra* note 10.

¹⁰³ See *supra* notes 80–81, 88–89, 94–97 and accompanying text.

¹⁰⁴ See *infra* Section II.B.

¹⁰⁵ See *infra* Section II.A.

¹⁰⁶ See *infra* Section II.B.

¹⁰⁷ See *infra* Section II.B.

of sound policy. This will allow the promotion of cryptocurrency without sacrificing tax revenue due to either circumvention of regulatory provisions or simply evading all forms of taxation.¹⁰⁸

A. *The Vulnerabilities of Notice 2014-21 and the Treatment of Cryptocurrency as Property*

Under the property method, cryptocurrency must be taxed as a capital asset.¹⁰⁹ Capital asset taxation requires a taxpayer to determine their basis in the property and holding period in order to determine the appropriate tax treatment.¹¹⁰ Basis in asset refers to the cost needed to acquire an asset.¹¹¹ Once basis is determined, a taxpayer must determine the gain or loss on the disposition property by finding the difference between the sales price and the basis.¹¹² After computing the gain or loss, the tax treatment is dependent upon the holding period of the asset.¹¹³ A determination of whether the property was held for greater than one year determines the classification of capital gain.¹¹⁴ If the asset's holding period exceeds one year, then the taxpayer will classify the transaction as either a long-term capital gain or loss.¹¹⁵ Whereas, assets held under a year are treated as short-term capital gains or losses.¹¹⁶ The type of capital gains treatment impacts the tax liability tremendously.¹¹⁷ When a taxpayer has a net long-term capital gain, that income is subject to preferential tax rates.¹¹⁸ Utilizing this approach fails to fully account for the highly unique and complex nature of cryptocurrency.¹¹⁹

¹⁰⁸ See *infra* Part II.

¹⁰⁹ See I.R.C. § 1221(a) (stating that property qualifies as a capital subject to several exceptions, which cryptocurrency falls outside of).

¹¹⁰ See I.R.C. § 1223 (defining holding period as the length of time from when the asset is acquired to when it is disposed). If a capital asset is held less than a year, short-term capital gain (or loss) rules apply, which means that the taxpayer will be taxed at the applicable ordinary rates on this income. If the holding period exceeds one year, then the gain will be classified as a long-term capital gain (or loss). I.R.C. § 1222.

¹¹¹ I.R.C. § 1012.

¹¹² I.R.C. § 1001.

¹¹³ I.R.C. § 1223(1) (stating that the holding period is the amount of time elapsed from the taxpayer acquired the property to when it was disposed of).

¹¹⁴ I.R.C. § 1222.

¹¹⁵ I.R.C. § 1222(3)–(4).

¹¹⁶ I.R.C. § 1222(1)–(2). If a transaction results in short-term treatment, the taxpayer must pay taxes on the gain at the ordinary rate, which is the typical rate that a taxpayer would pay on all other forms of income except capital gains.

¹¹⁷ See I.R.C. § 1(h) (showing that a taxpayer pays tax at a reduced tax rate regardless of the tax bracket they fall under).

¹¹⁸ See *id.*

¹¹⁹ See *infra* Section II.A.1.

1. Basis Issues

Basis plays a pivotal role in determining the appropriate amount of a capital gain.¹²⁰ Digital currency, in some instances, is not obtained through traditional means or for an ascertainable value.¹²¹ Several issues arise in determining the appropriate basis that a taxpayer has in digital currency.¹²²

The process of mining digital currency poses a significant challenge in determining basis in the cryptocurrency.¹²³ Oftentimes, a person that mines cryptocurrency expends a considerable amount of resources and time to generate the new unit of digital currency,¹²⁴ and for their efforts receives a new unit of virtual currency.¹²⁵ Nevertheless, a miner at the time of receiving the new unit must report the fair market value of the digital currency as gross income.¹²⁶ Determining the fair market value is a relatively simple process because the exchange platform provides an easily determinable value for the currency.¹²⁷ An issue occurs at the time of disposition of the unit of digital currency, especially in the event that the value of the virtual currency experiences a dramatic reduction in value because they will not be able to completely deduct the full value of the loss as an ordinary loss.¹²⁸ Even though the taxpayer includes the fair market value of the currency at the moment it is fully mined, the IRS guidance surrounding the transfer is a major source of confusion because of the uncertainty in determining whether the

¹²⁰ See I.R.C. § 1001; James Chen, *Cost Basis*, INVESTOPEDIA (June 22, 2019), <https://www.investopedia.com/terms/c/costbasis.asp> [<https://perma.cc/P726-KUEM>] (showing that basis is needed to compute the value of the gain (loss)).

¹²¹ Zachary B. Johnson, Note, *I Got 988 Problems but Bitcoin Ain't One: The Current Problems Presented by Internal Revenue Service's Guidance on Virtual Currency*, 47 U. MEM. L. REV. 633, 654 (2016) (showing that mining or exchanging for goods and services creates difficulties in determining basis because there are issues quantifying the value of each at the moment of transfer).

¹²² See generally *infra* Section II.A.1.

¹²³ Johnson, *supra* note 121, at 655.

¹²⁴ See Aaron Hankin, *Here's How Much It Costs to Mine a Single Bitcoin in Your Country*, MARKETWATCH (May 11, 2018, 9:18 AM), <https://www.marketwatch.com/story/heres-how-much-it-costs-to-mine-a-single-bitcoin-in-your-country-2018-03-06> [<https://perma.cc/9GD3-HFFE>] (noting that presently bitcoins trade at approximately the break-even cost for a miner, which at the time was \$8,038).

¹²⁵ BRITO & CASTILLO, *supra* note 30, at 9.

¹²⁶ Isaac Pflaum & Emmeline Hateley, *A Bit of a Problem: National and Extraterritorial Regulation of Virtual Currency in the Age of Financial Disintermediation*, 45 GEO. J. INT'L. L. 1169, 1211–12 (2014).

¹²⁷ Websites, such as [Binance.com](https://www.binance.com), provide people with an easily accessible real-time valuation of the cryptocurrency. See *Active Markets*, BINANCE, <https://coinmarketcap.com/exchanges/binance/> [<https://perma.cc/HL9X-M86J>].

¹²⁸ Johnson, *supra* note 121, at 655.

unit of virtual currency is treated as “prize income, earned income or even capital asset[].”¹²⁹

In certain instances, a taxpayer can deduct expenses used to acquire income in order to offset the cost of acquiring that income.¹³⁰ According to Section 162 of the IRC, a taxpayer is allowed a deduction of expenses incurred in relation to a trade or business.¹³¹ Alternative guidance issued by different regulatory agencies, such as Financial Crimes Enforcement Network (FinCEN), fails to recognize cryptocurrency mining as a trade or business.¹³² Consequently, miners have looked to Section 212 of the IRC, which allows a taxpayer to deduct expenses connected to the production of income, to provide a way to have their taxable income reflect the actual net income produced by mining.¹³³ With capital losses, there are limitations regarding deductibility.¹³⁴ Therefore, not allowing a miner to write off their expenses results in an inequitable situation in the event of a loss.

Basis determination issues will also create a pervasive challenge for taxpayers that routinely accept and use cryptocurrency as a form of payment.¹³⁵ Theoretically, a party that accepts numerous cryptocurrencies in any given day will have to account for the value of all the cryptocurrency they obtained.¹³⁶ To ensure compliance with the IRS, the taxpayer would have to maintain meticulous records of each transaction involving cryptocurrency.¹³⁷ In this instance, the record keeping presents an onerous, if not impossible, task that would require a person or business to devote a considerable amount of time and resources away from other more economically productive activities.¹³⁸

IRS Notice 2014-21 also fails to provide any meaningful direction on how to appropriately record cryptocurrency

¹²⁹ *Id.* at 654.

¹³⁰ *See* I.R.C. § 162(a).

¹³¹ *Id.*

¹³² *See* FIN. CRIMES ENF'T NETWORK, U.S. DEPT OF THE TREASURY, FIN-2013-G001, APPLICATION OF FINANCE'S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES 1–2 (2013).

¹³³ *See* I.R.C. § 212. Allowing a deduction for the offsetting income would create an equitable situation because miners do incur significant costs to produce a new unit of cryptocurrency.

¹³⁴ *See* I.R.C. § 1211.

¹³⁵ *See* Johnson, *supra* note 121, at 656.

¹³⁶ *See id.* at 654.

¹³⁷ *See* Sam Hampton, Note, *Undermining Bitcoin*, 11 WASH. J.L. TECH. & ARTS 331, 342 (2016).

¹³⁸ *See id.* Although the average cash-basis taxpayer also maintains a similar sort of ledger, a person using cryptocurrency could engage in a wide array of transactions or partially sell a given unit of cryptocurrency that will create a virtually untraceable transaction. Consequently, this creates a task that will produce an imperfect answer with a staggering cost.

inventory.¹³⁹ Currently, taxpayers are given broad leeway in selecting the digital currency that they can report to be transferred.¹⁴⁰ But if the taxpayer uses cryptocurrency with varying holding periods, a perplexing issue arises in determining the capital gains treatment of the coins.¹⁴¹ Because of the inability to appropriately differentiate units of digital currency once they are in digital wallet, a taxpayer can arbitrarily assign the units of digital currency used in a transaction.¹⁴² This results in a loss of tax revenue because a shrewd taxpayer can pick the cryptocurrencies that will generate taxable losses.

Partial unit sales augment issues with tracking basis.¹⁴³ Currently, digital currency wallets do not have a feature that distinguishes units from one another.¹⁴⁴ When an individual acquires units of digital currency at various times for different per unit values, a person or entity must engage in the improvident task of desegregating cryptocurrency transactions.¹⁴⁵ Shifting away from the property method for cryptocurrency transactions will remove an unnecessary, nonsensical reporting requirement.

These basis issues arising from the property treatment stem from digital currency users engaging in routine transactions of cryptocurrency that mirror ordinary cash or credit card purchases. In effect, IRS Notice 2014-21's property treatment creates basis tracking requirements that make it an unwise proposition to use cryptocurrency like cash. Removing the wholesale property treatment will greatly benefit parties that want to use cryptocurrency like a form of currency rather than an investment.¹⁴⁶

2. Straddles

Straddles present a systemic vulnerability for cryptocurrency holders that enter into transactions with the sole purpose of generating artificial taxable losses to offset against

¹³⁹ *Id.* at 345–46.

¹⁴⁰ Erin M. Hawley & Joseph J. Colangelo, *Bitcoin Taxation: Recommendations to Improve the Understanding and Treatment of Virtual Currency*, FEDERALIST SOC'Y (Nov. 19, 2014), <https://fedsoc.org/commentary/publications/bitcoin-taxation-recommendations-to-improve-the-understanding-and-treatment-of-virtual-currency> [https://perma.cc/VKR9-6EZM].

¹⁴¹ Kathleen R. Semanski, *Income from Whatever Exchange, Mine, or Fork Derived: The Basics of U.S. Cryptocurrency Taxation*, BANKING & FIN. SERVICES POL'Y REP., June 2018, at 8, 10.

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ Hawley & Colangelo, *supra* note 140.

¹⁴⁵ *Id.*

¹⁴⁶ *See* Johnson, *supra* note 121, at 657.

income.¹⁴⁷ To combat transactions that do not comport with the economic realities of the world, the IRS must reconfigure its approach to taxing virtual currency.¹⁴⁸

By treating cryptocurrency as property, the IRS created an opportunity for an investor to utilize straddles to reduce taxable income.¹⁴⁹ By using straddles, a taxpayer can lower their tax liability by selling a losing position to offset any taxable gain.¹⁵⁰ Typically, an investor utilizes a straddle when a commodity has highly volatile prices because it allows them to hedge their position in the asset and guarantee that price volatility will not impact their investment.¹⁵¹ The extreme price fluctuations of virtual currency make it an ideal commodity for investors to use straddles on.¹⁵²

Given the artificial nature of the losses associated with straddles, the IRS has placed an emphasis on curbing taxpayer abuse of straddles.¹⁵³ At a generalized level, a derivative position that is sold with the intention of generating artificial taxable losses would be disallowed.¹⁵⁴ This disallowed loss would be reincorporated into the basis of the derivative contract taking the opposite position because this will reduce the amount of gain the taxpayer will have to recognize upon the disposition of the

¹⁴⁷ *Id.* at 659–60; James Chen, *Straddle*, INVESTOPEDIA (Oct. 8, 2019), <https://www.investopedia.com/terms/s/straddle.asp> [<https://perma.cc/8U89-MWTJ>]. A straddle is an investment strategy that involves holding two financial derivatives that have opposite positions. The notion of opposite positions essentially means that the investor has bet that the value of the underlying asset will both increase and decrease. Subsequently, an investor does not lose money in this transaction because one derivative will always be profitable and one will always be unprofitable. *See id.*

¹⁴⁸ *See infra* Part III.

¹⁴⁹ *See* Johnson, *supra* note 121, at 662.

¹⁵⁰ GEORGE MICHAELS, G2 FINTECH, TAX IMPLICATIONS FOR STRADDLES 5 (Feb. 15, 2012), http://g2ft.com/papers/Tax%20Implications%20of%20Straddles_G2FinTech.pdf [<https://perma.cc/KF9L-FTPH>].

¹⁵¹ *See* Noble DraKoln, *Understanding Straddle Strategy for Market Profits*, INVESTOPEDIA (Feb. 26, 2018, 9:46 AM), <https://www.investopedia.com/articles/option-investor/08/straddle-strategy.asp> [<https://perma.cc/3PV4-DGAC>].

¹⁵² *See supra* note 84 and accompanying text; *see also* *Bitcoin: BTC*, COINDESK, <https://www.coindesk.com/price/bitcoin> [<https://perma.cc/GQ5G-WD9>] (updated on a real-time basis reflecting current currency trading); *Ethereum: ETH*, COINDESK, <https://www.coindesk.com/price/ethereum> [<https://perma.cc/6CKD-3L73>] (updated on a real-time basis reflecting current currency trading).

¹⁵³ *See* I.R.C. § 1092(c)(1); *see also* George Michaels, *Tax Implications of Straddles*, G2 FINTECH 1 (Feb. 15, 2012), http://g2ft.com/papers/Tax%20Implications%20of%20Straddles_G2FinTech.pdf [<https://perma.cc/EVL3-72JP>] (citing abusive taxpayer practices throughout the 1960s and 1970s leading to the implementation of the straddle rules).

¹⁵⁴ *See* I.R.C. § 1092 (c)(2); *see also* *Gregory v. Helvering*, 293 U.S. 465 (1935) (allowing the courts and the regulatory agency to look at the substance of the transaction when determining the tax implications).

profitable investment.¹⁵⁵ Consequently, the taxpayer cannot accelerate “paper” losses that only existed for accounting records.¹⁵⁶

In the context of cryptocurrency, IRC Section 1092 would not apply because the straddle would not meet the statutory requirements.¹⁵⁷ With cryptocurrency, the holder of cryptocurrency can sell the losing position and reap the benefits of a taxable loss.¹⁵⁸ Subsequently, the taxpayer can reestablish the derivative position later and repeat the same process the following year.¹⁵⁹ On personal property transactions, the IRS permits a taxpayer to take advantage of the taxable losses generated by straddles.¹⁶⁰ IRS Notice 2014-21 does not adequately address whether virtual currency is either a capital asset, security or commodity.¹⁶¹ Instead, the taxpayer has autonomy to choose their own treatment.¹⁶² A holder of a unit of cryptocurrency would have the option to hold the digital currency like a capital asset, which would allow for a taxpayer to take advantage of a straddle with a large price variance.¹⁶³

This leads to an anomalous situation where a taxpayer can engage in a cryptocurrency transaction that produces a tax result that differs from the economic reality.¹⁶⁴ By establishing property treatment, the IRS created the potential for savvy investors to take advantage of a significant loophole.¹⁶⁵ This glaring weakness can be rectified by requiring a classification system that mandates tax treatment as a capital asset, which would make the cryptocurrency subject to straddle treatment under IRC Section 1092.¹⁶⁶

¹⁵⁵ See I.R.C. § 1092(c)(2); Michaels, *supra* note 153, at 5–6. For example, a taxpayer that purchases two opposing derivative contracts at \$1,000. Subsequently, the theoretical taxpayer sells the derivative position for \$100, which results in a \$900 loss. However, under the straddle rules that taxpayer would not be able to deduct the loss. Instead, the payer would add the \$900 to the \$1,000 unsold derivative contract and have a basis of \$1,900. Accordingly, gain or loss calculations would be computed off the \$1,900 basis.

¹⁵⁶ I.R.C. § 1092(c)(2); Michaels, *supra* note 153, at 5–6.

¹⁵⁷ See I.R.C. § 1092(c)(4); Notice 2014-21, *supra* note 9; Johnson, *supra* note 121, at 661 n.165 (positing that BitCoin and other cryptocurrencies would likely not qualify for straddle treatment because they are not publicly traded on an SEC approved exchange).

¹⁵⁸ Johnson, *supra* note 121, at 662.

¹⁵⁹ *Id.*

¹⁶⁰ See I.R.C. § 1092(c)(1).

¹⁶¹ See Notice 2014-21, *supra* note 9 (noting the characterization of income is dependent upon how the taxpayer treats the virtual currency).

¹⁶² See *id.*

¹⁶³ Johnson, *supra* note 121, at 662.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ See I.R.C. § 1092(c)(1).

B. The Benefits and Problems of Treating Cryptocurrency as Currency or Cash

Given the potential use of cryptocurrency as an alternative to government-issued legal tender, some scholars have advocated for the adoption of the currency treatment, which essentially means that capital gains and losses resulting from fluctuations in the value of currency are disregarded, for virtual currency.¹⁶⁷ Unfortunately, this treatment also suffers from the potential for abuse that will lead to the IRS foregoing a significant source of tax revenue. Given the highly versatile nature of cryptocurrency, relying on only one approach will not adequately solve the problems with this new form of commercial exchange.¹⁶⁸

Under IRC Section 988, a taxpayer does not have to account for the change in value of a foreign currency when computing taxable income if they use the currency as a medium of exchange in a personal transaction.¹⁶⁹ In any other type of transaction, the IRS would treat the disposition as a taxable event analogous to the property method.¹⁷⁰ Cryptocurrency falls outside of the parameters of Section 988 because the IRS refuses to classify it as a foreign currency.¹⁷¹ Therefore, some have argued for the IRS to extend its definition of foreign currency to include cryptocurrency because of its functional equivalence to a foreign currency.¹⁷² The proponents of this method further elaborate that this approach will allow the IRS to leverage its past experience and case law to inform taxpayers on how it intends to treat cryptocurrency transactions.¹⁷³ Ultimately, applying the currency method to cryptocurrencies will allow several stakeholders to derive benefits that are currently suppressed due to the onerous reporting and taxation burdens imposed upon holders of cryptocurrency.¹⁷⁴

¹⁶⁷ See Aaron Hsieh, *The Faceless Coin: Achieving Modern Tax Policy in The Changing Landscape of Cryptocurrency*, 2019 U. ILL. L. REV. 1079, 1108 (2019); see also e.g., Liedel, *supra* note 51, at 115 (advocating for treating virtual currency like cash in all areas of law, which includes the disregarding gain or loss on the change in value of the currency).

¹⁶⁸ See *infra* Section III.B. (showing that a detailed multi-tiered approach helps achieve policy objectives both related and unrelated to the taxation of cryptocurrency).

¹⁶⁹ I.R.C. § 988(e)(2).

¹⁷⁰ See I.R.C. § 988(a)–(d); I.R.C. § 1001.

¹⁷¹ See I.R.S. Notice 2014-21, *supra* note 9.

¹⁷² See, e.g., Johnson, *supra* note 121, at 664. Although academics believe adopting Section 988 treatment would be beneficial to the growth of cryptocurrency, the federal government would be unlikely to adopt such measures. The U.S. government's concerns over volatility, anonymity, lack of governmental backing, and criminal association with virtual currency will mitigate adopting measures that provide preferential tax treatment to cryptocurrency. Hsieh, *supra* note 167, at 1109–10.

¹⁷³ See Johnson, *supra* note 121, at 664.

¹⁷⁴ See *supra* Section II.A.1.

Under the currency treatment, consumers would be able to fully recognize the reduced transaction costs of cryptocurrency.¹⁷⁵ Under the present method, the IRS simply shifted the transaction costs because consumers must pay the transaction costs in the form of reporting and tracking the change in value of cryptocurrency, which requires a significant amount of time and resources.¹⁷⁶ Moreover, grouping all users under the same classifications fails to adequately account for the wide array of uses of cryptocurrency.¹⁷⁷ Utilizing the currency treatment framework from Section 988 will shift the pendulum of preferential tax treatment toward those users that use cryptocurrency like cash because of the non-inclusion of income in personal transactions.¹⁷⁸

Similarly, adopting the currency treatment will further encourage vendors and merchants to be more willing to accept cryptocurrency.¹⁷⁹ Like casual consumers, businesses accepting cryptocurrency as payment are hampered by the same burdensome reporting and taxation requirements.¹⁸⁰ Therefore, using the currency treatment would pass on the same ostensible benefits of cryptocurrency while eliminating the need to have a middleman to guarantee that the payments are valid.¹⁸¹ At the state level, there is a potential for triple sales taxation of transactions involving cryptocurrency.¹⁸² The three forms of sales taxation occur when the merchant engages in a commercial transaction involving cryptocurrency, which include the consumers initial purchase of cryptocurrency, the commercial transaction using cryptocurrency as a form of tender, and the sellers conversion of the cryptocurrency to recognized legal tender.¹⁸³ Even though the IRS does not have a say in state sales tax, the property treatment enables state governments to levy sales tax on cryptocurrency conversions. Consequently, businesses that are wavering on accepting cryptocurrency could benefit tremendously from the adoption of the currency method due to actually reaping the benefit of the reduced transaction

¹⁷⁵ See *supra* Section I.B.

¹⁷⁶ Hampton, *supra* note 137, at 342–45.

¹⁷⁷ See *supra* Section I.B.

¹⁷⁸ See Hsieh, *supra* note 167, at 1108–10.

¹⁷⁹ *Id.* at 1110.

¹⁸⁰ See Hampton, *supra* note 137, at 342.

¹⁸¹ See *supra* Section II.B.

¹⁸² Johnson, *supra* note 121, at 669.

¹⁸³ Jamie Redman, *Sales Tax and Bitcoin in The United States Can Be Confusing*, BITCOIN.COM (Sept. 12, 2018), <https://news.bitcoin.com/sales-tax-and-bitcoin-in-the-united-states-can-be-confusing/> [<https://perma.cc/XRL6-L8X3>] (showing how California mirrors the example by taxing cryptocurrency transactions independent of the underlying commercial transaction).

costs,¹⁸⁴ leading to a greater acceptance of cryptocurrency as an alternative form of payment.¹⁸⁵

Furthermore, applying the currency treatment to cryptocurrency will promulgate some of the other beneficial traits of cryptocurrency.¹⁸⁶ As a result of the tax reasons outlined above, an increased willingness to allow cryptocurrency will result in a more secure marketplace.¹⁸⁷ Because cryptocurrency's reduction of charge-back fraud and irreversibility, transactions will have an added layers of protection that will lead to a more efficient form of commercial interaction.¹⁸⁸ Moreover, the increased promotion of cryptocurrency will augment the ability to transact internationally.¹⁸⁹ Like transaction fees, taxation on the change in value of digital currency merely supplants the original transaction fees and gives rise to a new form of transaction fee.¹⁹⁰ By using the currency method, parties will not be subjected to fees commonly associated with cross-border transactions. This will thus accomplish digital currency's primary goal: to eliminate wasteful transaction costs.¹⁹¹ Lastly, digital currencies operate more efficiently with an increased usage, which scholars refer to as the network effect.¹⁹² Since the currency treatment will not generate a taxable event upon the disposition of cryptocurrency, there will be a higher acceptance of digital currency, which will supplement the effectiveness of the new form of tender. Ultimately, allowing this treatment will indirectly result in other ancillary benefits that will help cryptocurrency users.

However, applying the currency treatment alone would only address the criticism that currently affect commercial uses of

¹⁸⁴ See Liedel, *supra* note 51, at 113.

¹⁸⁵ Clayton Moore, *Retailers Will Drive the Adoption of Cryptocurrency, Not the Other Way Around*, CROWDFUND INSIDER (June 1, 2018, 8:26 AM), <https://www.crowdfundinsider.com/2018/06/134307-retailers-will-drive-the-adoption-of-cryptocurrency-not-the-other-way-around/> [<https://perma.cc/TCP7-693V>].

¹⁸⁶ See *supra* Section I.B.

¹⁸⁷ See *supra* Section I.B. As digital currencies gain wide-spread acceptance, more users are able to provide a system check to authenticate the validity of the transactions.

¹⁸⁸ See *supra* Section I.B.

¹⁸⁹ See *supra* Section I.B.

¹⁹⁰ By creating a taxable event, users of cryptocurrency in a commercial setting have costs imposed with respect to record keeping, and in the event of a gain, a tax being imposed. See *infra* Section IV.

¹⁹¹ See *supra* Section I.B.

¹⁹² The network effect refers to an economic concept that a product or service's value increases as more people use it. With cryptocurrency, a network effect results for several reasons, which include a higher level of security, retailers accepting a single currency, size stabilization effect and uniform practices with one currency. Justin Chan, *Blockchain Economics and Network Effects*, DATA DRIVEN INVESTOR (Aug. 22, 2018), <https://www.datadriveninvestor.com/2018/08/22/blockchain-economics-and-network-effects/> [<https://perma.cc/GZ2N-2L3U>].

cryptocurrency,¹⁹³ however, the currency treatment would lead to a significant loss of tax revenue. A lot of the publicity surrounding cryptocurrency stems from its staggering growth in value, which has led to a segment of the population holding the currency like an investment asset.¹⁹⁴ Adopting the currency method would drastically reduce the IRS's ability to collect tax revenue on those gains because sophisticated holders of cryptocurrency will assert they engaged in a commercial rather than a financial transaction. Given the pseudonymous nature of cryptocurrency, determining investment intent would be a nearly impossible task, ignoring the economic reality of some cryptocurrency transactions. Admittedly, encouraging currency treatment may lead to increased market stabilization because straddles would be utilized for reasons other than tax.¹⁹⁵ This results in a more economically efficient use because the market will be able to course correct speculative price changes.¹⁹⁶ Alternative means, such as increased regulation, exist to accomplish the same effect.¹⁹⁷ A wholesale disallowance on taxation of cryptocurrency could potentially create an inefficient market because investors would be allowed to have a tax-free appreciation in assets. This would encourage a price spike in the value of cryptocurrency that may ultimately lead to a price that is not a true reflection of the market value of cryptocurrency because the tax-free saving makes it a much more favorable investment,¹⁹⁸ strengthening the notion that cryptocurrency's value results purely from speculative activity rather than true economic value ascribed by the market.¹⁹⁹ By using a more flexible approach than the currency method, the IRS could play a vital role in shaping the future of the cryptocurrency market.

¹⁹³ Since the currency treatment reduces all of the onerous compliance measures, such as determining basis and keeping track of when the digital currency was acquired, there may be realized benefits related to fiscal administration. But this view is too narrow and does not fully address governmental concerns over regulation of cryptocurrency. *See supra* Section II.A.1.

¹⁹⁴ *Cryptocurrency Market Capitalizations: All Cryptocurrencies*, COINMARKETCAP, <https://coinmarketcap.com/currencies/views/all> [<https://perma.cc/7DUX-K26S>] (illustrating the staggering growth trend that has led cryptocurrency to gain notoriety as an investment).

¹⁹⁵ *See supra* Section II.A.1.

¹⁹⁶ *See supra* Section II.A.1.

¹⁹⁷ *See supra* Section I.C.

¹⁹⁸ *See* Douglas A. Shackelford, *Capital Gains Taxes and Equity Prices*, NAT'L BUREAU ECON. RES. (2004), <https://www.nber.org/reporter/fall04/shackelford.html> [<https://perma.cc/4AWK-8R69>] (estimating that preferential tax treatment increases the value of securities by approximately 20 percent).

¹⁹⁹ *See* Jay Adkisson, *The Cryptocurrency Paradox and Why Crypto Is Failing*, FORBES (Nov. 28, 2018), <https://www.forbes.com/sites/jayadkisson/2018/11/28/the-crypto-currency-paradox-and-why-crypto-is-failing/#174176bd7c9d> [<https://perma.cc/W8HE-WUMG>] (stating that “[b]y far most purchases of cryptocurrency have been raw speculation”).

III. HOW THE IRS SHOULD TAX CRYPTOCURRENCY

Developing a model of taxation that takes a holistic account of the dynamics surrounding cryptocurrency will lead to an optimal system. To accomplish this, the IRS should implement a model that considers the notion that cryptocurrency functions as an alternative to traditional government-backed legal tender while also realizing that cryptocurrencies can also be held as an investment asset.²⁰⁰ A new tiered system of taxing virtual currencies can further policy objectives outside of the tax realm, such as the need for more regulation to address cryptocurrency's nefarious criminal ties.²⁰¹

IV. THREE-TIERED TAXATION OF CRYPTOCURRENCY

To accomplish a wide array of policy goals ranging from price stabilization, disassociation with the criminal uses, and widespread commercial acceptance, cryptocurrency should be taxed under a three-tiered classification. Under the first classification, which will be labeled as Qualified Virtual Tender, taxpayers that use a qualified currency-use cryptocurrency would be subject to the currency treatment. The second tier, a Qualified Virtual Currency Investment, will treat certain qualified cryptocurrency assets as investments subject to the property method. This means dispositions will be subject to traditional capital gain and loss rules.²⁰² Lastly, cryptocurrency that does not qualify for treatment under the first two classifications will be referred to as Unqualified Virtual Currency. Taxpayers possessing this form of cryptocurrency, regardless of holding period, would be subject to ordinary taxation, which means they will not receive the beneficial treatment of holding the currency as a capital asset. Taxpayers can also only deduct losses on Unqualified Virtual Currency to the extent of the offsetting gains of cryptocurrency under the same classification.

To dissuade taxpayer abuse and close any potential loopholes, several additional provisions must be enacted. To

²⁰⁰ See Ryan Browne, *The Cryptocurrency Market Is Now Worth More than JPMorgan*, CNBC (Dec. 6, 2017), <https://www.cnbc.com/2017/12/06/the-cryptocurrency-market-is-now-worth-more-than-jpmorgan.html> [<https://perma.cc/R9P2-ESU6>]; Christian Kameir, *The Fundamentals of Cryptocurrency Investment*, FORBES (Aug. 29, 2018), <https://www.forbes.com/sites/forbesfinancecouncil/2018/08/29/the-fundamentals-of-cryptocurrency-investment/#15695913491c> [<https://perma.cc/9TZ4-FAYF>] (illustrating that cryptocurrency has been used as an investment).

²⁰¹ See *supra* Section I.C.

²⁰² The qualification stems from meeting various regulatory requirements, such as having a third-party audit and having value tied to some discernable asset.

limit Qualified Virtual Tender abuses, a holding period limitation must be enacted to ensure that taxpayers do not hold onto the digital currency for an extended period of time like investment assets. Miners, however, would not be subject to the holding period exception. Since miners acquire their virtual currency in a manner similar to an independent contractor,²⁰³ allowing them to hold their cryptocurrency for an unlimited period of time will allow them to derive a benefit from the fruits of their labor. Nevertheless, to reduce any basis issues upon disposition, digital currency miners would not be allowed to deduct any of the associated expenses. Additionally, for cryptocurrency holdings that exceed \$100,000, the taxpayer must demonstrate that the virtual currency was either acquired by the sale of tangible goods or services or that it was used in purchasing tangible goods or services. When an abuse is found, even though the currency designation may be regulated, the taxpayer would be subject to Unqualified Virtual Currency treatment. Creating such a stark penalty for abuses will increase the chance that taxpayers do not abuse the generous treatment associated with Qualified Virtual Tender.

For a cryptocurrency to be considered qualified for the purposes of the first and second tier, the Commodity Futures Trading Commission (CFTC) would decide whether it meets certain criteria. Given that the CFTC has taken the position that cryptocurrency is considered a commodity,²⁰⁴ allowing them to formulate a regulatory regime seems appropriate. Shifting some of the regulatory burden for classification to the CFTC will allow them to leverage their specialized knowledge of the commodities markets to help create a comprehensive plan that considers the unique nature of commodities market while helping to achieve policy goals, such as reduced volatility and severing criminal connections. The CFTC should mandate that currency wallets and exchanges have some form of consumer registration to verify that consumers fall within the jurisdiction of the United States. This action would reduce the U.S. government's extraterritorial intrusion of other countries' policies. Combining the efforts of two agencies will leverage the skills of both agencies to provide a comprehensive system that fully examines a truly novel form of technology.

²⁰³ See David Klasing, *Are Bitcoin Miners Required to Pay Self-Employment Tax?*, KLASSING ASSOCIATES (Nov. 29, 2016), <https://klasing-associates.com/question/bit-coin-miners-required-pay-self-employment-tax/> [<https://perma.cc/9TAY-H4YD>].

²⁰⁴ William Foxley, *CFTC Chairman Confirms Ether Cryptocurrency Is a Commodity*, COINDESK (Oct. 10, 2019), <https://www.coindesk.com/cftc-chairman-confirm-s-ether-cryptocurrency-is-a-commodity> [<https://perma.cc/6ADP-VS43>].

Under this new taxation regime for cryptocurrency, the onus will be placed on both the taxpayer and the cryptocurrency companies to faithfully report the appropriate classifications. Within the class of U.S. cryptocurrency holders, the cryptocurrency wallets should provide a year-end statement—similar to the statements provided by banks to their customers—to those users at the end of every year.²⁰⁵ These statements would ensure that consumers and the IRS have an accurate source of information on which to rely. Additionally, when taxpayers create their cryptocurrency wallet, they must make an election of how to appropriately classify their holdings. To ensure compliance, providers of digital currency wallets must have some form of monitoring to ensure the taxpayer's election comports with the economic reality of their cryptocurrency holdings. Like a bank, the cryptocurrency wallet websites must have some form of insurance similar to how the Federal Deposit Insurance Corporation does for regulated U.S. banks.²⁰⁶ Federal banking regulations may also potentially provide guidance in determining cryptocurrency wallet eligibility and help further future regulatory plans concerning the cryptocurrency market.

Although enforcing regulations on cryptocurrency may lead to costs being imposed upon users, the alternatives do not yield a viable solution because each scenario does not produce the highest net utility.²⁰⁷ Therefore, adopting an alternative that passes on some costs to the consumers leads to the best solution because all the parties will be able to benefit from cryptocurrency rather than being an all or nothing proposition.

V. BENEFITS OF THE THREE-TIERED TAXATION OF CRYPTOCURRENCY

Under the proposed taxation method for cryptocurrency, every party will be able to derive an ascertainable benefit from the cryptocurrency industry. Under the current treatment of virtual currency, the IRS stands to be the only entity benefiting because a significant source of new tax revenue is flowing through to them regardless of the substance of the transactions.²⁰⁸ However, the gains are not absolute because consumers and

²⁰⁵ Tina Orem, *What Is a 1099 Tax Form? How It Works and What to Do*, NERDWALLET (Jan. 16, 2020), <https://www.nerdwallet.com/blog/taxes/what-is-a-1099-form/> [<https://perma.cc/D7XX-PFL2>].

²⁰⁶ See Rhodes, *supra* note 94; *Who Is the FDIC*, FED. DEPOSIT INS. CORP (May 3, 2017), <https://www.fdic.gov/about/learn/symbol/> [<https://perma.cc/9KPB-YUAR>].

²⁰⁷ See *supra* Part II.

²⁰⁸ See *supra* Part IV.

retailers bear significant costs when they use virtual currency.²⁰⁹ Additionally, the opportunity to allow for cross-collaboration with different governmental agencies to ensure compliance through the tax code is lost due to the IRS's failure to realize that regulatory goals could be implemented through the tax code.²¹⁰ Instead, the IRS adopted a short-sighted measure that helps only further an agenda of collecting tax revenue. Under the proposed taxation scheme, all the relevant stakeholders would be addressed in a manner that mitigates the downsides of cryptocurrency. This ensures that the IRS will be able derive a source of taxable income from transactions that should be taxed and allows cryptocurrency to function as a medium of exchange without having adverse tax implications arising from using it.

By forcing cryptocurrency companies to create classifications of use, several important regulatory objectives can be achieved. First, allowing the users to choose the designation provides a suitable alternative to the IRS examining every single transaction and determining the economic substance of the transaction. Second, the taxpayer's election to choose a particular tier aligns with the principle that taxation in the United States relies on individual self-assessment.²¹¹ Therefore, relying on the consumer to place an honest and good faith rationale into choosing the designation for their funds would further the notion that the taxpayer and not the government is responsible for filling out the tax return. Lastly, the method employs a similar system in allowing people and businesses to choose how they designate their funds in a bank account.²¹² Simply extending the same logic to virtual currencies would not require any sort of adjustment in behavior. Like a banking account, the currency wallet must remit some form to both the taxpayer and IRS to properly account for the activity in the account.²¹³ Unlike the traditional 1099 forms remitted to the taxpayer by the banks, these forms will contain the amount of activity in the digital wallet.

²⁰⁹ See *supra* Section I.C.

²¹⁰ See Nat'l Fed'n Indep. Bus. v. Sebelius, 567 U.S. 519, 563 (2012) (noting that the Affordable Care Act was in effect a tax). The IRC helps ensure compliance by levying a tax against those individuals that fail to maintain minimum coverage. I.R.C. § 5000A. In effect, Congress utilized the IRC as a means of combining the resources of the Social Security Administration, which issues Medicare and Medicaid, and the IRS to enact one of the most impactful pieces of legislation. See *id.*; INTERNAL REVENUE Serv., 5187, AFFORDABLE CARE ACT: WHAT YOU AND YOUR FAMILY NEED TO KNOW (2019).

²¹¹ See I.R.C. § 6201(a)(1).

²¹² Andrew Palmer, *What Are the Different Types of Bank Accounts?*, BANKRATE (Jan. 18, 2018), <https://www.bankrate.com/banking/what-are-the-different-types-of-bank-accounts/> [https://perma.cc/FK7Z-UHPP].

²¹³ See *id.*

Employing the currency treatment in limited circumstances allows for certain taxpayers to actually use cryptocurrency for its original purpose, which is to function as an alternative medium of exchange.²¹⁴ Amending the current property treatment will mitigate the concern that consumers and merchants will have an onerous tax burden whenever they engage in a cryptocurrency transaction.²¹⁵ This results in an increased acceptance of cryptocurrency because the market will operate more efficiently due to decreased costs and a reduced fear that consumers will be subject to charge-back fraud.²¹⁶ Additionally, the IRS would not be burdened with having to scrutinize cryptocurrency transactions.²¹⁷ Ultimately, this would allow the IRS to focus its limited resources toward solving more pressing issues of tax avoidance.

Using the two tiers of property taxation for cryptocurrency also provides a significant economic benefit for those that invest in qualified currencies. Given the combination of the unfavorable rates and an inability to deduct losses, unregulated digital currencies would not be seen as a viable option to investors seeking to maximize returns. Speculative activity associated with this form of cryptocurrency would be halted because taxpayers could no longer benefit from the generous tax treatment. The promotion of qualified virtual currencies ensures that policy objective such as price stabilization and the reduced use of cryptocurrency for criminal enterprises could be accomplished by other regulatory agencies.²¹⁸ Given that the code promotes using “qualified” to promote investment into certain types of investment vehicles, extending the logic to cryptocurrency would present a viable option to policy implementation through the tax code.

The special provisions relating to miners eliminate the complicated issues associated with determining the basis of their cryptocurrency.²¹⁹ Using the currency method for miners eliminates the complex task of determining the miners basis in

²¹⁴ See *supra* Section I.A.

²¹⁵ Given that each cryptocurrency transaction results in a taxable event, any policy that reduces the reporting burden and taxpayer liability would provide considerable benefits to cryptocurrency users. See *supra* Part IV.

²¹⁶ See *supra* Section II.B.

²¹⁷ See *supra* Section II.A.

²¹⁸ See Linda S. Eads, *From Capone to Boesky: Tax Evasion, Insider Trading, and Problems of Proof*, 79 CALIF. L. REV. 1421, 1426–27 (1991) (mentioning that the tax code has been used to help the government prosecute criminals for a deficiency in their tax obligation, and, consequently, the tax code helps the government achieve its policy objective of limiting illicit activities); I.R.C. § 1256 (giving taxpayers that invest in regulated derivative contracts a preferential treatment).

²¹⁹ See *supra* Section II.A.1.

the cryptocurrency.²²⁰ Since miners will not be eligible to deduct the expenses associated with mining, allowing them to reap the benefits of their labor by allowing tax-free appreciation provides an equitable form of relief. Given the highly technical skillset needed to mine cryptocurrency,²²¹ the probability of taxpayer abuse would be relatively low. Traditionally, the IRS has always provided preferential treatment towards individuals and businesses engaged in procuring difficult resources.²²² Applying the same logic to miners would further promote a sustainable form of growth of cryptocurrency, since miners act as a form of fiscal control because they essentially control the amount of cryptocurrency in the market.²²³

The penalty provision provides an additional mechanism to ensure that taxpayers will comply with this proposed taxation scheme. The added risk of incurring a penalty ensures that taxpayers will comply with the measures because non-adherence runs the risk of significant tax liability.²²⁴ Also, the penalty provision gives the IRS additional authority to help prevent such abuses from happening.²²⁵ When a taxpayer does abuse the generous currency treatment, the IRS can guarantee that the virtual currency usage complies with the statutory mandate. Such a power ensures that taxpayers will maximize the use of cryptocurrency and not engage in speculative activity.²²⁶ Ultimately, the penalty provision provides an added safeguard that curbs the potential for abusive behavior.

The flexibility of the three-tiered cryptocurrency tax plan produces an optimal result for all vested stakeholders. Developing a cohesive plan that helps accentuate the potential benefits of cryptocurrency while simultaneously imposing an onerous burden on those that do not comply ensures that the plan will have enhanced adherence. Moreover, the proposal aims

²²⁰ See *supra* Section II.A.1.

²²¹ See *supra* Section I.A.

²²² See Carrie Cecil, *Budget Battles: Would the Obama Administration's Proposal to Eliminate Oil and Gas Tax Subsidies Injure the Industry?*, 8 PITT. TAX REV. 209, 212 (2011) (discussing the existence of several highly favorable accounting methods present in the IRC that promote the procuring of oil and other minerals); Daniel S. Goldberg, *Tax Subsidies: One-Time vs. Periodic an Economic Analysis of Tax Policy Alternatives*, 49 TAX L. REV. 305, 305 (1994) (noting that Congress implements tax subsidies to further certain policy or political initiatives); Tamar Haspel, *Why Do Taxpayers Subsidize Rich Farmers?*, WASH. POST (Mar. 15, 2018), https://www.washingtonpost.com/lifestyle/food/why-do-taxpayers-subsidize-rich-farmers/2018/03/15/50e89906-27b6-11e8-b79df3d931db7f68_story.html?noredirect=on&utm_term=.27d9d7eb844c [<https://perma.cc/HQ37-ZVZ4>] (discussing several tax subsidies that benefit farmers).

²²³ See *supra* Section I.A.

²²⁴ See *supra* Part IV.

²²⁵ See *supra* Part IV.

²²⁶ See *supra* Section II.A.1.

to expand the usage of cryptocurrency as an actual alternative form of currency that will further advance the United States toward the next generation of transacting and will encourage cryptocurrency regulation through the tax code, which will result in a more widely accepted and reliable iteration of cryptocurrency than what presently exists.

CONCLUSION

Given cryptocurrencies' potential to lead to a dramatic shift in marketplace efficiency and security, it is imperative that the government enacts appropriate regulatory measures that maximize its utility. When the IRS issued Notice 2014-21, they missed a tremendous opportunity to implement a taxation scheme for cryptocurrency that could appropriately address all of the concerns associated with cryptocurrency while simultaneously promoting a technological innovation that could shape the future. Instead, the IRS took an overly aggressive position that could potentially threaten the viability of cryptocurrency before the market comes up with the most efficient model that could change the commercial world.

Devising a new framework for taxing cryptocurrency can mitigate some of the harsh effects of the current property treatment. But simply reversing course and adopting the currency method misses the mark due to some glaring weaknesses present with cryptocurrency.²²⁷ Instead, Congress has the chance to implement a framework that uses the tax code as an outlet to strengthen the regulation of cryptocurrency. This three-tiered taxation plan could simultaneously help to increase security and efficiency in consumer transactions.²²⁸ Concocting a new holistic approach that fully accounts for the unique traits of cryptocurrency, both as an investment and as currency, can lead to a sustainable coexistence between cryptocurrency companies, the government, and people and businesses that use cryptocurrencies.

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²²⁷ See *supra* Section I.C.

²²⁸ See *supra* Section I.B.

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